



Deutsche  
Bundesbank  
Monthly Report  
April 1999

Vol. 51  
No. 4

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Annual and weekly publishing schedules for selected statistics of the Deutsche Bundesbank are available and can be downloaded from the above-mentioned Internet address.

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ISSN 0418-8292

The German original of this Report went to press on April 20, 1999

The Monthly Report is published autonomously by the Deutsche Bundesbank, Frankfurt am Main, by virtue of section 18 of the Bundesbank Act of July 26, 1957. It is available to interested parties free of charge.

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## Commentaries

### Securities markets

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#### Bond market

In February gross sales of domestic bonds fell distinctly short of the record level of the previous month. Domestic borrowers issued bonds with a market value of € 47.6 billion, compared with € 68.1 billion in January. Once again, just under half of the volume of issues was denominated in euro. Net of redemptions, and after taking account of changes in issuers' holdings of their own bonds, net sales came to € 14.5 billion in February, compared with € 30.9 billion one month earlier. On balance, it was primarily longer-dated paper (with maturities of more than four years) that was sold. Foreign bonds were sold in the German market to the tune of € 16.5 billion net. € 13.2 billion of that amount was accounted for by euro and Deutsche Mark bonds issued by non-residents, and € 3.3 billion by foreign currency bonds. Altogether, sales of German and foreign debt securities generated € 31.0 billion in February, following € 39.0 billion in the previous month.

*Sales of bonds*

The funds raised by sales of domestic bonds all accrued to credit institutions in February (€ 16.2 billion). At € 9.1 billion, communal bonds (*Öffentliche Pfandbriefe*) were again in the forefront. The outstanding amount of other bank bonds went up by € 4.4 billion. Bonds issued by specialised credit institutions and mortgage bonds (*Hypothekendarlehenbriefe*) were sold in the amount of € 1.5 billion and € 1.2 billion net, respectively.

*Bank bonds*

## Sales and purchases of bonds

DM billion		
Item	1999	
	January	February
<b>Sales</b>		
Domestic bonds <sup>1</sup>	30.9	14.5
of which		
Bank bonds	20.0	16.2
Public sector bonds	11.0	- 1.7
Foreign bonds <sup>2</sup>	8.0	16.5
<b>Purchases <sup>3</sup></b>		
Residents	22.6	24.9
Credit institutions <sup>4</sup>	- 5.1	9.1
Non-banks <sup>5</sup>	27.8	15.8
of which		
Domestic bonds	19.7	- 1.0
Non-residents <sup>2</sup>	16.3	6.1
<b>Total sales/purchases</b>	<b>39.0</b>	<b>31.0</b>

<sup>1</sup> Net sales at market values plus/less changes in issuers' holdings of their own bonds. — <sup>2</sup> Transaction values. — <sup>3</sup> Provisional figures. — <sup>4</sup> Book values, statistically adjusted. — <sup>5</sup> Residual.

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The public sector reduced its debt in the bond market by € 1.7 billion in February. The outstanding amount of bonds issued by the Federal Government declined by € 1.5 billion. From sales of five-year special Federal bonds and two-year Treasury notes, the Federal Government received € 2.9 billion net and € 0.8 billion net, respectively. Sales of thirty-year bonds yielded € 0.4 billion. The outstanding amount of Federal savings bonds and ten-year bonds decreased by € 1.3 billion and € 1.7 billion, respectively. In addition, four-year Treasury notes to the value of € 2.0 billion were redeemed; the Federal Government had dropped them from its range of issues quite a long time ago.<sup>1</sup> The Länder Governments ran down their indebtedness in the bond market by € 0.9 billion. Other public

issuers' bond market debt changed only marginally.

Domestic non-banks predominated among the buyers of German bonds in February. Their bond holdings went up by € 15.8 billion. They only purchased foreign bonds (€ 16.8 billion), most of which were denominated in euro (€ 14.8 billion). Non-banks reduced their portfolios of domestic debt securities by € 1.0 billion. German credit institutions purchased bonds totalling € 9.1 billion net, all of them domestic paper (€ 9.4 billion). Following heavy net purchases in the previous month (€ 16.3 billion), foreign investors' buying in the German bond market in February declined to € 6.1 billion. Whereas they purchased bank bonds worth € 11.1 billion net, they sold bonds issued by the public sector to the value of € 5.0 billion net.

*Purchases of bonds*

In February, gross sales of Deutsche Mark/euro bonds issued by non-residents under the lead-management of a German syndicate, at € 8.4 billion (nominal value), distinctly exceeded the previous month's level (€ 5.3 billion). Net of redemptions, € 4.4 billion was raised in the month under review, compared with € 3.4 billion in January.

*Foreign Deutsche Mark/euro bonds*

## Equity market

In February issuing activity in the German equity market again diminished. Domestic

*Share sales*

<sup>1</sup> The individual items for the Federal Government are shown at nominal values, rather than market values, and without taking account of changes in issuers' holdings of their own bonds. The sum total of these individual figures therefore normally does not tally with the above-mentioned net sales of Federal Government bonds.

enterprises sold new shares with a market value of € 0.6 billion, compared with € 1.3 billion in January. Foreign equities were sold in the German market to the extent of € 3.8 billion net, mostly in the form of portfolio investments (€ 3.5 billion). Altogether, € 4.4 billion was raised in the German equity market in February, as against € 10.3 billion in the previous month.

*Share purchases*

Domestic credit institutions' share holdings went up by € 1.5 billion in February. On balance, the entire increase was accounted for by foreign equities. Foreign investors likewise added German shares worth € 1.5 billion (net) to their portfolios. German non-banks purchased equities in the amount of € 1.4 billion net; just like domestic banks, they only bought foreign shares (€ 3.8 billion).

### Investment fund certificates

*Sales of investment fund certificates*

In February German investment funds raised € 8.8 billion, against € 14.0 billion in the previous month. Just over half of that amount accrued to funds open to the general public (€ 4.6 billion). Of the funds open to the general public, share-based funds received € 1.5 billion. Bond-based funds and open-end real estate funds sold certificates worth € 1.1 billion and € 1.0 billion, respectively. Money-market funds received € 0.7 billion. Mixed funds and pension investment mutual funds (*Altersvorsorgefonds*) sold certificates worth € 0.3 billion and € 0.1 billion, respectively. Specialised funds raised € 4.2 billion. In this context, mixed funds were again in the forefront, receiving € 2.4 billion. Bond-based funds and share-based funds raised € 1.5 bil-

lion and € 0.3 billion, respectively. Foreign investment fund certificates were sold in the German market in the amount of € 1.1 billion net. The total amount raised by sales of investment fund certificates thus came to € 9.9 billion.

The principal buyers of investment fund certificates were domestic non-banks (€ 7.3 billion), which concentrated on German certificates (€ 6.8 billion); non-banks purchased certificates of domestic and foreign money market funds totalling € 1.1 billion net. Domestic credit institutions increased their holdings of investment fund certificates by € 2.2 billion, with € 0.7 billion of this sum being attributable to foreign certificates. Non-residents bought domestic investment fund certificates worth € 0.4 billion net.

*Purchases of investment fund certificates*

### Public finance

#### Federal cash trends

In March of this year, the Federal Government incurred a cash deficit of € 2 billion, i.e. around DM 4 billion, compared with almost DM 5 billion for the same period last year. In the first quarter, considered as a whole, the deficit amounted to slightly more than € 16 billion. It was thus somewhat higher than the corresponding amount one year ago. In the first three months, cash receipts increased by slightly more than 10½%, whereas expenditure – proceeding from a decidedly higher level – rose by 9½%. The balance recorded in the budgetary accounts, based on the draft budget which was submitted by the Federal

*March*

*First quarter*

### Federal finance on a cash basis \*

Item	DM billion		€ billion	
	1999			
	Jan.– March p	March p	Jan.– March p	March p
Cash receipts	146.45	56.58	74.88	28.93
Cash expenditure	178.09	60.56	91.06	30.96
Cash surplus (+) or deficit (–) 1	– 31.65	– 3.99	– 16.18	– 2.04
Financing				
1. Change in cash resources 2	+ 0.59	– 3.01	+ 0.30	– 1.54
2. Change in money market debt	+ 18.02	+ 1.42	+ 9.21	+ 0.72
3. Change in capital market debt, total	+ 14.28	– 0.42	+ 7.30	– 0.21
a) Treasury discount paper	– 0.44	–	– 0.22	–
b) Treasury financing paper	– 0.61	– 0.15	– 0.31	– 0.07
c) Federal Treasury notes	– 4.09	– 3.41	– 2.09	– 1.74
d) Special Fed- eral bonds	+ 8.12	+ 0.94	+ 4.15	+ 0.48
e) Federal sav- ings bonds	– 3.86	– 0.03	– 1.97	– 0.01
f) Federal bonds	+ 23.38	+ 9.01	+ 11.95	+ 4.61
g) Bank advances	– 8.04	– 6.77	– 4.11	– 3.46
h) Loans from social security funds	–	–	–	–
i) Loans from other non-banks	– 0.20	–	– 0.10	–
j) Other debt	– 0.01	– 0.01	– 0.00	– 0.00
4. Seigniorage	– 0.05	– 0.03	– 0.03	– 0.01
5. Total (1 less 2 less 3 less 4)	– 31.65	– 3.99	– 16.18	– 2.04
Memo items				
Increase or decrease from the previous year in %				
Cash receipts	+ 10.7	+ 12.5	+ 10.7	+ 12.5
Cash expenditure	+ 9.6	+ 10.0	+ 9.6	+ 10.0

\* The transactions recorded here as cash receipts and cash expenditure comprise payments into and out of the accounts carried by the Bundesbank for the Federal Government. The cash receipts and cash expenditure differ from those shown in the official financial statistics primarily because these transactions are recorded not at the time they are entered in the budgetary accounts but at the time of the actual inflow or outflow, and because transactions on behalf of the European Union (which are not entered in the Federal budget) are conducted through the accounts of the Federal Government. — 1 Including special transactions. — 2 Deposits at the Bundesbank and in the money market.

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Government to the Bundestag for the current year, shows a deficit of DM 56.3 billion (€ 28.8 billion); in 1998, expenditure had exceeded revenue by DM 56.5 billion.

### Public sector borrowing

At just over € 2 ½ billion (almost DM 5 ½ billion) new borrowing by the central, regional and local authorities in February was rather limited, compared with January, when it reached the very high level of € 10 billion. In February borrowing was particularly strong in the short-term maturity categories. Thus, the central, regional and local authorities tapped the money market for slightly more than € 3 billion, while, on balance, they redeemed just over € ½ billion worth of debt in the capital market. The Federal Government cut its capital market debt by € 1 billion, redemptions of € 8 ½ billion offsetting gross borrowing to the tune of € 7 ½ billion. In the course of gross borrowing, the volume of five-year special Federal bonds outstanding was expanded; by contrast, Federal Treasury notes, Federal bonds and Federal savings bonds were redeemed on balance. In addition, the Federal Government borrowed just over € 3 billion in the money market. The Länder Governments took up new loans to the tune of € 1 billion, relying mainly on short-term bridging loans from banks. The level of the local authorities' indebtedness in February appears to have remained unchanged. The combined capital market debt of the special funds was reduced by approximately € ½ billion. In the process, loans against borrowers' notes were redeemed at slightly more than € 1 bil-

February



## Net borrowing in the market

Borrower	DM billion		€ billion	
	1998		1999	
	Total pe	of which Jan.–Feb.	Jan.–Feb. pe	Jan.–Feb. pe
Federal Government	+ 52.2	+ 24.0	+ 31.3	+ 16.0
Länder Governments	+ 28.3	+ 7.0	– 0.4	– 0.2
Local authorities 1, pe	+ 2.6	+ 1.4	+ 0.4	+ 0.2
ERP Special Fund "German Unity" Fund	+ 0.5	+ 0.9	– 0.1	– 0.1
Federal Railways Fund	– 0.4	+ 0.0	+ 1.2	+ 0.6
Federal Railways Fund	– 0.0	+ 0.2	– 0.2	– 0.1
Redemption Fund for Inherited Liabilities	– 18.5	– 1.3	– 7.4	– 3.8
Equalisation Fund for Safeguarding the Use of Coal 2	+ 0.8	+ 0.0	– 0.0	– 0.0
Central, regional and local authorities, total	+ 65.5	+ 32.2	+ 24.7	+ 12.6

1 Including special-purpose associations. — 2 Including Indemnification Fund.

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lion (net); at the same time bonded debt was increased by € ½ billion.

March

The Federal Government did not draw from the capital markets in March, either, but actually reduced its debt there marginally. Its gross borrowing amounted to not quite € 10½ billion. Here the Federal Government had special recourse to ten-year Federal bonds and two-year Federal Treasury notes, the aggregate sale of which amounted to almost € 9 billion. The Federal Government redeemed approximately € 10½ billion, repaying Federal Treasury notes from 1997 of just over € 6 billion and bank advances of € 4½ billion. As in the previous month, the Federal Government's cash deficit was financed through the money market. Thus, the Federal Government increased its money market

debt by just over € ½ billion, while simultaneously decreasing its money market deposits by € 1½ billion.

## Economic conditions

### Manufacturing

Following quite a good start to 1999, the situation in industry became calmer again in February. Seasonally adjusted manufacturing orders were latterly somewhat down on the preceding month, which had benefited from the conclusion of a number of major contracts. Taking January and February together in order to eliminate random fluctuations, orders were slightly less than 1% higher than their comparatively low level in the last three months of 1998. Since orders had been quite buoyant at the beginning of 1998, the year-on-year decline in early 1999 increased to around 3¾% on a two-month average.

*Orders received*

Domestic orders in January and February were as much as 4½% down on the year; towards the end of 1998, the figure had been just over 1¼%. Even in seasonally adjusted terms, the notable result at the beginning of the current year was not matched in February. This means that the level in the first two months of 1999 taken together was 1% higher than in the fourth quarter.

*Domestic orders*

By contrast, in seasonally adjusted terms, the volume of orders from abroad was higher in February than in January. In January and February together, the flow of orders increased by 1% compared with the fourth quarter,

*Foreign orders*

thus undershooting the comparable figure for early 1998 by around 2 ½ %.

*Output*

In line with orders, manufacturing output<sup>2</sup> likewise declined in February. Taking January and February together, it exceeded the quite low level in the final quarter of 1998 by a seasonally adjusted ½ %. For the first time in a long while, production was therefore no longer higher than a year before. Whereas there had been an expansion of just under 2 % in the final quarter of 1998, there was a decline of around ¼ % on an average of January and February.

### Construction

*Orders received*

In January – more recent statistical data is not yet available – demand for construction work was much higher than in the last few months of 1998. In comparison with the level at the start of last year, too, there was a sharp rise of around 6¾ %. Major contracts were awarded especially in the area of residential construction, but the public sector, too, started a greater number of projects. What may have been of significance was that weather conditions were comparatively mild in January and that many construction projects were started which had been postponed due to the sharp onset of winter weather at the end of last year.

*Output*

In February, seasonally adjusted output perceptibly returned to normal compared with the high level of activity in January. Even so, for the first two months of 1999 – after eliminating seasonal fluctuations derived over a fairly long period – there was a marked ex-

pansion of output compared with autumn 1998. Although the level of output at the beginning of 1998 was latterly undershot by around 2 ½ %, the decline in the last quarter of 1998 had been much greater at 6 ½ %.

### Labour market

*Unemployment*

The situation on the labour market remained largely unchanged over the past few months. The seasonally adjusted number of unemployed in March, at 4.07 million, persisted at its level of the end of January. The seasonally adjusted unemployment rate at the end of the period under review was 10.5 %, which only marginally undershot the figure for January (10.6 %). The year-on-year fall in unemployment, amounting to 335,000 persons, was not as favourable as it had been in the preceding months.

*Labour market  
policy measures*

The number of persons on job-creation schemes and attending training courses amounted to just under 845,000 at the end of March. Although this was slightly more than in the preceding months, the year-on-year increase went down to around 290,000.

*Employment*

There is no current information on employment as no new base data were available for the group of wage and salary earners on ac-

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<sup>2</sup> The monthly output index has been recalculated by the Federal Statistical Office from the start of 1995. It is now based on the recorded quarterly overall output of all firms of enterprises with, in general, 20 or more employees. These quarterly data are converted into monthly data for calculating the index and are expanded using a monthly survey of a selection of firms. The most recent index values which are determined in this way are later adapted to new quarterly data. For details, see Federal Statistical Office, *Wirtschaft und Statistik*, April 1999.

count of the lack of figures on employees liable to social security contributions.

## Prices

### Consumer prices

There was a somewhat stronger rise in consumer prices in March. The month-on-month price level increased by 0.2 % in seasonally adjusted terms, which also slightly exceeded the level at the start of the year. The year-on-year rise went up to 0.4 %, having been 0.2 % in the two preceding months. This was due, firstly, to mineral oil products becoming more expensive. In the case of light heating oil, the price rises were intensified by high demand in the run-up to the increase in energy taxes on April 1. Secondly, there were comparatively small seasonal reductions in prices for food and services.

### Import prices/ industrial producer prices

There were scarcely any further price reductions in the case of imports and industrial products made for sale in Germany, data for both of which are available only up to February. Latterly, the year-on-year decline in import prices, at 5.6 %, has not accelerated, and the year-on-year decline in industrial producer prices, at 2.4 %, has accelerated only slightly.

## Balance of payments

### Current account

Germany's current account – the combined outcome of foreign trade, services, factor income and current transfers - ran a surplus of € 0.2 billion in February 1999 compared with a deficit of € 4.3 billion in January. The main reason for the improvement is that the def-

## Economic conditions in Germany \*

### Seasonally adjusted

Period	New orders (volume); 1995 = 100			
	Manufacturing 1			Construction
	Total	of which		
	Domestic	Foreign		
1998 2nd qtr	111.0	103.3	125.0	88.1
3rd qtr	110.4	103.7	122.6	89.5
4th qtr	106.4	99.1	119.7	84.7
Dec.	105.8	97.6	120.7	82.3
1999 Jan.	107.8	101.2	119.7	88.2
Feb.	107.0	98.7	122.1	...
Period	Output; 1995 = 100			
	Manufacturing			Construction
	Total	of which		
	Inter-mediate goods industry 2	Capital goods industry		
1998 2nd qtr	110.1	111.9	112.9	86.8
3rd qtr	111.2	112.8	114.8	87.1
4th qtr	109.1	109.6	113.6	84.5
Dec.	109.1	109.1	113.9	83.5
1999 Jan.	111.0	112.5	113.2	94.1
Feb.	108.2	108.8	110.1	82.6
Period	Labour market			
	Employed 3	Vacancies	Un-employed	Un-employment rate in % 4
	Number in thousands			
1998 3rd qtr	34,019	446	4,209	10.9
4th qtr	34,061	436	4,130	10.7
1999 1st qtr	...	432	4,089	10.6
1998 Dec.	34,042	417	4,148	10.7
1999 Jan.	...	427	4,082	10.6
Feb.	...	438	4,076	10.5
March	...	448	4,073	10.5
Period	Prices			
	Import prices	Producer prices of industrial products 5	Overall construction price level 6	Consumer price index 7
	1991=100	1995 = 100		
1998 3rd qtr	97.4	99.5	98.9	104.5
4th qtr	95.5	98.6	98.8	104.5
1999 1st qtr	...	...	98.7	104.2
1998 Dec.	95.0	98.4	.	104.5
1999 Jan.	94.6	97.8	.	104.2
Feb.	94.5	97.7	.	104.1
March	...	...	.	104.3

\* Data in many cases provisional. — 1 Excluding the food and drink industry, and tobacco products. — 2 Excluding energy supply and excluding mining and quarrying. — 3 Work-place concept. — 4 In terms of the total labour force. — 5 Domestic sales. — 6 Calculated by the Bundesbank. Mid-quarter level. — 7 All households.

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icits on invisibles were smaller than in the previous month.

*Foreign trade*

According to calculations by the Federal Statistical Office, the surplus on foreign trade also increased again in February; it amounted to € 5.9 billion compared with € 4.5 billion in January of this year. Even so, in seasonally adjusted terms, the surplus was virtually unchanged; as in the previous month it amounted to approximately € 6 billion. In February the value of exports rose by just under 2 %, seasonally adjusted, compared with January. If the first two months of the year are taken together, exports likewise rose by 2 % compared with the previous period (November-December 1998). This means that, following their sharp decline towards the end of 1998, they regained the level they had reached during the autumn. The seasonally adjusted value of imports increased by just over 3 % during the period under review. There was a slight downturn of almost 1% in a two-month comparison, however, although the further fall in import prices played a major role in that.

*Invisibles*

The deficit on invisible transactions with non-residents was substantially lower, at € 5.5 billion, in February than it had been in January (€ 8.5 billion). This was mainly due to the balance on factor income, which is subject to significant monthly fluctuations. The deficit here declined from € 3.7 billion in January to € 0.7 billion in the month under review. Service transactions with non-residents also incurred a smaller deficit in February (€ 2.2 billion compared with € 3.4 billion in January); a seasonally-induced fall in expenditure on for-

ign travel was a significant factor here. In the case of current transfers to non-residents, by contrast, there was a rise in the deficit from € 1.4 billion in January to € 2.6 billion during the month under review.

There were diverging trends in the various segments of statistically recorded financial transactions with non-residents in February 1999. Net capital exports as a result of portfolio transactions increased to € 11.8 billion compared with € 1.3 billion in January. The larger deficit was primarily due to foreign investors' dwindling interest in German securities. They bought only € 8.4 billion worth of this paper in February after spending € 16.4 billion on it in January. It was principally German public bonds that non-residents returned on balance (minus € 5.0 billion). German residents, by contrast, again increased their investment in the foreign securities markets during the period under review (€ 20.2 billion compared with € 17.7 billion in January). Their main interest was in foreign euro or Deutsche Mark bonds (€ 13.2 billion); less interest was shown in shares (€ 3.5 billion) and foreign currency bonds issued by foreign borrowers (€ 3.3 billion).

*Portfolio transactions*

Direct investment accounted for net outflows of € 2.1 billion in February. German enterprises provided their foreign subsidiaries with funds totalling € 2.0 billion whereas foreign proprietors withdrew € 0.1 billion from their subsidiaries in Germany.

*Direct investment*

There were also net capital outflows – of € 7.0 billion – as a result of the credit transactions of enterprises and individuals in February. By

*Credit transactions*

contrast, the cross-border credit transactions of the public sector almost cancelled out.

As a counterpart, as it were, to the capital outflows in the aforementioned sectors, German credit institutions recorded a sharp decline in their short-term net external position (€ 21.7 billion) during the month under review; their long-term operations resulted in further net capital imports of € 2.0 billion. The changes in the external assets and liabilities of the Bundesbank, which do not count towards the monetary reserves and which have likewise been recorded as part of the cross-border credit transactions since the beginning of this year, were fairly limited; there was a net influx of € 0.9 billion.

*Monetary  
reserves of the  
Bundesbank*

The monetary reserves of the Bundesbank, as uniformly defined for the Eurosystem since the beginning of monetary union, declined, at transaction values, by € 1.0 billion in February after declining by € 12.4 billion in the previous month as a result of the transfer of monetary reserves to the ECB. The decline was primarily a reflection of the reduction in the IMF position.

## Major items of the balance of payments

€ billion

Item	1998 1	1999 1	
	Feb.	Jan. r	Feb. p
I. Current account			
1. Foreign trade 2			
Exports (f.o.b.)	39.2	35.4	39.0
Imports (c.i.f.)	33.6	30.9	33.1
Balance	+ 5.7	+ 4.5	+ 5.9
Memo item			
Seasonally adjusted figures			
Exports (f.o.b.)	40.4	39.3	40.2
Imports (c.i.f.)	34.7	33.2	34.3
2. Supplementary trade items 3	- 0.1	- 0.2	- 0.1
3. Services			
Receipts	5.4	5.2	5.6
Expenditure	7.4	8.6	7.8
Balance	- 2.0	- 3.4	- 2.2
4. Factor income (net)	- 0.8	- 3.7	- 0.7
5. Current transfers			
from non-residents	0.9	3.8	0.7
to non-residents	3.9	5.2	3.4
Balance	- 3.1	- 1.4	- 2.6
Balance on current account	- 0.4	- 4.3	+ 0.2
II. Capital transfers (net)	- 0.1	+ 0.5	- 0.2
III. Financial account (net capital exports: -)			
Direct investment	- 0.6	- 1.3	- 2.1
German investment abroad	- 8.6	- 3.9	- 2.0
Foreign investment in Germany	+ 8.0	+ 2.6	- 0.1
Portfolio investment 4	- 2.3	- 1.3	-11.8
German investment abroad	-13.8	-17.7	-20.2
of which			
Shares	- 6.3	- 8.2	- 3.5
Bonds and notes	- 5.9	- 8.0	-16.5
Foreign investment in Germany	+11.4	+16.4	+ 8.4
of which			
Shares	+ 1.2	+ 0.1	+ 1.5
Bonds and notes	+ 8.4	+16.6	+ 3.6
Financial derivatives	- 0.6	- 0.7	+ 1.1
Credit transactions 4	+ 4.0	-34.1	+17.4
of which			
Credit institutions	+ 5.4	-13.5	+23.7
of which			
Short-term	+ 1.8	- 8.6	+21.7
Enterprises and individuals 5	- 1.8	+ 7.0	- 7.0
Public authorities	+ 0.2	- 1.4	- 0.2
Bundesbank	+ 0.1	-26.3	+ 0.9
Other investment	- 0.2	- 0.2	- 0.1
Overall balance on financial account	+ 0.3	-37.6	+ 4.5
IV. Change in the monetary reserves at transaction values (increase: -) 6	- 0.8	+12.4	+ 1.0
V. Balance of unclassifiable transactions	+ 1.0	+29.0	- 5.5

1 Figures subject to major uncertainty owing to changes in the method of data collection in foreign trade. — 2 Special trade according to the official foreign trade statistics (source: Federal Statistical Office). — 3 Mainly warehouse transactions for account of residents and deduction of goods returned. — 4 Excluding direct investment. — 5 For February 1999 including the financial flows and flows of trade credits that are classified as direct investment. — 6 Excluding allocation of SDRs and changes due to value adjustments.

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## The role of economic fundamentals in the emergence of currency crises in emerging markets

Following the currency crises in some Asian emerging market economies, the question as to what causes such crises has once again become the focus of interest. Occasionally the responsibility for such crises is placed on speculative capital movements detached from macroeconomic fundamentals which attack currencies at random, so to speak; i.e., completely independently of whatever the economic surroundings happen to be at that particular time. This report refutes that at times quite stereotypical view by systematically and comprehensively studying the development of macroeconomic fundamentals in the run-up to currency turbulence in 12 countries over a period of more than 25 years. It also shows that macroeconomic misalignments from the past bear at least a significant share of the responsibility for most currency crises.

### Preliminary remarks

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The eruption of the currency crises in Asia in the summer of 1997 caught many observers by surprise. The immediate cause of the outbreak of the crises was the sudden emergence of doubts concerning the sustainability of Thailand's current account deficits, the export sector having been confronted with major sales problems owing to the plunge in world market prices for semiconductors. The massive pressure on the Thai baht triggered a confidence shock among international invest-

*Currency crises  
in Asia ...*

ors which at the same time also called the sustainability of some other countries' exchange rate peg to the dollar into question. Thus, within a few weeks, the Philippine peso, the Malaysian ringgit, and the Indonesian rupee were drawn into the devaluation spiral created by the Thai baht. Following repeated speculative attacks, the South Korean won also fell sharply towards the end of 1997. In the period thereafter, the situation deteriorated considerably, which meant that the currencies involved fell to all-time lows against the US dollar in the first half of 1998. Compared with exchange rates of June 1997, the value of the Indonesian rupee had sunk by a maximum of over 80 % by the spring of 1998; the losses sustained by the currencies of Thailand, Malaysia, the Philippines and South Korea were between 35 % and 50 %.

Due to the relatively sizeable short-term external indebtedness, denominated in foreign currency, as well as the sudden disruptions to the exchange rate relations, the turbulence in the foreign-exchange markets spilled over quickly to the banking systems (which in some countries were already fragile to begin with) and to the real economy. The devaluations and slump in share prices intensified by the withdrawal of international lenders and residents' capital exports led to considerable losses in assets. Furthermore, the slumping growth in those countries generated considerable political and social tension. From 1986 to 1996 Thailand, Indonesia, Malaysia and South Korea had annual growth rates averaging over 7 %; in 1998, however, real GDP shrank considerably in those countries. Over the past year, the decline in GDP in Thailand,

Malaysia and South Korea ranged from 6 ½ % to 8 %; in Indonesia, this figure was even as high as 15 %. The sharp rise in import prices caused by devaluation, but also the fact that implementation of the necessary stabilisation measures was insufficient at first, caused inflationary risks to increase as well. In most of those countries, though, inflation picked up much less strongly than was originally feared. However, Indonesia formed the exception, its inflation rate jumping from single digits to approximately 60 %.

Opinions diverge greatly on the determinants of the Asian currency crises. On the one hand, many argue that the fundamental economic data of those economies prior to the outbreak of the crisis were no cause for worry and that the crises were more likely attributable to speculative movements completely detached from macroeconomic factors. At all events, none of those countries pursued an excessively expansionary fiscal policy financed by printing money, which, according to standard theories, would have been an important factor explaining currency crises. On the contrary, the government budgets of Thailand, Malaysia and Indonesia were even running surpluses before the crises. Moreover, those countries had been showing strong growth rates for several years, and inflation was fairly restrained compared with other developing countries; therefore, for some time those countries were even regarded as a model for successful development processes.

On the other hand, rising current account deficits were pointing to increasing competi-

*Cause: speculative movements or...*

*... fundamental imbalances*

*... led to burdens on the real economy*

*... and rising inflation*



tive problems. As long as the excessively booming securities and real-estate markets of those countries and the – in some cases – foreign-exchange-rate-oriented domestic monetary policy were ensuring ample inflows of foreign capital, though, “bankrolling” those deficits did not appear to be a problem. The short-term nature of the incoming capital from abroad, though, also magnified the danger of setbacks and sudden capital withdrawals. The risk potential was increased also by the fact that a large portion of this capital was denominated in foreign exchange and flowed into those countries upon confidence in an alleged exchange rate guarantee for those domestic currencies vis-à-vis the US dollar. To make matters worse, the problem was not completely understood by lenders for a long time because there was insufficient transparency in the banking systems of many emerging market economies, which were insufficiently supervised. Only when the persistent strength of the dollar threatened to severely weaken the competitiveness of many South-East Asian countries (owing to the pegging of their currencies to the dollar), which are strongly dependent on exports, and enterprises and banks were increasingly encountering difficulties, did the market participants become more and more aware of the risks.

#### The term “currency turbulence” and its definition

*Systematic analysis*

The following empirical analysis of the economic fundamentals prior to currency turbulence spans a period between January 1970

#### Selected economic data

Country	1986-96	1995	1996	1997	1998
Growth (% per year)					
Thailand	9.1	8.8	5.5	-0.4	-8.0
Malaysia	7.8	9.5	8.6	7.8	-6.4
Philippines	3.7	4.8	5.7	5.1	-0.6
Indonesia	7.4	8.2	8.0	4.6	-15.0
South Korea	8.6	8.9	7.1	5.5	-7.0
Inflation (% per year)					
Thailand	4.5	5.8	5.9	5.6	9.0
Malaysia	2.6	3.4	3.5	2.7	6.0
Philippines	8.9	8.1	8.4	6.0	10.0
Indonesia	8.2	9.4	7.9	6.6	60.0
South Korea	5.7	4.5	4.9	4.4	8.5
Balance on current account (as a % of GDP)					
Thailand	-4.9	-7.9	-7.9	-2.0	10.7
Malaysia	-2.6	-10.0	-4.9	-4.8	6.5
Philippines	-2.5	-4.4	-4.7	-5.2	-1.5
Indonesia	-2.8	-3.3	-3.3	-1.8	2.5
South Korea	0.9	-1.9	-4.7	-1.8	12.9

Source: IMF.

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and June 1997. It includes 12 emerging market economies which for the most part have been classified by the World Bank as middle-income countries and which have a sufficiently well-developed domestic financial system and a somewhat liberal capital account. These countries are Argentina, Brazil, Chile, Indonesia, South Korea, Malaysia, Mexico, the Philippines, South Africa, Thailand, Uruguay and Venezuela. For this relatively homogeneous group of countries, the development of selected fundamentals in the year prior to the onset of currency turbulence (“run-up period”) was compared to that in periods of tranquillity.

To make such a comparison, it is necessary at first to operationalise the term “currency turbulence”. That means a catalogue containing

*Operationalisation of the term “currency turbulence”*

a sufficient number of such crisis phases in the selected countries must be compiled. There are basically two possible approaches. One is to compile a catalogue of currency turbulence according to how it is judged by economic history in that particular country. The other is to identify currency turbulence using a pressure indicator constructed for precisely that purpose.

*Collecting episodes by studying the literature*

The compilation of a catalogue of crises using the first of the two methods would have the disadvantage that this relatively historically based selection method would not be neutral in its judgement of the outcome of the crisis. Speculative attacks that have been warded off relatively quickly and successfully are generally given considerably less attention, historically speaking, than more protracted crises which in the end led to a sharp devaluation of the currencies involved. Hence, there would be the danger that the study would ultimately be limited to a certain category of currency turbulence and would therefore unnecessarily narrow the scope.

*Developing a pressure indicator using crisis symptoms*

Some recent scholarly papers have therefore proposed identifying turbulence in the foreign exchange markets using an indicator relying on the known symptoms of such episodes of currency turbulence:<sup>1</sup>

- an extremely sharp devaluation of the affected country's currency;
- plummeting foreign exchange reserves; and
- an abrupt rise in interest rates.

This study basically follows the aforementioned approach. However, since for many

emerging economies there was often a lack of interest rate data having a sufficient quality, this variable was dropped. This procedure seems to be justified methodologically, since there is a close correlation between interest rate increases and foreign exchange market interventions to sustain exchange rates in times of speculative attacks.<sup>2</sup> The devaluation criterion here is based on the movement of the real (US dollar) exchange rate of the currencies under observation, since the economic environment in some of the emerging economies being studied here was characterised at times by high inflation. The pressure indicator used here is thus calculated as a weighted average of the percentage change of the real exchange rate and of the foreign exchange reserves (each vis-à-vis the previous month), with the weights corresponding to the ratio of the different variances of those two variables.<sup>3</sup>

Speculative strains on a given currency cause the pressure indicator calculated in this manner to fluctuate sharply, since the exchange rate generally nose-dives and/or the foreign exchange reserves of the country in question are considerably depleted. A country's foreign

*Identification of currency crises*

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<sup>1</sup> See, for example, Eichengreen, B. et al. (1995), Exchange Rate Mayhem, The Antecedents and Aftermath of Speculative Attacks, Economic Policy, Vol. 21, pages 249 to 312; Sachs, J.D. et al. (1996), Financial Crises in "Emerging Markets": The Lessons from 1995, Brookings Papers on Economic Activity, No. 1, pages 147 to 198; Kaminsky, G. et al. (1998), Leading Indicators of Currency Crises, IMF Staff Papers, Vol. 45, No. 1, pages 1 to 49.

<sup>2</sup> See Corsetti, G. et al. (1998), Paper Tigers? A Model of the Asian Crisis, NBER Working Paper No. 6783, Cambridge, MA, page 22.

<sup>3</sup> See Schnatz, B. (1998), Macroeconomic determinants of currency turbulences in emerging markets, Discussion paper 3/98, Economic Research Group of the Deutsche Bundesbank, for a more thorough description and critique of this calculation method.

exchange trends can thus be termed "currency turbulence" once the indicator has exceeded a given threshold. Here, this threshold has been set at 1.5 times the standard deviation of the indicator calculated for all countries. The extreme values of the indicator determined in this manner often show up at rather short intervals. This is a reflection of the fact that in many cases speculative attacks precede currency crises or that currency crises become exacerbated over time, as could be observed in several Asian countries. In order to be able to define the length of a currency crisis more precisely, the beginning of the crisis was set at the time where the pressure indicator crosses the critical threshold for the first time following a period of tranquillity. The end of a crisis is that time when the indicator remains below the threshold value for the following three quarters. Using this definition, a total of 49 cases of foreign exchange market turbulence were identified in the 12 countries concerned.

#### On selecting possible explanatory factors

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*Fundamental  
determinants of  
currency turbu-  
lence*

In order to more precisely specify the explanatory approach, there are basically a number of fundamental determinants to choose from. For this study, seven factors were selected which in earlier studies proved to be relevant and quite robust against alternative specifications.<sup>4</sup> These factors are:

- the deviation of the real exchange rate from the trend;
- export growth,
- balance on current account as a percentage of GDP,

- foreign exchange reserves in terms of a broadly defined monetary aggregate,
- domestic credit growth (as a percentage of GDP),
- the inflation differential between the country in question and the US, and
- the international interest rate level, represented by the US money market rate.

Restricting the study to those variables is the result of a compromise between capturing a broad range of determinants, the corresponding data availability and the desirable high frequency of data. In order to take account of the fast reactions in the financial markets, it seemed necessary to take recourse to data published at least monthly; even quarterly data may obscure much of the information used by foreign exchange market agents in their actions. Unfortunately, this means that some explanatory factors which do share some part of the responsibility for the currency crises of the past few years will have to be dropped owing to their low data frequency. They include, in particular, data on the composition, denomination and maturity structure of foreign debt. Moreover, in such an analysis there are also a number of other influencing factors of a more qualitative nature which are difficult to capture. Some of these are the institutional terms of the exchange rate regime and the underlying political, legal and cultural conditions. These limitations must be taken into account when interpreting the results presented here. In the final analysis, the results do not claim to comprehensively explain the evolution of currency turbulence, but are instead

*Data frequency  
versus data  
availability*

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<sup>4</sup> Schnatz (1998), page 45 ff.

meant to classify important macroeconomic data within this context.

*Comparison of  
mean values*

A simple comparison of the mean values of the seven aforementioned macroeconomic variables in the period prior to the outbreak of currency crises with their mean values in periods of tranquillity may provide some clues. Specifically, the mean values of the variables during periods of tranquillity were compared with their corresponding mean values in the twelve months prior to the onset of a crisis.

*Real exchange  
rate and export  
growth*

Such a comparison of real exchange rates shows initially that those currencies tended to be overvalued prior to speculative attacks. In the case of Asia, too, the test calculations for most currencies usually point to such overvaluation prior to the outbreak of the crises.<sup>5</sup> Consequently, export growth generally declines visibly in the run-up to currency turbulence – including the period prior to the outbreak of the currency crises in Asia, when export growth of Thailand, Malaysia and South Korea declined noticeably over past levels. Taken as an average of all cases of currency turbulence, export growth in the run-up period was down by more than ten percentage points over its level in tranquil phases. Current-account deficits, too, were around 1% of GDP higher in the periods prior to currency turbulence than in periods of tranquillity; in most of the Asian countries, in 1996 they were even over 3% higher than their average in tranquil periods.

*Large credit  
growth and  
inflation  
differential*

The other variables being examined also show striking differences in both phases. Thus, domestic credit growth (as a percent-

age of GDP) is an average of around five percentage points higher than in periods of tranquillity. For one thing, this could indicate that those countries are conducting an excessively expansionary economic policy in the run-up to currency crises. One argument in favour of this interpretation is the fact that the inflation differential vis-à-vis the industrial countries (represented here by the United States) is higher on average. Prior to the currency crises in Asia, though, the impact exerted by this differential is likely to have played a relatively minor role in this general form. More important in this context, though, was asset price inflation, especially real estate and equities. For another thing, a relatively large level of domestic credit growth could also indicate excessive lending which, in many cases, is financed by the exchange-rate-oriented monetary policy in those particular countries. The impetus was often provided by large inflows of short-term funds from abroad received by the banks of some Asian emerging economies which were then used to refinance their own lending to their domestic economies.

Besides, prior to currency turbulence the countries under observation tend to show, on average, lower levels of foreign exchange reserves (in terms of broad monetary aggregates) than during tranquil periods. This observation also fits in with the theoretically expected pattern of development. What is less clear in this simple comparison, however, is the influence the level of international inter-

*Foreign  
exchange  
reserves and  
inflation  
differentials*

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<sup>5</sup> See also Chinn, M. D. (1998), *Before the Fall: Were East Asian Currencies Overvalued?*, NBER Working Paper No. 6491, Cambridge, MA.

est rates has on the vulnerability of the emerging economies under observation to crises. This applies in any event if the interest rate variable is approximated using US money market rates, as has been done here. For example, at the beginning of the eighties, those rates – prior to the outbreak of the international debt crisis – had reached quite a high level. By contrast, in the run-up to the Asian crisis, they were even below their average during periods of tranquillity. On average, prior to currency crises international interest rates were only marginally higher than in periods of tranquillity. However, the simple method of comparing mean values is too imprecise for drawing reliable conclusions concerning the relevance of the variables observed here.

### Selected fundamentals prior to currency turbulence and in periods of tranquillity

Item	Average in	
	the 12 months prior to currency turbulence	periods of tranquillity
Real exchange rate <sup>1</sup>	- 11.53	0.54
Export growth <sup>2</sup>	3.31	14.69
Credit growth <sup>2, 3</sup>	7.36	2.16
Inflation differential	47.22	20.14
Foreign exchange reserves <sup>4</sup>	19.31	25.66
Balance on current account <sup>3</sup>	- 2.77	- 1.54
US money market rate <sup>5</sup>	7.30	6.71

<sup>1</sup> Deviation of the real exchange rate from the trend; real exchange rates based on consumer price movements compared with the US. — <sup>2</sup> Change from the previous year in %. — <sup>3</sup> As a % of GDP. — <sup>4</sup> In terms of the (broadly defined) money stock. — <sup>5</sup> Per year, in %.

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### Results of a systematic analysis of data

#### Results

Hence, the analysis was run using a more sophisticated method. This was based on regressions, with the help of which the interaction of the variables under observation was captured. The method used and the results obtained are explained in more detail in the overviews on pages 22 and 23. On the whole, the interrelationships presented in the preceding text can be confirmed in this manner; all variables are in a reliable and plausible relationship (in terms of the sign) to the situation in the foreign exchange markets under observation. The interest rate variable also proves to be relevant.

#### Crisis indicator

In order to gain an impression of the accuracy of the results, these estimations were then

used to calculate forecast values for the resulting "crisis indicator", and on the basis of those values the forecast accuracy of the indicator was tested. The estimated indicator is interpreted as a crisis warning signal if it exceeds a given threshold value.

Defining the threshold value means striking a balance between two opposing goals. If the value is set at a relatively low level so as not to miss a crisis warning if at all possible, the danger exists that warning signals would be received not just prior to currency turbulence but frequently also (erroneously) in tranquil periods. Yet if the threshold value is set at a relatively high level to avoid this problem, there is the risk of the appropriate early warning signal not being received. Therefore, the decision on the threshold value for each of

## Methodological explanations

To perform the econometric calculations, a method was used which incorporated "pooled" data. In simple terms, this means combining the traditional time-series analysis with the cross-country analysis. This made it possible to include the time series of all countries in the estimations simultaneously. The idea is basically to explain the state of each individual country's foreign exchange market by the developments of a series of macroeconomic variables. One thing that makes this more difficult than standard quantitative analysis methods is that there is no simple method of measuring this state – or, more precisely, the vulnerability of a country to currency turbulence. Therefore, for the purpose of this estimation, the latent variable  $Y^*_{it}$  (called latent because it is actually impossible to observe) is represented by the binary variable  $Y_{it}$ , which is equal to 1 twelve months prior to the onset of currency turbulence and 0 in the remaining periods of tranquillity.<sup>1</sup>

The variable  $Y_{it}$  thus specified for country  $i$  at time  $t$  is defined by the vector of the fundamentals  $X_{it}$  for country  $i$  and period  $t$ .

Specifically,  $X_{it}$  is made up of the following variables:

- the deviation of the real exchange rate from its trend;
- year-on-year growth of exports ;
- year-on-year growth of domestic credit (as a percentage of GDP);
- the inflation differential compared with the United States;
- holdings of foreign exchange reserves in terms of broad money;
- the current account deficit as a percentage of GDP; and
- US money market rates.

<sup>1</sup> A similar method is also used by Berg, A. and C. Pattillo (1998). — <sup>2</sup> For a discussion of this method see, e.g., Mad-

For the estimation, a (multivariate) logit model was estimated using the maximum likelihood method.<sup>2</sup> The expected value of the binary variable is represented by:

$$E(Y_{it} | X_{it}, \beta) = F(\beta'X_{it}),$$

where  $E$  denotes the expectation operator and  $F$  the underlying logistical distribution function, which serves here as a probability transformation.

In the first step, the estimations were conducted using monthly data from 12 developing countries and emerging market economies between the beginning of 1970 and mid-1997 (Estimation I). However, the values observed during the period of currency turbulence itself were excluded, and only the data that occurred during the run-up to such crises and during periods of tranquillity were entered into the calculations. To be able to test the goodness of fit of the forecasts outside the observation period, as a second step the calculation was limited to data up to December 1993 (Estimation II). The remaining observations were then used to calculate the forecast values on the basis of the estimation results.

All in all, the results support the central hypothesis that the macroeconomic situation in the run-up to currency turbulence differs from that during periods of tranquillity. In the first estimation, all coefficients show the expected sign and are statistically significant given an error probability of less than 5%. The second estimation, run using the abbreviated estimation period, largely supports these results. Apart from the growth of domestic credit, which is no longer significant at the usual levels of confidence, the correlation between all other variables remains well protected.

dala, G. S. (1992), *Introduction into Econometrics*, 2nd ed., New York et al., page 322ff.

## Logit estimations

Variable	Estimation I		Estimation II 1	
	Coefficient	z value	Coefficient	z value
Real exchange rate 2	-0.035	-9.697 **	-0.033	-8.224 **
Export growth 3	-0.028	-8.858 **	-0.034	-9.612 **
Credit growth 3, 4	0.010	2.710 **	0.005	1.151
Inflation differential	0.009	8.678 **	0.014	10.554 **
Foreign exchange reserves 5	-0.018	-4.181 **	-0.014	-2.718 **
Balance on current account 4	-0.045	-2.845 **	-0.044	-2.427 *
US money market rate 6	0.037	1.996 *	0.110	4.843 **
Constant	-1.993	-10.340 **	-2.950	-11.833 **
Number of observations	2.595		2.113	
Mc Fadden's R <sup>2</sup>	0.153		0.228	
Chi <sup>2</sup> (7) 7	341.0	(0.000)	383.6	(0.000)

\*\*/\* Significant at a level of 1%/5 %. — 1 Estimated up to December 1993. — 2 Deviation of the real exchange rate from the trend. Real exchange rates based on consumer price movements compared with the US. — 3 Change

from the previous year in %. — 4 As a % of GDP. — 5 In terms of the (broadly defined) money stock. — 6 Per year, in %. — 7 In parentheses: error probability.

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the countries under observation was taken using a uniform formula, with allowances being made for the past experience of each individual country, though. Specifically, the value was set as the percentile of the distribution of the appropriate crisis indicator forecast values. The rank of the percentile was set as a ratio of the overall number of values available in the year prior to currency turbulence to the total number of the observations available for that country. Using this method, in nearly 70 % of all cases of currency turbulence, at least one value exceeded the critical limit in the preceding year, thus signalling that particular country's vulnerability to currency turbulence.

by turbulence. There are two possible reasons: one is that they might be random forecasting errors. The other is that this may be a sign that the countries affected recognised the looming misalignments in a timely manner and used the remaining room for manoeuvre to undertake a lasting economic policy reversal which then heightened their currencies' resistance to crises. In that case, the susceptibility of those currencies to speculative attacks would have been accurately flagged but would have ended up not being accurate to the extent that it was possible to prevent the outbreak of the crisis in time.

The range of possible cases can be split up into four categories (see chart on page 24):<sup>6</sup>

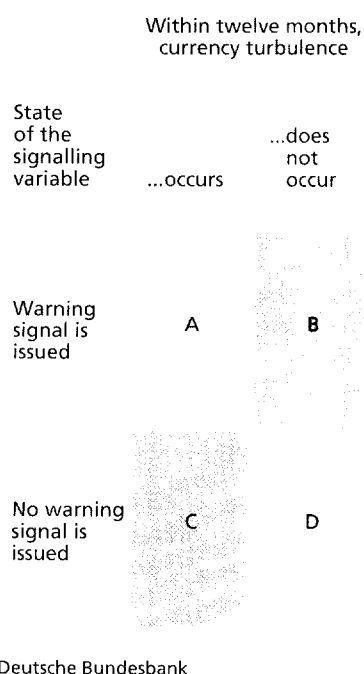
*Categorisation  
of signals*

*Interpretation  
of false signals*

However, false signals were also given; this meant that prior warnings were not followed

<sup>6</sup> See: Kaminsky, G. et al. (1998).

### Framework for classifying signals



The signals are correct if

- the crisis indicator exceeds a given threshold value and currency turbulence ensues within the predefined run-up period (here: twelve months) (A);
- the crisis indicator remains below the threshold value and no currency turbulence ensues within the run-up period (D).

The signal is false if:

- the threshold value is exceeded yet currency turbulence does not occur (B);
- the threshold value is not exceeded although currency turbulence occurred (C).

This can be used as a basis for calculating a measure of the goodness-of-fit of the results, known as the “adjusted noise-to-signal” ratio. This ratio is the quotient of

- the number of false warning signals divided by the number of observations in tranquil periods ( $B/(B+D)$ )
- and the number of correct warning signals divided by the number of observations in the run-up period ( $A/(A+C)$ ):

$$Q = \frac{(B / (B + D))}{(A / (A + C))}$$

This quotient has the following features:

- In the case of a purely random process, it is expected to be 1;
- it approaches 0 the more correct warning signals are sent prior to currency turbulence or the fewer false signals are sent during periods of tranquillity.

This sample yields a value of 0.25, which is clearly less than 1 and therefore shows that the explanatory ability of this approach is rather reliable.

This observation is tempered somewhat, though, when the Asian currency crises are analysed. In the cases of Indonesia, Malaysia and the Philippines, none of the forecast values exceeds the calculated threshold value. The framework presented here would have yielded no clues, based on the data used, for an increased vulnerability of these countries to speculative attacks. For Thailand and South Korea, too, this framework only provides very isolated indications of the then-looming crisis. If the regression is limited to the period prior to 1994 and the resulting relationships are taken as a basis for analysing the behaviour of the indicator during the Asian crisis, the estimated indicators did not

*Applied to  
Asian crises*



# **BERICHTIGUNG**

Der SCAN des vorhergehenden  
Schriftstückes wurde wiederholt,  
um volle Lesbarkeit zu gewährleisten.  
Das Schriftstück erscheint unmittelbar  
nach diesem Hinweis.

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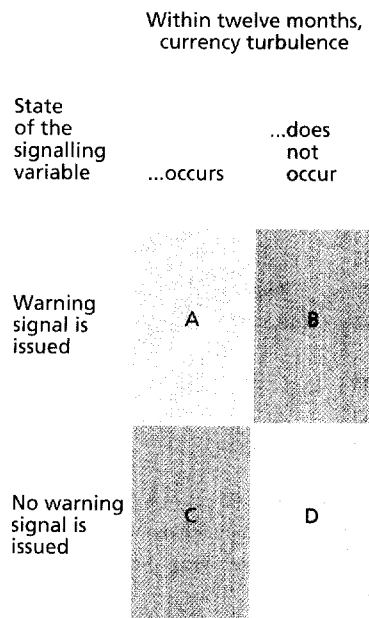
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This can be used as a basis for calculating a measure of the goodness-of-fit of the results, known as the “adjusted noise-to-signal” ratio. This ratio is the quotient of

- the number of false warning signals divided by the number of observations in tranquil periods ( $B/(B+D)$ )
- and the number of correct warning signals divided by the number of observations in the run-up period ( $A/(A+C)$ ):

$$Q = \frac{(B / (B + D))}{(A / (A + C))}$$

This quotient has the following features:

- In the case of a purely random process, it is expected to be 1;
- it approaches 0 the more correct warning signals are sent prior to currency turbulence or the fewer false signals are sent during periods of tranquillity.

This sample yields a value of 0.25, which is clearly less than 1 and therefore shows that the explanatory ability of this approach is rather reliable.

This observation is tempered somewhat, though, when the Asian currency crises are analysed. In the cases of Indonesia, Malaysia and the Philippines, none of the forecast values exceeds the calculated threshold value. The framework presented here would have yielded no clues, based on the data used, for an increased vulnerability of these countries to speculative attacks. For Thailand and South Korea, too, this framework only provides very isolated indications of the then-looming crisis. If the regression is limited to the period prior to 1994 and the resulting relationships are taken as a basis for analysing the behaviour of the indicator during the Asian crisis, the estimated indicators did not

*Applied to  
Asian crises*

provide any clues whatsoever that would point to increased vulnerability to crises.

*Modification of  
the analysis*

Yet this cannot be construed to mean that speculative movements and not fundamental weaknesses are responsible for the Asian currency crises. It is just as possible that the market participants may have learned from past experience and now react more sensitively to macroeconomic disequilibria than, for instance, prior to the outbreak of the international debt crisis at the beginning of the eighties. Technically speaking, that would mean that the threshold value is not to be regarded as a constant – as specified up to now – but would have to be set considerably lower than in the seventies and early eighties.

*Limiting the  
period to the  
nineties*

In order to test this hypothesis, the threshold values used were not calculated based on the distribution of the series over the entire observation period starting in 1970 but were calculated solely from their distribution over the nineties. Following this adjustment, the results improved considerably. The number of correct warning signals prior to the outbreak of currency turbulence rose considerably without impairing the quality of the results in terms of the noise-to-signal ratio. In both test calculations, warning signals are sent out prior to almost all episodes of currency turbulence in the countries under observation during the nineties. Only in the year before the unsuccessful speculative attack against the Argentine peso following the Mexican crisis did the indicator not show an unambiguous crisis warning.

According to those calculations, crisis warnings were given for both Thailand and Malay-

### Signalling behaviour prior to currency turbulence

Item	In-sample 1	Out-of-sample 2
Period between 1990 and 1997		
Number of turbulences	14	14
Percentage signalled	100	92.8
Noise-to-signal ratio	0.216	0.275
Percentage signalled in Asia in 1997	100	100
Entire estimation period		
Number of turbulences	35	35
Percentage signalled	68.6	62.8
Noise-to-signal ratio	0.245	0.276
Percentage signalled in Asia in 1997	40.0	0.0

1 Forecast values based on the estimation over the entire estimation period. — 2 Forecast values based on the estimation up to December 1993.

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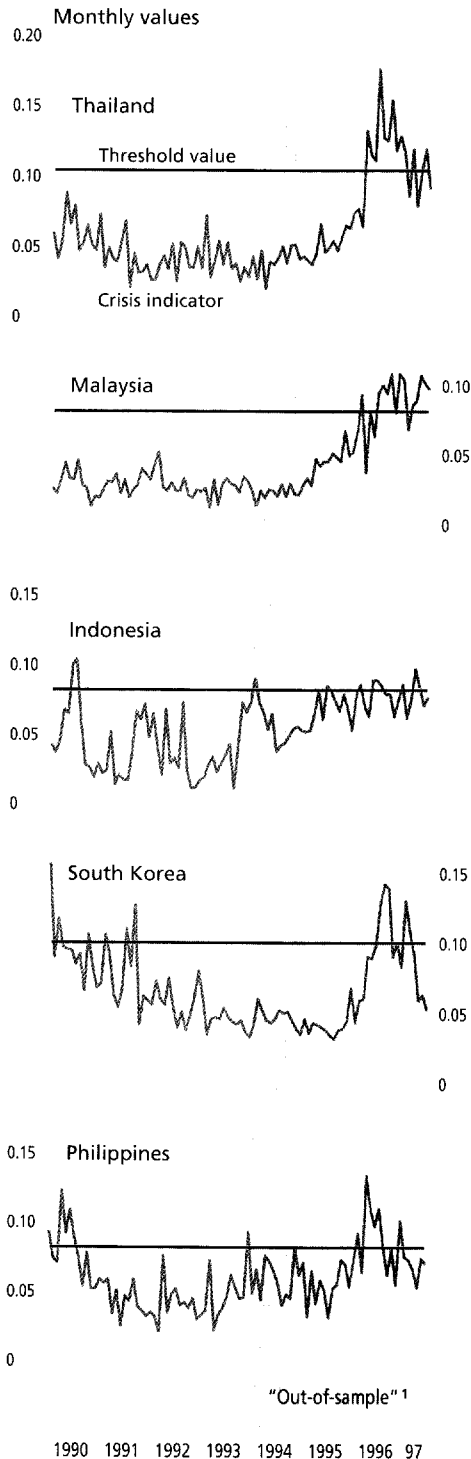
sia in the last 18 months prior to the outbreak of the Thai currency crisis of July 1997, whereas the indicator showed no conspicuous movement between January 1990 and December 1995. In the case of Thailand, the signal values were, on average, more than twice as high as during the period of tranquillity in the nineties, and for Malaysia the corresponding figures were nearly twice as high.

*Clear signals in  
Thailand and  
Malaysia*

Prior to the outbreak of the Thai currency crisis, the crisis indicator considerably exceeded its average value during periods of tranquillity in the other three countries (the Philippines, Indonesia, South Korea) as well, by around 50%. The indicator, having sent at least five concrete warning signals between January 1996 and July 1997, does flag a certain vulnerability of those countries to speculative

*... and signs of  
suspicion in  
other countries*

### Estimated indicator for Asian crisis countries



1 Forecast going beyond the estimation period.

Deutsche Bundesbank

attacks at that time. However, the indicator sent occasional false signals for those countries at the beginning of the nineties, too.

### Summary and conclusions

On balance, it can be concluded that currency crises in the emerging markets studied here are, on the whole, not the accidental results of speculative movements detached from macroeconomic fundamentals; rather, in the run-up to the crises, there were very often macroeconomic misalignments. At any rate, in the past the movements of the macroeconomic variables examined here during the year prior to currency turbulence were markedly different from conditions during periods of tension-free foreign exchange markets. On the whole, this means macroeconomic misalignments are likely to bear at least a significant share of the responsibility for much of the turbulence in the foreign exchange markets of the emerging markets.

*Result: turbulence is not an accident*

However, one must not expect too much of such a crisis indicator. This is especially the case regarding the indicator's suitability as an early warning system for looming currency crises, which some recent studies have set out to demonstrate.<sup>7</sup>

*No reliable early warning system*

Thus, it is hardly possible to predict with sufficient accuracy the point in time when turbulence will break out. The most that can be

<sup>7</sup> See Kaminsky, G. et al. (1998), for a critique and comprehensive analysis of different strategies: Berg, A. and C. Pattillo (1998), Are Currency Crises Predictable? A Test, IMF Working Papers 98/154, Washington, D. C.

achieved is to ascertain a greater degree of vulnerability to speculative attacks. Besides, one must not forget the risk that, in addition to many correct warning signals in the run-up to currency turbulence, false alarms are sounded now and then in periods of tranquility, too. This harbours the danger, which must not be underestimated, that the announcement of such (erroneous) forecasts can trigger otherwise preventable currency crises if it influences market sentiment and encourages market participants to withdraw their funds accordingly.

Furthermore, there is another fundamental problem. If the market participants are given

a basically functioning instrument to predict currency crises, they would use that new information when making their decisions and then change their behaviour. The structural relationships recognised while analysing the past would no longer carry over to the future, thus calling the value of the early warning indicator into question. At any rate, the studies presented here provide some indications that the market participants do not always react at the same constant speed. These reactions have become faster as the financial systems have become more integrated and the markets have become more globalised.



## Development of public sector investment, and its financing

Investment plays a special role within public expenditure. From a budgetary point of view, it differs from consumption spending in that – at least in part – it increases the stock of government assets. From a macroeconomic perspective, specific growth-promoting effects are ascribed to it. Owing to its direct impact on the economic process and its flexibility, capital formation by the public sector is also often regarded as a suitable tool of an anti-cyclical fiscal policy. For both budgetary and macroeconomic reasons, it is often concluded that the debt-financing of public sector investment is acceptable or even desirable. The following article traces the development of public sector investment<sup>1</sup> since the beginning of this decade and, in particular, examines its financing aspects. The article shows, specifically, that by no means all public sector investment increases the future growth potential and that financing it through borrowing can lead to substantial future burdens.

### Development of investment expenditure by the central, regional and local authorities

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After the weight of public sector investment had tended to decline in the eighties, it then rose appreciably for a time following German

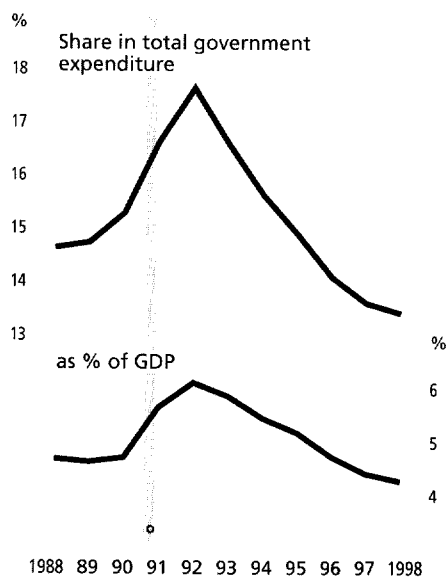
*Overall  
development*

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<sup>1</sup> Unless otherwise stated, excluding the investment of the social security funds, which is only of minor importance.



### Investment expenditure of the central, regional and local authorities\*



\* As defined in the financial statistics. —  
○ From 1991 Germany as a whole.

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unification. In eastern Germany (now referred to as the new Länder) there was an enormous need for public investment, above all in the transportation infrastructure, urban renewal and municipal utilities. In addition, much of the publicly owned housing stock and educational buildings required fundamental renovation. As a result, public sector investment, as defined in the financial statistics (for a detailed definition of public sector investment see the box on page 31), increased very steeply from just over DM 100 billion in 1989 to almost DM 190 billion in 1992. It should be pointed out, however, that a considerable part of this extra spending was neutralised by the sharp rise in construction prices, which itself was partly attributable to government activities. Once the most pressing pent-up demand had been met, however, public sec-

tor investment declined again from 1993. In 1998 its share of both general government expenditure and gross domestic product (GDP) in Germany was below the corresponding levels in 1989 (see chart).

Within public sector investment, the emphasis has shifted from direct capital formation by the central, regional and local authorities to the acquisition of financial assets and measures aimed at encouraging private sector capital formation. Whereas in 1989 expenditure on tangible fixed assets had accounted for as much as 60% of total public sector investment, this figure fell to 54% in 1998. The increased importance of indirect investment (i.e. investment not leading to public sector capital formation) relates mainly to the massive promotion of private sector capital formation in the new Länder, especially in the first few years after unification. Besides expanding investment grants, the Federal Government and the ERP Special Fund, in particular, stepped up their lending programmes significantly.<sup>2</sup> There has also been a substantial increase in spending on the acquisition of participating interests, although this was offset, especially in recent years, by a far higher volume of privatisations undertaken principally by the Federal Government, so

*Breakdown  
by type of  
investment*

<sup>2</sup> Furthermore, government promotion of private sector capital formation in the new Länder also took the form of tax breaks and separate loan programmes launched by publicly owned promotional banks, notably the Reconstruction Loan Corporation (*Kreditanstalt für Wiederaufbau – KfW*) and the German Equalisation Bank (*Deutsche Ausgleichsbank*). However, these measures are not contained in the figures for public sector investment. See Deutsche Bundesbank, *Progress in the adjustment process in eastern Germany and the contribution of economic promotion measures*, Monthly Report, July 1995, pages 37 ff.

## The different definitions of public sector investment in the financial statistics and in the national accounts

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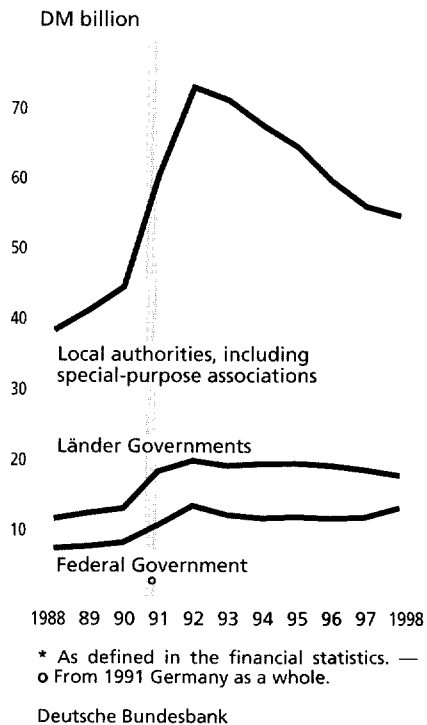
The financial statistics and the national accounts represent two different measuring concepts. Whereas the financial statistics record the transactions entered in the government budget accounts – and hence indicate *inter alia* the extent to which the budget plans have been implemented – the national accounts include public finance as part of the process of generating total output. Owing to these different approaches, government receipts and expenditure are defined in different ways. This applies not least to investment.

In the sectoral breakdown the two concepts differ from one another, in particular, in the treatment of publicly owned enterprises. These figure in the financial statistics if all receipts and expenditure are contained in the budgets of the central, regional and local authorities. By contrast, in the national accounts publicly owned enterprises are allocated to the enterprise sector. The definition of investment used in the financial statistics is very broad. In formal terms it comprises the main groups 7 (construction measures) and 8 (other capital spending and investment promotion measures) of the system of classification by object pursuant to section 10 of the Budget Principles Act. This includes non-military capital formation (construction measures and the purchase of real estate and movable goods, provided that they exceed a threshold value laid down in the respective applicable budgetary law and that they are available over the longer term), investment grants and the acquisition of financial assets (purchase of participating interests and securities, granting of loans, calls on warranty commitments). Depreciation is generally not recorded as part of the financial statistics, which are geared to payment flows, as the consumption of fixed capi-

tal does not entail any actual disbursements of funds. Besides the restructuring and extension of existing plant, repairs are also classified as investment provided that they exceed certain threshold values. The time of entry of the figures is determined by the time at which the transaction is booked in the budget, which largely corresponds to the date of disbursement.

In the national accounts the concept of investment (“gross fixed capital formation”) comprises only expenditure on tangible fixed assets, comprising construction measures and net purchases of land and machinery. The consumption of fixed capital is shown – except in the case of underground and road construction. For the latter a certain percentage of construction expenditure is included in other operating expenditure as repair costs. Investment grants are classified in the national accounts as capital transfers. The acquisition of financial assets is treated not as expenditure that affects the fiscal deficit but rather as financial transactions, that is an exchange between different government financial assets. In the national accounts the time of recording depends on the production principle: machinery and equipment plus buildings are shown as capital formation in line with the state of production progress even if they have not yet been paid for during the period in question. Use of the national accounts seems advantageous, especially for macroeconomic analyses as well as longer-run studies and for international comparisons, as these data series have been recorded over an extended period without any major conceptual changes and are internationally comparable to a large extent.

### Capital formation by level of government \*



that, on balance, the stock of publicly owned participating interests declined substantially.

The decline in expenditure on capital formation – the “core area” of public sector investment – was thus particularly pronounced from 1993 onwards. The main factor responsible was the decrease in capital formation by the local authorities, which in 1998 had fallen by one-quarter compared with the level of 1992. Despite this sharp decline, at DM 55 billion, the local authorities still accounted for almost two-thirds of all public sector capital formation. This means that they are the most important level of government as far as the development of the public infrastructure is concerned.<sup>3</sup> Capital formation by the Länder Governments fell by one-tenth to DM 18 billion. By contrast, the Federal Government last

year regained the level of capital formation of 1992 (just under DM 14 billion) following temporary slight reductions; a major role in this capital formation was played by construction measures connected with the relocation of the seat of government to Berlin (see chart).

One rather “technical” reason for the decline in capital formation is the increased tendency that has been evident in recent years for local authorities to release facilities from their core budgets. These institutions were previously operated as public enterprises whose accounts form an integral part of the accounts of other public entities – especially in the utilities sector. Following their transformation into autonomously operating enterprises still owned by the local authorities or even more radical forms of outsourcing, these institutions, which have high capital formation requirements, no longer appear in the public sector budgets. The portion of the decline attributable to this factor therefore does not imply a neglect of the infrastructure but is merely the result of the recording limits of the financial statistics.<sup>4</sup> However, such outsourcing only explains a fairly small part of the decline of almost 5% per year in capital formation since 1992.

*Causes  
of the decline:  
restructuring  
and ...*

<sup>3</sup> The weight of the local authorities is lessened considerably, however, if the yardstick used is the financing of these tasks. Thus if the capital transfers from other levels of government are deducted from the total investment (including the acquisition of financial assets and investment promotion measures) of a given level of government, the Federal Government is the main financier of public sector investment. Judged by this criterion, the local authorities rank even lower than the Länder Governments.

<sup>4</sup> The private sector financing models for public sector capital formation that have recently been developed (leasing etc.) may have a similar effect.

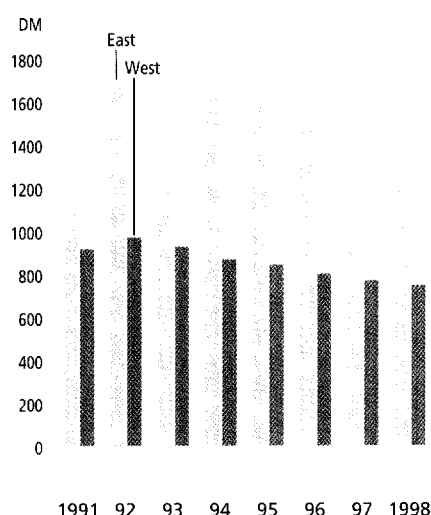
... tight  
situation of  
municipal  
finance

The tight budgetary situation of the local authorities had a bigger impact. Not least the reduced grants they received from the Länder Governments and the trend towards a growing expenditure burden – caused to some extent by the labour market situation – led to a decline in the current account surplus of the municipal budgets, which (after redemptions) is available to the local authorities for financing investment. Thus the local authorities were obliged to respond to this by curbing their capital formation just for reasons of budgetary law. This spending policy was alleviated by the fact that the infrastructure in many west German local authorities has now reached quite a high level, so that new capital spending appears necessary only to a limited degree. This does not mean to say, however, that a protracted decline in the weight of capital formation would be macroeconomically sustainable. In the long term there is a danger of damage by fiscal consolidation if the public infrastructure needed by industry grows obsolete because of neglected capital formation. According to surveys carried out by the *Deutsches Institut für Urbanistik*, the need for replacement investments during the nineties probably amounts to around two-thirds of total municipal capital formation requirements.<sup>5</sup>

Differences  
between old  
and new  
Länder

A decline in expenditure on tangible fixed assets from 1993 can be seen in both the old (i. e. western) and the new Länder. Following initial difficulties in 1991, the *per capita* capital formation of the east German Länder Governments and their local authorities rose sharply in 1992. It exceeded the west German level by more than 70 %. In the years 1993

### Per capita capital formation in the west and east German Länder\*



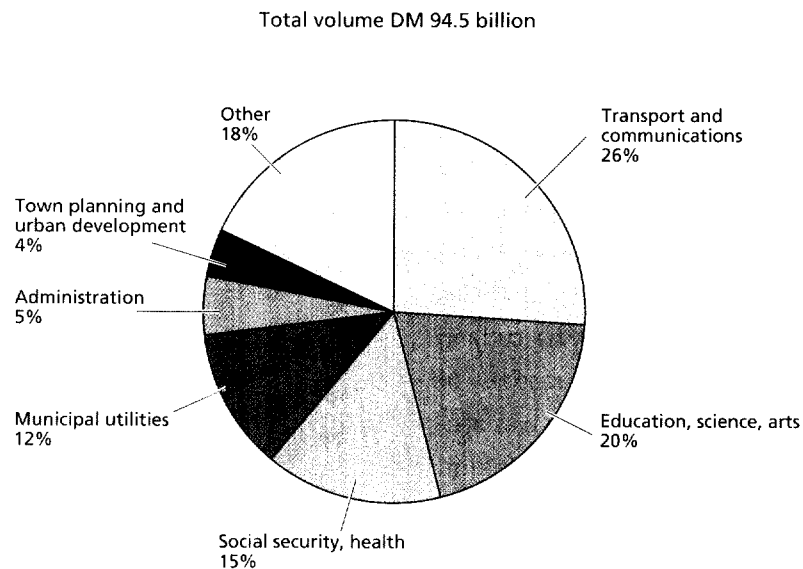
\* As defined in the financial statistics. The figures comprise the capital formation of the Länder Governments and local authorities, excluding special-purpose associations. The west German Länder include Berlin.

Deutsche Bundesbank

and 1994 capital formation in the west declined at a faster rate, with the result that the investment lead of the east German Länder widened to over 90 %. Once the most pressing infrastructural requirements had been met (and some capital formation projects had turned out to be oversized), *per capita* capital formation then fell more sharply in eastern Germany in the subsequent years. Nevertheless, the “investment intensity” in the eastern part of the country remained far higher than in the west, so that the desired process of catching-up in the new Länder persisted (see chart).

<sup>5</sup> See Reidenbach, Michael et al., *Der kommunale Investitionsbedarf in den neunziger Jahren*, Difu-Beiträge zur Stadtforschung, Berlin 1992, page 274 f.

## Breakdown of capital formation by purpose in 1996\*



\* As defined in the financial statistics, including capital formation of the social security funds.

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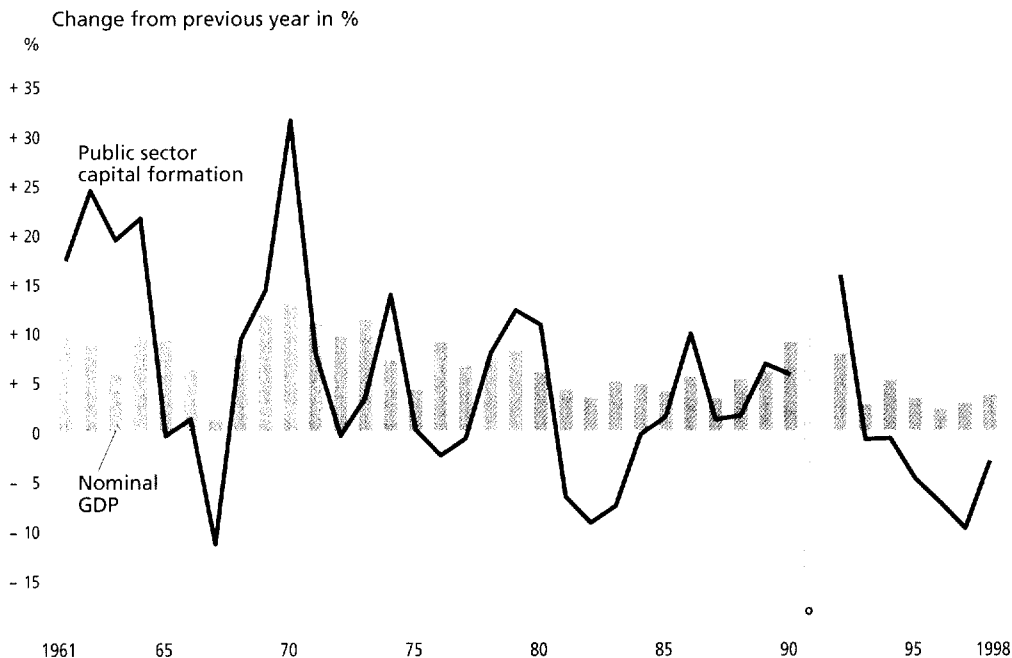
Breakdown  
of capital  
formation by  
purpose

A breakdown of capital formation (including that of the social security funds) by purpose shows that transport and communication – which notably includes public road construction – is by far the largest single item of capital formation. In 1996 (the latest year for which figures are available) it accounted for 26% of total expenditure (compared with almost 29% ten years earlier).<sup>6</sup> Education, science and the arts likewise had a large share in public sector capital formation, at 20%. Schools and colleges played a major role in this. The importance of this segment increased by 4 percentage points during the last ten years; among other things, this reflects the extra capital spending necessitated by the stipulation of guaranteed *kindergarten* places. The sector social security and health, which primarily comprises spending on hos-

pitals and sports amenities, recorded a share of 15% in 1996. Its importance has likewise grown somewhat, with hospitals constituting a focal point of capital formation activity. By contrast, the share of municipal utilities declined distinctly by nearly 4 percentage points to 12%, though this should not be taken to imply a uniform, across-the-board decrease in capital formation in this sector, which includes important responsibilities in the field of environmental protection such as waste management and water treatment. It is more likely that the aforementioned “outsourcing” of certain municipal facilities is felt particularly strongly. Administration accounted for only 5% of public sector capital formation, while

<sup>6</sup> This sector also has a great weight in respect of investment grants. In particular, the extensive capital formation by the railways is largely financed in this way.

### GDP and public sector capital formation \*



\* As defined in the national accounts, including capital formation by the social security funds. — o From 1991 Germany as a whole.

Deutsche Bundesbank

the share of town planning and urban development came to just 4%. The category "Other", which makes up 18%, mainly includes real property not allocatable to specific sectors and the capital formation of public enterprises whose accounts form an integral part of the accounts of other public entities.

Calls are sometimes made to use public sector capital formation as a means of moderating cyclical fluctuations. A longer-run view of the development of public sector capital formation (as defined in the national accounts) shows no such pattern of response. Contrary to the intentions of the Economic Stability and Growth Act of 1967, no anti-cyclical trend is discernible in public sector capital formation on a longer-term view. Instead, the rates of change of public sector gross capital

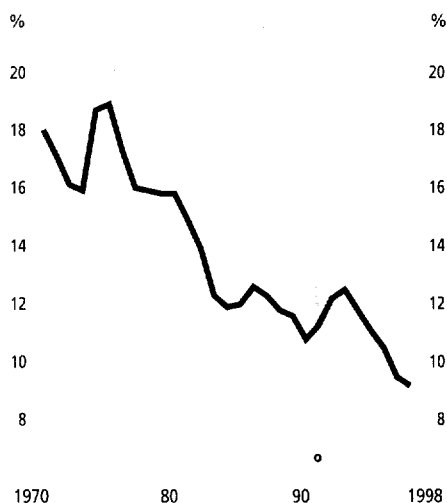
formation correlate positively with those of GDP (see chart). One plausible explanation for this are the above-mentioned financial constraints on the local authorities, which are the foremost public investor. During recessionary phases the tax receipts, the level of which fluctuates sharply in line with the cyclical momentum, do not yield sufficient revenue to finance an increase in capital formation. An additional factor is that the investment grants received from the Länder Governments have not had a steadying influence either.

Public sector capital formation was less susceptible to cyclical swings than that of the enterprise sector, however. Thus the public sector's share in the expenditure on tangible fixed assets of the economy as a whole rose

*Share in aggregate expenditure on tangible fixed assets*

*Capital formation in the course of the business cycle*

Share of aggregate expenditure on tangible fixed assets accounted for by the public sector \*



\* As defined in the national accounts, including respective expenditure by the social security funds. — o From 1991 Germany as a whole.

Deutsche Bundesbank

appreciably during the downswings of 1974-5 and 1992-3. Only during the economic lull of 1980-2 did public sector capital formation decline more sharply than asset formation by enterprises. However, this was partly due to the fact that the ending of a government economic stimulation package ("Programme of Future Investment") launched in 1977 coincided with the start of the downturn.<sup>7</sup> On a longer-run view, however, the weight of the public sector in aggregate capital formation has declined considerably. Whereas public sector expenditure on tangible fixed assets had accounted for around 4½% of GDP in 1970, this fell to less than 2% last year. On the other hand, the share of capital formation accounted for by the enterprise sector remained fairly constant, at almost one-fifth. Consequently, the public sector's share of ag-

gregate expenditure on tangible fixed assets fell by half between 1970 and 1998 from 18% to just over 9% (see chart). As past experience has shown, public sector capital formation is rather problematical as a macroeconomic control variable. Besides the difficulties of getting the timing right, anti-cyclical programmes are *per se* not a suitable antidote if the economic weakness has supply-side causes.

Developments in the main EU member states in the recent past were similar to those in Germany. While the share of public sector gross capital formation in GDP (as defined in the national accounts) had largely stayed constant or even increased from the mid-eighties to the early nineties, it declined markedly thereafter, not least because of the efforts to reduce government deficits. In the European Union the government investment ratio fell by 0.8 percentage point to 2.2% between 1991 and 1998.<sup>8</sup> In Germany it rose up to 1992 in the wake of unification, but subsequently it decreased sharply to 1.8% in 1998, which was among the lowest ratios in the EU. Lower government investment ratios were recorded only by Belgium, Denmark, Sweden and the United Kingdom (in the UK an important role was played by the growth of private sector financing of capital formation for the public sector). Government investment in the south European states Spain, Portugal and Greece shows fairly strong

*Developments  
in the EU*

<sup>7</sup> The handling of this programme graphically illustrates the difficulties of correctly timing anti-cyclical fiscal policy measures, for the capital formation programme had an impact on demand just as the share of private sector capital formation in GDP was also rising.

<sup>8</sup> The figures for 1998 are European Commission estimates.

shares. These countries receive large grants from the European Structural Fund and the Cohesion Fund to improve their less well developed infrastructure.

### The financing of public sector investment

*Original rule of project-related debt-financing ...*

Both in public finance literature and in budgetary practice, investment was treated very early on as a separate category which, as "expenditure for productive purposes", has an impact that extends beyond the time frame of the current budget and which helps to increase the government capital stock. This led to the conclusion that such expenditure could legitimately be debt-financed – in contrast to "ordinary" public expenditure, which should be financed out of current revenue. In the original wording of the relevant clause in the present-day Constitution (Article 115), which was largely taken over from the Weimar Constitution, it was stipulated that credit may be procured only to meet exceptional needs and, as a rule, only for expenditure for productive purposes.

*... was supplemented by a more situation-related rule*

With the spread of anti-cyclical fiscal policy concepts, as mirrored in the Economic Stability and Growth Act, this traditional project-related funding principle was supplemented by a situation-related approach, however. The economic policy imperative of linking budgetary policy to the requirements of overall economic equilibrium was given the force of constitutional law in Article 109. The borrowing rule contained in Article 115 was adjusted at the same time. Although the Federal Government's borrowing may not exceed total in-

### Gross capital formation by the public sector

as % of GDP

Country	1991	1997	1998 e
Austria	3.2	2.0	2.0
Belgium	1.3	1.4	1.4
Denmark	1.5	1.9	1.7
Finland	3.7	3.1	2.9
France	3.4	2.8	2.8
Germany	2.6	1.9	1.8
Greece	4.8	5.2	3.7
Ireland	2.1	2.4	2.5
Italy	3.3	2.3	2.9
Luxembourg	4.9	4.7	4.4
Netherlands	2.7	2.5	2.6
Portugal	3.3	4.3	4.1
Spain	4.8	3.0	3.4
Sweden	3.0	1.8	1.1
United Kingdom	2.4	1.3	1.2
EU 15	3.0	2.2	2.2

Source: European Commission.

Deutsche Bundesbank

vestment as a rule, this ceiling may be exceeded in case of "a disturbance of the overall economic equilibrium". Article 115 relates solely to the Federal Government, but the Länder Governments have included similar provisions in their constituting laws or budget regulations. Only in the case of the local authorities is borrowing strictly tied to the implementation of investment measures, as well as being subject to additional budgetary law restrictions.

The permissibility of borrowing up to the level of total investment enshrined in Article 115 of the Constitution is ultimately substantiated by the argument of intergenerational burden-sharing, according to which investment provides public capital goods that will create welfare in future periods. At the same time the

*Arguments for debt-financing of investment and ...*



growth of the production potential can be promoted and hence the income base of future generations broadened. According to this view, investment, in contrast to consumption spending, generates future income streams both for the government and its citizens. It is therefore considered justifiable to finance such spending by incurring debt, which is serviced by tax payments of future generations as the "fee" for using the public capital goods thus created ("pay as you use"). Servicing the debt (so the argument goes) will be made easier by the enlarged income base. These intergenerational and macroeconomic considerations are supplemented by arguments based on the long-term sustainability of budgetary policy. Analogously to private sector financial analysis, the fiscal policy trend is regarded as sustainable if the requirement of net value neutrality is observed over time, that is if new borrowing is offset by an equal value of assets created through net capital formation.

This substantiation for the debt-financing of public sector investment is not completely valid, however. Even the assertion that an intertemporal equalisation of burdens between different generations can only be achieved by such financing is questionable. Various concepts can be found in the literature for the definition of intergenerational equivalence. For example, an unchanging net burden on different generations over time could be deemed to be met if the relationship between the financing costs of public sector investment per inhabitant and the return on the government capital stock per inhabitant is constant in all periods. In the case of

tax-financing, the costs include the expenditure incurred by the investment and, in the case of debt-financing, the interest payments – which likewise have to be funded by tax receipts – on the government debt incurred for the purpose of creating the capital stock. If a given economy has reached the steady state of long-term growth equilibrium, the specified condition can be met for both financing alternatives.

In the long run, however, the tax burden ensuing from debt-financing is greater than that caused by tax-financing (see box on page 39). But this only holds true in the steady state in which the government capital stock grows at the same rate as national income. Whenever a new or additional investment requirement arises and public sector capital formation accelerates in the short run, the burden on the present-day generation during the adjustment period to a new steady-state growth equilibrium is greater in the case of tax-financing than for debt-financing. The burden on the present-day generation during the adjustment period is likewise greater if there is a switch to increased tax-financing. Hence choosing between the two financing alternatives implies assessing how the welfare of future generations is to be valued in relation to the current generation. Another point to bear in mind is that the fiscal burden on future generations will be greatly intensified anyway by demographic trends, in particular.<sup>9</sup> In order to limit the overall future burdens, therefore, it would make sense to resort more

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<sup>9</sup> See Deutsche Bundesbank, *The fiscal burden on future generations – an analysis using generational accounting*, Monthly Report, November 1997, pages 17 ff.

## Financing of public sector investment and the burdens to be borne by different generations

If public sector investment is debt-financed, taxes must be sufficiently high over the long term to ensure that the interest payments can be made. On the other hand, if it is funded by taxation, the taxes must be able to finance current investment by the public sector on a long-term basis. Irrespective of the method used for financing public sector investment, a uniform inter-generational relationship can be achieved in the long run under certain conditions between the tax burden arising from the investment or the resulting debt service, on the one hand, and the return on the public investment, on the other. If it is assumed, however, that *per capita* public sector investment requirements remain constant over the long term, the long-run tax burden is higher under debt-financing than in the case of tax-financing.

The government must finance the public sector investment  $K_{t+1}^o - K_t^o$  and the interest payments on the government debt  $rB_t$  during period  $t$  out of the funds borrowed in period  $t$  (the change in the government debt  $B_{t+1} - B_t$ ) and the tax receipts  $T_t$ . Hence the budget constraint for the government (ignoring other government expenditure) is given by:

$$(1) \quad T_t + (B_{t+1} - B_t) = (K_{t+1}^o - K_t^o) + rB_t.$$

The public sector capital earns a return  $uK_t^o$  which flows to the private sector. A constant rate of return  $u$  and a constant growth of the population and of labour productivity (technical progress) at the rates  $n$  and  $a$  are assumed. Then in the long run the interest rate  $r$  is constant, the national income grows at the rate  $g = n+a$ , and all *per capita* variables grow at the rate of technical progress – this characterises the equilibrium growth of the economy over the long term ("steady state"). Thus the steady-state budget constraint can be approximated as follows:

$$(2) \quad \tau_t = (r - g)b_t + gk_t^o$$

1 Equation (2) can be interpreted as follows. The *per capita* tax burden required over the long term is given by the sum of the primary balance  $(r-g)b_t$  and *per capita* net investment by the public sector  $gk_t^o$ . — 2 This statement holds true only under steady-state conditions. If, by contrast, we consider the case of a young economy which still has to accumulate its equilibrium capital stock, or if higher net in-

vestment is required in the short term, so that the rate of growth of  $k_t^o$  increases, the statement no longer holds true. This also applies to the case of a change in the financing structure. — 3  $\Delta^K$  and  $\Delta^{St}$  denote the absolute changes arising from pure debt-financing and pure tax-financing, respectively. The simple symbol  $\Delta$  is used for changes that do not differ in respect of the financing method.

where  $b_t$ ,  $k_t^o$  and  $\tau_t$  stand for the debt level, the government capital stock and the tax burden – all *per capita*.<sup>1</sup> As  $k_t^o$  and  $\tau_t$  grow at the same rate under steady-state conditions, the relationship between the tax burden and the return on public sector capital  $\tau_t/(uk_t^o)$  must also remain constant, irrespective of the way in which public sector capital formation is financed.<sup>2</sup>

$$(3) \quad \Delta\tau_t = b_t\Delta r + r\Delta b_t - g\Delta b_t + g\Delta k_t^o$$

The change in the steady-state tax burden ensuing from the change in the endogenous and exogenous variables can be approximated using the total differential of (2):

$$(4) \quad \Delta^K\tau_t = b_t\Delta^K r + r\Delta k_t^o.$$

If investment is exclusively debt-financed,  $\Delta b_t = \Delta k_t^o$  holds, so that (3) can be rewritten as<sup>3</sup>

$$(5) \quad \Delta^{St}\tau_t = b_t\Delta^{St} r + g\Delta k_t^o.$$

The difference between (4) and (5) is the difference between the respective burden of pure debt-financing and pure tax-financing:

$$(6) \quad \Delta^K\tau_t - \Delta^{St}\tau_t = b_t(\Delta^K r - \Delta^{St} r) + (r - g)\Delta k_t^o.$$

It can be taken as read that in the long term the interest rate  $r$  lies above the rate of growth of national income  $g$ . Over and above this, the capital market is as a rule additionally burdened in the case of pure debt-financing, so that in this case the new steady-state interest rate is greater than under pure tax-financing, with the result that  $\Delta^K r > \Delta^{St} r$ . Hence the difference in (6) is greater than zero. The long-run tax burden is higher in the case of pure debt-financing than in the case of pure tax-financing.

to tax-financing for the purpose of funding investment.

*Growth effect  
often lacking*

Regarding the growth effect of public sector investment, which might justify the use of debt-financing, the picture is likewise mixed. The very broad definition of investment given in Article 115 of the Constitution (which corresponds to the definition used in the financial statistics, as shown in the box on page 31) contains components for which growth-stimulating effects are either questionable or even non-existent. This applies, for example, to the acquisition of financial assets in the form of participating interests.<sup>10</sup> Investment promotion measures such as grants and low-interest loans do nothing to promote growth to the extent that they merely lead to "profit-taking" effects. If the financial aid is more of a subsidy, it could actually impede growth because it ties up both public and private sector capital that could be put to more profitable use elsewhere.

Similarly, capital formation does not always increase the growth potential. Growth is promoted only by net capital formation but not by that part of gross capital formation that is accounted for by replacement investments and which merely serves to maintain the existing level of production of the government capital stock. Furthermore, the latter can be divided into productive assets and consumption-related assets (which include such things as public recreation and sports amenities and nursing homes for old people). Although investing in the latter is an integral part of the provision of basic public services,

it does little to improve the prospects for macroeconomic growth.

Certain reservations must be made even in the case of public infrastructure capital formation. Thus capital formation for the sake of environmental protection, notwithstanding its necessity, is less "productive" in the customary sense. Moreover, government capital formation includes capital goods that could be more efficiently provided and maintained by private suppliers. In general it can be said that public sector capital goods are more likely to promote growth if they complement private sector capital formation. Their influence is thus dependent on the specific overall economic framework. Studies on the effect of public infrastructure capital formation in Germany during the past years come to relatively divergent conclusions. On balance, however, such investment is said to have a productivity enhancing tendency (see box on page 41).

If by no means all investment – especially as widely defined under Article 115 of the Constitution – promotes growth, it is also a fact, on the other hand, that part of the expenditure assigned to government consumption has productivity-boosting effects. This applies, in particular, to spending on education and science, which to some extent may be regarded as an investment in human capital. Spending on health care has a similarly mixed character. On the one hand, it maintains and promotes the efficiency of the factor labour. On the other hand, the entire population's right to a high level of medical treatment is

*Consumption  
spending may  
also promote  
growth*

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<sup>10</sup> In fact, it is conceivable that efficiency could be increased through disinvestment by way of privatisations.

## Studies on the productivity effects of public infrastructure capital formation

Studies on the productivity effects of public infrastructure capital formation examine the relationship between the creation of public infrastructure facilities and the costs or marginal yields to enterprises in temporal, sectoral and regional comparisons. In methodological terms a distinction may be made between pure time series studies and panel analyses using cross-sectional and longitudinal data.

In a purely longitudinal study, Kitterer/Schlag (1995) examine the effect of public infrastructure capital formation on the costs (the sum of capital cost and labour cost) in the private enterprise sector in western Germany. Using an error correction model, they estimate that an increase in public sector capital formation entails no noticeable lowering of costs in the enterprise sector.

More favourable overall results are obtained by panel studies in which the private producing sector is disaggregated by region or branch of industry, although there are some considerable differences between the cross-sectional units. Thus the panel study by Conrad/Seitz (1992), which is broken down into four sectors, gives values for the cost elasticities of between + 0.02 for the service sector and - 0.36 for the manufacturing sector. In the panel study by Seitz/Licht (1995), which is broken down by Länder, the largest cost elasticities appear in Bavaria, Baden-Württemberg and North Rhine-Westphalia (with values of -0.35) and the smallest in the city-states Hamburg (-0.10) and Bremen (-0.02). In their panel study, which is broken down by west German Länder, Kellermann/Schlag (1998) conclude that an increase of 1% in public infrastructure capital formation increases the value added of the private sector in the old Länder by 0.2%, with only a small variance between the individual Länder.

The present state of the discussion does not permit a definitive assessment to be made of the scale of the productivity effects of public infrastructure capital formation. The major differences in some cases in the estimated cost and output elasticities between the cross-section units in panel designs, on the one hand, and the negligible effects in pure longitudinal studies, on the other hand, suggest that the estimations should be interpreted with caution. Even so, the results indicate that public infrastructure capital formation makes a contribution – albeit a limited one – to value creation and cost reduction in the private sector.

### Literature:

Conrad, K./H. Seitz (1992): The "Public Capital Hypothesis". The Case of Germany, *Recherches Economiques de Louvain* 58, pages 1–19.

Kellermann, K./C.-H. Schlag (1998): Produktivitäts- und Infrastruktureffekte öffentlicher Sachinvestitionen, *Kredit und Kapital* 31 (3), pages 315–342.

Kitterer, W./C.-H. Schlag (1995): Sind öffentliche Investitionen produktiv? Eine empirische Analyse für die Bundesrepublik Deutschland, *Finanzarchiv* 52, pages 460–477.

Seitz, H. (1995): Public Infrastructure Capital Employment and Private Capital Formation, *OECD Job Study: Investment, Productivity and Employment*, Paris, pages 123–154.

Seitz, H./G. Licht (1995): The Impact of Public Infrastructure Capital on Regional Manufacturing Production Cost, *Regional Studies* 29 (3), pages 231–240.

the consequence of political considerations concerning income distribution.

*Statutory  
financing rule  
barely operable*

Given this complex of problems, it is very difficult to translate the concept of coupling borrowing to the level of investment into a statutory financing rule. Moreover, from a macroeconomic point of view the implications of the two alternatives tax-financing or debt-financing for the decisions of enterprises and households should be considered as well. It needs to be borne in mind, in particular, that government borrowing may lead to rising interest rates, with the result that more interest-sensitive private sector capital formation is crowded out.

*Budget policy  
justification  
likewise  
inadequate*

The budget policy argument that financing investment through borrowing leaves the stock of government net assets intact, and that it consequently has no effect on the long-term sustainability of public finance, is rather unconvincing, not least in the light of current budgetary law. Thus borrowing is not counterbalanced by the acquisition of assets "of equal value", as the stock of government assets have no, or only a minimal, realisable market value owing to the specialised nature of their use. One also needs to take into account the follow-up costs, in the form of increased personnel and other operating expenses, which limit the government's future room for manoeuvre. A quantifiable rate of return on the individual investments is virtually impossible to calculate with any accuracy, nor does it have a direct impact on the budget – in contrast to the interest charges ensuing from the debt-financing of investment. Of the indirect forms of investment,

the quantitatively very significant investment grants result in no asset acquisition at all by the government. The rate of return on loans granted by the public sector is often lower than the market rate of interest; moreover, a complete recovery of the capital may not be expected in all cases.

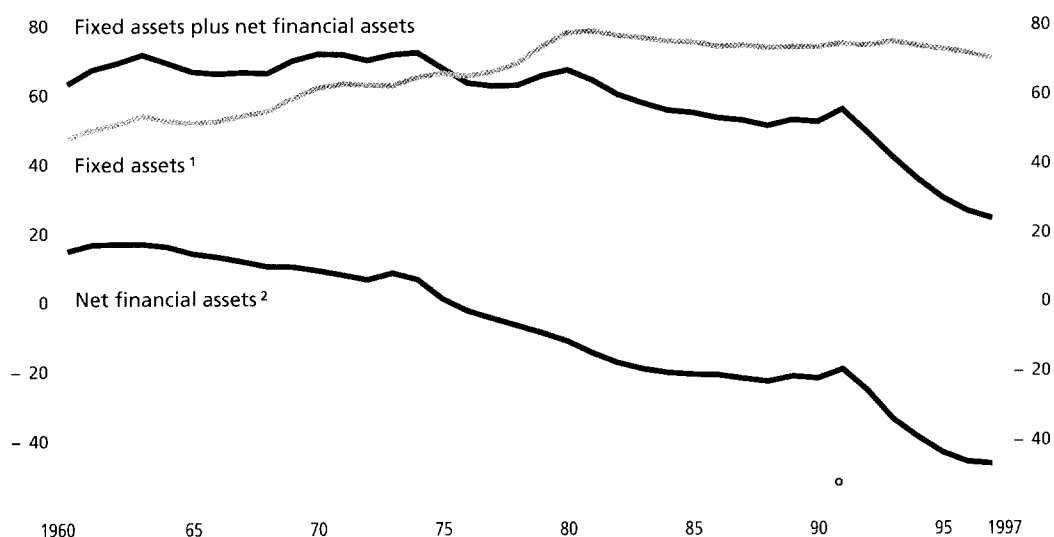
Finally, the concept of maintaining the net government capital stock would require subtracting both the imputed cost of consumption of fixed capital and the disposal of fixed and financial assets from gross capital formation. This is graphically illustrated by the massive privatisation proceeds that have accrued during the past few years. The amount earmarked for investment in the 1999 draft Federal budget, in line with the provisions of Article 115 of the Constitution, marginally exceeds the budgeted net borrowing of just over DM 56 billion. But if disposals of fixed assets and participating interests as well as loan repayments are taken into account, the increase in the capital stock would come to not quite DM 24 billion – even without allowing for the consumption of fixed capital. In other words, consumption spending has been financed on a large scale by a decline in the Federal Government's net assets.

The same applies very much to the practice in past years and to other levels of government. In a longer-run comparison, therefore, government borrowing has for some time no longer been accompanied by a corresponding growth of the government capital stock. The chart on page 43 shows the trends in fixed assets and net financial assets (as the balance of the financial claims and liabilities of the

*Negative trend  
in net assets*

## Fixed assets and net financial assets of the public sector 1960 - 1997

as % of GDP



o From 1991 Germany as a whole. — 1 Reproducible fixed assets of the public sector at year-end recorded at replacement cost. Underground and road construction assets are gross, otherwise assets are adjusted for consumption of fixed capital. Source: Federal Statistical Office, Subject-Matter Series 18, Series 1.3. — 2 Results of the financial accounts of the Deutsche Bundesbank.

Deutsche Bundesbank

government sector vis-à-vis other sectors) in the Federal Republic of Germany between 1960 and 1997. It shows that the ratio of fixed assets to GDP increased up to the beginning of the eighties and thereafter tended to decline slightly.<sup>11</sup> The ratio of net financial assets to GDP has been falling almost from the outset. Since the mid-seventies the stock of net financial assets has been used up and superseded by the accumulation of financial liabilities. If the sum of tangible fixed assets and net financial assets is taken as a rough indication of government net assets,<sup>12</sup> this figure stagnated in relation to GDP from 1960 to the mid-seventies. Since that time the ratio has fallen sharply. In fact, the provisions of Article 115 of the Constitution, and the similar regulations at the Länder Government level, have been unable to prevent an abso-

lute decrease in government net assets during the past few years.

Over and above the conceptual misgivings about pegging borrowing to the level of investment, Article 115 of the Constitution also has certain institutional shortcomings which further weaken its ability to promote fiscal discipline and which have likewise contributed to the depletion of the government capital stock described above. For example, the

*Other shortcomings of Article 115 of the Constitution*

<sup>11</sup> These figures, taken from the national accounts, probably overstate the weight of government fixed assets as no consumption of fixed capital is calculated on underground and road construction assets.

<sup>12</sup> At present no well substantiated accounting concept exists for calculating the total net assets of the public sector in Germany as a whole owing to diverse recording and valuation problems. Hence the indicator used here cannot provide exact figures for government net assets; nevertheless, it probably reflects the longer-term trend accurately.

provisions of the Article relate only to the net borrowing requirement as projected in the budget and not to the actual figure incurred during the year.<sup>13</sup> Moreover, the rule applies solely to the Federal budget itself and not to the off-budget special funds through which, for example, a large part of the borrowing to finance German unification was handled. Finally, the exception clause in the event of a disturbance of the overall economic equilibrium is asymmetric in that the authorisation to exceed the prescribed limit is not counter-balanced by any compensatory requirement when the economy is buoyant. After all, in ten of the years since 1970 the net borrowing figure given in the Federal budget was higher, by virtue of invoking the exception clause, than the budgeted volume of investment.

### Fiscal policy consequences

The fact that the growth effects of public sector investment cannot be estimated unambiguously and that the corresponding budgetary rules appear problematical does not imply that such spending is unimportant. Replacement investments and investment in environmental protection, as well as consumption-related assets, satisfy a somewhat pressing need and create important conditions for balanced overall economic development, not least by enhancing the country's attractiveness as a business location.<sup>14</sup>

However, the pressing need for investment and the appropriate method of financing it are two separate issues. It is true that, in principle, the debt-financing of investment is

more justifiable than borrowing for consumption purposes. For the reasons explained above, however, it is difficult to regard the debt-financing of public sector investment as being generally unproblematical, especially if such investment is so broadly defined as it is in Article 115 of the Constitution. Furthermore, such debt-financing rules should not be considered in isolation from the underlying fiscal policy situation. Whereas in 1970 the gross indebtedness of the west German public sector was less than 20% of GDP and interest payments amounted to just 1% of GDP, by 1998 the government debt had increased to over 60% of GDP, while interest payments totalled almost 4% of GDP. Given this situation, which prevails to a greater or lesser extent in the other EU states, too, the European Commission – while in favour of higher public sector investment in the member states – is urging that it should be funded by restructuring government expenditure. It considers that, by contrast, the “golden rule” of debt-financing of investment offers no guarantee for a sustainable public finance situation and a control over the government debt level.<sup>15</sup>

In the Stability and Growth Pact, which was agreed as a supporting measure for the launch of European monetary union, the

*Debt-financing of investment would jeopardise goals of Stability and Growth Pact*

<sup>13</sup> The Federal budget plans for 1993 and 1996, for example, envisaged that borrowing would keep within the investment limit, whereas in actual fact the amount borrowed exceeded that limit when the budget was implemented.

<sup>14</sup> It must also be said, though, that some of these goods could be provided more efficiently by the private sector.

<sup>15</sup> See COM(98) 682, Commission statement on public sector investment as part of overall economic policy strategy, of December 2, 1998.

member states are pledged to achieving a medium-term budgetary position that is "close to balance or in surplus". This presupposes that the "norm" for new borrowing – unlike that provided for under Article 115 of the Constitution – does not correspond to the level of investment but instead is close to zero. This more ambitious objective is designed to enable public authorities to cope with cyclically induced additional burdens without exceeding the current deficit limit of 3% of GDP stipulated by the Maastricht Treaty. It also accords with the need to reduce the currently excessive debt levels and interest charges in relation to GDP. Above all, it is necessary to take due account of the long-term

burdens on public finance that are likely to ensue, in particular, from demographic developments. Thus the strongly growing burden on future generations could be limited by the formation of a government capital stock that is not debt-financed. Attempts that have been evident recently to exempt investment from the objective of achieving a balanced budget in the medium term cannot be adequately justified by budget and growth policy considerations. Instead, they would dilute the aims of the Stability and Growth Pact and make it harder to take the steps necessary in order to put public finance in the member states of the European economic and monetary union lastingly on a sound footing.



## Investment of the central, regional and local authorities

DM billion

	1988	1989	1990	1991 1	1992	1993	1994	1995	1996	1997 p	1998 pe
I. As defined in the financial statistics											
1. Capital formation											
Federal Government	7.68	7.99	8.53	11.01	13.78	12.48	12.02	12.23	11.99	12.17	13.54
Länder Governments	11.92	12.75	13.40	18.68	20.21	19.50	19.78	19.86	19.54	18.92	18.16
Local authorities	38.63	41.49	44.81	60.89	73.31	71.48	67.88	64.84	59.96	56.30	54.96
Total	58.23	62.23	66.73	90.58	107.30	103.45	99.68	96.93	91.49	87.40	86.67
2. Indirect investment											
a) Loans											
Federal Government	6.10	6.19	7.49	6.93	7.17	11.12	15.32	14.11	10.16	11.29	6.74
Länder Governments	5.84	5.30	5.18	5.57	6.33	6.47	6.35	6.23	5.74	5.16	4.50
Local authorities	0.97	1.06	1.49	1.60	1.87	1.81	1.77	1.52	1.46	1.17	0.93
Special funds	3.56	3.73	6.50	11.44	11.79	9.60	11.30	10.62	9.47	10.81	13.40
Total	16.47	16.27	20.66	25.53	27.17	28.99	34.74	32.49	26.84	28.43	25.56
b) Grants											
Federal Government	9.76	9.76	10.27	17.38	21.86	20.21	13.88	14.20	11.59	9.87	14.01
Länder Governments	8.47	9.31	10.76	20.04	22.64	22.93	23.92	24.98	25.54	25.09	23.66
Local authorities	2.33	2.57	2.72	3.31	3.80	4.37	4.66	4.78	4.88	4.74	4.48
Total	20.56	21.63	23.74	40.73	48.30	47.51	42.45	43.95	42.01	39.70	42.15
c) Participating interests											
Federal Government	1.24	1.33	1.29	1.69	1.64	1.32	1.95	1.42	1.49	1.41	1.33
Länder Governments	0.79	0.80	0.98	1.89	1.90	1.90	0.91	1.54	3.75	1.66	3.27
Local authorities	1.37	1.11	1.23	1.43	2.36	2.47	2.17	2.61	1.94	1.80	2.20
Special funds	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00
Total	3.40	3.24	3.51	5.02	5.90	5.94	5.02	5.57	7.18	4.86	6.80
d) Total indirect investment											
Federal Government	17.10	17.28	19.04	26.00	30.67	32.64	31.15	29.74	23.25	22.57	22.08
Länder Governments	15.10	15.41	16.92	27.50	30.88	31.30	31.17	32.75	35.04	31.91	31.43
Local authorities	4.67	4.73	5.44	6.34	8.03	8.65	8.60	8.90	8.28	7.71	7.61
Special funds	3.56	3.73	6.50	11.44	11.79	9.85	11.30	10.62	9.47	10.81	13.40
Total	40.42	41.14	47.91	71.28	81.37	82.44	82.21	82.01	76.04	72.99	74.51
3. Total investment											
Federal Government	24.78	25.27	27.57	37.01	44.45	45.12	43.17	41.96	35.24	34.74	35.63
Länder Governments	27.02	28.16	30.32	46.18	51.09	50.80	50.95	52.60	54.57	50.84	49.58
Local authorities	43.29	46.22	50.24	67.23	81.34	80.13	76.48	73.75	68.24	64.01	62.57
Special funds	3.56	3.73	6.50	11.44	11.79	9.85	11.30	10.62	9.47	10.81	13.40
Total	98.65	103.37	114.64	161.86	188.67	185.89	181.90	178.94	167.53	160.39	161.18
II. As defined in the national accounts											
Gross capital formation	47.82	51.42	54.43	73.23	85.03	84.43	84.11	79.05	74.36	67.79	65.99
Consumption of fixed capital	14.10	14.94	16.00	19.30	21.05	22.59	23.53	24.48	25.06	25.54	25.97
Net capital formation	33.72	36.48	38.43	53.93	63.98	61.84	60.58	54.57	49.30	42.25	40.02

1 From 1991 including eastern Germany.

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## Taylor interest rate and Monetary Conditions Index

Two monetary policy indicators which have received a fairly large amount of attention in the nineties are the Taylor interest rate and the Monetary Conditions Index (MCI). The Taylor rule, which was constructed by the US economist John Taylor, makes the short-term interest rate dependent on current inflationary and cyclical developments. The MCI, which was developed by the Bank of Canada, combines changes in the short-term real interest rate and in the real effective exchange rate in a single variable. This is intended to take account of the role of both variables in the monetary policy transmission process. Both the Taylor interest rate and the MCI are also used by outside monetary policy analysts to assess the policy of the Eurosystem (and were used formerly to assess that of the Bundesbank). Moreover, they are recommended for use by the central banks themselves. One likely main reason for their popularity is that they appear at first glance to be simple and easy to understand. However, the following comments reveal that both indicators have some shortcomings. These are due, firstly, to uncertainties in their computation and, secondly, to weaknesses in their design. The Taylor interest rate and the MCI are therefore suitable, at best, as broad reference variables and have to be interpreted with due caution.

## The role of monetary policy indicators

*Necessity of  
monetary policy  
indicators*

Long and variable time lags and the fact that the structural relationships in the economy are not fully known mean that central banks are unable to exercise direct and sufficiently precise control over either the overall price level or other possible ultimate target variables. In order to assess the current monetary situation, central banks therefore require, firstly, variables which contain information on the future development of the ultimate target variable(s) (leading indicators). Secondly, they need variables which make it possible to assess the impact of their own policy (policy indicators). Some indicators – such as the money stock M3 up to the end of 1998 in Germany – can perform both functions simultaneously in a satisfactory manner, whereas others are not able to do so at all, or only with regard to one function.

*The lack of an  
ideal indicator  
in practice...*

An ideal indicator, which invariably gives a reliable indication of the future development of the ultimate target variable(s) and gives clear-cut information on the course of monetary policy, is not available in practice. As a rule, central banks therefore make use of a broad range of indicators. This does not preclude certain indicators being assigned a prominent role because they have particularly good indicator properties. The broadly defined monetary aggregate M3, for example, has a special position within the monetary policy strategy of the Eurosystem. The fact that there is no variable which adequately reflects all the relevant information leads to the constant development of new indicators. In the nineties, two concepts, in particular, have been given a certain amount of attention by a number of central banks,

*... encourages  
the develop-  
ment of new  
concepts*

financial market participants and international organisations: the Taylor interest rate and the Monetary Conditions Index (MCI).

## The Taylor interest rate

The monetary policy rule presented by John Taylor in 1993 postulates that the central bank should base the setting of the short-term interest rate on the current situation with regard to inflation and the business cycle:<sup>1</sup>

*Construction of  
the Taylor  
interest rate*

Taylor interest rate = real equilibrium interest rate  
+ (expected) inflation rate  
+  $a_p$  · output gap  
+  $a_i$  · inflation gap.

The output gap is the relative difference between the actual and the potential output level, the inflation gap is the difference between the measured inflation rate and the rate of inflation which the central bank aims for. Both variables are included in the Taylor interest rate with a positive weighting of  $a_p$  and  $a_i$ , respectively. This reflects the idea that an excessive price rise and an overutilisation of production capacity should be counteracted by a higher short-term interest rate and vice versa. Accordingly, given full use of capacity and realisation of the envisaged rate of

<sup>1</sup> Strictly speaking, a monetary policy rule is understood to mean a formula-like advance determination of monetary policy. Taylor himself, however, sees the potential application of his "rule" more as a guideline and thus as a (prominent) indicator. The character of an indicator variable tends to be assigned to the Taylor interest rate in practical applications, too. As in the economic science literature, frequent reference is made to the "Taylor rule" in the present article. However, the comments made apply equally to the use of the Taylor interest rate as a monetary policy indicator.

inflation, the “real equilibrium interest rate” is the level of the real rate of interest at which the long-term equilibrium is not changed by monetary policy. The (expected) inflation rate is added to the sum of these three components to make the Taylor interest rate comparable with the relevant nominal interest rate.

*Taylor achieves quite good approximation of the US short-term interest rate...*

In his original paper, Taylor applied the concept subsequently named after him to US monetary policy from 1987 to 1992.<sup>2</sup> For his deliberately simple calculation, he selected the following approximations of the non-observable variables: he substituted the realised inflation rate of the preceding four quarters for the expected inflation rate over the same period, assumed a 2.2% annual rate of growth for the production potential (which corresponds to the trend growth of real income in the United States between 1984 and 1992), set the equilibrium real short-term rate of interest at 2%<sup>3</sup>, and calculated the inflation gap as the difference between the current inflation rate and an inflation target which is a constant 2%. He gave equally high weighting to the inflation and output gaps, at 0.5 each. Measured by its simplicity, the Taylor interest rate thus calculated captures the behaviour of the US Federal Funds Rate in the period reviewed quite well.

*... and proposes that the Euro-system follows his rule*

Taylor backs up his suggestion that this concept be used as a guideline for monetary policy in general – and, possibly with different weights, for the monetary policy of the Eurosystem in particular<sup>4</sup> – with the fact that his rule has proved itself in simulation studies (ranging over a large number of model economies) to be a good monetary policy guideline for stabilising

inflation and output.<sup>5</sup> According to Taylor, although somewhat better monetary policy rules could be found for individual model economies, previous papers indicated that these (in most cases, more complicated) rules are inferior to those of the Taylor-type even under slightly changed assumptions. The robustness of a monetary policy rule in respect of changed model assumptions is important as the “true” structure of the economy is unknown.<sup>6</sup> According to Taylor, the risk of following an incorrect monetary policy rule, which is the risk associated with the uncertainty about the structure of the economy, is smaller using his rule than in the case of many others.

Calculating and using the Taylor interest rate appear at first glance to be very simple. In actual fact, however, it raises a number of practical and theoretical problems. First of all, for example, the weightings of the output and inflation gaps have to be determined. The weighting scheme used by Taylor is not necessarily appropriate.<sup>7</sup> The central bank’s

*Problems in calculating the Taylor interest rate on account of ...*

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2 See Taylor, J. B. (1993), Discretion versus policy rules in practice, Carnegie-Rochester Conference Series on Public Policy 39, p. 195–214.

3 Taylor points out that this value is approximately equal to the assumed potential growth, i.e. compatible with a long-term equilibrium growth path.

4 See Taylor, J. B. (1998), The ECB and the Taylor rule. How monetary policy could unfold at Europe’s new central bank, The International Economy, Vol 12/5, p. 24f and p. 58f.

5 See Taylor, J. B. (1998), The robustness and efficiency of monetary policy rules as guidelines for interest rate setting by the European Central Bank, Conference on monetary policy rules organized by the Sveriges Riksbank and the Institute for International Economics (Stockholm University), Stockholm, June 12–13, 1998.

6 See McCallum, B. T. (1988), Robustness properties of a rule for monetary policy, Carnegie-Rochester Conference Series on Public Policy 29, p. 173–203.

7 In the United States, too, there are doubts about the equal weighting given to the inflation and output gaps. See Ball, L. (1997), Efficient rules for monetary policy, NBER Working Paper No. 5952, Cambridge, MA.

orientation and the structure of the economy have to be taken into consideration when determining the coefficients. The weights are to be estimated and are thus method-dependent. Depending on the relative weight, however, there may be considerable differences in the Taylor interest rate at different periods resulting in a correspondingly varied assessment of current monetary policy.

*... degrees of freedom in selecting the price variables ...*

In this connection, broadly based indices such as the consumer price index and the GDP deflator are generally suitable for calculating inflation. For Germany, both variables follow a similar path over fairly long periods. Nevertheless, there were sometimes major deviations, one of the causes of which were exchange rate movements (see below, page 54). If the real rate of interest is calculated as usual as the difference between the nominal rate of interest and the inflation rate, the choice of the price index influences that variable as well as the inflation gap.

*... in estimating the output gap ...*

There are also different options available for estimating the output gap. Depending on the method used for determining the potential – for example, log-linear trend, Hodrick-Prescott trend or the estimation of a production function – this may produce quite major differences which are reflected directly in the level and the behaviour of the Taylor interest rate.

*... and in determining the equilibrium real short-term rate of interest*

Finally, problems are raised by the setting of the equilibrium real rate of interest. This is frequently approximated by a multi-year average of the difference between the actual nominal interest rate and the inflation rate

and therefore depends crucially on the period used for forming the average.<sup>8</sup> Furthermore, assuming a constant equilibrium real short-term rate of interest over long periods is not entirely without problems. Besides the (expected) rate of return on tangible fixed assets and the general propensity to save, the determinants of this variable include the general assessment of the uncertainty in the economy and the degree of credibility of the central bank. As the Taylor interest rate does not take changes in these factors into account, it may lead to inaccurate assessments. Overall, the Taylor interest rate therefore shows a wide range of variations, especially for individual points in time, which may amount to far more than 1 percentage point.

However, in addition to the above-mentioned computational problems, the Taylor interest rate also has some shortcomings in its design. From the point of view of practical monetary policy, a fundamental objection to orienting monetary policy to the traditional Taylor interest rate is that it does not take due account of the necessity of forward-looking behaviour. Because of the aforementioned time lags between the central bank taking its interest-rate measures and their impact on price movements, the monetary policy decision-makers should, in principle, be guided by the outlook for prices rather than by current inflation. Otherwise, monetary policy decisions will systematically be taken too late. Current

*Design shortcomings owing to a lack of foresight ...*

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<sup>8</sup> Most computations of the Taylor interest rate differ from Taylor's original method, which links the equilibrium real rate of interest to growth-theoretical considerations. Compared with the formation of the average, Taylor's method can lead to very low values for the equilibrium real rate of interest and hence for the Taylor interest rate.

inflation and the output gap, which are included in the Taylor interest rate, do provide a certain amount of information on future price developments. Even so, the incorporation of additional information that is held to be relevant enhances the quality of the interest rate policy.<sup>9</sup>

... and, in some cases, wrong signals

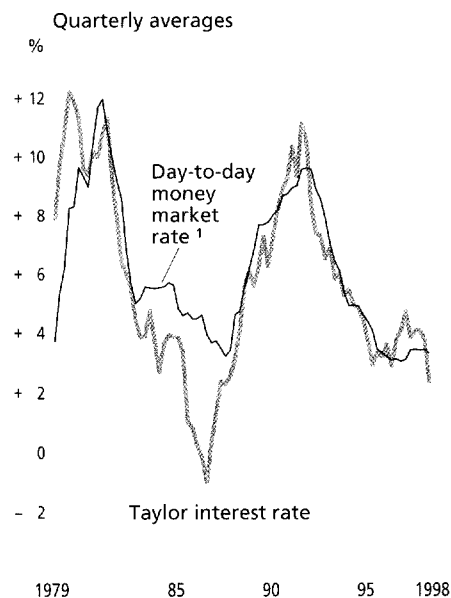
The Taylor rule also gives wrong signals in certain cases. For instance, it indicates a need for monetary policy action, in principle, if there is a one-off increase in the overall price level, such as one caused by an increase in value-added tax. It is possible to argue, however, that monetary policy can tolerate the "first-round effects" of such shifts in the overall price level. This shows that a prudent application of the Taylor rule calls for a more detailed analysis of the individual determinants of price level changes. Alternatively, such misdirections can also be alleviated by basing the rule on a "core inflation rate" instead of the inflation rate recorded in the statistics. Such core inflation rates attempt to eliminate purely transitory price impulses and capture merely the longer-term price trend.<sup>10</sup>

### A Taylor interest rate for Germany

Calculation based on Taylor's method

The chart on this page shows the behaviour of the Taylor interest rate for Germany if it is largely calculated using Taylor's original method. The inflation and output gaps are both given an equally high weighting of 0.5 and are entered simultaneously into the Taylor interest rate. The inflation rate is based on the (west German) consumer price index, and the inflation target is the upper limit of the "unavoidable rate of inflation" (or, from

### Day-to-day money market rate and Taylor interest rate for Germany



<sup>1</sup> Day-to-day money market rate in Frankfurt.

Deutsche Bundesbank

1985, the "normative inflation") used by the Bundesbank in deriving the monetary targets. The output gap is based on the Bundesbank's potential estimation for western Germany.<sup>11</sup> The equilibrium real short-term rate of interest is set at 3.4%. This corresponds to the

<sup>9</sup> This is the conclusion arrived at by a number of papers dealing with the relative advantages of different monetary policy rules. See, for example, Batini, N., Haldane, A. (1999), Monetary policy rules and inflation forecasts, Bank of England Quarterly Bulletin, February, 1999, pp. 60–67, and Rudebusch, G., Svensson, L.E.O., Policy rules for inflation targeting, in J. B. Taylor (eds.), Monetary policy rules (due to appear in summer 1999).

<sup>10</sup> There are, however, several methods of computing core inflation rates which, in some cases, lead to differing results.

<sup>11</sup> West German data were used as these formed the relevant database over the largest part of the period under review: even in the initial period after reunification, there was only a limited possibility of determining the Bundesbank's monetary policy on the basis of the data from eastern Germany – firstly, because the data were not sufficiently reliable and, secondly, because eastern Germany's structural problems could not be solved by monetary policy.

average of the (ex post) real day-to-day money market rate during the period under review of roughly two interest-rate cycles (first quarter of 1979 to fourth quarter of 1998).<sup>12</sup> When interpreting the Taylor interest rate calculated in this way, it should be borne in mind, however, that, in principle, other estimation periods, and, therefore, other average values are acceptable, too.<sup>13</sup>

*Interest-rate smoothing not taken into consideration*

The behaviour of the observed day-to-day money market rate is smoother than the Taylor interest rate calculated as described above. Other things being equal, orientation to the Taylor interest rate would have implied greater interest rate movements than the Bundesbank actually allowed on the basis of its concept.<sup>14</sup> The reason for the stronger movement of the Taylor interest rate is that it does not take account of the adverse implications of an overly activist monetary policy. Given uncertainties about the current and future state of the economy and its structural relationships, it is inappropriate, for example, to react in full immediately to every piece of information that is received.<sup>15</sup> An additional factor is that frequent interest rate movements may entail drawbacks in the shape of higher uncertainty and more difficult expectation formation. A steady monetary policy which, as far as possible, avoids sharp interest rate fluctuations, avoids these drawbacks and facilitates stabilisation.

*Although there tends to be a parallel movement with the day-to-day money market rate ...*

Overall, the behaviour of the day-to-day money market rate and the Taylor interest rate are quite similar. At first glance, this largely parallel movement appears to be very surprising since the output gap has not

played an explicit role in Bundesbank policy. It is less surprising, however, if the similarities between the Taylor rule and monetary targeting are taken into consideration. The potential-oriented monetary targeting policy, too, has an automatic anticyclical component, for example: if gross domestic product (GDP) grows more slowly than the production potential, the central bank uses falling interest rates to provide more money than is needed to fund current growth. Furthermore, monetary targeting, too, reacts to deviations of the inflation rate from the "normative inflation" (see overview page 53).

Despite the tendency to parallel movement, fairly major deviations between the day-to-day money market rate and the Taylor interest rate can be identified at certain periods. This is most obviously the case between the beginning of 1984 and early 1987, when a growing differential between the day-to-day money market rate and the Taylor interest rate emerged. However, this noticeable differential disappears almost entirely in 1985 and 1986 if the computation of the Taylor interest rate is based on the GDP deflator rather than the con-

*... there are fairly major deviations in some periods*

---

<sup>12</sup> During this period, the hypothesis of stationarity of the real rate of interest cannot be rejected. This indicates that the real rate of interest has a tendency to revert to its mean. This property is an essential condition for the mean value to be used informatively as an estimation variable for the equilibrium real rate of interest.

<sup>13</sup> An estimation period from 1972, for example, produces an average real rate of interest of 2.6%.

<sup>14</sup> For an econometric analysis which accommodates this by incorporating a lag-dependent variable, see Clarida, R. et al. (1998), Monetary policy rules in practice: some international evidence, *European Economic Review* 42/6, pp. 1033–1067.

<sup>15</sup> See, for example, Brainard, W. (1967), Uncertainty and the effectiveness of policy, *American Economic Review* 57/2, pp.411–425, and Goodhart, C. A. E. (1999), Central bankers and uncertainty, *Bank of England Quarterly Bulletin*, February, pp.102–121.

## Monetary targeting and the Taylor rule

The Bundesbank derived its target growth for the money stock  $\Delta m^T$  from the quantity equation (except in the case of interest rate  $i$ , lower-case letters stand for logarithmic variables, and  $\Delta$  stands for first differences):

$$(1) \quad \Delta m = \Delta p + \Delta y - \Delta v.$$

This was based on the inflation rate envisaged over the medium term (normative inflation)  $\Delta p^T$ , the expected rate of growth in the real production potential  $\Delta y^*$ , and the trend rate of change in the velocity of circulation  $\Delta v^*$ :

$$(2) \quad \Delta m^T = \Delta p^T + \Delta y^* - \Delta v^*.$$

If the setting of interest rates is oriented to the deviation of the money stock from its target growth

$$(3) \quad \Delta i = \lambda \cdot (\Delta m - \Delta m^T), \text{ with } \lambda > 0,$$

and equations (1) and (2) are taken into consideration, the following interest rate rule emerges:

$$(4) \quad i = i_{-1} + \lambda \cdot [(\Delta p - \Delta p^T) + (\Delta y - \Delta y^*) - (\Delta v - \Delta v^*)].$$

For better comparability with the Taylor rule, the deviation of the rate of change in the velocity of circulation can be replaced by the trend value, taking account of the money market equilibrium. Assuming a standard money demand function in the following form ( $\varepsilon$  is a stochastic residual)

$$(5) \quad \Delta m^d = -\gamma_1 \cdot \Delta i + \gamma_2 \cdot \Delta y + \Delta p + \Delta \varepsilon, \text{ with } \gamma_1, \gamma_2 > 0,$$

the following applies in accordance with equation (1) in the money market equilibrium:

$$(6) \quad \Delta v = \gamma_1 \cdot \Delta i + (1 - \gamma_2) \cdot \Delta y - \Delta \varepsilon.$$

Accordingly, in the long-term equilibrium for the trend rate of change in the velocity of circulation, the linear relationship with potential growth follows:

$$(7) \quad \Delta v^* = (1 - \gamma_2) \cdot \Delta y^*.$$

The interest rate rule (4) can thus be rewritten as:

$$(8) \quad i = i_{-1} + a_p \cdot (\Delta y - \Delta y^*) + a_i \cdot (\Delta p - \Delta p^T) + a_1 \cdot \Delta \varepsilon,$$

$$\text{with } a_1 = \frac{\lambda}{1 + \lambda \cdot \gamma_1} \text{ and } a_p = a_i \cdot \gamma_2$$

Like the Taylor rule, equation (8) contains the inflation and output gaps as feedback variables. However, a closer inspection reveals some differences:

- In contrast to the Taylor rule, the target path for output relates to the growth in output and not to its level.
- The central bank responds to the feedback variables deviating from their target path by changes in the short-term interest rate from the preceding period, whereas the Taylor rule provides for an adjustment of the interest rate relative to its equilibrium value.
- Furthermore, linking interest rate policy to an intermediate monetary target as in equation (4) implies that the central bank responds not only to fluctuations in inflation and output but also to deviations of the velocity of circulation from its trend. This is based on the idea that future inflationary risks are reflected at an early stage by a rise in cash holdings.



sumer price index.<sup>16</sup> The reason for this is that the price trend in domestic overall output (which is measured by the GDP deflator) was very different from the price trend in the goods and services of domestic consumption (which is measured by the consumer price index). The marked appreciation of the Deutsche Mark in 1985 and 1986 led to lower prices for imported goods and, because imported consumer goods had become cheaper, lower rates of inflation based on consumer prices. By contrast, inflation based on the GDP deflator did not decline to the same extent.

When comparing the day-to-day money market rate with the Taylor interest rate, it should also be borne in mind that the Bundesbank would have been unable to base its monetary policy decisions completely on the real-time data used here for calculating the Taylor interest rate since it is generally only in the second half of a given quarter that the GDP (and hence also the GDP deflator) of the preceding quarter becomes known. Moreover, some of these data are subject to subsequent major statistical revisions.<sup>17</sup>

### The Monetary Conditions Index (MCI)

Monetary policy measures affect aggregate demand and prices not only through interest rates but also through exchange rates.<sup>18</sup> Furthermore, exogenous exchange rate movements influence the monetary policy setting. For a central bank in an open economy with flexible exchange rates and capital mobility, it is therefore advisable to include the exchange rate situation in the assessment

of the underlying monetary conditions. This applies especially to small economies, in which the exchange rate has greater importance for economic developments.

Given that background, the purpose of computing an MCI is to combine interest rate and exchange rate movements in a consistent manner and thus express the change in the underlying monetary conditions in a single variable. In its original form, as developed by the Bank of Canada, the MCI is, at a given time  $t$ , the weighted sum of the (relative) change in the effective real exchange rate and the (absolute) change in the short-term real rate of interest compared with a base period:<sup>19</sup>

$$\text{MCI}_t = w_e \cdot \left[ \frac{\text{weighted real external value } t}{\text{weighted real external value in base period}} - 1 \right] + w_r \cdot \left[ \begin{array}{l} \text{short-term real rate of interest in } t \\ - \text{short-term real rate of interest in base period} \end{array} \right]$$

Interest rate movements are included in the MCI with a weight of  $w_r$ , and exchange rate movements are included with a weight of  $w_e$ .

<sup>16</sup> Similarly, using the GDP deflator leads to striking deviations from the day-to-day money market rate in other periods, which do not occur when the consumer price index is used (at the end of the eighties and in 1997, for example).

<sup>17</sup> Orphanides shows for the United States that using real-time data rather than revised data leads to significant differences in the Taylor interest rate. See Orphanides, A. (1998), Monetary policy rules based on real-time data, Finance and Economics Discussion Series 1998-03, Federal Reserve Board, Washington D.C.

<sup>18</sup> In addition, a distinction can be made among a number of other transmission channels. See, for example, Mishkin, F.S. (1996), The channels of monetary transmission: lessons for monetary policy, NBER Working Paper No. 5464, Cambridge, MA.

<sup>19</sup> See Freedman, C. (1994), The use of indicators and the monetary conditions index in Canada, in Baliño, T.J.T. and Cottarelli, C. (eds.), Frameworks for monetary stability – policy issues and country experiences, IMF, Washington, p. 470.

*Construction  
of the MCI*

*Computation  
based on subse-  
quently revised  
data*

*Significance of  
the exchange  
rate for  
monetary policy*

As a rule, these weights reflect the relative effects of the respective MCI component on aggregate demand. The effect on aggregate demand which is assigned to an increase in the short-term real rate of interest by 1 percentage point is the same as that ascribed to an increase in the external value of  $w_r/w_e$  per cent.

The base period, to which the MCI relates, is selected as desired. No independent significance is to be ascribed to the absolute level of the MCI. Its ongoing development can only indicate whether the underlying monetary conditions between two points in time have eased (decline in the MCI) or become tighter (increase in the MCI).

*Use of the MCI  
as an operational  
reference  
variable ...*

MCI's are used in quite a number of ways by various institutions. In the monetary policy of the Bank of Canada, which has been pursuing an inflation targeting strategy since 1991, the MCI is used as a short-term operational reference variable.<sup>20</sup> On the basis of the quarterly inflation forecasts, a "desired or target path for the monetary conditions" is determined internally which is compatible with the desired development of the inflation rate.<sup>21</sup> In the period between two inflation forecasts, there is a continuous examination of the direction in which the current MCI is moving and of whether there is cause for reassessing the price outlook and thus for adjusting the MCI path which is "consistent with the inflation target". If the monetary policy course appears to be in need of correction – which is signalled by a significant discrepancy between the actual MCI and the envisaged MCI

– measures are taken to effect a change in the short-term interest rates.<sup>22</sup>

Some central banks of smaller open economies (Sweden and Norway, for example), and especially international organisations, such as the IMF and OECD, and commercial banks use the MCI both as an indicator for a change in the degree of monetary policy restriction and as an indicator for future output and price developments.<sup>23</sup> In both cases, the analysis focuses primarily on the development of the current MCI, and not on a comparison with a "target path" for the MCI which is de-

*... and as a  
monetary policy  
indicator*

<sup>20</sup> See, for example, Freedman, C. (1994), The use of indicators and the monetary conditions index in Canada, in Baliño, T. J. T. and Cottarelli, C. (eds.), Frameworks for monetary stability – policy issues and country experiences, IMF, Washington, pp. 458–476, and Freedman, C. (1995), The role of monetary conditions and the monetary conditions index in the conduct of policy, in Bank of Canada Review, autumn 1995, pp. 53–59. On account of the significantly more rapid availability of the necessary data, the Bank of Canada uses the nominal MCI as a basis for this, although the real MCI is, theoretically, the relevant variable. However, this poses few problems if the MCI is employed for the short-term analysis as the development of both variables is invariably very similar over short periods.

<sup>21</sup> The path of the "desired MCI" is construed more as a range than as a precise line of development, however. See, for example, OECD (1998), Economic Surveys, Canada, p. 13 and p. 137.

<sup>22</sup> In the last two years, the MCI played a role in the implementation of monetary policy at the Reserve Bank of New Zealand which was similar to that at the Bank of Canada. Latterly, however, its importance has been scaled down somewhat. See Reserve Bank of New Zealand (1996), Summary indicators of monetary conditions. Reserve Bank Bulletin 59/3, pp. 223–228, Reserve Bank of New Zealand (1996), Monetary Policy Statement, December, p. 22f.; Reserve Bank of New Zealand (1997), Monetary Policy Statement, June, p. 25ff.; Reserve Bank of New Zealand (1999), Monetary Policy Statement, March, in particular, p. 20f. and p. 27f., and Reserve Bank of New Zealand (1999), Reserve Bank Bulletin 62/1.

<sup>23</sup> The IMF suggested the MCI as an inflation indicator to supplement M3 for Germany, for instance. See Corker, R. (1995), Indicators of monetary conditions, in Corker, R. et al., United Germany: The first five years – performance and policy issues, IMF Occasional Paper, No. 125, pp. 51–61. In the case of the above-mentioned central banks, the MCI has always played a secondary role and has recently been further downgraded in importance.

rived in line with the final monetary policy objective.

*MCI fraught with problems*

The indicator properties of MCI are debatable, however. Firstly, this is connected with the fact that it is not a clearly specified statistical variable. Instead, it is – much like the Taylor interest rate – a construction which allows a certain amount of freedom in its calculation. Furthermore, it is based on econometric estimations, the results of which are generally very sensitive with regard to the chosen specification. Secondly, movements in the MCI require a great deal of interpretation.

*Selection of the MCI components*

When constructing an MCI, the components to be included first have to be specified. The traditional MCI, i.e. the weighted sum of the changes in the real effective exchange rate and in the short-term real rate of interest, is by no means necessarily appropriate for every currency area. In particular, if it is construed as a yardstick of the influence which financial market prices have on the trends in real income and inflation, all the variables which are of particular relevance in the transmission process in an economy are, in principle, to be included. For countries in which long-term financing relationships play a major role, as they do, for example, in Germany, it would be logically consistent to include a long-term interest rate in addition to the short-term interest rate and the external value.<sup>24</sup>

*Exact definition of the components*

The exact definition of the components included in the MCI influences the computation of the indicator, too. The day-to-day money market rate or the three-month rate is normally used as the short-term interest rate.

The expected inflation rate for the relevant period is deducted in order to calculate the real rate of interest. The expected inflation rate is generally approximated using the current rate of inflation, which may relate, in principle, to different price indices. Owing to the fact that the inflation rate develops quite slowly in the short term, approximating expected price movements by means of current ones appears generally acceptable for the short-term real rate of interest.<sup>25</sup> The choice of the deflator plays a crucial role in terms of the real external value. The deflator can be calculated, for example, on the basis of the prices for total sales, consumer prices, or unit labour costs. Since these series differ – in some cases significantly – in their development, the selection of the deflator has both a direct and – through the computation of relative weights of the MCI – an indirect influence on the movement of the MCI.<sup>26</sup>

The relative weights with which the individual components are included in the MCI are not observable and must therefore be estimated econometrically. The MCI therefore depends on the specification and the assumptions of these estimations. In the majority of analyses, the weights are determined using single

*Estimation of the relative weights fraught with a high degree of uncertainty*

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<sup>24</sup> An "extended" MCI is not a very suitable monetary policy indicator, however. To an even greater extent than the traditional MCI, it is subject to numerous different influencing factors which are independent of monetary policy.

<sup>25</sup> By contrast, if a long-term interest rate is additionally used, this approach can, at times, be misleading. It is likely that the long-term ex post real rate of interest tends to be overestimated in periods when interest rates are very low and underestimated when inflation rates are high.

<sup>26</sup> For alternative ways of measuring the real external value, see Deutsche Bundesbank, The indicator quality of different definitions of the real external value of the Deutsche Mark, Monthly Report, November 1998, pp. 39–52.

equation-estimates. From an econometric point of view, this has a number of shortcomings and thus increases the risk of inaccurate monetary policy assessments.<sup>27</sup>

*Assumed transmission process disregards important transmission channels*

The weights of the MCI components are generally estimated on the basis of real-income equations even if price stability is assumed as the final objective of monetary policy. This makes the implicit assumption that monetary policy influences the inflation rate only through the output gap. In this way, other transmission channels are disregarded. For example, movements in the exchange rate may have a direct impact on the consumer price index as a result of changes in import prices. Furthermore, the liquidity gap plays a significant role in explaining the development of inflation. An MCI with weights estimated on the basis of a real-income equation, is thus likely to be of limited usefulness, at most, for the inflation forecast.<sup>28</sup> In principle, this criticism could be met by estimating the MCI weights on the basis of "price equations" rather than of real-income equations.<sup>29</sup>

*Need to interpret the MCI*

Irrespective of the difficulties in constructing an MCI, there is the problem that it is by no means easy to interpret its changes in terms of their significance for current monetary policy. Whether it is appropriate or not for the central bank to take an interest rate measure in response to a change in the MCI caused by an appreciation or depreciation of the domestic exchange rate depends, in principle, on the reasons for the change in the exchange rate. If the change in the real exchange rate has its origins in the real economy – say, in an exogenous rise in foreign demand for domestic

goods – it would not be at all appropriate, with a view to the objective of price stability, to try to use monetary policy to reduce the MCI to its original level. That is because the demand shock, taken in isolation, is accompanied by an increased inflationary pressure which justifies more restrictive underlying monetary conditions. Mechanistically adjusting official interest rates in response to exchange rate movements – as suggested by an overly simple interpretation of the MCI – would by no means be appropriate. In practice, a central bank is additionally faced with the problem of being unable to identify the factors underlying a movement in the exchange rate with adequate certainty, or of being able to do so only after a considerable period. This fundamentally argues against excessive actionism on the part of monetary policy.<sup>30</sup>

The usefulness of using an MCI is also called into question by the fact that the assumed

*Constancy of weights doubtful*

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27 See, above all, Eika, K. et al. (1996), Hazards in implementing a monetary conditions index, Oxford Bulletin of Economics and Statistics, 58, pp. 765–790. The associated problems are explained in greater detail in the annex on p. 62. As an alternative to single-equation approaches, more or less comprehensively specified econometric multi-equation models are used in some cases.

28 Ultimately, this is an empirical question, however. For Germany, an MCI with weights estimated on the basis of a real-income equation has no significant lead over prices. See annex p. 63.

29 Experience has shown, however, that simple specifications produce implausible weightings.

30 This applies to an even greater extent to an MCI extended to include the long-term real rate of interest. The interpretation of movements in the long-term real rate of interest is subject to difficulties comparable to those encountered in the case of the real external value. Moreover, it is risky to take monetary policy countermeasures in the event of an increase in the long-term real rates of interest which is regarded as unjustified by the fundamentals. A step of that kind may lead to a rise in risk premiums and thus to a further increase in the long-term interest rate, especially in situations where there is a high level of uncertainty in the financial markets. It might not even be possible under such circumstances to steer the MCI in the desired direction.

consistency of the relative weights of the individual components is not convincing over time.<sup>31</sup> The impact of exchange rate movements on aggregate demand depends, for example, on the domestic economic agents' relative share of indebtedness in foreign currency. A significant change in this share is likely to have an impact on the MCI weights. Furthermore, it has to be borne in mind that exchange rate movements do not affect the individual sectors of the economy equally but, instead, tend to have the biggest effect on the export-oriented sectors. Accordingly, the impact that an appreciation or a depreciation of the domestic currency has on the outlook for prices will depend on the specific economic situation in the sector of traded goods.

### An MCI for Germany

A typical estimation of the MCI weights for Germany based on an equation for the change in the output gap over the period from the first quarter of 1975 to the fourth quarter of 1998 is (all variables with the exception of the interest rate are logarithms; t values in brackets)

$$\Delta_4 (y - y^*)_t = \underset{(6.14)}{0.65} \Delta_4 (y - y^*)_{t-1} + \underset{(2.96)}{0.50} \Delta_4 (y^a - y^{a*})_t - \underset{(1.88)}{0.09} \Delta_4 r_{t-8} - \underset{(1.30)}{0.03} \Delta_4 e_{t-8} + u_t$$

$$\bar{R}^2 = 0.59 \quad \text{LM}(1) = 1.96 \quad (0.16) \quad \text{LM}(4) = 8.80 \quad (0.07)$$

The expression  $\Delta_4$  represents the fourth difference, i.e.  $\Delta_4 y_t = y_t - y_{t-4}$ ,  $y_t$  represents real GDP and  $y_t^a$  the real production potential.  $\Delta_4 (y - y^*)_t$  therefore states the change in the output gap from the previous year.  $y_t^a$  and  $y_t^{a*}$  represent the corresponding variables for

industrial countries (excluding Germany). The estimation of the production potential for Germany is based on a production function. Because of the lack of adequate data, the production potential of the industrial countries is estimated by applying the Hodrick-Prescott filter to the real GDP. The real external value  $e_t$  is the weighted external value vis-à-vis 18 industrial countries, deflated by the price index of total sales. The real short-term rate of interest  $r_t$  is the day-to-day money market rate less the current inflation rate as measured by the consumer price index. LM(1) and LM(4) give the results of the LM tests for first-order and fourth-order autocorrelation, respectively. The values in brackets in this case give the relevant marginal significance levels. It follows from the estimation that:

$$\text{MCI}_t = 0.25 (e_t - e_0) + 0.75 (r_t - r_0).$$

The ratio of the weights of the real rate of interest to the weighted real external value is hence 3:1, i.e. the relative weight of the real external value amounts to 0.33.<sup>32</sup> The standard error of 0.29 does have to be borne in mind, however. This implies the very broad 95 % confidence interval of -0.25 to 0.91, which also contains the value of zero. Standardising this MCI to the first quarter of 1990 produces the curve in the chart on page 59.

<sup>31</sup> See also Smets, F. (1997), Financial asset prices and monetary policy: theory and evidence, Bank for International Settlements, Working Paper No. 47, Basle, p. 11.

<sup>32</sup> In other MCI estimations for Germany, the weight of the short-term real rate of interest in relation to the real external value varies between 1.4 and 4. See, for example, Dornbusch, R. et al. (1998), Immediate challenges for the European Central Bank, Economic Policy 26, pp. 15-64; Frochen, P. (1996), Les indicateurs des conditions monétaires, Bulletin de la Banque de France, June, pp. 97-111.

*Volatile curve  
of the MCI*

This curve is characterised, firstly, by a fairly high degree of volatility. Secondly, it shows that the underlying monetary conditions – measured against the base period – were most restrictive in the early eighties and nineties, when inflationary pressures were quite high. Since the second half of 1992, there has been a marked easing of conditions as a result of the reduction in official interest rates, although this easing was obscured at times (notably in 1994–5 and at the start of 1998) by a real appreciation of the Deutsche Mark. In 1999 so far, there has been an obvious easing of the underlying monetary conditions due to a weakening of the euro exchange rate and the Governing Council of the ECB cutting interest rates in April.

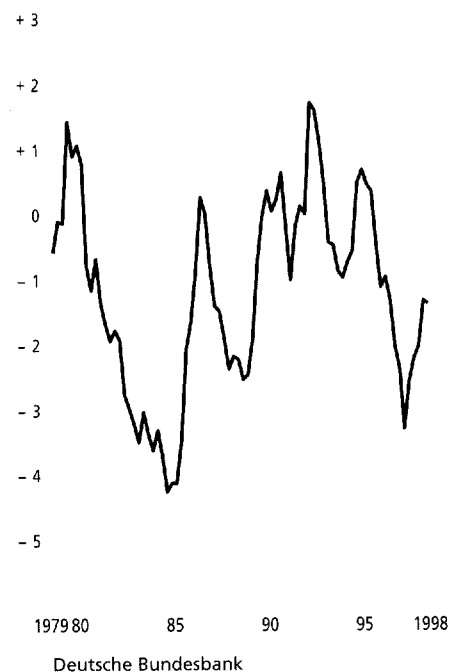
#### Lead properties of the money stock, the Taylor interest rate and the MCI with regard to price movements

*Investigation of  
the lead over  
price mov-  
ements ...*

Notwithstanding the indicated shortcomings of the Taylor interest rate and the MCI, the possibility that analysing them (as a supplement to M3) would have provided additional information for the Bundesbank's policy in the past cannot be ruled out a priori. That would have been the case especially if they had possessed a satisfactory predictive quality for price movements. The lead over price movements for the money stock M3, the Taylor interest rate and the MCI was therefore examined in greater depth. The relevant econometric estimations showed that the money stock had lead properties, but not the MCI and the Taylor interest rate.<sup>33</sup> This is also illustrated by the chart on the next page.

#### MCI for Germany

1st qtr 1990 = 0, quarterly averages



The upper panel of the chart shows the curve of the differential between the Taylor interest rate and the day-to-day money market rate, the curve of the MCI as it was previously calculated (but with a reversal of sign), and the "price gap" using the P-star approach, which reflects the pressure on prices indicated by the money stock. The rising curve of each indicator shows a monetary policy that is becoming more expansionary. Taken in isolation – with certain time lags – this ought to lead to rising rates of inflation. The lower part of the chart therefore shows the movement in the consumer price index.

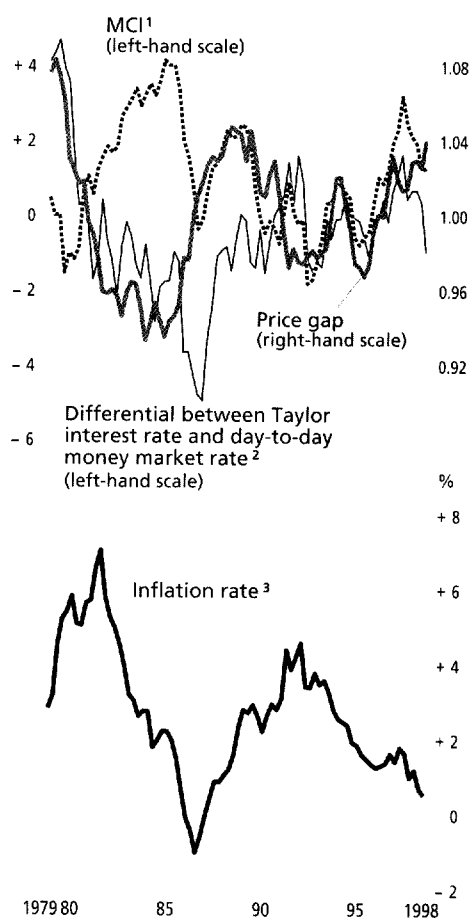
It can be clearly seen that the money stock (in the form of the price gap) displays a lead over

*... reveals satis-  
factory results  
for M3, ...*

<sup>33</sup> See annex, p. 63.

### MCI, Taylor interest rate, price gap and inflation rate

Quarterly averages



1 1st qtr 1990 = 0; reversal of sign. — 2 Day-to-day money market rate in Frankfurt; differential in percentage points. — 3 Percentage change from the previous year in the west German consumer price index.

Deutsche Bundesbank

price movements during most of the period under review. The "price gap" anticipates by between two and three years both the fall in the inflation rate from early 1982 to the end of 1986 and its subsequent rise up to 1992. The "price gap" turns out to be less reliable in the period after 1992, however, when the picture of monetary growth was frequently distorted, especially by changes in tax legislation.

The Taylor interest rate differential (at least up to around 1993) shows a movement that is largely parallel with inflation. A crucial factor is likely to have been the direct inclusion of the current inflation rate in the computation of the Taylor interest rate. Overall, the differential between the Taylor interest rate and the actual interest rate is not a satisfactory indicator of future price movements.

*... but not for the Taylor interest rate ...*

The MCI's predictive quality for price movements is also unsatisfactory. The signals it gives for the period from early 1982 to the end of 1986, during which there was a continuous decline in inflation, are predominantly incorrect. In the period after that, its curve is very volatile – in contrast to the quite smooth development of inflation.

*... and the MCI*

### Monetary policy conclusion

Both the Taylor interest rate and the MCI have significant shortcomings. How they are both calculated is subject to a large degree of freedom, and interpreting them is by no means as simple as it may appear at first sight. To that extent, they provide, at most, rough points of reference for the assessment

*Taylor interest rate and MCI to be used, at most, as broad reference variables*

of monetary policy.<sup>34</sup> Neither of the variables is hence suitable – applied in isolation – for deriving interest rate policy recommendations.

*Monetary  
policy of the  
Eurosystem not  
based on the  
Taylor interest  
rate and MCI*

The monetary policy strategy of the Eurosystem is based just as little on the Taylor interest rate and the MCI as was the former strategy of the Bundesbank.<sup>35</sup> Instead, the variables incorporated in them are examined individually. They are included in the broad analysis of the outlook for prices, which is the second pillar of the Eurosystem's monetary policy strategy alongside the reference value for the money stock M3. This takes account of the need to interpret the individual variables.<sup>36</sup> In particular, consideration is given to the fact that the monetary policy environment cannot be characterised solely by current price movements and the output gap or by the situation with regard to interest rates and the exchange rate. Instead, the broadly defined monetary aggregate M3 as well as a number of other monetary, financial and real economic indicators contain valuable information on

the future trend in inflation. Ignoring these would not be appropriate for a central bank oriented to the objective of price stability.

---

<sup>34</sup> Taylor himself views the interest rate which is named after him more as a reference variable than as a rule which is to be followed mechanically. See, for example, Taylor, J.B., The ECB and the Taylor rule. How monetary policy could unfold at Europe's new central bank, *The International Economy* 12/5 (1998), especially pp. 58–59. Likewise, the Bank of Canada fundamentally acknowledges the shortcomings of the MCI. It therefore stresses its specific use for short-term analysis, in which some of the mentioned shortcomings are less serious, as well as the necessity of thorough interpretation. See, for example, Freedman, C., The use of indicators and the monetary conditions index in Canada, in Baliño, T.J.T. and Cottarelli, C. (eds.), *Frameworks for monetary stability – policy issues and country experiences*, IMF, Washington D.C. (1994), pp. 458–476.

<sup>35</sup> In any case, the MCI does not come into consideration as an operational variable for a large economic area with a comparatively low degree of openness.

<sup>36</sup> The difficulties of computing the Taylor interest rate and the MCI are even greater for the euro area than for an individual country since the variables incorporated in them have to be aggregated from national data. As there are a number of possibilities of doing so, resulting in an additional freedom of scope in their computation, this leads to even greater variability in the calculated or estimated values. For the construction of an MCI for the euro area, see, for example, Verdelhan, A. (1998), *Construction d'un indicateur des conditions monétaires pour la zone euro*, *Bulletin de la Banque de France*, October, pp. 75–82.



## Annex

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### Potential deficiencies of single-equation estimations for determining the MCI from an econometric point of view

#### Dynamics

The relationships between changes in the exchange rate or in interest rates and the change in the inflation rate or the rate of growth of real GDP are dynamic in nature. This means that their relative effects differ in the short, medium and long term, and perhaps even in terms of the direction in which the relationship works. Since prices react with comparatively long time lags, focusing on a time horizon of six to eight quarters (medium term) for analysis, as is usual when computing MCIs, is inadequate. Even if a given interest-exchange rate situation appears favourable with regard to price movements in the short-term perspective, the associated long-term trend may be undesirable from the point of view of economic policy.

#### Long-term properties

A consistent modelling of the long term is necessary even if the analysis is confined to a period of around two years. This assumes that the properties of the time series are adequately captured. If necessary, estimated or theoretical cointegration relationships have to be taken into consideration. Ignoring information of that kind leads to biases in the short and medium-term multipliers, from which the weights are derived.

#### Incorrect specification

Failure to include significant variables when the weights are derived affects the dynamics, the cointegration analysis, etc. Neglected variables lead to biases in the estimated parameters, i.e. in the relative weights. These biases may fluctuate over time.

#### Structural constancy

If conclusions are to be drawn on future price movements or the future growth of GDP, the weights must not change over time. However, unrestricted vector-autoregressive models and reduced form equations, in particular, often have widely varying coefficients if they are estimated recursively. One of the reasons for this is "over-parametrisation", i.e. the large number of parameters to be estimated.

#### Volatility clusters

The estimations for determining the weights are generally made using quarterly data. By contrast, for the current analysis daily data are included in the computation of the MCI, i.e. daily data are generated for this index. In the analysis of daily data in the financial market, however, model groups other than those for quarterly or annual data are appropriate, as the latter have different statistical properties (ARCH effects or volatility clusters). There is a risk of misinterpretation if these aspects are not taken into account.

**What informative content do the MCI and the Taylor interest rate possess when compared with the price gap?**

The question of whether the MCI has informative content for the future development of inflation which goes beyond that already contained in the price gap (and thus indirectly in the money stock) has not been given attention so far in the literature and will be discussed below.<sup>37</sup>

In logarithmic terms, the price gap equals:

$$(p^* - p) = (y - y^*) + (v^* - v),$$

where  $p^*$  is the equilibrium price level,  $p$  the current price level,  $y$  the real GDP,  $y^*$  the production potential,  $v^*$  the equilibrium velocity of circulation, and  $v$  the actual velocity of circulation. A positive price gap indicates inflationary pressure, i.e. a rise in the inflation rate in the future. The reasons for this are a high level of capacity utilisation ( $y - y^*$ ) and/or a monetary overhang ( $v^* - v$ ).

As the velocity of circulation for M3 shows a falling trend, this should be taken into consideration when calculating the equilibrium price level. The consumer price index is used to measure the price rise. The production potential is estimated using a production function.

The interaction between the short-term dynamics and the long-term equilibrium is depicted as an error correction model. The OLS estimation of the equation for the inflation rate gives:

$$\begin{aligned} \Delta_4 p_t = & 0.97 \Delta_4 p_{t-1} + 0.09 \Delta_4 \text{pim}_t - 0.08 \Delta_4 \text{pim}_{t-1} \\ & \text{(64.94)} \quad \text{(7.60)} \quad \text{(5.53)} \\ & + 0.03 (p^* - p)_{t-4} + u_t \\ & \text{(2.70)} \end{aligned}$$

The development of the inflation rate is influenced not only by the long-term effects, which are captured by the price gap, but also by short-term factors. Changes in import prices (pim) are therefore included in the equation above. The adjustment coefficient of the price gap is comparatively low. This implies a slow adjustment of the actual price level to the equilibrium level.

If the change in the traditionally defined MCI is included as well, the resulting coefficient is insignificant.

$$\begin{aligned} \Delta_4 p_t = & 0.97 \Delta_4 p_{t-1} + 0.08 \Delta_4 \text{pim}_t - 0.07 \Delta_4 \text{pim}_{t-1} \\ & \text{(65.42)} \quad \text{(5.12)} \quad \text{(5.15)} \\ & + 0.04 (p^* - p)_{t-4} - 0.04 \Delta_4 \text{MCI}_t + u_t \\ & \text{(2.57)} \quad \text{(1.05)} \end{aligned}$$

This indicates that the MCI has no explanatory power beyond the price gap for explaining the development of inflation. The likely reason for this is that the MCI is mainly a measure of the output gap.

An estimation incorporating the differential between the Taylor interest rate and the current interest rate shows that the differential likewise has no significant explanatory power for the development of the inflation rate.

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<sup>37</sup> For a description of the P-star approach, see Deutsche Bundesbank, The correlation between monetary growth and price movements in the Federal Republic of Germany, Monthly Report, January 1992, pp. 20-28.



## Statistical Section

### Note

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The start of Stage Three of European economic and monetary union (EMU) has led to a changed presentation of the Statistical Section of the Monthly Report. As monetary policy is now conducted and analysed in the context of the single currency area, the tables relating to monetary policy are geared to the geographical area comprising the monetary union; the relevant figures for Germany are shown as additional information. The changes result, on the one hand, from the altered composition of the range of monetary policy instruments and, on the other, from the harmonisation of national banking statistics in the EMU member countries. The newly defined reporting population for the production of banking statistics includes "monetary financial institutions (MFIs)", i.e. central banks, credit institutions as defined by Community law and certain other financial institutions which meet the MFI definition. In Germany the redefinition of the reporting population means that data reported by building and loan associations and (in the subsection "Overall monetary survey") money market funds will also have to be incorporated in the statistical presentations. The statistical breaks resulting from the changed reporting population and modified contents of individual items, which should be taken into account when examining time series for the turn of 1998-9, are reported in footnotes and are eliminated – as far as possible – from the flow figures in the time series.

In the balance of payments, further items have been harmonised on the basis of internationally binding concepts. This applies, in particular, to direct investment and portfolio investment. In addition, the changes in the monetary reserves are now shown as a separate item. The changes in all other external assets and liabilities of the Bundesbank are recorded under other financial account movements. The launch of monetary union has also resulted in a changed definition of the monetary reserves. In addition to gold holdings and the IMF position, this item now only comprises claims on non-euro-area residents in foreign currency. This in turn results in a changed presentation of the Bundesbank's external position.

Finally, the adoption of the euro is reflected in the statistics in that amounts are shown in D-Mark for the reporting periods up to the end of 1998 and in euro from January 1999, which means that the time series are continued with the denomination changing from D-Mark to euro. Only a few synoptic tables will show values in both D-Mark and euro for a transitional period.

Further information on the modifications to the Statistical Section of the Monthly Report will appear on the Internet.

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## Abbreviations and symbols

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- e Estimated
- p Provisional
- pe Partly estimated
- r Revised
- ... Figure available at a later date
- . Figure unknown or not to be published  
or not meaningful
- 0 Less than 0.5 but more than nil
- Nil

Discrepancies in the totals are due to rounding.



I. Key economic data for European monetary union

New table <sup>8</sup>

1. Monetary developments and interest rates

Period	Money stock in various definitions <sup>1</sup>			Determinants of the money stock <sup>1</sup>			Interest rates		
	M1	M2	M3	MFI lending, total	MFI lending to enterprises and individuals	Monetary capital formation <sup>2</sup>	EONIA <sup>3, 5</sup>	3-month EURIBOR <sup>4, 5</sup>	Yield on European government bonds outstanding <sup>6</sup>
	Change from previous year, in % <sup>7</sup>						% p. a. as a monthly average		
1997 Sep.	0.0	0.0	0.0	.	.	.	.	.	5.8
Oct.	0.0	0.0	0.0	.	.	.	.	.	5.8
Nov.	0.0	0.0	0.0	.	.	.	.	.	5.8
Dec.	0.0	0.0	0.0	.	.	.	.	.	5.5
1998 Jan.	8.1	4.0	4.6	.	.	.	.	.	5.2
Feb.	8.6	4.2	4.5	.	.	.	.	.	5.1
Mar.	9.1	4.4	4.6	.	.	.	.	.	5.0
Apr.	10.6	5.1	5.1	.	.	.	.	.	5.0
May	10.3	5.2	4.9	.	.	.	.	.	5.1
June	9.8	5.2	4.8	.	.	.	.	.	4.9
July	8.3	4.4	4.6	.	.	.	.	.	4.8
Aug.	8.4	4.3	4.3	.	.	.	.	.	4.6
Sep.	8.1	4.6	4.4	6.6	8.8	3.8	.	.	4.3
Oct.	8.3	4.6	4.8	7.0	8.9	3.6	.	.	4.2
Nov.	8.6	5.0	4.6	7.0	9.3	3.3	.	.	4.3
Dec.	9.4	5.7	4.5	7.0	9.1	2.4	.	.	4.0
1999 Jan.	14.3	7.3	5.6	7.8	10.2	4.1	3.14	3.13	3.8
Feb.	12.0	6.0	5.2	7.4	9.5	3.6	3.12	3.09	3.9
Mar.	...	...	...	...	...	...	2.93	3.05	4.2

<sup>1</sup> Source: ECB. — <sup>2</sup> Longer-term liabilities to euro area non-MFIs. — <sup>3</sup> Euro OverNight Index Average. — <sup>4</sup> Euro InterBank Offered Rate. — <sup>5</sup> See also footnotes to table VI.5., p. 40\*. — <sup>6</sup> GDP-weighted yield on ten-year

government bonds; excluding Luxembourg. — <sup>7</sup> Statistical breaks not eliminated up to December 1998. — <sup>8</sup> See the note on the title page of the Statistical Section (page 1\*).

2. Foreign trade and payments

Period	Selected items of the EMU balance of payments <sup>1</sup>						Euro exchange rates		
	Current account		Capital account			Monetary reserves	Dollar rate	Effective exchange rate	
	Balance	of which: Trade balance	Balance	Direct investment	Securities transactions			Credit transactions	nominal
	Euro billion						US-\$/Euro	1990=100	
1997 Sep.	.	.	.	.	.	.	.	.	88.4
Oct.	.	.	.	.	.	.	.	.	89.4
Nov.	.	.	.	.	.	.	.	.	90.9
Dec.	.	.	.	.	.	.	.	.	91.1
1998 Jan.	.	.	.	.	.	.	.	90.3	90.4
Feb.	.	.	.	.	.	.	.	89.5	89.6
Mar.	.	.	.	.	.	.	.	88.9	88.9
Apr.	.	.	.	.	.	.	.	89.6	89.4
May	.	.	.	.	.	.	.	92.2	91.9
June	.	.	.	.	.	.	.	92.2	92.0
July	.	.	.	.	.	.	.	92.0	92.1
Aug.	.	.	.	.	.	.	.	93.3	93.3
Sep.	.	.	.	.	.	.	.	95.2	94.9
Oct.	.	.	.	.	.	.	.	95.8	95.3
Nov.	.	.	.	.	.	.	.	94.1	93.6
Dec.	.	.	.	.	.	.	.	94.0	93.5
1999 Jan.	...	...	...	...	...	...	1.1608	92.7	92.1
Feb.	...	...	...	...	...	...	1.1208	90.9	90.5
Mar.	...	...	...	...	...	...	1.0883	89.5	88.9

<sup>1</sup> Initial figures are unlikely to be available until April.

I. Key economic data for the euro area (EMU)

3. General economic indicators

Period	Belgium	Germany	Finland	France	Ireland	Italy	Luxembourg	Netherlands	Austria	Portugal	Spain	EMU
<b>Real gross domestic product <sup>1)</sup></b>												
1996	1.3	1.3	3.6	1.6	7.4	0.7	3.0	3.1	2.0	3.2	2.4	1.6
1997	3.0	2.2	6.0	2.3	9.8	1.5	3.7	3.6	2.5	3.5	3.5	2.5
1998	2.9	2.8	.	3.2	.	1.4	.	3.7	3.3	.	3.8	3.0
1997 3rd qtr	3.3	2.4	6.4	2.6	2.1	2.1	3.4	2.8	3.8	3.7	2.8	2.8
4th qtr	3.4	2.4	6.3	3.0	2.5	2.5	4.3	3.6	4.1	3.8	3.2	3.2
1998 1st qtr	4.2	4.3	7.0	3.8	2.2	2.2	4.9	4.2	3.6	3.9	3.8	3.8
2nd qtr	3.3	1.6	5.0	3.4	1.8	1.8	3.7	4.2	3.4	3.9	3.0	3.0
3rd qtr	2.1	2.8	4.8	2.9	1.5	1.5	3.2	2.7	3.3	3.8	2.9	2.9
4th qtr	.	2.5	.	2.8	.	.	3.1	2.1	.	3.6	2.4	2.4
<b>Industrial production <sup>1) 2)</sup></b>												
1996	0.9	7) r 0.6	3.7	0.3	8.0	- 2.9	- 1.9	2.7	0.8	1.4	- 0.7	0.2
1997	4.3	r 3.6	9.1	3.8	15.3	2.8	7.1	2.0	5.7	2.5	6.8	4.3
1998	3.4	r 4.5	7.6	4.5	15.7	0.7	4.6	1.1	3.4	.	5.4	4.2
1997 3rd qtr	5.9	r 4.1	9.1	5.0	20.0	3.3	10.8	2.6	4.5	2.4	9.0	5.2
4th qtr	4.3	r 4.6	9.5	6.2	15.1	5.7	11.5	3.3	8.6	5.2	8.5	5.9
1998 1st qtr	4.6	r 7.4	10.2	7.5	16.8	3.0	10.1	1.3	5.6	6.4	10.2	6.6
2nd qtr	5.8	r 4.6	8.9	4.8	15.1	1.3	4.5	1.9	6.4	4.9	3.6	4.6
3rd qtr	1.8	r 4.9	7.5	3.4	15.6	0.7	3.4	1.5	3.5	3.3	5.2	4.0
4th qtr	1.1	r 1.5	4.2	2.7	15.3	- 1.7	0.4	0.3	- 1.5	.	3.0	1.9
<b>Capacity utilisation <sup>3)</sup></b>												
1996	79.5	82.2	83.3	83.6	77.2	76.5	79.0	83.8	80.2	78.9	77.1	80.6
1997	81.6	83.5	87.2	83.7	76.2	76.7	82.8	84.4	82.0	81.0	78.5	81.5
1998	82.6	85.4	88.5	84.9	76.6	78.3	87.8	85.3	83.7	81.4	80.4	83.1
1997 4th qtr	82.9	84.4	88.9	84.7	73.9	77.8	85.3	84.8	84.0	81.9	80.5	82.5
1998 1st qtr	82.4	85.4	89.6	84.0	75.7	78.7	88.5	85.8	83.1	80.1	79.1	82.8
2nd qtr	82.9	85.5	88.9	85.4	76.8	78.6	87.6	85.9	83.3	83.1	80.6	83.4
3rd qtr	83.0	85.8	89.9	85.7	76.4	79.3	87.5	85.1	84.7	81.0	81.0	83.7
4th qtr	82.3	85.4	87.2	84.9	77.6	77.3	88.2	84.6	83.5	81.4	80.6	82.8
1999 1st qtr	79.6	84.3	85.1	85.2	73.1	76.1	85.5	84.1	81.4	81.2	80.8	81.9
<b>Unemployment rate <sup>4)</sup></b>												
1996	9.7	8.9	15.3	12.4	11.6	12.0	3.0	6.3	4.3	7.3	22.2	11.6
1997	9.2	9.9	12.7	12.3	9.8	12.1	2.8	5.2	4.4	6.8	20.8	11.6
1998	8.8	9.4	11.4	11.7	7.8	12.2	2.8	4.0	4.7	4.9	18.8	10.9
1998 July	8.8	9.3	11.4	11.7	7.8	12.3	2.9	3.8	4.7	4.6	18.8	10.9
Aug.	8.9	9.3	11.2	11.7	7.7	12.3	2.8	3.7	4.7	4.6	18.7	10.8
Sep.	8.8	9.2	11.0	11.7	7.5	12.3	2.8	3.7	4.7	4.6	18.6	10.8
Oct.	8.6	9.1	10.8	11.6	7.4	12.2	2.9	3.6	4.7	4.5	18.5	10.7
Nov.	8.5	9.1	10.8	11.6	7.3	12.2	2.7	3.6	4.6	4.4	18.1	10.6
Dec.	8.5	9.2	10.8	11.5	7.3	12.1	2.6	3.6	4.6	4.4	18.0	10.6
1999 Jan.	8.4	9.0	10.8	11.4	7.2	12.0	2.8	3.4	4.6	4.3	17.8	10.5
Feb.	8.4	9.0	10.8	11.4	7.0	.	2.8	.	4.6	4.2	17.6	10.5
<b>Harmonised index of consumer prices <sup>1)</sup></b>												
1996	1.8	1.2	1.1	2.1	2.2	4.0	1.2	1.4	1.8	2.9	3.6	2.2
1997	1.5	1.5	1.2	1.3	1.2	1.9	1.4	1.9	1.2	1.9	1.9	1.6
1998	0.9	0.6	1.4	0.7	2.1	2.0	1.0	1.8	0.8	2.2	1.8	1.1
1998 Aug.	1.0	0.6	1.1	0.6	3.0	2.2	1.0	1.4	0.7	2.2	2.1	1.1
Sep.	0.8	0.5	1.4	0.5	2.8	2.1	0.7	1.3	0.6	2.2	1.6	1.0
Oct.	0.7	0.4	1.1	0.5	2.6	1.9	0.5	1.5	0.7	2.5	1.6	0.9
Nov.	0.6	0.4	0.9	0.2	2.2	1.7	0.5	1.5	0.5	2.6	1.4	0.8
Dec.	0.7	0.2	0.8	0.3	2.2	1.7	0.4	1.5	0.5	2.8	1.4	0.8
1999 Jan.	1.0	0.2	0.5	0.4	2.1	1.5	- 1.4	2.1	0.3	2.5	1.5	0.8
Feb.	1.0	0.1	0.9	0.3	2.3	1.4	0.6	2.0	0.3	2.7	1.8	0.8
Mar.	.	.	0.9	0.5	2.0	.	0.6	2.0	.	.	.	.
<b>General government financial balance <sup>5)</sup></b>												
1997	- 1.9	- 2.7	- 1.2	- 3.0	1.1	- 2.7	2.9	- 0.9	- 1.9	- 2.5	- 2.6	- 2.5
1998	- 1.3	6) - 2.0	1.0	- 2.9	2.3	- 2.7	2.1	- 0.9	- 2.1	- 2.3	- 1.8	- 2.1
<b>General government debt <sup>5)</sup></b>												
1997	123.4	61.5	54.9	58.1	61.3	122.4	6.4	71.2	64.3	61.7	67.5	75.4
1998	117.3	6) 61.1	49.6	58.5	52.1	118.7	6.7	67.7	63.1	57.8	65.6	73.6

Sources: National data, European Commission, Eurostat, European Central Bank. Latest data are provisional. — 1 Annual percentage changes; GDP of France, Portugal, Spain and EMU are calculated from seasonally adjusted data. — 2 Manufacturing, mining, gas and electricity; adjusted for working-day variations (except France and Spain). — 3 Manufacturing,

in %; seasonally adjusted (except Austria); data are collected in January, April, July and October. — 4 Standardised, as a percentage of persons in civilian employment; seasonally adjusted. — 5 As a percentage of GDP; Maastricht Treaty definition. — 6 GDP results of March 1999. — 7 For the reason for the revisions see section IX, table 2.

II. Overall monetary survey in the European monetary union

New table <sup>12</sup>

1. The money stock and its counterparts<sup>1)</sup>

Period	I. Lending to non-banks (non-MFIs) in the euro area <sup>3</sup>					II. Net claims on non-euro-area residents			III. Monetary capital formation at monetary financial institutions (MFIs) in the euro area				
	Enterprises and individuals		Public authorities			Total	Claims on non-euro-area residents	Liabilities to non-euro-area residents	Total <sup>4</sup>	Deposits with an agreed maturity of over 2 years <sup>4</sup>	Deposits at agreed notice of over 3 months	Debt securities with maturities of over 2 years (net) <sup>5</sup>	Capital and reserves
	Total	of which: Securities	Total	of which: Securities	Total								
European monetary union (euro billion) <sup>1</sup>													
1998 Feb.	48.4	38.0	13.3	10.4	8.8	- 6.2	26.7	32.9	22.7	8.2	- 0.2	15.6	- 0.9
Mar.	65.8	52.7	20.6	13.1	15.1	2.6	54.3	51.7	20.0	1.1	- 0.8	8.5	11.1
Apr.	54.6	42.2	8.8	12.4	7.4	- 10.4	- 38.2	- 27.8	- 4.8	1.8	- 2.0	7.2	- 11.8
May	27.5	27.6	9.2	- 0.1	11.0	10.0	1.9	- 8.1	10.0	1.4	- 1.7	3.5	6.8
June	63.6	47.0	- 13.7	16.6	10.7	8.1	22.0	13.9	26.7	- 2.6	- 1.0	15.4	14.9
July	20.5	42.1	- 1.2	- 21.7	- 17.4	- 18.1	- 38.0	- 20.0	5.2	2.2	- 1.2	5.5	- 1.4
Aug.	- 5.2	- 6.9	- 6.1	1.6	- 0.8	5.7	6.3	0.5	11.9	4.6	- 0.9	8.9	- 0.7
Sep.	52.4	54.9	2.6	- 2.6	- 5.8	- 28.8	- 18.1	10.6	4.6	- 4.1	- 0.6	6.1	3.2
Oct.	61.4	44.0	7.4	17.5	9.7	- 40.9	6.1	47.0	- 11.9	- 3.2	- 0.2	- 6.5	- 2.0
Nov.	62.0	53.5	8.0	8.5	1.8	- 12.7	52.4	65.1	1.2	- 4.4	0.4	7.8	- 2.5
Dec.	38.0	70.4	12.8	- 32.4	- 33.4	19.5	- 63.2	- 82.8	- 1.5	5.9	5.5	- 7.4	- 5.5
1999 Jan.	74.1	59.8	4.7	14.3	11.2	- 36.6	147.1	183.6	44.7	2.2	- 0.3	25.8	17.0
Feb.	22.8	5.0	- 0.1	17.8	15.4	- 50.2	- 102.0	- 51.8	9.8	4.5	- 0.7	10.9	- 4.8
German contribution (euro billion) <sup>2</sup>													
1998 Feb.	18.8	12.6	6.0	6.2	- 2.5	3.4	5.1	1.7	19.7	5.8	- 0.1	11.5	2.5
Mar.	27.8	20.0	11.4	7.8	10.9	0.7	13.8	13.2	8.3	1.4	- 0.8	6.4	1.4
Apr.	22.2	16.3	6.9	5.9	3.5	- 5.2	- 1.6	3.6	10.1	4.3	- 2.1	7.0	1.0
May	12.2	10.3	1.6	1.9	7.8	- 3.9	8.1	12.0	5.3	3.1	- 1.7	2.0	1.9
June	10.8	5.4	- 7.1	5.4	5.4	- 2.6	- 1.9	0.6	4.1	0.5	- 0.9	2.5	2.0
July	5.3	4.3	- 1.9	1.0	- 3.7	0.4	- 7.4	- 7.8	14.7	2.6	- 1.1	12.6	0.6
Aug.	9.6	9.3	0.3	0.3	- 2.3	12.5	19.6	7.1	- 0.6	3.5	- 1.0	- 2.8	- 0.3
Sep.	6.2	15.1	0.1	- 8.9	- 6.6	- 0.9	- 8.9	- 8.0	4.1	- 1.9	- 0.6	6.8	- 0.1
Oct.	25.3	10.6	2.2	14.6	11.3	- 21.9	- 1.5	20.4	- 7.8	- 2.1	- 0.2	- 6.8	1.2
Nov.	28.2	20.0	8.6	8.2	6.3	6.3	26.2	19.9	4.7	- 1.9	0.2	5.2	1.1
Dec.	41.2	51.7	11.4	- 10.5	- 15.5	- 6.3	- 2.8	3.5	- 1.0	- 3.4	5.4	- 3.5	0.5
1999 Jan.	14.9	12.7	- 0.9	2.2	- 5.6	- 19.3	17.4	36.7	15.7	3.5	- 0.7	12.4	0.5
Feb.	11.6	0.9	0.1	10.6	1.3	- 25.5	- 30.0	- 4.5	15.2	3.3	- 1.2	9.7	3.3
German contribution (DM billion) <sup>2</sup>													
1998 Feb.	36.7	24.7	11.7	12.1	- 4.9	6.6	10.0	3.4	38.5	11.3	- 0.1	22.5	4.9
Mar.	54.3	39.1	22.2	15.2	21.3	1.3	27.1	25.8	16.3	2.7	- 1.5	12.5	2.7
Apr.	43.5	31.9	13.5	11.6	6.8	- 10.2	- 3.2	7.0	19.8	8.4	- 4.2	13.6	1.9
May	23.9	20.1	3.1	3.7	15.3	- 7.7	15.9	23.5	10.4	6.2	- 3.3	3.8	3.7
June	21.1	10.6	- 13.9	10.5	10.6	- 5.0	- 3.8	1.2	8.1	0.9	- 1.7	5.0	3.9
July	10.3	8.4	- 3.8	1.9	- 7.3	0.7	- 14.4	- 15.2	28.7	5.1	- 2.2	24.6	1.2
Aug.	18.8	18.2	0.6	0.6	- 4.5	24.5	38.4	13.8	- 1.2	6.8	- 1.9	- 5.5	- 0.6
Sep.	12.1	29.6	0.3	- 17.5	- 12.9	- 1.8	- 17.4	- 15.6	8.1	- 3.8	- 1.2	13.3	- 0.3
Oct.	49.4	20.8	4.2	28.6	22.1	- 42.9	- 3.0	39.9	- 15.3	- 4.1	- 0.4	- 13.2	2.4
Nov.	55.2	39.1	16.8	16.0	12.3	12.2	51.2	39.0	9.1	- 3.7	0.5	10.2	2.2
Dec.	80.6	101.2	22.2	- 20.6	- 30.2	- 12.4	- 5.5	6.9	- 2.0	- 6.6	10.6	- 6.9	1.0
1999 Jan.	29.2	24.8	- 1.8	4.3	- 11.0	- 37.8	34.0	71.8	30.7	6.8	- 1.4	24.3	1.1
Feb.	22.6	1.8	0.1	20.8	2.5	- 49.8	- 58.6	- 8.8	29.8	6.5	- 2.3	19.0	6.5

\* The data in this table are based on the consolidated balance sheet of monetary financial institutions (MFIs) (table II.2); statistical breaks have been eliminated from the flow figures. — 1 Source: ECB. — 2 Owing to changes in the definitions of the items and differences in the range of reporting institutions, the figures are not comparable with those published for

Germany up to end of 1998. — 3 For the German contribution: up to December 1998, including loans on a trust basis and bill-based lending instead of bill holdings. — 4 For the German contribution: up to December 1998, including liabilities arising from loans on a trust basis. — 5 Excluding MFIs portfolios. — 6 For the European monetary union: including the

II. Overall monetary survey in the European monetary union

IV. Deposits of central governments	V. Other factors <sup>6</sup>	VI. Money stock M3 (balance I plus II less III less IV less V)										Period
		Total	Money stock M2					Repo-transactions <sup>11</sup>	Money market fund certificates and money market paper (net) <sup>5</sup>	Debt securities for up to 2 years (net) <sup>5</sup>		
			Total	Money stock M1			Deposits with an agreed maturity of up to 2 years <sup>8,9</sup>				Deposits at agreed notice of up to 3 months <sup>8,10</sup>	
				Total	Currency in circulation <sup>7</sup>	Overnight deposits <sup>8</sup>						
<b>European monetary union (euro billion) <sup>1</sup></b>												
13.6	- 2.0	7.8	2.0	1.0	0.4	0.7	- 3.1	4.1	- 0.8	1.7	4.9	1998 Feb.
- 20.4	60.5	8.3	4.3	29.4	0.0	29.3	- 26.8	1.8	- 4.1	1.9	6.1	Mar.
2.0	9.3	37.8	32.7	16.0	3.0	12.9	14.9	1.8	- 5.6	9.8	0.9	Apr.
- 6.5	10.4	23.6	20.6	19.8	2.4	17.4	- 3.3	4.0	1.6	- 1.9	3.3	May
13.1	14.1	17.8	28.0	46.4	- 1.7	48.2	- 18.2	- 0.3	- 4.8	- 4.5	- 0.9	June
8.2	- 4.8	- 6.1	- 31.3	- 34.1	5.2	- 39.3	2.3	0.6	12.1	7.2	5.8	July
8.8	- 6.2	- 14.0	- 5.0	- 14.8	- 5.7	- 9.0	6.8	3.0	- 7.3	3.8	- 5.5	Aug.
- 1.8	20.5	0.3	9.0	19.3	- 3.1	22.3	- 10.2	- 0.2	- 0.5	- 3.2	- 5.1	Sep.
- 1.6	- 10.8	44.9	19.3	5.7	1.5	4.2	7.9	5.6	10.9	6.2	8.6	Oct.
- 6.7	27.9	26.9	47.3	42.1	0.9	41.2	2.9	2.3	- 19.9	2.1	- 2.6	Nov.
1.2	- 21.6	79.4	126.1	81.9	9.4	72.5	13.6	30.7	- 20.5	- 13.2	- 13.0	Dec.
- 6.3	- 13.9	13.0	12.9	9.9	- 9.3	19.3	- 11.9	14.9	- 4.6	13.0	- 8.3	1999 Jan.
8.4	- 34.4	- 11.1	- 45.6	- 33.8	- 3.8	- 30.0	- 15.5	3.7	12.4	19.7	2.4	Feb.
<b>German contribution (euro billion) <sup>2</sup></b>												
0.2	- 6.5	8.8	5.4	3.9	0.7	3.1	- 0.7	2.2	-	2.3	1.1	1998 Feb.
- 0.1	22.1	- 1.9	- 2.4	2.4	- 0.5	2.9	- 4.2	- 0.5	-	0.8	- 0.2	Mar.
- 0.8	1.5	6.2	6.5	7.2	1.0	6.3	0.0	- 0.8	-	0.7	- 0.9	Apr.
0.3	- 1.7	4.4	3.4	- 0.4	- 0.3	- 0.1	3.6	0.2	-	0.6	0.3	May
0.8	2.8	0.5	- 0.5	7.0	- 1.1	8.1	- 6.9	- 0.6	-	0.7	0.3	June
- 0.2	- 6.7	- 2.2	- 2.2	- 6.4	1.2	- 7.6	4.6	- 0.4	-	0.5	- 0.4	July
0.3	8.2	14.3	11.2	8.4	- 1.3	9.7	2.6	0.2	-	1.5	1.5	Aug.
0.1	3.4	- 2.3	- 2.0	1.5	- 1.7	3.1	- 3.1	- 0.3	-	- 0.1	- 0.3	Sep.
- 0.4	- 1.2	12.8	11.4	8.1	0.4	7.7	1.7	1.7	-	0.7	0.7	Oct.
0.2	- 0.2	29.7	27.9	26.4	1.1	25.3	- 0.1	1.6	-	2.2	- 0.4	Nov.
1.6	- 13.5	47.8	50.2	12.0	0.7	11.2	22.9	15.3	-	- 2.6	0.2	Dec.
0.9	- 18.9	- 2.1	- 0.4	- 8.9	- 2.5	- 6.4	6.5	2.1	0.1	- 2.1	0.2	1999 Jan.
0.9	- 38.3	8.4	2.8	1.2	0.3	0.9	- 0.9	2.4	0.5	2.6	2.5	Feb.
<b>German contribution (DM billion) <sup>2</sup></b>												
0.4	- 12.7	17.1	10.5	7.6	1.4	6.2	- 1.3	4.2	-	4.4	2.2	1998 Feb.
- 0.3	43.2	- 3.6	- 4.7	4.6	- 1.0	5.6	- 8.3	- 1.0	-	1.5	- 0.4	Mar.
- 1.5	2.9	12.1	12.6	14.2	1.9	12.3	0.0	- 1.5	-	1.3	- 1.9	Apr.
0.6	- 3.4	8.6	6.7	- 0.7	- 0.6	- 0.1	7.1	0.4	-	1.3	0.7	May
1.5	5.5	1.0	- 0.9	13.7	- 2.2	15.9	- 13.5	- 1.2	-	1.4	0.6	June
- 0.3	- 13.1	- 4.2	- 4.4	- 12.6	2.3	- 14.9	9.1	- 0.9	-	1.0	- 0.8	July
0.5	16.1	27.9	21.9	16.4	- 2.5	19.0	5.1	0.4	-	3.0	3.0	Aug.
0.2	6.7	- 4.6	- 3.8	2.9	- 3.3	6.1	- 6.1	- 0.6	-	- 0.2	- 0.5	Sep.
- 0.8	- 2.4	25.0	22.3	15.8	0.7	15.1	3.3	3.3	-	1.4	1.3	Oct.
0.4	- 0.3	58.2	54.6	51.7	2.1	49.6	- 0.2	3.1	-	4.3	- 0.8	Nov.
3.1	- 26.4	93.4	98.1	23.5	1.4	22.0	44.8	29.9	-	- 5.1	0.4	Dec.
1.7	- 36.9	- 4.2	- 0.7	- 17.5	- 5.0	- 12.5	12.7	4.0	0.2	- 4.1	0.4	1999 Jan.
1.7	- 75.0	16.4	5.4	2.3	0.6	1.8	- 1.7	4.8	1.0	5.0	4.9	Feb.

counterparts of monetary liabilities of central governments. — <sup>7</sup> Excluding euro-area MFIs cash in hand denominated in euros or in currencies of the euro area. — <sup>8</sup> For the European monetary union: including the monetary liabilities of central governments (Post Office, Treasury). — <sup>9</sup> For the German

contribution: up to December 1998, with maturities of less than 4 years. — <sup>10</sup> In Germany, only savings deposits. — <sup>11</sup> For the German contribution: data collected separately only from 1999. — <sup>12</sup> See the note on the title page of the Statistical Section (page 1\*).

II. Overall monetary survey in the European monetary union

New table 14

2. Consolidated balance sheet of monetary financial institutions (MFIs) \*

Period	Assets 3										
	Lending to non-banks (non-MFIs) in the euro area 4									Claims on non-euro-area residents	Other assets
	Total assets 3 or liabilities 5	Enterprises and individuals					Public authorities				
		Total	Advances 4	Debt securities 5	Shares and other equities	Total	Advances 4	Debt securities 6			
Total									Advances 4		
<b>European monetary union (euro billion) 1</b>											
1998 Jan.	10,149.9	7,173.5	5,162.7	4,721.0	190.4	251.4	2,010.8	827.6	1,183.2	1,891.6	1,084.8
Feb.	10,231.2	7,220.8	5,199.7	4,744.7	195.6	259.4	2,021.1	829.1	1,192.0	1,918.2	1,092.2
Mar.	10,327.5	7,286.8	5,251.7	4,776.0	199.8	275.9	2,035.1	827.2	1,207.9	1,970.7	1,070.0
Apr.	10,364.6	7,338.3	5,291.3	4,806.9	199.9	284.4	2,047.1	832.1	1,215.0	1,932.4	1,093.8
May	10,419.5	7,365.0	5,318.2	4,824.7	203.5	290.0	2,046.8	820.9	1,225.9	1,934.6	1,119.9
June	10,389.5	7,422.4	5,358.2	4,876.6	196.4	285.3	2,064.2	826.9	1,237.3	1,963.3	1,003.8
July	10,412.5	7,442.3	5,396.7	4,917.2	201.8	277.7	2,045.6	822.5	1,223.1	1,925.2	1,045.0
Aug.	10,409.0	7,437.4	5,390.0	4,916.7	202.4	270.9	2,047.3	825.0	1,222.4	1,931.5	1,040.2
Sep.	10,447.5	7,485.2	5,440.5	4,964.8	202.9	272.8	2,044.7	828.0	1,216.7	1,912.9	1,049.4
Oct.	10,510.5	7,539.7	5,479.5	4,999.1	206.6	273.8	2,060.2	833.9	1,226.3	1,919.1	1,051.7
Nov.	10,640.1	7,601.0	5,532.2	5,043.7	201.3	287.2	2,068.8	840.7	1,228.1	1,971.2	1,067.9
Dec.	10,597.4	7,633.3	5,597.9	5,096.6	194.9	306.5	2,035.4	841.6	1,193.7	1,905.0	1,059.1
1999 Jan.	10,978.6	7,687.0	5,644.3	5,104.3	207.1	333.0	2,042.7	838.7	1,204.0	2,053.8	1,237.8
Feb.	10,914.6	7,713.0	5,652.1	5,112.0	201.8	338.4	2,060.8	841.2	1,219.6	1,951.9	1,249.8
<b>German contribution (euro billion) 2</b>											
1998 Jan.	3,418.7	2,786.6	2,093.4	1,928.5	41.9	123.0	693.2	485.6	207.6	484.9	147.2
Feb.	3,440.5	2,805.4	2,106.0	1,935.1	42.1	128.8	699.4	494.3	205.1	490.0	145.1
Mar.	3,480.3	2,833.2	2,126.0	1,943.8	42.1	140.1	707.1	491.2	215.9	503.8	143.3
Apr.	3,500.6	2,855.4	2,142.3	1,953.2	44.1	145.0	713.1	493.6	219.4	502.2	143.0
May	3,527.8	2,867.6	2,152.6	1,961.9	44.6	146.1	715.0	487.7	227.2	510.3	149.9
June	3,542.0	2,875.0	2,154.0	1,968.8	43.4	141.9	721.0	487.7	233.3	514.4	152.7
July	3,544.1	2,878.7	2,156.8	1,974.3	42.0	140.5	721.9	492.4	229.6	507.1	158.3
Aug.	3,574.7	2,888.3	2,166.1	1,983.3	43.2	139.7	722.2	495.0	227.2	526.7	159.7
Sep.	3,575.9	2,894.5	2,181.2	1,998.2	43.3	139.7	713.3	492.6	220.7	517.8	163.6
Oct.	3,602.0	2,919.8	2,191.8	2,006.7	44.7	140.4	728.0	496.0	232.0	516.3	166.0
Nov.	3,658.9	2,948.0	2,211.8	2,018.1	43.3	150.4	736.1	497.9	238.3	542.1	168.8
Dec.	3,695.0	2,987.3	2,261.7	2,056.7	40.3	164.8	725.6	502.8	222.8	539.5	168.2
1999 Jan.	3,685.9	2,953.1	2,250.5	2,013.7	48.4	188.4	702.6	502.6	200.0	560.9	171.9
Feb.	3,668.4	2,964.6	2,251.4	2,014.5	46.7	190.2	713.2	512.0	201.2	530.8	173.0
<b>German contribution (DM billion) 2</b>											
1998 Jan.	6,686.4	5,450.1	4,094.4	3,771.8	82.0	240.6	1,355.8	949.8	406.0	948.4	287.9
Feb.	6,729.0	5,486.9	4,119.0	3,784.8	82.4	251.8	1,367.8	966.8	401.1	958.4	283.8
Mar.	6,806.9	5,541.2	4,158.2	3,801.7	82.3	274.1	1,383.0	960.7	422.4	985.4	280.3
Apr.	6,846.5	5,584.7	4,190.0	3,820.2	86.2	283.6	1,394.6	965.5	429.2	982.3	279.6
May	6,899.8	5,608.5	4,210.2	3,837.2	87.1	285.8	1,398.4	953.9	444.5	998.1	293.2
June	6,927.6	5,623.0	4,212.9	3,850.6	84.8	277.5	1,410.1	953.8	456.3	1,006.0	298.6
July	6,931.7	5,630.2	4,218.3	3,861.3	82.2	274.7	1,412.0	963.0	449.0	991.8	309.7
Aug.	6,991.5	5,649.1	4,236.5	3,878.9	84.4	273.1	1,412.6	968.1	444.5	1,030.1	312.3
Sep.	6,993.9	5,661.2	4,266.0	3,908.2	84.7	273.1	1,395.1	963.5	431.6	1,012.8	320.0
Oct.	7,044.9	5,710.6	4,286.8	3,924.8	87.4	274.7	1,423.7	970.0	453.7	1,009.7	324.6
Nov.	7,156.2	5,765.7	4,325.9	3,947.1	84.6	294.2	1,439.8	973.7	466.0	1,060.3	330.1
Dec.	7,226.7	5,842.6	4,423.5	4,022.5	78.7	322.3	1,419.1	983.4	435.7	1,055.1	329.0
1999 Jan.	7,209.0	5,775.7	4,401.6	3,938.4	94.7	368.5	1,374.1	983.0	391.1	1,097.0	336.2
Feb.	7,174.8	5,798.2	4,403.4	3,940.1	91.4	371.9	1,394.8	1,001.4	393.4	1,038.2	338.3

\* Monetary financial institutions (MFIs) comprise banks (including building and loan associations), money market funds, and the European Central Bank and central banks (the Eurosystem). — 1 Source: ECB. — 2 Owing to changes in the definitions of the items and differences in the range of reporting institutions, the figures are not comparable with those published for Germany up to the end of 1998. — 3 For the German contribution: up to

December 1998, including trust funds and bill-based lending instead of bill holdings. — 4 For the German contribution: up to December 1998, including loans on a trust basis and bill-based lending instead of bill holdings. — 5 Including money market paper of enterprises. — 6 Including Treasury bills and other money market paper of public authorities. — 7 For the German

II. Overall monetary survey in the European monetary union

Liabilities 7											Period
Currency in circulation 8	Deposits of non-banks (non-MFIs) in the euro area 9										
	Total	of which: in euros 10	Enterprises and individuals							At agreed notice of 13	
			Total	Overnight	With agreed maturities of			over 2 years 9, 12			
					up to 1 year	over 1 year up to 2 years 11	up to 3 months		over 3 months		
<b>European monetary union (euro billion) 1</b>											
311.4	4,589.2	4,295.5	4,306.2	1,135.4	761.7	113.0	958.8	1,120.7	216.5	1998 Jan.	
311.7	4,614.4	4,304.2	4,313.5	1,134.4	765.9	105.7	967.0	1,124.3	216.3	Feb.	
311.8	4,598.1	4,310.7	4,327.0	1,169.6	744.6	102.6	968.4	1,126.3	215.5	Mar.	
314.8	4,628.7	4,338.5	4,353.5	1,181.5	761.3	99.6	969.8	1,127.9	213.5	Apr.	
317.2	4,640.6	4,348.4	4,368.0	1,200.4	757.1	96.4	971.1	1,131.2	211.8	May	
315.5	4,680.2	4,376.7	4,396.1	1,248.3	743.1	94.0	969.0	1,130.8	210.8	June	
320.6	4,650.7	4,342.6	4,357.2	1,208.6	743.9	93.2	970.6	1,131.3	209.6	July	
314.9	4,664.0	4,343.6	4,360.7	1,200.8	750.5	91.7	975.2	1,133.7	208.7	Aug.	
311.9	4,665.8	4,353.0	4,364.6	1,221.7	741.3	89.9	970.1	1,133.4	208.1	Sep.	
313.4	4,670.7	4,359.4	4,371.1	1,225.2	744.8	89.8	966.3	1,137.0	207.9	Oct.	
314.3	4,708.5	4,400.5	4,410.6	1,263.6	751.4	86.1	962.0	1,139.3	208.3	Nov.	
323.7	4,829.6	4,529.7	4,528.9	1,334.4	760.5	83.1	971.5	1,166.0	213.4	Dec.	
313.6	4,826.4	4,536.6	4,566.1	1,355.8	766.6	74.6	973.2	1,182.9	213.1	1999 Jan.	
309.8	4,808.4	4,512.7	4,539.9	1,329.3	754.5	72.4	985.2	1,186.0	212.4	Feb.	
<b>German contribution (euro billion) 2</b>											
123.6	1,849.7	1,766.4	1,710.3	311.0	192.3	10.9	499.9	480.7	215.5	1998 Jan.	
124.3	1,860.2	1,775.8	1,718.9	312.6	191.0	11.2	505.8	482.8	215.5	Feb.	
123.8	1,858.7	1,774.4	1,719.0	315.7	187.7	11.5	507.2	482.2	214.7	Mar.	
124.8	1,865.6	1,781.1	1,727.7	321.9	188.5	11.5	511.7	481.5	212.5	Apr.	
124.4	1,871.2	1,786.0	1,729.3	321.9	188.6	11.7	514.9	481.4	210.8	May	
123.3	1,872.2	1,785.9	1,730.6	330.1	182.5	11.8	515.5	480.8	210.0	June	
124.5	1,870.1	1,784.5	1,729.4	323.6	186.9	12.0	517.8	480.3	208.8	July	
123.2	1,885.4	1,798.4	1,740.9	331.9	187.3	12.3	521.1	480.4	207.9	Aug.	
121.6	1,882.6	1,795.3	1,740.2	335.6	185.5	12.4	519.2	480.2	207.3	Sep.	
121.9	1,891.0	1,803.9	1,750.2	342.8	187.9	12.9	517.6	482.0	207.1	Oct.	
123.0	1,916.4	1,830.1	1,772.4	366.7	186.0	13.2	515.4	483.7	207.3	Nov.	
123.7	1,969.5	1,880.9	1,820.2	376.3	203.1	13.3	515.9	499.3	212.3	Dec.	
120.4	1,932.9	1,855.6	1,821.0	371.9	210.6	8.1	517.7	501.2	211.6	1999 Jan.	
120.7	1,945.3	1,863.9	1,830.6	371.3	209.3	7.9	528.1	503.6	210.5	Feb.	
<b>German contribution (DM billion) 2</b>											
241.7	3,617.6	3,454.7	3,345.1	608.2	376.1	21.4	977.8	940.1	421.5	1998 Jan.	
243.1	3,638.2	3,473.2	3,361.8	611.5	373.6	21.8	989.2	944.3	421.4	Feb.	
242.1	3,635.3	3,470.5	3,362.0	617.4	367.0	22.4	992.1	943.2	419.9	Mar.	
244.0	3,648.9	3,483.5	3,379.2	629.7	368.8	22.5	1,000.7	941.8	415.7	Apr.	
243.4	3,659.7	3,493.2	3,382.1	629.5	368.9	22.8	1,007.0	941.5	412.4	May	
241.2	3,661.8	3,492.8	3,384.8	645.5	356.9	23.0	1,008.2	940.4	410.7	June	
243.6	3,657.6	3,490.3	3,382.3	632.8	365.5	23.5	1,012.7	939.3	408.4	July	
241.0	3,687.5	3,517.4	3,404.9	649.1	366.3	24.1	1,019.2	939.7	406.5	Aug.	
237.8	3,682.1	3,511.4	3,403.6	656.5	362.9	24.2	1,015.5	939.2	405.4	Sep.	
238.5	3,698.5	3,528.1	3,423.1	670.4	367.4	25.3	1,012.3	942.7	405.0	Oct.	
240.6	3,748.2	3,579.4	3,466.4	717.3	363.7	25.9	1,008.1	946.0	405.4	Nov.	
242.0	3,851.9	3,678.8	3,560.1	736.0	397.3	25.9	1,009.1	976.5	415.3	Dec.	
235.4	3,780.5	3,629.3	3,561.6	727.3	412.0	15.8	1,012.6	980.2	413.8	1999 Jan.	
236.0	3,804.6	3,645.4	3,580.4	726.2	409.4	15.4	1,033.0	984.9	411.6	Feb.	

contribution: up to December 1998, including liabilities incurred in the banks own name but on behalf of third parties and including endorsement liabilities on rediscounted bills. — 8 Excluding the cash in hand (in euros) of MFIs. — 9 For the German contribution: up to December 1998, including liabilities arising from loans on a trust basis. — 10 Excluding central

governments deposits. — 11 For the German contribution: up to December 1998, with maturities of 1 year to less than 4 years. — 12 For the German contribution: up to December 1998, with maturities of 4 years and more. — 13 In Germany, only saving deposits. — 14 See the note on the title page of the Statistical Section (page 1\*).

II. Overall monetary survey in the European monetary union

New table 16

2. Consolidated balance sheet of monetary financial institutions (MFIs) \* (cont'd)

Liabilities (cont'd)													
Deposits of non-banks (non-MFIs) in the euro area (cont'd 3)											Repo transactions with counterparties in the euro area 6		Money market fund certificates and money market paper (net) 8
Public authorities													
Period	Other public authorities										Total	of which: Enterprises and individuals	
	Central governments	Total	Overnight	With agreed maturities of			At agreed notice of 6						
				up to 1 year	over 1 year up to 2 years 4	over 2 years 3ü.5	up to 3 months	over 3 months					
<b>European monetary union (euro billion) 1</b>													
1998 Jan.	146.3	136.7	44.0	31.6	0.9	55.6	3.4	1.2	217.1	214.5	308.0		
Feb.	160.0	140.8	48.6	31.4	0.9	55.5	3.3	1.2	216.3	213.3	309.8		
Mar.	139.6	131.5	41.2	29.5	0.8	55.4	3.4	1.2	212.3	209.8	311.2		
Apr.	141.6	133.7	43.3	29.6	0.8	55.3	3.4	1.2	206.6	203.8	320.9		
May	135.1	137.5	43.1	33.4	0.8	55.2	3.7	1.2	208.2	205.4	319.4		
June	148.2	135.9	43.2	32.1	0.7	54.9	3.7	1.2	203.4	200.7	315.1		
July	156.4	137.1	42.4	33.6	0.8	55.2	3.8	1.2	215.5	212.4	322.3		
Aug.	165.2	138.2	41.7	35.1	0.9	55.3	3.9	1.2	208.2	204.9	326.2		
Sep.	163.3	137.8	42.8	33.7	0.9	55.4	3.9	1.2	207.7	204.4	322.5		
Oct.	161.7	137.9	44.3	32.7	1.0	55.0	3.7	1.2	218.3	213.3	328.5		
Nov.	155.0	142.8	47.9	33.9	1.0	55.2	3.7	1.2	198.4	195.5	331.8		
Dec.	156.2	144.4	47.6	39.6	0.9	51.3	3.7	1.2	178.0	175.8	314.0		
1999 Jan.	137.9	122.4	50.5	38.8	0.8	27.2	4.0	1.3	175.1	172.5	350.2		
Feb.	146.2	122.3	50.6	38.8	0.9	26.9	3.8	1.3	187.5	184.1	370.6		
<b>German contribution (euro billion) 2</b>													
1998 Jan.	55.0	84.4	8.7	19.0	0.3	52.7	2.4	1.2	-	-	28.3		
Feb.	55.2	86.2	10.2	19.3	0.3	52.7	2.4	1.2	-	-	30.6		
Mar.	55.0	84.7	10.0	18.2	0.3	52.6	2.5	1.2	-	-	31.3		
Apr.	54.2	83.7	10.0	17.2	0.3	52.5	2.4	1.2	-	-	32.0		
May	54.5	87.4	10.0	20.6	0.3	52.4	2.7	1.2	-	-	32.7		
June	55.3	86.3	10.1	19.8	0.3	52.2	2.7	1.2	-	-	33.3		
July	55.1	85.6	8.9	19.8	0.4	52.5	2.8	1.2	-	-	33.8		
Aug.	55.4	89.1	10.3	21.6	0.4	52.7	2.8	1.2	-	-	35.3		
Sep.	55.5	86.9	9.7	20.2	0.4	52.6	2.8	1.2	-	-	35.2		
Oct.	55.1	85.7	10.3	19.0	0.4	52.2	2.6	1.2	-	-	35.9		
Nov.	55.3	88.7	11.6	20.5	0.4	52.5	2.5	1.2	-	-	38.2		
Dec.	56.9	92.3	13.4	26.2	0.4	48.6	2.6	1.2	-	-	35.5		
1999 Jan.	45.8	66.1	11.4	26.2	0.3	24.3	2.7	1.3	1.5	1.5	34.4		
Feb.	46.7	67.9	12.9	26.8	0.3	24.0	2.8	1.2	2.0	2.0	37.0		
<b>German contribution (DM billion) 2</b>													
1998 Jan.	107.5	165.0	17.0	37.1	0.6	103.1	4.7	2.4	-	-	55.4		
Feb.	107.9	168.5	20.0	37.8	0.6	103.0	4.7	2.3	-	-	59.8		
Mar.	107.6	165.8	19.6	35.5	0.7	102.8	4.8	2.4	-	-	61.3		
Apr.	106.1	163.6	19.7	33.7	0.7	102.6	4.7	2.4	-	-	62.6		
May	106.6	170.9	19.6	40.4	0.7	102.5	5.3	2.4	-	-	63.9		
June	108.2	168.8	19.7	38.7	0.7	102.2	5.2	2.4	-	-	65.2		
July	107.8	167.5	17.5	38.7	0.7	102.7	5.4	2.4	-	-	66.1		
Aug.	108.4	174.2	20.2	42.3	0.7	103.1	5.5	2.4	-	-	69.1		
Sep.	108.5	169.9	18.9	39.5	0.7	102.9	5.4	2.4	-	-	68.9		
Oct.	107.8	167.6	20.1	37.2	0.7	102.2	5.1	2.4	-	-	70.3		
Nov.	108.2	173.5	22.8	40.2	0.7	102.6	4.9	2.4	-	-	74.7		
Dec.	111.3	180.6	26.1	51.2	0.8	95.0	5.0	2.4	-	-	69.5		
1999 Jan.	89.6	129.3	22.2	51.2	0.5	47.5	5.3	2.5	2.9	2.9	67.4		
Feb.	91.3	132.9	25.2	52.4	0.5	46.9	5.4	2.4	4.0	4.0	72.4		

\* Monetary financial institutions (MFIs) comprise banks (including building and loan associations), money market funds, and the European Central Bank and central banks (the Eurosystem). — 1 Source: ECB. — 2 Owing to changes in the definitions of the items and differences in the range of reporting institutions, the figures are not comparable with those published for Germany up to the end of 1998. — 3 For the German contribution: up to December 1998, including liabilities arising from loans on a trust basis. —

4 For the German contribution: up to December 1998, with maturities of 1 year to less than 4 years. — 5 For the German contribution: up to December 1998, with maturities of 4 years and more. — 6 In Germany: only savings deposits. — 7 For the German contribution: data collected separately from 1999 only; up to December 1998, included in the deposits with agreed maturities of up to 1 year. — 8 Excluding holdings of MFIs. — 9 In Germany, bank debt securities with maturities of up to one year count as money

II. Overall monetary survey in the European monetary union

											Memo item				Period	
Debt securities issued (net) <sup>8</sup>											Monetary aggregates			Monetary capital formation <sup>14</sup>		Monetary liabilities of central governments (Post Office, Treasury) <sup>15</sup>
Total	of which: denominated in euros	With maturities of			Liabilities to non-euro-area residents <sup>10</sup>	Capital and reserves	Excess of inter-MFI liabilities	Other liabilities	M1 <sup>11</sup>	M2 <sup>12</sup>	M3 <sup>13</sup>					
		up to 1 year	over 1 year up to 2 years	over 2 years												
<b>European monetary union (euro billion) <sup>1</sup></b>																
1,311.7	1,135.3	17.6	55.2	1,239.0	1,452.0	695.6	- 74.8	1,339.6	1,561.9	3,647.3	4,245.2	3,166.7	125.2	1998 Jan.		
1,331.6	1,146.6	19.2	58.4	1,254.0	1,484.9	694.5	- 62.9	1,330.9	1,562.8	3,648.9	4,252.5	3,188.5	122.8	Feb.		
1,346.2	1,158.4	21.1	62.6	1,262.5	1,536.6	703.7	- 35.8	1,343.5	1,592.5	3,654.0	4,261.2	3,206.7	124.3	Mar.		
1,350.6	1,159.5	19.9	64.5	1,266.2	1,508.8	691.8	- 50.8	1,393.2	1,607.6	3,684.8	4,296.7	3,197.8	122.6	Apr.		
1,355.0	1,167.7	21.6	65.9	1,267.5	1,501.2	698.8	- 28.2	1,407.3	1,627.1	3,704.6	4,319.7	3,205.7	121.3	May		
1,369.1	1,179.6	16.7	70.0	1,282.5	1,516.9	711.4	- 50.1	1,327.9	1,674.0	3,733.6	4,338.8	3,229.8	122.1	June		
1,377.5	1,190.8	22.3	70.0	1,285.2	1,496.9	711.2	- 34.6	1,352.4	1,639.2	3,700.7	4,330.8	3,233.1	122.4	July		
1,381.3	1,192.8	19.7	67.0	1,294.6	1,497.4	710.1	- 35.1	1,341.9	1,624.4	3,695.6	4,316.8	3,245.1	122.2	Aug.		
1,377.0	1,195.4	21.6	59.6	1,295.8	1,508.1	713.2	- 17.6	1,359.1	1,641.9	3,700.4	4,311.8	3,243.7	120.9	Sep.		
1,378.6	1,195.5	23.6	61.0	1,294.1	1,555.0	711.5	- 22.2	1,356.6	1,647.4	3,711.9	4,343.3	3,235.9	119.9	Oct.		
1,384.8	1,200.2	23.5	58.4	1,302.9	1,620.1	708.8	8.0	1,365.4	1,690.4	3,761.4	4,373.4	3,238.4	120.3	Nov.		
1,365.2	1,195.4	19.1	49.7	1,296.3	1,534.8	702.6	37.3	1,312.3	1,771.8	3,885.7	4,446.6	3,236.4	126.1	Dec.		
1,390.5	1,235.4	22.3	32.0	1,336.2	1,702.7	761.9	- 17.3	1,475.5	1,783.2	3,910.5	4,490.1	3,312.8	123.1	1999 Jan.		
1,407.0	1,241.8	22.3	34.8	1,349.9	1,650.9	757.2	8.2	1,415.1	1,750.5	3,867.4	4,482.5	3,333.0	121.2	Feb.		
<b>Germany contribution (euro billion) <sup>2</sup></b>																
618.1	546.5	-	17.3	600.8	318.2	206.1	- 8.1	282.8	443.2	1,148.9	1,194.5	1,576.3	-	1998 Jan.		
630.8	553.3	-	18.5	612.3	320.0	208.5	- 12.1	278.2	447.1	1,154.2	1,203.3	1,596.0	-	Feb.		
637.0	558.2	-	18.3	618.7	333.2	209.9	- 1.2	287.7	449.5	1,151.8	1,201.4	1,604.3	-	Mar.		
643.0	561.5	-	17.3	625.7	336.8	210.9	- 11.8	299.4	456.7	1,158.3	1,207.6	1,614.4	-	Apr.		
645.3	560.8	-	17.6	627.6	348.8	212.7	- 5.5	298.3	456.4	1,161.7	1,212.0	1,619.7	-	May		
647.7	562.3	-	17.9	629.7	351.3	214.7	- 16.4	315.9	463.5	1,161.4	1,212.6	1,623.4	-	June		
659.8	574.0	-	19.5	640.4	343.5	215.4	- 15.9	312.9	457.0	1,159.1	1,212.4	1,636.1	-	July		
658.6	573.2	-	19.1	639.5	350.6	215.1	- 17.1	323.7	465.4	1,170.3	1,224.7	1,637.5	-	Aug.		
665.1	579.8	-	18.8	646.3	342.6	214.9	- 13.6	327.5	466.9	1,168.4	1,222.4	1,641.6	-	Sep.		
659.0	574.4	-	19.4	639.6	363.0	216.1	- 14.5	329.5	474.9	1,179.8	1,235.2	1,633.8	-	Oct.		
663.8	579.1	-	19.0	644.8	382.9	217.2	- 3.4	320.8	501.4	1,207.7	1,264.9	1,638.4	-	Nov.		
660.5	577.6	-	19.2	641.3	386.4	217.7	- 6.7	308.1	513.4	1,258.2	1,313.0	1,637.1	-	Dec.		
674.7	627.3	-	9.7	665.0	415.2	243.6	- 43.0	306.2	503.6	1,252.7	1,298.3	1,663.5	-	1999 Jan.		
687.0	634.5	-	12.2	674.8	410.7	246.9	- 56.8	275.5	504.8	1,255.4	1,306.6	1,685.6	-	Feb.		
<b>Germany contribution (DM billion) <sup>2</sup></b>																
1,208.9	1,068.9	-	33.9	1,175.1	622.4	403.0	- 15.9	553.2	866.9	2,247.0	2,336.3	3,082.9	-	1998 Jan.		
1,233.7	1,082.1	-	36.1	1,197.6	625.8	407.9	- 23.6	544.1	874.5	2,257.5	2,353.4	3,121.4	-	Feb.		
1,245.8	1,091.7	-	35.7	1,210.1	651.6	410.5	- 2.4	562.7	879.2	2,252.8	2,349.8	3,137.7	-	Mar.		
1,257.6	1,098.2	-	33.9	1,223.7	658.6	412.4	- 23.1	585.5	893.3	2,265.4	2,361.9	3,157.5	-	Apr.		
1,262.1	1,096.8	-	34.5	1,227.6	682.2	416.1	- 10.8	583.4	892.6	2,272.2	2,370.5	3,167.9	-	May		
1,266.7	1,099.7	-	35.1	1,231.7	687.0	420.0	- 32.1	617.8	906.5	2,271.4	2,371.6	3,175.1	-	June		
1,290.5	1,122.6	-	38.1	1,252.5	671.8	421.3	- 31.1	612.0	893.9	2,267.0	2,371.2	3,200.0	-	July		
1,288.0	1,121.1	-	37.3	1,250.8	685.6	420.7	- 33.5	633.0	910.3	2,289.0	2,395.3	3,202.6	-	Aug.		
1,300.8	1,134.1	-	36.7	1,264.1	670.0	420.4	- 26.5	640.5	913.2	2,285.1	2,390.7	3,210.7	-	Sep.		
1,288.9	1,123.4	-	38.0	1,250.9	709.9	422.8	- 28.4	644.5	928.9	2,307.4	2,415.8	3,195.4	-	Oct.		
1,298.3	1,132.6	-	37.3	1,261.0	748.8	424.9	- 6.6	627.4	980.6	2,362.0	2,473.9	3,204.5	-	Nov.		
1,291.9	1,129.6	-	37.6	1,254.3	755.8	425.9	- 13.0	602.7	1,004.0	2,460.8	2,568.1	3,202.0	-	Dec.		
1,319.6	1,226.8	-	18.9	1,300.7	812.1	476.4	- 84.2	598.8	985.0	2,450.0	2,539.2	3,253.5	-	1999 Jan.		
1,343.7	1,240.9	-	23.8	1,319.9	803.3	483.0	- 111.0	538.9	987.3	2,455.4	2,555.6	3,296.7	-	Feb.		

market paper. — <sup>10</sup> Excluding liabilities arising from securities issued. — <sup>11</sup> Currency in circulation, overnight deposits (excluding central governments' deposits), and (for EMU) central governments' monetary liabilities, which are not included in the consolidated balance sheet. — <sup>12</sup> M1 plus deposits with agreed maturities of up to 2 years and at agreed notice of up to 3 months (excluding central governments' deposits). —

<sup>13</sup> M2 plus repo transactions, money market fund certificates, money market paper and debt securities up to 2 years. — <sup>14</sup> Deposits with agreed maturities of over 2 years and at agreed notice of over 3 months, debt securities with maturities of over 2 years, capital and reserves. — <sup>15</sup> Non-existent in Germany. — <sup>16</sup> See the note on the title page of the Statistical Section (page 1\*).



III. Consolidated financial statement of the Eurosystem

New Table 3

1. Assets \*

Euro billion

On reporting date	Total assets	Gold and gold-receivables	Claims on non-euro area residents in foreign currency			Claims on euro area residents in foreign currency	Claims on non-euro area residents in euro		
			Total	Receivables from the IMF	Balances with banks, security investments, external loans and other external assets		Total	Balances with banks, security investments and loans 2	Claims arising from the credit facility under the ERM II
<b>Eurosystem 1</b>									
1999 Jan.	694,6	99,6	233,0	29,1	203,9	7,4	9,1	9,1	-
Feb.	692,6	99,6	228,8	26,0	202,8	9,3	4,4	4,4	-
Mar.	699,4	99,6	228,5	26,6	202,0	8,9	3,8	3,8	-
1999 Jan. 1	697,2	99,6	230,3	29,5	200,8	6,7	8,9	8,9	-
8	685,1	99,6	234,1	29,4	204,8	5,3	8,8	8,8	-
15	687,0	99,6	235,4	29,2	206,2	6,5	8,1	8,1	-
22	667,6	99,6	235,4	29,1	206,3	7,3	7,2	7,2	-
29	694,6	99,6	233,0	29,1	203,9	7,4	9,1	9,1	-
Feb. 5	687,3	99,6	231,7	27,0	204,7	7,5	6,7	6,7	-
12	680,2	99,6	231,4	27,0	204,4	8,1	6,2	6,2	-
19	681,9	99,6	232,2	27,0	205,2	8,4	5,3	5,3	-
26	692,6	99,6	228,8	26,0	202,8	9,3	4,4	4,4	-
Mar. 5	698,1	99,6	228,5	26,7	201,9	8,6	4,9	4,9	-
12	693,1	99,6	227,4	26,6	200,9	9,8	4,0	4,0	-
19	668,3	99,6	228,2	26,5	201,6	9,0	4,4	4,4	-
26	699,4	99,6	228,5	26,6	202,0	8,9	3,8	3,8	-
<b>Deutsche Bundesbank</b>									
1999 Jan.	221,8	27,5	54,0	8,5	45,6	-	4,5	4,5	-
Feb.	214,8	27,5	53,0	7,1	45,9	-	3,7	3,7	-
Mar.	215,2	27,5	53,0	7,1	45,9	-	13,7	13,7	-
1999 Jan. 1	214,7	29,3	64,6	8,5	56,2	-	0,1	0,1	-
8	230,6	27,5	54,2	8,5	45,8	-	1,7	1,7	-
15	238,5	27,5	54,3	8,5	45,8	-	2,2	2,2	-
22	219,0	27,5	54,2	8,5	45,7	-	3,9	3,9	-
29	221,8	27,5	54,0	8,5	45,6	-	4,5	4,5	-
Feb. 5	218,2	27,5	52,9	7,1	45,8	-	10,1	10,1	-
12	217,2	27,5	52,9	7,2	45,8	-	15,4	15,4	-
19	210,6	27,5	53,0	7,2	45,9	-	19,8	19,8	-
26	214,8	27,5	53,0	7,1	45,9	-	3,7	3,7	-
Mar. 5	220,4	27,5	53,2	7,1	46,0	-	2,1	2,1	-
12	210,8	27,5	53,1	7,1	45,9	-	9,1	9,1	-
19	207,4	27,5	53,1	7,1	45,9	-	14,2	14,2	-
26	215,2	27,5	53,0	7,1	45,9	-	13,7	13,7	-

\* The consolidated financial statement of the Eurosystem comprises the statement of the European Central Bank (ECB) and the statements of the national central banks of the EU member countries (NCBs) of the euro area. — The balance sheet items for foreign currency, securities, gold and

financial instruments are valued at market rates at the end of the quarter. Resulting changes in relation to the preceding reporting date in excess of EUR 500 million are reported in footnotes. — 1 Source: ECB. —

III. Consolidated financial statement of the Eurosystem

Lending to financial sector counterparties of euro area in euro								Securities of euro area residents in euro	General government debt in euro	Other assets	On reporting date
Total	Main refinancing operations	Longer-term refinancing operations	Fine-tuning reverse operations	Structural reverse operations	Marginal lending facility	Credits related to margin calls	Other lending				
<b>Eurosystem <sup>1</sup></b>											
182,9	128,0	45,0	-	-	8,7	0,1	1,1	22,1	60,2	80,4	1999 Jan.
186,4	139,9	45,0	-	-	0,4	0,1	1,0	24,3	60,2	79,6	Feb.
192,2	146,0	45,0	-	-	0,2	0,1	0,9	26,1	60,2	80,0	Mar.
185,1	144,9	24,7	6,7	-	6,4	0,0	2,4	21,7	60,1	84,7	1999 Jan. 1
174,8	145,1	22,2	0,0	-	5,4	0,0	2,0	20,9	60,1	81,6	8
173,1	122,9	45,0	-	-	2,7	0,1	2,5	21,3	60,1	82,7	15
155,3	106,9	45,0	-	-	2,1	0,1	1,2	21,8	60,2	80,9	22
182,9	128,0	45,0	-	-	8,7	0,1	1,1	22,1	60,2	80,4	29
177,7	131,0	45,0	-	-	0,6	0,1	1,0	22,5	60,2	81,4	Feb. 5
173,2	126,9	45,0	-	-	0,2	0,1	1,1	23,3	60,2	78,3	12
173,5	126,8	45,0	-	-	0,6	0,1	1,0	23,9	60,2	78,8	19
186,4	139,9	45,0	-	-	0,4	0,1	1,0	24,3	60,2	79,6	26
190,9	144,8	45,0	-	-	0,1	0,1	0,9	24,6	60,2	80,8	Mar. 5
188,0	141,8	45,0	-	-	0,2	0,1	0,9	25,4	60,2	78,6	12
165,3	119,0	45,0	-	-	0,2	0,1	1,0	25,0	60,2	76,6	19
192,2	146,0	45,0	-	-	0,2	0,1	0,9	26,1	60,2	80,0	26
<b>Deutsche Bundesbank</b>											
95,4	71,0	23,9	-	-	0,4	-	0,0	-	4,4	35,9	1999 Jan.
92,4	65,9	26,2	-	-	0,3	-	0,0	-	4,4	33,8	Feb.
99,5	71,5	27,8	-	-	0,2	-	0,0	-	4,4	17,1	Mar.
110,4	83,1	24,7	-	-	2,6	-	0,0	-	4,4	5,8	1999 Jan. 1
111,6	86,1	22,2	-	-	3,1	-	0,1	-	4,4	31,2	8
96,9	69,4	23,9	-	-	2,3	-	1,4	-	4,4	53,2	15
86,5	60,9	23,9	-	-	1,7	-	0,0	-	4,4	42,6	22
95,4	71,0	23,9	-	-	0,4	-	0,0	-	4,4	35,9	29
90,6	66,1	23,9	-	-	0,6	-	0,0	-	4,4	32,6	Feb. 5
84,4	60,3	23,9	-	-	0,2	-	0,0	-	4,4	32,6	12
82,5	58,0	23,9	-	-	0,5	-	0,0	-	4,4	23,3	19
92,4	65,9	26,2	-	-	0,3	-	0,0	-	4,4	33,8	26
92,0	65,8	26,2	-	-	0,0	-	0,0	-	4,4	41,2	Mar. 5
91,2	64,9	26,2	-	-	0,2	-	0,0	-	4,4	25,5	12
86,8	60,4	26,2	-	-	0,2	-	0,0	-	4,4	21,4	19
99,5	71,5	27,8	-	-	0,2	-	0,0	-	4,4	17,1	26

<sup>2</sup> Whereas the consolidated financial statement of the Eurosystem shows the bilateral TARGET balances of the individual non-Eurosystem NCBs as an aggregated (net) figure, the Bundesbank statement reports gross figures for

the claims on and liabilities to the individual non-Eurosystem NCBs. — <sup>3</sup> See the note on the title page of the Statistical Section page 1\*).

III. Consolidated financial statement of the Eurosystem

New Table 4

2. Liabilities \*

Euro billion

On reporting date	Total liabilities	Banknotes in circulation	Liabilities to financial sector counterparties in the euro area in euro						Debt certificates issued	Liabilities to other euro area residents in euro		
			Total	Current accounts (covering the minimum reserve system)	Deposit facility	Fixed-term deposits	Fine-tuning reverse operations	Deposits related to margin calls		Total	General government	Other liabilities
<b>Eurosystem <sup>1</sup></b>												
1999 Jan.	694,6	326,5	85,4	84,6	0,7	-	-	0,0	11,7	56,7	52,4	4,3
Feb.	692,6	325,2	100,0	99,3	0,7	-	-	0,0	11,7	62,1	57,4	4,7
Mar.	699,4	327,1	100,4	100,3	0,1	-	-	0,0	11,7	64,3	60,7	3,6
1999 Jan. 1	697,2	341,7	87,3	84,4	1,0	1,9	-	0,0	13,8	61,5	58,6	2,9
8	685,1	336,6	106,0	102,5	3,5	-	-	0,0	11,7	32,2	28,0	4,2
15	687,0	330,8	109,9	107,8	2,1	-	-	0,0	11,7	33,0	29,1	3,9
22	667,6	326,6	88,0	87,7	0,2	-	-	0,0	11,7	43,4	39,4	4,0
29	694,6	326,5	85,4	84,6	0,7	-	-	0,0	11,7	56,7	52,4	4,3
Feb. 5	687,3	328,3	109,1	108,1	1,0	-	-	0,0	11,7	44,0	40,1	4,0
12	680,2	327,3	106,0	105,8	0,2	-	-	0,0	11,7	43,6	39,4	4,2
19	681,9	324,5	97,3	95,4	1,9	-	-	0,0	11,7	54,9	50,7	4,2
26	692,6	325,2	100,0	99,3	0,7	-	-	0,0	11,7	62,1	57,4	4,7
Mar. 5	698,1	328,8	115,2	114,9	0,2	-	-	0,1	11,7	49,7	45,3	4,4
12	693,1	328,6	108,1	107,6	0,4	-	-	0,0	11,7	53,5	49,6	3,9
19	668,3	327,3	87,9	84,4	3,4	-	-	0,0	11,7	49,5	46,0	3,5
26	699,4	327,1	100,4	100,3	0,1	-	-	0,0	11,7	64,3	60,7	3,6
<b>Deutsche Bundesbank</b>												
1999 Jan.	221,8	126,0	31,1	30,4	0,7	-	-	-	-	0,8	0,1	0,7
Feb.	214,8	125,9	28,2	27,6	0,5	-	-	-	-	0,5	0,1	0,4
Mar.	215,2	126,7	28,6	28,5	0,1	-	-	-	-	0,4	0,1	0,3
1999 Jan. 1	214,7	130,6	29,3	29,3	-	-	-	-	-	0,9	0,1	0,7
8	230,6	129,2	24,0	22,2	1,8	-	-	-	-	0,5	0,1	0,3
15	238,5	127,7	34,1	32,2	1,9	-	-	-	-	0,5	0,1	0,4
22	219,0	126,5	23,5	23,3	0,2	-	-	-	-	0,4	0,1	0,4
29	221,8	126,0	31,1	30,4	0,7	-	-	-	-	0,8	0,1	0,7
Feb. 5	218,2	127,1	36,0	35,0	1,0	-	-	-	-	0,5	0,1	0,3
12	217,2	126,9	36,0	35,9	0,1	-	-	-	-	0,6	0,2	0,4
19	210,6	126,0	30,9	29,2	1,7	-	-	-	-	0,4	0,1	0,3
26	214,8	125,9	28,2	27,6	0,5	-	-	-	-	0,5	0,1	0,4
Mar. 5	220,4	127,4	36,4	36,3	0,1	-	-	-	-	0,5	0,1	0,4
12	210,8	127,3	29,3	29,2	0,1	-	-	-	-	0,5	0,2	0,3
19	207,4	127,0	26,4	25,8	0,6	-	-	-	-	0,4	0,1	0,3
26	215,2	126,7	28,6	28,5	0,1	-	-	-	-	0,4	0,1	0,3

\* The consolidated financial statement of the Eurosystem comprises the statement of the European Central Bank (ECB) and the statements of the national central banks of the EU member countries (NCBs) of the euro area. — The balance sheet items for foreign currency, securities, gold and

financial instruments are valued at market rates at the end of the quarter. Resulting changes in relation to the preceding reporting date in excess of EUR 500 million are reported in footnotes. — 1 Source: ECB. —

III. Consolidated financial statement of the Eurosystem

Liabilities to non-euro area residents in euro 2	Liabilities to euro area residents in foreign currency	Liabilities to non-euro area residents in foreign currency			Counterpart of special drawing rights allocated by the IMF	Other liabilities	Revaluation accounts	Capital and reserves	On reporting date
		Total	Deposits, balances and other liabilities	Liabilities arising from the credit facility under the ERM II					
<b>Eurosystem 1</b>									
14,0	1,6	4,3	4,3	—	5,8	77,8	59,7	51,3	1999 Jan. 1
7,7	0,8	6,4	6,4	—	5,8	62,1	59,7	51,3	Feb. 8
7,7	0,9	7,8	7,8	—	5,8	62,9	59,7	51,3	Mar. 22
10,0	0,6	3,3	3,3	—	5,8	60,7	59,9	52,6	1999 Jan. 1
11,5	1,1	3,9	3,9	—	5,8	64,0	59,7	52,8	8
10,9	1,5	4,1	4,1	—	5,8	68,4	59,7	51,2	15
9,1	1,3	4,3	4,3	—	5,8	66,5	59,7	51,3	22
14,0	1,6	4,3	4,3	—	5,8	77,8	59,7	51,3	29
8,2	0,8	5,8	5,8	—	5,8	62,7	59,7	51,3	Feb. 5
7,8	0,7	6,4	6,4	—	5,8	60,0	59,7	51,3	12
8,1	0,7	7,2	7,2	—	5,8	60,9	59,7	51,3	19
7,7	0,8	6,4	6,4	—	5,8	62,1	59,7	51,3	26
7,1	0,8	6,9	6,9	—	5,8	61,2	59,7	51,3	Mar. 5
7,8	0,8	6,9	6,9	—	5,8	58,9	59,7	51,3	12
8,1	0,9	6,7	6,7	—	5,8	59,6	59,7	51,3	19
7,7	0,9	7,8	7,8	—	5,8	62,9	59,7	51,3	26
<b>Deutsche Bundesbank</b>									
14,6	0,0	0,0	0,0	—	1,5	17,4	25,3	5,1	1999 Jan. 1
14,5	0,0	0,0	0,0	—	1,5	13,8	25,3	5,1	Feb. 8
7,0	0,0	0,0	0,0	—	1,5	20,6	25,3	5,1	Mar. 22
8,1	0,0	0,0	0,0	—	1,5	14,0	25,3	5,1	1999 Jan. 1
26,4	0,0	0,0	0,0	—	1,5	18,6	25,3	5,1	8
26,2	0,0	0,0	0,0	—	1,5	18,1	25,3	5,1	15
21,3	0,0	0,0	0,0	—	1,5	15,5	25,3	5,1	22
14,6	0,0	0,0	0,0	—	1,5	17,4	25,3	5,1	29
8,6	0,0	0,0	0,0	—	1,5	14,1	25,3	5,1	Feb. 5
8,2	0,0	0,0	0,0	—	1,5	13,7	25,3	5,1	12
7,3	0,0	0,0	0,0	—	1,5	14,0	25,3	5,1	19
14,5	0,0	0,0	0,0	—	1,5	13,8	25,3	5,1	26
10,1	0,0	0,0	0,0	—	1,5	14,0	25,3	5,1	Mar. 5
7,7	0,0	0,0	0,0	—	1,5	14,1	25,3	5,1	12
6,8	0,0	0,0	0,0	—	1,5	15,0	25,3	5,1	19
7,0	0,0	0,0	0,0	—	1,5	20,6	25,3	5,1	26

2 Whereas the consolidated financial statement of the Eurosystem shows the bilateral TARGET balances of the individual non-Eurosystem NCBs as an aggregated (net) figure, the Bundesbank statement reports gross figures for

the claims on and liabilities to the individual non-Eurosystem NCBs. — 3 See the note on the title page of the Statistical Section page 1\*).

IV. Banks

New table 5

1. Assets and liabilities of monetary financial institutions (excluding the Bundesbank) in Germany \*  
Assets

Until the end of 1998 DM billion, from 1999 euro billion

Period	Balance-sheet total 2	Cash in hand	Lending to banks (MFIs) in the euro area 3						Lending to non-banks (non-MFIs) in the				
			Total	to banks in the home country			to banks in other member countries			Total	to non-banks in the home country		
				Total	Ad- vances 3	Secur- ities issued by banks	Total	Ad- vances 3	Secur- ities issued by banks		Total	Enterprises and viduals	Ad- vances 3
End of year or month													
1989	4,438.4	15.0	1,307.3	1,195.3	824.3	370.9	112.0	98.1	13.9	2,649.1	2,605.5	2,054.4	1,994.4
1990	5,412.4	22.1	1,706.8	1,573.7	1,146.0	427.8	133.1	115.6	17.4	3,134.8	3,081.4	2,412.5	2,336.4
1991	5,751.6	23.9	1,713.9	1,576.9	1,122.9	454.0	137.0	117.2	19.8	3,437.9	3,380.2	2,665.2	2,573.7
1992	6,143.1	27.8	1,779.6	1,638.4	1,168.0	470.4	141.2	116.8	24.3	3,727.7	3,665.2	2,898.1	2,775.0
1993	6,799.5	27.8	1,940.4	1,757.5	1,212.6	544.9	182.9	151.9	31.0	4,085.0	4,005.8	3,156.8	2,980.3
1994	7,205.7	26.2	2,030.1	1,854.1	1,285.1	569.1	175.9	145.0	30.9	4,411.4	4,333.2	3,391.3	3,143.2
1995	7,778.7	27.3	2,210.2	2,019.0	1,399.8	619.3	191.2	158.0	33.2	4,723.3	4,635.0	3,548.8	3,298.7
1996	8,540.5	30.3	2,523.0	2,301.1	1,585.7	715.4	221.9	181.2	40.7	5,084.7	4,981.9	3,812.8	3,543.0
1997	9,368.2	30.7	2,836.0	2,580.7	1,758.6	822.1	255.3	208.8	46.5	5,408.8	5,269.5	4,041.3	3,740.8
1998	10,355.5	29.9	3,267.4	2,939.4	1,977.4	962.0	328.1	264.9	63.1	5,833.9	5,615.9	4,361.0	3,966.5
1997 Sep.	9,063.3	25.1	2,705.3	2,469.2	1,654.9	814.4	236.1	191.1	45.0	5,312.9	5,181.3	3,958.7	3,658.3
Oct.	9,182.1	24.8	2,759.1	2,521.4	1,700.4	821.0	237.8	190.5	47.3	5,350.1	5,212.8	3,969.0	3,672.3
Nov.	9,322.5	24.5	2,834.0	2,584.0	1,759.1	825.0	249.9	202.2	47.7	5,388.0	5,252.5	3,988.4	3,689.9
Dec.	9,368.2	30.7	2,836.0	2,580.7	1,758.6	822.1	255.3	208.8	46.5	5,408.8	5,269.5	4,041.3	3,740.8
1998 Jan.	9,413.4	24.9	2,847.9	2,592.6	1,756.6	836.0	255.3	208.1	47.1	5,441.4	5,293.9	4,051.0	3,728.8
Feb.	9,476.3	25.5	2,868.7	2,618.9	1,773.9	845.0	249.8	202.1	47.7	5,478.2	5,326.9	4,073.4	3,739.6
Mar.	9,561.2	26.1	2,876.1	2,618.6	1,765.1	853.5	257.5	206.9	50.6	5,532.5	5,377.2	4,111.0	3,755.6
Apr.	9,627.2	26.0	2,903.6	2,638.8	1,769.8	869.0	264.9	215.7	49.1	5,576.0	5,421.2	4,144.8	3,775.9
May	9,736.1	26.7	2,970.9	2,698.7	1,817.1	881.6	272.2	221.3	50.9	5,599.9	5,430.7	4,163.4	3,792.0
June	9,851.7	26.6	3,036.4	2,745.8	1,857.7	888.0	290.6	230.6	60.0	5,614.3	5,439.4	4,165.8	3,805.5
July	9,834.4	25.6	3,017.5	2,747.4	1,837.4	910.1	270.1	216.2	53.9	5,621.6	5,445.9	4,169.7	3,815.4
Aug.	9,982.9	26.1	3,106.4	2,825.9	1,895.1	930.8	280.5	224.9	55.6	5,640.4	5,462.6	4,184.9	3,830.8
Sep.	9,982.8	26.7	3,104.5	2,820.8	1,889.9	930.9	283.6	227.6	56.1	5,652.5	5,473.0	4,211.5	3,857.0
Oct.	10,122.0	25.8	3,193.9	2,899.1	1,947.3	951.8	294.8	234.5	60.3	5,701.9	5,506.0	4,230.5	3,873.5
Nov.	10,309.8	25.2	3,277.2	2,958.9	1,996.5	962.4	318.3	255.6	62.7	5,757.0	5,555.9	4,267.3	3,894.6
Dec.	10,355.5	29.9	3,267.4	2,939.4	1,977.4	962.0	328.1	264.9	63.1	5,833.9	5,615.9	4,361.0	3,966.5
1999 Jan.	5,306.1	13.3	1,709.0	1,516.5	1,015.4	501.2	192.4	178.4	14.1	2,948.3	2,812.3	2,185.0	1,982.8
Feb.	5,258.1	12.9	1,675.4	1,494.7	988.0	506.6	180.7	165.6	15.2	2,959.8	2,828.5	2,188.8	1,985.1
Changes 1													
1990	974.0	7.1	399.5	378.5	321.7	56.8	21.1	17.5	3.6	485.7	475.9	358.1	342.0
1991	339.2	1.8	7.1	3.2	- 23.1	26.3	3.9	1.6	2.3	303.1	298.8	252.7	237.3
1992	391.5	3.9	65.7	61.5	45.1	16.4	4.2	- 0.4	4.6	289.8	285.0	232.9	201.3
1993	656.3	0.0	160.8	119.1	44.6	74.5	41.7	35.1	6.6	357.3	340.7	258.7	205.3
1994	406.2	- 1.6	89.7	96.6	72.4	24.2	- 6.9	- 6.9	- 0.1	326.5	327.4	234.5	162.9
1995	573.0	1.1	180.2	164.9	114.7	50.2	15.2	13.0	2.3	311.8	301.8	157.5	155.6
1996	761.8	3.0	312.8	282.1	186.0	96.1	30.7	23.2	7.5	361.5	346.9	264.0	244.3
1997	827.7	0.5	313.0	279.6	172.9	106.7	33.4	27.6	5.8	324.0	287.7	228.6	197.7
1998	987.3	- 0.8	431.4	358.7	218.8	139.9	72.7	56.1	16.6	425.2	346.4	319.7	225.7
1997 Sep.	12.3	0.0	7.4	- 0.8	- 6.3	5.5	8.2	9.7	- 1.5	11.0	11.3	21.0	21.6
Oct.	118.8	- 0.2	53.9	52.1	45.5	6.6	1.7	- 0.6	2.3	37.1	31.5	10.3	14.0
Nov.	140.4	- 0.3	74.8	62.7	58.7	4.0	12.2	11.7	0.4	37.9	39.7	19.4	17.6
Dec.	45.7	6.2	2.1	- 3.3	- 0.4	- 2.9	5.4	6.6	- 1.2	20.8	17.1	52.9	50.8
1998 Jan.	45.2	- 5.8	11.8	11.9	- 2.0	13.9	- 0.0	- 0.7	0.7	32.7	24.3	9.6	- 12.0
Feb.	62.9	0.5	20.9	26.4	17.3	9.0	- 5.5	- 6.0	0.5	36.7	33.0	22.4	10.8
Mar.	84.9	0.6	7.4	- 0.3	- 8.9	8.5	7.7	4.8	2.9	54.3	50.4	37.6	16.0
Apr.	65.9	- 0.1	27.5	20.2	4.7	15.4	7.4	8.8	- 1.4	43.5	44.0	33.8	20.3
May	108.9	0.7	67.2	59.9	47.3	12.6	7.3	5.5	1.8	23.9	9.5	18.6	16.2
June	115.6	- 0.2	65.5	47.1	40.6	6.5	18.4	9.3	9.1	14.5	8.7	2.4	13.5
July	- 17.3	- 1.0	- 18.8	1.7	- 20.4	22.1	- 20.5	- 14.4	- 6.1	7.2	6.5	4.0	9.9
Aug.	148.5	0.6	88.9	78.4	57.7	20.7	10.4	8.7	1.7	18.8	16.7	15.2	15.3
Sep.	- 0.1	0.6	- 1.9	- 5.0	- 5.1	0.1	3.1	2.7	0.4	12.1	10.4	26.5	26.2
Oct.	139.2	- 0.9	89.4	78.2	57.4	20.8	11.2	6.9	4.2	49.4	33.0	19.0	16.5
Nov.	187.7	- 0.7	83.3	59.9	49.2	10.6	23.5	21.1	2.4	55.2	49.9	36.8	21.1
Dec.	45.7	4.7	- 9.8	- 19.5	- 19.1	- 0.4	9.7	9.3	0.4	76.9	60.0	93.7	71.9
1999 Jan.	113.5	- 2.0	69.8	26.1	15.3	10.8	43.7	42.9	0.8	14.9	9.4	12.2	11.8
Feb.	- 47.8	- 0.3	- 33.5	- 21.8	- 27.3	5.6	- 11.7	- 12.8	1.1	11.6	16.3	3.9	2.3

\* This table serves to supplement the Overall monetary survey of section II; it is planned to compare the figures for MFIs in the euro area with the data for Germany. Notwithstanding the other tables in section IV, this table includes - in addition to the figures reported by banks (including building

and loan associations) - the data of money market funds. - 1 Up to December 1998, absolute (unadjusted) changes; from 1999, statistical breaks have been eliminated from the flow figures. - 2 Up to December 1998,

IV. Banks

euro area <sup>3</sup>										Claims on non-euro-area residents		Other assets	Period
to non-banks in other member countries										Total	of which: Advances <sup>3</sup>		
indi-	Public authorities			Total	Enterprises and individuals		Public authorities						
Secur-ities	Total	Ad- vances <sup>3</sup>	Secur-ities <sup>4</sup>		Total	Total	of which: Ad- vances <sup>3</sup>	Total	Ad- vances <sup>3</sup>	Secur-ities	Total	of which: Ad- vances <sup>3</sup>	
<b>End of year or month</b>													
60.0	551.1	442.2	108.9	43.6	29.4	29.4	14.1	5.6	8.5	357.8	334.9	109.2	1989
76.1	668.9	527.3	141.6	53.4	34.7	34.7	18.7	6.6	12.1	425.1	394.5	123.5	1990
91.5	715.0	582.9	132.1	57.7	35.2	35.2	22.5	6.7	15.8	437.1	399.8	138.7	1991
123.1	767.1	556.3	210.8	62.5	35.1	35.1	27.5	6.7	20.8	446.1	398.5	162.0	1992
176.5	849.0	599.6	249.4	79.1	44.5	44.5	34.6	8.4	26.3	565.2	504.8	181.1	1993
248.1	941.9	650.1	291.8	78.2	39.6	39.6	38.6	8.3	30.3	548.8	479.6	189.2	1994
250.0	1,086.3	792.2	294.1	88.2	39.4	39.2	48.8	11.3	37.6	608.5	526.0	209.4	1995
269.7	1,169.1	857.8	311.4	102.8	36.8	36.8	66.0	17.2	48.8	678.1	575.3	224.4	1996
300.6	1,228.2	911.0	317.2	139.2	41.9	41.2	97.3	23.4	73.9	839.6	710.2	253.1	1997
394.5	1,254.9	939.1	315.8	218.0	62.5	56.0	155.5	35.6	119.9	922.0	758.0	302.2	1998
300.4	1,222.6	891.8	330.8	131.7	40.2	39.6	91.5	18.8	72.7	777.6	650.2	242.5	1997 Sep.
296.7	1,243.8	912.1	331.7	137.3	40.6	39.9	96.7	18.7	78.0	799.1	672.5	249.0	Oct.
298.5	1,264.0	930.5	333.6	135.5	41.0	40.3	94.5	19.0	75.5	824.9	693.5	251.2	Nov.
300.6	1,228.2	911.0	317.2	139.2	41.9	41.2	97.3	23.4	73.9	839.6	710.2	253.1	Dec.
322.2	1,242.9	914.8	328.0	147.6	43.4	43.1	104.2	26.3	77.9	833.4	703.4	265.7	1998 Jan.
333.8	1,253.5	932.0	321.5	151.3	45.7	45.2	105.7	26.1	79.6	842.4	708.8	261.5	Feb.
355.4	1,266.2	925.7	340.6	155.3	47.2	46.1	108.1	26.3	81.8	868.5	729.9	258.0	Mar.
368.9	1,276.4	930.6	345.8	154.8	45.3	44.3	109.6	26.2	83.4	864.5	723.8	257.0	Apr.
371.4	1,267.3	918.6	348.7	169.2	46.8	45.2	122.4	26.6	95.8	868.1	727.0	270.5	May
360.2	1,273.6	918.2	355.4	174.9	47.2	45.1	127.7	26.9	100.8	898.5	745.8	276.0	June
354.3	1,276.2	927.0	349.2	175.6	48.5	45.9	127.1	27.3	99.8	884.9	734.1	284.9	July
354.2	1,277.6	930.4	347.2	177.8	51.5	48.2	126.3	29.0	97.3	922.5	773.0	287.5	Aug.
354.5	1,261.5	927.5	334.0	179.5	54.6	51.2	124.9	27.3	97.6	904.0	751.9	295.1	Sep.
357.0	1,275.5	933.7	341.7	195.9	56.3	51.2	139.6	27.6	112.0	900.8	743.1	299.7	Oct.
372.7	1,288.6	937.2	351.4	201.1	58.6	52.5	142.5	27.8	114.7	945.3	782.7	305.1	Nov.
394.5	1,254.9	939.1	315.8	218.0	62.5	56.0	155.5	35.6	119.9	922.0	758.0	302.2	Dec.
202.2	627.3	480.0	147.3	136.0	65.1	30.5	70.8	18.2	52.6	475.8	396.4	159.8	1999 Jan.
203.8	639.7	489.5	150.2	131.2	62.2	29.1	69.0	18.1	51.0	447.5	365.7	162.5	Feb.
<b>Changes <sup>1</sup></b>													
16.1	117.8	85.1	32.7	9.9	5.2	5.2	4.6	1.0	3.6	67.4	59.7	14.3	1990
15.4	46.1	55.6	- 9.5	4.3	0.5	0.5	3.8	0.1	3.7	12.0	5.3	15.2	1991
31.6	52.1	- 26.6	78.7	4.8	- 0.1	- 0.1	4.9	- 0.0	5.0	8.9	- 1.3	23.3	1992
53.4	82.0	43.3	38.6	16.6	9.5	9.5	7.1	1.7	5.5	119.1	106.3	19.2	1993
71.6	92.9	50.6	42.4	- 0.9	- 4.9	- 4.9	4.0	- 0.0	4.0	- 16.4	- 25.1	8.1	1994
1.9	144.3	142.1	2.3	10.0	- 0.2	- 0.4	10.2	3.0	7.3	59.7	46.3	20.2	1995
19.7	82.9	65.5	17.3	14.6	- 2.6	- 2.5	17.2	5.9	11.2	69.5	49.3	15.0	1996
30.8	59.1	53.3	5.8	36.4	5.1	4.5	31.2	6.1	25.1	161.5	134.9	28.6	1997
94.0	26.7	28.1	- 1.4	78.8	20.6	14.7	58.2	12.2	46.0	82.4	47.9	49.2	1998
- 0.6	- 9.7	2.1	- 11.7	- 0.3	- 0.2	- 0.3	- 0.1	0.0	- 0.2	- 5.2	- 9.4	- 0.9	1997 Sep.
- 3.7	21.2	20.3	0.9	5.6	0.4	0.3	5.2	- 0.1	5.3	21.5	22.2	6.5	Oct.
1.8	20.2	18.3	1.9	- 1.7	0.4	0.4	- 2.2	0.3	- 2.5	25.8	21.0	2.2	Nov.
2.1	- 35.8	- 19.4	- 16.4	3.7	1.0	0.9	2.7	4.4	- 1.6	14.7	16.7	1.9	Dec.
21.7	14.7	3.8	10.9	8.4	1.4	1.9	7.0	2.9	4.0	- 6.2	- 6.8	12.6	1998 Jan.
11.5	10.6	17.2	- 6.6	3.7	2.3	2.1	1.4	- 0.2	1.6	8.9	5.4	- 4.1	Feb.
21.6	12.7	- 6.4	19.1	4.0	1.5	0.9	2.5	0.3	2.2	26.1	21.0	- 3.5	Mar.
13.5	10.2	4.9	5.2	- 0.5	- 1.9	- 1.8	1.4	- 0.2	1.6	- 4.0	- 6.1	- 1.0	Apr.
2.5	- 9.1	- 12.0	2.9	14.4	1.5	0.9	12.9	0.4	12.4	3.6	3.2	13.5	May
- 11.1	6.4	- 0.4	6.8	5.7	0.4	- 0.1	5.3	0.3	5.0	30.4	18.8	5.5	June
- 5.9	2.5	8.8	- 6.3	0.7	1.4	0.8	- 0.6	0.4	- 1.0	- 13.6	- 11.8	8.8	July
- 0.1	1.4	3.5	- 2.0	2.2	3.0	2.3	- 0.8	1.7	- 2.5	37.6	38.9	2.6	Aug.
0.3	- 16.1	- 2.9	- 13.2	1.7	3.0	3.1	- 1.3	- 1.7	0.4	- 18.4	- 21.1	7.6	Sep.
2.5	14.0	6.2	7.8	16.4	1.7	0.0	14.7	0.3	14.4	- 3.3	- 8.8	4.6	Oct.
15.7	13.2	3.5	9.6	5.2	2.4	1.2	2.9	0.2	2.7	44.5	39.6	5.4	Nov.
21.8	- 33.7	1.9	- 35.6	16.9	3.9	3.5	13.0	7.8	5.3	- 23.3	- 24.7	- 2.8	Dec.
0.5	- 2.8	7.8	- 10.6	5.5	0.5	1.9	5.0	0.0	5.0	25.4	29.8	5.3	1999 Jan.
1.6	12.4	9.5	2.9	- 4.7	- 2.9	- 1.4	- 1.8	- 0.2	- 1.7	- 28.3	- 30.7	2.8	Feb.

volume of business (balance-sheet total plus endorsement liabilities and bills sent for collection from the banks' portfolios prior to maturity) and trust funds. — <sup>3</sup> Up to December 1998, including loans on a trust basis and

bill-based lending instead of bill holdings. — <sup>4</sup> Including debt securities arising from the exchange of equalisations claims. — <sup>5</sup> See the note on the title page of the Statistical Section (page 1\*).

IV. Banks

New table <sup>9</sup>

1. Assets and liabilities of monetary financial institutions (excluding the Bundesbank) in Germany \*  
Liabilities

Until the end of 1998 DM billion, from 1999 euro billion

Period	Deposits of banks (MFIs) in the euro area <sup>3</sup>				Deposits of non-banks (non-MFIs) in the euro area <sup>4</sup>								
	Balance-sheet total <sup>2</sup>	of banks			Total	Deposits of non-banks in the home country					Deposits of non-banks		
		Total	in the home country	in other member countries		Total	Over-night	With agreed maturities		At agreed notice		Total	Over-night
								Total <sup>4</sup>	of which: up to 2 years <sup>5</sup>	Total	of which: up to 3 months		
End of year or month													
1989	4,438.4	995.5	931.5	64.0	2,159.5	2,048.7	288.2	931.7	345.2	828.9	479.3	38.3	1.9
1990	5,412.4	1,359.9	1,281.0	78.9	2,479.9	2,352.5	400.4	1,068.2	432.5	883.9	515.6	47.2	2.3
1991	5,751.6	1,365.7	1,282.7	83.0	2,617.5	2,482.5	410.5	1,182.8	511.7	889.3	513.4	49.7	2.4
1992	6,143.1	1,405.6	1,304.2	101.4	2,743.6	2,585.3	444.5	1,228.2	563.5	912.6	522.4	60.6	3.0
1993	6,799.5	1,556.3	1,438.2	118.1	2,981.8	2,810.6	489.6	1,312.6	628.5	1,008.4	587.7	70.4	3.5
1994	7,205.7	1,650.9	1,483.5	167.4	3,082.2	2,894.4	510.4	1,288.3	549.2	1,095.8	654.6	79.6	4.1
1995	7,778.7	1,761.5	1,582.0	179.6	3,260.0	3,038.9	549.8	1,289.0	472.0	1,200.1	749.5	110.1	4.5
1996	8,540.5	1,975.3	1,780.2	195.1	3,515.9	3,264.0	638.1	1,318.5	430.6	1,307.4	865.7	137.3	7.5
1997	9,368.2	2,195.6	1,959.1	236.5	3,647.1	3,376.2	654.5	1,364.9	426.8	1,356.9	929.2	162.5	7.3
1998	10,355.5	2,480.3	2,148.9	331.4	3,850.8	3,552.1	751.6	1,411.0	461.5	1,389.6	971.9	187.4	9.4
1997 Sep.	9,063.3	2,088.3	1,856.5	231.9	3,510.6	3,246.2	603.1	1,327.2	404.7	1,315.8	894.8	158.1	8.3
Oct.	9,182.1	2,149.4	1,906.0	243.4	3,523.2	3,257.0	604.6	1,336.4	407.8	1,316.0	896.2	160.3	8.4
Nov.	9,322.5	2,206.0	1,959.7	246.3	3,571.6	3,303.3	641.4	1,343.0	410.2	1,318.8	898.9	161.4	7.3
Dec.	9,368.2	2,195.6	1,959.1	236.5	3,647.1	3,376.2	654.5	1,364.9	426.8	1,356.9	929.2	162.5	7.3
1998 Jan.	9,413.4	2,213.3	1,963.1	250.2	3,616.8	3,344.8	616.1	1,369.5	427.0	1,359.3	935.4	164.6	8.5
Feb.	9,476.3	2,221.4	1,969.2	252.3	3,637.5	3,356.9	620.6	1,373.0	426.2	1,363.3	939.6	172.8	10.2
Mar.	9,561.2	2,243.6	1,970.6	272.9	3,634.4	3,351.4	626.7	1,363.9	414.8	1,360.8	938.6	175.5	9.4
Apr.	9,627.2	2,240.4	1,972.3	268.1	3,648.1	3,360.0	638.7	1,366.1	413.9	1,355.2	937.1	182.1	9.9
May	9,736.1	2,283.8	1,997.3	286.5	3,659.0	3,369.6	639.6	1,377.8	423.2	1,352.3	937.5	182.8	9.0
June	9,851.7	2,333.3	2,029.6	303.7	3,661.1	3,369.9	654.7	1,365.9	410.8	1,349.3	936.3	183.0	9.9
July	9,834.4	2,295.8	2,010.6	285.2	3,656.8	3,364.8	641.5	1,377.1	418.1	1,346.3	935.5	184.1	8.0
Aug.	9,982.9	2,361.5	2,073.3	288.2	3,686.5	3,388.3	659.2	1,384.3	422.2	1,344.8	935.9	190.0	9.3
Sep.	9,982.8	2,360.1	2,059.6	300.6	3,680.9	3,384.2	665.1	1,376.0	415.4	1,343.1	935.3	188.4	9.2
Oct.	10,122.0	2,426.4	2,107.0	319.3	3,697.7	3,402.3	679.1	1,377.4	419.1	1,345.8	938.5	187.7	10.7
Nov.	10,309.8	2,510.6	2,155.3	355.4	3,747.2	3,450.5	726.5	1,374.6	418.0	1,349.4	941.6	188.6	12.6
Dec.	10,355.5	2,480.3	2,148.9	331.4	3,850.8	3,552.1	751.6	1,411.0	461.5	1,389.6	971.9	187.4	9.4
1999 Jan.	5,306.1	1,273.9	1,068.3	205.6	1,932.1	1,786.6	374.7	700.0	238.4	711.9	500.5	99.8	7.8
Feb.	5,258.1	1,220.2	1,042.4	177.8	1,944.8	1,790.2	378.5	698.7	237.6	713.0	502.9	108.0	5.3
Changes <sup>1</sup>													
1990	974.0	364.4	349.5	14.9	320.4	303.7	112.2	136.5	87.3	55.0	36.3	8.9	0.4
1991	339.2	5.8	1.7	4.1	137.7	130.1	10.1	114.6	79.2	5.4	- 2.2	2.5	0.1
1992	391.5	39.9	21.5	18.4	126.1	102.8	34.0	45.5	51.8	23.3	9.0	11.0	0.5
1993	656.3	150.7	134.0	16.7	238.2	225.2	45.1	84.4	64.9	95.8	65.3	9.7	0.5
1994	406.2	94.6	45.3	49.3	100.4	83.8	20.8	- 24.3	- 79.3	87.4	66.9	9.2	0.6
1995	573.0	110.7	98.5	12.2	177.8	144.4	39.4	0.7	- 77.2	104.3	94.9	30.5	0.4
1996	761.8	213.7	198.2	15.5	256.0	225.2	88.3	29.5	- 41.4	107.3	116.2	27.2	3.0
1997	827.7	220.4	179.0	41.4	131.1	112.2	16.4	46.4	- 3.8	49.4	63.5	25.2	- 0.2
1998	987.3	284.7	189.8	94.9	203.7	175.9	97.1	46.1	34.7	32.7	42.6	24.9	2.1
1997 Sep.	12.3	- 16.1	- 9.1	- 6.9	- 4.1	- 4.8	3.0	- 7.7	- 7.8	- 0.2	1.1	1.1	1.5
Oct.	118.8	61.0	49.5	11.5	12.6	10.8	1.4	9.2	3.1	0.2	1.5	2.2	0.1
Nov.	140.4	56.6	53.7	2.9	48.4	46.3	36.8	6.6	2.4	2.8	2.7	1.0	- 1.1
Dec.	45.7	- 10.4	- 0.6	- 9.8	75.5	73.0	13.1	21.8	16.5	38.0	30.3	1.1	0.0
1998 Jan.	45.2	17.7	3.9	13.7	- 30.3	- 31.4	- 38.4	4.6	0.2	2.4	6.2	2.1	1.2
Feb.	62.9	8.2	6.1	2.1	20.7	12.1	4.5	3.5	- 0.8	4.0	4.2	8.3	1.7
Mar.	84.9	22.1	1.5	20.7	- 3.1	- 5.5	6.1	- 9.1	- 11.4	- 2.5	- 1.0	2.7	- 0.7
Apr.	65.9	- 3.1	1.7	- 4.8	13.8	8.6	12.1	2.2	- 0.8	- 5.6	- 1.5	6.6	0.4
May	108.9	43.4	24.9	18.4	10.9	9.6	0.8	11.6	9.3	- 2.9	0.4	0.7	- 0.9
June	115.6	49.5	32.3	17.2	2.1	0.4	15.1	- 11.8	- 12.4	- 2.9	- 1.2	0.2	0.9
July	- 17.3	- 37.5	- 19.0	- 18.5	- 4.3	- 5.1	- 13.2	11.2	7.3	- 3.1	- 0.8	1.1	- 1.9
Aug.	148.5	65.7	62.7	3.0	29.8	23.4	17.7	7.2	4.1	- 1.5	0.4	5.9	1.2
Sep.	- 0.1	- 1.4	- 13.7	12.3	- 5.6	- 4.1	5.9	- 8.3	- 6.8	- 1.7	- 0.5	- 1.7	- 0.0
Oct.	139.2	66.2	47.5	18.8	16.8	18.2	14.0	1.4	3.7	2.8	3.2	- 0.7	1.4
Nov.	187.7	84.3	48.2	36.0	49.5	48.2	47.4	- 2.8	- 1.1	3.5	3.1	0.9	2.0
Dec.	45.7	- 30.3	- 6.3	- 24.0	103.6	101.6	25.1	36.4	43.4	40.2	30.3	- 1.2	- 3.3
1999 Jan.	113.5	- 49.7	13.5	36.2	5.6	- 0.7	- 9.6	7.5	5.4	1.4	3.6	5.4	3.0
Feb.	- 47.8	- 46.9	- 25.8	- 21.0	5.9	3.6	3.8	- 1.4	- 0.8	1.1	2.4	1.4	- 2.6

\* This table serves to supplement the Overall monetary survey of section II; it is planned to compare the figures for MFIs in the euro area with the data for Germany. Notwithstanding the other tables in section IV, this table includes - in addition to the figures reported by banks (including building and loan associations) - the data of money market funds. - 1 Up to

December 1998, absolute (unadjusted) changes; from 1999, statistical breaks have been eliminated from the flow figures. - 2 Up to December 1998, volume of business (balance-sheet total plus endorsement liabilities and bills sent for collection from the banks' portfolios prior to maturity) and liabilities incurred in the banks' own name but on behalf of third parties. -

IV. Banks

in other member countries <sup>6</sup>				Deposits of central governments <sup>4</sup>			Money market paper and money fund certificates issued	Debt securities issued		Liabilities to non-euro-area residents <sup>8</sup>	Capital and reserves	Other Liabilities	Period
With agreed maturities		At agreed notice		Total	of which: domestic central governments	Liabilities arising from repos <sup>7</sup>		Total	of which: with maturities of up to 2 years				
Total <sup>4</sup>	of which: up to 2 years <sup>5</sup>	Total	of which: up to 3 months										
<b>End of year or month</b>													
32.8	3.7	3.5	3.5	72.5	72.5	—	2.7	779.3	25.9	164.8	171.3	165.3	1989
40.5	4.6	4.4	4.4	80.2	80.2	—	2.8	918.3	33.9	203.1	209.6	238.9	1990
42.6	4.8	4.6	4.6	85.3	85.3	—	4.4	1,054.8	36.0	213.7	229.2	266.3	1991
52.0	5.9	5.6	5.6	97.6	97.6	—	9.4	1,165.7	44.6	260.9	256.6	301.4	1992
60.3	6.8	6.5	6.5	100.8	100.8	—	18.7	1,309.0	66.8	302.5	278.3	353.0	1993
68.5	11.8	7.0	7.0	108.2	108.2	—	53.8	1,418.7	59.4	337.3	305.2	357.8	1994
97.3	11.4	8.3	8.3	111.0	111.0	—	60.5	1,586.7	48.9	393.9	325.0	391.0	1995
120.6	9.0	9.2	9.2	114.6	114.6	—	53.2	1,785.1	35.2	422.1	350.0	438.8	1996
145.8	9.2	9.4	9.4	108.3	108.3	—	54.6	1,973.3	37.5	599.2	387.2	511.3	1997
168.3	13.8	9.7	9.7	111.2	111.2	—	84.1	2,209.9	41.9	739.8	415.9	574.8	1998
140.7	8.2	9.1	9.1	106.3	106.3	—	54.4	1,966.7	39.7	539.0	377.7	526.5	1997 Sep.
142.8	8.4	9.1	9.1	105.9	105.9	—	54.1	1,972.1	38.7	574.0	380.6	528.6	Oct.
145.0	8.6	9.1	9.1	107.0	107.0	—	54.5	1,985.1	38.0	592.1	383.7	529.4	Nov.
145.8	9.2	9.4	9.4	108.3	108.3	—	54.6	1,973.3	37.5	599.2	387.2	511.3	Dec.
146.7	8.3	9.4	9.4	107.4	107.4	—	56.7	2,000.7	37.4	610.0	389.4	526.4	1998 Jan.
153.2	7.7	9.5	9.5	107.8	107.8	—	61.5	2,032.4	40.2	613.4	394.3	515.8	Feb.
156.6	10.9	9.4	9.4	107.5	107.5	—	63.8	2,049.9	40.0	639.3	396.9	533.5	Mar.
162.9	11.7	9.4	9.4	106.0	106.0	—	63.4	2,075.1	38.4	646.4	398.8	554.9	Apr.
164.5	9.6	9.3	9.3	106.6	106.6	—	64.4	2,090.5	39.3	670.0	402.5	565.9	May
163.7	8.5	9.3	9.3	108.1	108.1	—	65.5	2,111.8	40.3	674.8	406.4	598.8	June
166.8	10.3	9.3	9.3	107.8	107.8	—	68.1	2,153.8	42.2	659.6	407.6	592.6	July
171.5	11.3	9.3	9.3	108.3	108.3	—	71.2	2,172.2	42.0	673.0	407.0	611.3	Aug.
169.9	12.0	9.3	9.3	108.4	108.4	—	72.0	2,187.6	41.7	657.7	406.8	617.7	Sep.
167.7	11.5	9.4	9.4	107.7	107.7	—	74.1	2,196.1	42.5	697.5	409.1	621.0	Oct.
166.5	12.4	9.4	9.4	108.1	108.1	—	81.0	2,215.2	41.5	741.7	411.3	602.8	Nov.
168.3	13.8	9.7	9.7	111.2	111.2	—	84.1	2,209.9	41.9	739.8	415.9	574.8	Dec.
87.1	6.7	4.9	3.4	45.8	45.2	1.5	42.1	1,153.9	16.4	400.7	213.2	288.8	1999 Jan.
97.7	6.7	5.0	3.5	46.6	44.6	2.0	44.6	1,172.1	19.4	396.2	216.5	261.7	Feb.
<b>Changes <sup>1</sup></b>													
7.7	0.9	0.8	0.8	7.7	7.7	—	0.1	138.9	8.0	38.4	38.3	73.6	1990
2.1	0.2	0.2	0.2	5.1	5.1	—	1.6	136.5	2.0	10.5	19.6	27.4	1991
9.4	1.1	1.0	1.0	12.3	12.3	—	5.1	110.9	8.7	47.2	27.4	35.0	1992
8.3	0.9	0.9	0.9	3.2	3.2	—	9.2	143.3	22.2	41.6	21.7	51.6	1993
8.1	5.0	0.4	0.4	7.4	7.4	—	35.1	109.7	- 7.5	34.8	26.9	4.8	1994
28.8	- 0.4	1.3	1.3	2.8	2.8	—	6.8	168.0	- 10.4	56.7	19.8	33.3	1995
23.3	- 2.4	0.9	0.9	3.6	3.6	—	- 7.3	198.5	- 13.7	28.1	25.0	47.8	1996
25.2	0.2	0.2	0.2	- 6.2	- 6.2	—	1.3	188.2	2.3	177.1	37.1	72.4	1997
22.5	4.6	0.3	0.3	2.9	2.9	—	29.5	236.6	4.4	140.6	28.7	63.5	1998
- 0.4	- 0.7	- 0.0	- 0.0	- 0.3	- 0.3	—	2.3	7.2	- 0.6	- 8.1	2.7	28.4	1997 Sep.
2.1	0.3	- 0.0	- 0.0	- 0.4	- 0.4	—	- 0.2	5.4	- 1.0	35.0	2.9	2.0	Oct.
2.1	0.1	0.0	0.0	1.1	1.1	—	0.4	13.0	- 0.7	18.1	3.1	0.9	Nov.
0.8	0.6	0.3	0.3	1.4	1.4	—	0.0	- 11.8	- 0.5	7.1	3.4	- 18.2	Dec.
0.9	- 0.9	0.0	0.0	- 0.9	- 0.9	—	2.2	27.4	- 0.1	10.9	2.2	15.1	1998 Jan.
6.5	- 0.5	0.1	0.1	0.4	0.4	—	4.8	31.7	2.7	3.4	4.9	- 10.6	Feb.
3.4	3.1	- 0.0	- 0.0	- 0.3	- 0.3	—	2.3	17.5	- 0.1	25.9	2.7	17.6	Mar.
6.2	0.9	- 0.1	- 0.1	- 1.5	- 1.5	—	- 0.4	25.2	- 1.7	7.1	1.9	21.4	Apr.
1.6	- 2.2	- 0.0	- 0.0	0.6	0.6	—	1.0	15.4	1.0	23.6	3.7	11.0	May
- 0.7	- 1.1	0.0	0.0	1.5	1.5	—	1.1	21.3	1.0	4.8	3.9	32.9	June
3.1	1.8	- 0.0	- 0.0	- 0.3	- 0.3	—	2.6	42.0	1.8	- 15.2	1.2	- 6.2	July
4.7	1.0	- 0.0	- 0.0	0.5	0.5	—	3.1	18.4	- 0.2	13.4	- 0.6	18.7	Aug.
- 1.6	0.7	- 0.0	- 0.0	0.1	0.1	—	0.8	15.4	- 0.2	- 15.3	- 0.3	6.4	Sep.
- 2.2	- 0.4	0.1	0.1	- 0.7	- 0.7	—	2.1	8.5	0.7	39.8	2.4	3.3	Oct.
- 1.1	0.9	0.1	0.1	0.4	0.4	—	6.9	19.0	- 1.0	44.2	2.2	- 18.2	Nov.
1.8	1.3	0.2	0.2	3.1	3.1	—	3.1	- 5.3	0.4	- 1.9	4.6	- 28.0	Dec.
2.4	1.1	- 0.1	- 1.5	0.9	0.3	0.1	- 0.9	24.0	1.8	29.4	0.5	4.9	1999 Jan.
3.9	- 0.0	0.2	0.0	0.8	- 0.6	0.5	2.5	18.2	3.0	- 4.5	3.3	- 26.8	Feb.

<sup>3</sup> Up to December 1998, including liabilities arising from loans on a trust basis and liabilities arising from rediscounted bills (endorsement liabilities). — <sup>4</sup> Up to December 1998, including liabilities arising from loans on a trust basis. — <sup>5</sup> Up to December 1998, with maturities of less than 4 years. — <sup>6</sup> Excluding central governments' deposits. — <sup>7</sup> Data collected

separately only from 1999; up to December 1998, included in the deposits with agreed maturities of up to 2 years. — <sup>8</sup> Excluding liabilities arising from securities issued. — <sup>9</sup> See the note on the title page of the Statistical Section (page 1\*).



IV. Banks

Table changed <sup>13</sup>

2. Principal assets and liabilities of banks (MFIs) in Germany, by category of banks \*

Until the end of 1998 DM billion, from 1999 euro billion

End of month	Number of reporting institutions	Balance sheet total <sup>1</sup>	Cash in hand and balances with central banks	Lending to banks (MFIs)			Lending to non-banks (non-MFIs)				Participating interests	Other assets	
				Total	of which:		Total	of which:					
					Balances and advances	Securities issued by banks		Loans and advances not evidenced by certificates for		Bills			Securities issued by non-banks
								up to 1 year	over 1 year				
<b>All categories of banks</b>													
1998 Sep.	3,307	9,720.4	84.9	3,347.7	2,389.6	913.7	5,833.3	755.8	4,098.8	49.1	718.1	162.5	292.0
Oct.	3,284	9,858.3	76.8	3,446.5	2,465.1	935.9	5,874.4	739.3	4,126.0	48.7	739.8	163.8	296.8
Nov.	3,250	10,046.8	82.4	3,556.8	2,562.0	947.3	5,939.9	750.6	4,152.1	45.1	770.9	165.6	302.0
Dec.	3,246	10,087.6	93.6	3,513.1	2,521.2	946.4	5,990.1	758.4	4,244.1	34.9	738.8	192.1	298.7
1999 Jan.	3,227	5,369.5	50.6	1,906.4	1,402.8	497.2	3,072.1	384.7	2,256.0	8.7	374.7	88.8	251.6
Feb.	3,224	5,321.2	50.2	1,837.6	1,329.1	502.6	3,089.2	386.2	2,267.3	9.2	381.4	89.4	254.9
<b>Commercial banks</b>													
1999 Jan.	289	1,431.7	15.6	540.9	451.2	86.8	747.7	185.7	437.2	4.5	103.8	51.3	76.2
Feb.	288	1,379.7	18.8	487.0	396.9	87.2	741.8	182.0	440.0	4.8	101.2	51.6	80.5
<b>Big banks <sup>5</sup></b>													
1999 Jan.	4	865.4	6.4	300.3	255.8	42.3	482.9	108.5	305.7	2.9	57.3	42.0	33.7
Feb.	4	826.5	8.6	262.3	218.0	42.5	475.5	105.9	307.5	3.2	53.2	42.3	37.8
<b>Regional banks and other commercial banks <sup>6, 7</sup></b>													
1999 Jan.	205	455.8	7.5	179.0	140.4	37.8	231.8	63.2	123.2	1.2	36.3	7.7	29.8
Feb.	204	449.0	7.1	171.3	133.0	37.5	234.0	62.7	124.2	1.3	37.9	7.7	28.8
<b>Branches of foreign banks</b>													
1999 Jan.	80	110.5	1.7	61.7	54.9	6.7	32.9	14.1	8.3	0.3	10.3	1.5	12.7
Feb.	80	104.2	3.2	53.4	45.8	7.2	32.3	13.4	8.3	0.4	10.2	1.5	13.8
<b>Land banks <sup>8</sup></b>													
1999 Jan.	13	1,026.3	5.2	476.8	398.4	77.0	470.7	48.1	350.2	0.6	58.0	16.6	57.1
Feb.	13	1,023.7	2.6	471.2	392.8	77.4	475.6	48.6	353.4	0.7	59.3	16.6	57.8
<b>Savings banks</b>													
1999 Jan.	589	879.1	18.6	216.8	64.5	150.9	608.1	69.5	454.3	2.1	76.0	8.9	26.7
Feb.	589	879.6	17.7	215.9	62.8	152.0	611.2	70.5	454.6	2.1	77.9	8.9	25.9
<b>Regional institutions of credit cooperatives (including Deutsche Genossenschaftsbank)</b>													
1999 Jan.	4	203.4	0.6	136.2	90.4	45.8	55.1	11.4	23.6	0.3	12.9	6.2	5.3
Feb.	4	197.5	0.2	128.9	83.6	45.2	56.2	13.4	23.8	0.3	11.7	6.4	5.8
<b>Credit cooperatives</b>													
1999 Jan.	2,252	514.8	10.1	137.6	60.9	76.4	346.4	53.5	256.9	1.3	33.8	2.8	17.9
Feb.	2,250	515.3	10.0	137.4	60.1	77.0	347.6	53.5	256.9	1.3	34.9	2.8	17.4
<b>Mortgage banks</b>													
1999 Jan.	32	738.4	0.4	167.8	143.3	24.4	543.8	6.9	486.9	-	49.2	1.4	25.0
Feb.	32	746.6	0.8	169.5	142.9	26.5	551.1	7.3	489.2	-	53.9	1.4	23.8
<b>Building and loan associations <sup>9</sup></b>													
1999 Jan.	34	138.7	0.1	26.3	16.0	10.3	104.6	2.1	94.2	-	8.3	0.4	7.2
Feb.	34	138.7	0.0	26.5	16.1	10.4	104.6	2.0	93.7	-	8.9	0.4	7.2
<b>Banks with special functions <sup>10</sup></b>													
1999 Jan.	14	437.3	0.0	204.1	178.1	25.7	195.8	7.5	152.8	0.0	32.6	1.3	36.1
Feb.	14	440.2	0.0	201.3	173.8	27.0	201.0	9.0	155.6	0.0	33.6	1.3	36.5
<b>Memo item: Foreign banks <sup>11</sup></b>													
1999 Jan.	147	241.8	4.1	120.3	103.4	16.8	89.5	29.4	39.6	0.6	19.5	2.5	25.4
Feb.	148	226.6	5.0	103.3	87.2	15.6	89.4	27.7	39.6	0.8	19.4	2.6	26.3
<b>of which: Banks majority-owned by foreign banks <sup>12</sup></b>													
1999 Jan.	67	131.3	2.4	58.6	48.4	10.1	56.6	15.3	31.3	0.4	9.2	0.9	12.7
Feb.	68	122.4	1.8	49.9	41.4	8.4	57.1	14.3	31.3	0.4	9.2	1.0	12.5

\* For the period up to December 1998, section IV (except for table IV.1) shows the assets and liabilities of banks (excluding building and loan associations) in Germany; from January 1999, the assets and liabilities of monetary financial institutions (MFIs) in Germany. The assets and liabilities of foreign branches, of money market funds (which are likewise classified as MFIs) and of the Bundesbank are not included. For the definitions of the respective items, see the footnotes to table IV.3. — 1 Up to December 1998,

volume of business (balance sheet total plus endorsement liabilities arising from rediscounted bills and bills sent for collection from the banks' portfolios prior to maturity). — 2 Up to December 1998, including loans on a trust basis. — 3 Included in time deposits. — 4 Including subordinated negotiable bearer debt securities; excluding non-negotiable bearer debt securities. — 5 Deutsche Bank AG, Dresdner Bank AG, Commerzbank AG and, from 1999, Bayerische Hypo- und Vereinsbank AG. — 6 From January

IV. Banks

Deposits of banks (MFIs)			Deposits of non-banks (non-MFIs) 2							Bearer debt securities outstanding 4	Capital (including published reserves, participation rights capital, funds for general banking risks)	Other liabilities	End of month	
Total	of which:		Total	of which:			Memo item: Liabilities arising from repos 3	Savings deposits						
	Sight deposits	Time deposits		Sight deposits	Time deposits for			Total	of which: At three months' notice					Bank savings bonds
					up to 1 year	over 1 year								
<b>All categories of banks</b>														
2,779.2	704.1	1,948.8	3,728.9	738.4	426.2	1,024.8	.	1,193.3	951.5	249.0	2,212.9	397.6	601.9	1998 Sep.
2,873.6	714.8	2,032.8	3,757.1	755.0	430.4	1,030.2	.	1,196.5	954.8	247.4	2,222.8	400.1	604.6	Oct.
2,994.3	760.2	2,110.6	3,815.0	807.8	430.3	1,034.2	.	1,199.7	957.9	245.1	2,248.6	402.3	586.7	Nov.
2,962.6	782.0	2,067.7	3,910.6	850.8	453.1	1,038.3	.	1,234.2	988.7	243.9	2,247.1	406.9	560.4	Dec.
1,559.1	305.3	1,253.3	2,052.8	402.2	269.2	534.9	12.3	724.2	509.3	122.3	1,172.5	213.2	372.0	1999 Jan.
1,490.6	247.7	1,242.5	2,076.4	406.3	273.9	550.4	13.8	725.5	511.7	120.3	1,192.4	216.5	345.4	Feb.
<b>Commercial banks</b>														
559.6	194.8	364.5	508.2	170.3	110.3	103.3	11.6	109.1	85.6	15.2	150.0	74.5	139.4	1999 Jan.
510.3	141.2	368.8	513.8	171.3	111.5	107.3	12.4	108.8	85.5	15.0	157.5	77.2	120.8	Feb.
<b>Big banks 5</b>														
322.3	121.6	200.6	302.4	93.4	74.2	74.8	10.6	54.6	38.5	5.5	121.5	46.0	73.3	1999 Jan.
287.5	81.7	205.7	306.7	93.5	74.8	78.3	11.6	54.7	38.4	5.3	128.7	48.5	55.2	Feb.
<b>Regional banks and other commercial banks 6, 7</b>														
161.1	47.2	113.7	195.8	73.3	32.7	25.7	1.0	54.4	47.1	9.7	28.3	25.2	45.3	1999 Jan.
154.0	41.2	112.5	196.6	73.6	33.1	26.2	0.8	54.1	47.1	9.6	28.6	25.4	44.4	Feb.
<b>Branches of foreign banks</b>														
76.2	26.0	50.2	10.0	3.6	3.4	2.8	-	0.0	0.0	0.1	0.2	3.4	20.8	1999 Jan.
68.9	18.3	50.6	10.6	4.2	3.5	2.8	-	0.0	0.0	0.1	0.2	3.4	21.3	Feb.
<b>Land banks 8</b>														
374.7	46.9	327.8	225.1	28.5	26.2	152.5	0.4	16.4	15.1	1.5	323.0	37.5	66.0	1999 Jan.
375.4	51.7	323.7	229.2	29.3	27.1	155.3	1.1	16.3	15.0	1.3	320.0	37.9	61.3	Feb.
<b>Savings banks</b>														
179.1	5.2	173.8	580.9	120.5	64.0	6.7	-	318.4	252.9	71.3	46.1	35.9	37.0	1999 Jan.
178.4	4.1	174.2	583.3	122.5	64.5	6.8	-	319.2	254.9	70.3	45.9	36.0	36.1	Feb.
<b>Regional institutions of credit cooperatives (including Deutsche Genossenschaftsbank)</b>														
133.8	36.8	97.0	18.5	4.2	2.7	11.5	0.3	0.0	0.0	0.0	32.5	7.2	11.4	1999 Jan.
127.4	35.4	92.0	19.5	4.1	3.3	12.1	0.3	0.0	0.0	0.0	32.9	7.2	10.6	Feb.
<b>Credit cooperatives</b>														
67.1	1.8	65.2	377.3	75.8	59.0	20.0	-	188.4	155.4	34.1	27.4	25.2	17.8	1999 Jan.
67.4	1.9	65.5	378.1	76.3	59.4	20.1	-	188.8	155.9	33.5	27.4	25.3	17.1	Feb.
<b>Mortgage banks</b>														
98.5	10.6	87.9	126.9	1.8	2.0	122.8	-	0.1	0.1	0.2	476.0	14.3	22.8	1999 Jan.
87.7	7.9	79.8	134.4	1.7	2.2	130.2	-	0.1	0.1	0.2	489.1	14.3	21.0	Feb.
<b>Building and loan associations 9</b>														
21.4	1.9	19.5	94.3	0.2	0.6	1.6	-	91.8	0.2	0.1	1.7	6.4	14.8	1999 Jan.
21.4	1.7	19.7	94.7	0.3	0.6	1.6	-	92.1	0.3	0.1	1.8	6.5	14.3	Feb.
<b>Banks with special functions 10</b>														
124.9	7.3	117.6	121.7	0.9	4.4	116.4	-	-	-	-	115.8	12.2	62.8	1999 Jan.
122.5	3.9	118.6	123.4	1.0	5.3	117.1	-	-	-	-	117.8	12.3	64.2	Feb.
<b>Memo item: Foreign banks 11</b>														
130.3	52.0	78.2	50.9	20.4	10.8	11.7	0.5	6.2	5.2	1.8	12.2	10.0	38.5	1999 Jan.
112.5	36.1	76.4	52.3	21.1	11.8	11.9	0.3	6.1	5.0	1.5	12.3	10.2	39.2	Feb.
<b>of which: Banks majority-owned by foreign banks 12</b>														
54.1	26.1	28.0	40.9	16.8	7.4	8.9	0.5	6.2	5.1	1.7	12.0	6.6	17.7	1999 Jan.
43.7	17.8	25.8	41.7	16.9	8.2	9.1	0.3	6.1	5.0	1.5	12.2	6.8	18.0	Feb.

1999 including institutions of the discontinued category "Private bankers" and including Deutsche Postbank AG. — 7 Up to December 1998, including Bayerische Hypo- und Vereinsbank AG; see footnote 5. — 8 Previously known as: "Regional giro institutions". — 9 Assets and liabilities of building and loan associations included from 1999 only. — 10 Up to December 1998, including Deutsche Postbank AG; see footnote 6. — 11 Sum of the banks majority-owned by foreign banks and included in other categories of banks

and of the category "Branches (of dependent legal status) of foreign banks" — 12 Separate presentation of the banks majority-owned by foreign banks included in the categories "Regional banks and other commercial banks" and, up to December 1998, in the categories "Private bankers" and "Mortgage banks". — 13 See the note on the title page of the Statistical Section (page 1\*) and the footnotes to the changed items. Up to February 1999, this table was numbered IV.3.

IV. Banks

Table changed <sup>19</sup>

3. Assets and liabilities of banks (MFIs) in Germany vis-à-vis residents \*

Until the end of 1998 DM billion, from 1999 euro billion

Period	Cash in hand (euro-area notes and coins) <sup>1</sup>	Balances with the Bundesbank	Lending to domestic banks (MFIs) <sup>2, 3</sup>						Lending to domestic non-banks (non-MFIs) <sup>3, 8</sup>				
			Total	Balances and loans and advances not evidenced by certificates <sup>3</sup>	Bills <sup>4</sup>	Negotiable money market paper issued by banks <sup>5</sup>	Securities issued by banks <sup>6</sup>	Memo item: Trust loans <sup>7</sup>	Total	Loans and advances not evidenced by certificates <sup>3</sup>	Bills <sup>4</sup>	Treasury bills and negotiable money market paper issued by non-banks	Securities issued by non-banks <sup>9</sup>
End of year or month *													
1989	14.2	82.6	1,062.4	692.8	19.1	—	345.8	4.7	2,470.1	2,189.4	58.8	4.0	144.0
1990	21.1	96.6	1,420.8	1,001.7	16.8	—	396.8	5.5	2,875.0	2,546.9	61.1	19.7	171.7
1991	22.8	90.0	1,424.9	976.5	22.5	—	419.5	6.3	3,147.0	2,813.8	62.5	11.7	181.5
1992	26.8	88.2	1,483.5	1,020.8	19.0	—	435.1	8.6	3,478.2	3,034.9	52.1	9.6	237.8
1993	26.7	75.3	1,596.8	1,076.2	14.7	3.3	493.2	9.3	3,826.4	3,291.6	44.7	5.6	327.7
1994	25.0	61.5	1,695.6	1,150.6	17.4	4.6	513.6	9.5	4,137.2	3,502.8	45.9	2.2	433.7
1995	26.0	61.0	1,859.9	1,264.9	17.5	4.3	561.9	11.4	4,436.9	3,802.0	46.8	1.4	427.3
1996	28.9	59.7	2,134.0	1,443.3	17.9	3.4	657.2	12.2	4,773.1	4,097.9	44.8	5.9	437.2
1997	29.3	60.2	2,397.9	1,606.3	18.1	3.6	758.9	11.1	5,058.4	4,353.9	44.7	2.9	473.3
1998	28.5	63.6	2,738.2	1,814.7	14.6	12.2	887.7	9.1	5,379.8	4,639.7	32.8	5.0	527.8
1997 Sep.	23.5	49.9	2,302.7	1,518.5	17.1	1.9	753.7	11.5	4,970.6	4,245.6	46.6	3.2	490.7
Oct.	23.4	54.9	2,350.6	1,560.1	17.0	2.9	759.0	11.5	5,001.6	4,278.4	47.5	4.5	486.5
Nov.	23.2	56.0	2,409.4	1,614.7	17.8	3.1	762.6	11.3	5,041.8	4,313.8	47.8	3.8	492.3
Dec.	29.3	60.2	2,397.9	1,606.3	18.1	3.6	758.9	11.1	5,058.4	4,353.9	44.7	2.9	473.3
1998 Jan.	23.6	56.9	2,411.8	1,606.5	18.1	4.1	772.0	11.1	5,081.6	4,343.8	47.4	4.8	501.3
Feb.	24.0	61.6	2,431.7	1,618.9	18.0	4.8	779.5	10.5	5,111.4	4,372.0	47.7	3.7	503.7
Mar.	24.5	58.0	2,432.9	1,613.4	17.8	5.0	786.6	10.2	5,161.0	4,381.1	48.4	3.5	543.6
Apr.	24.4	54.6	2,458.8	1,624.9	17.4	4.6	802.0	9.8	5,203.7	4,404.4	49.1	7.1	559.3
May	25.0	56.4	2,516.1	1,670.0	17.1	4.4	814.6	10.0	5,214.3	4,409.9	49.8	5.5	566.0
June	24.7	63.6	2,551.8	1,699.8	16.8	4.4	820.9	9.8	5,225.2	4,426.1	49.2	5.3	562.2
July	23.8	52.9	2,563.2	1,689.8	16.8	6.2	840.6	9.8	5,236.6	4,448.3	50.6	5.1	551.4
Aug.	24.5	59.9	2,633.7	1,739.4	16.9	6.6	861.2	9.6	5,253.3	4,467.4	49.9	3.6	551.4
Sep.	24.5	58.0	2,630.7	1,735.1	16.6	7.5	862.0	9.5	5,264.8	4,495.4	46.9	2.4	539.5
Oct.	24.4	50.7	2,714.3	1,798.5	16.3	8.9	881.0	9.5	5,297.6	4,519.2	46.4	8.0	543.1
Nov.	23.9	57.1	2,767.9	1,842.3	16.0	11.4	888.8	9.4	5,348.0	4,548.1	42.8	7.0	569.1
Dec.	28.5	63.6	2,738.2	1,814.7	14.6	12.2	887.7	9.1	5,379.8	4,639.7	32.8	5.0	527.8
1999 Jan.	12.8	37.0	1,450.8	976.3	0.1	6.0	468.3	4.4	2,764.9	2,449.3	7.5	4.2	267.3
Feb.	12.4	37.2	1,428.1	948.4	0.1	5.5	474.0	4.5	2,781.3	2,460.7	8.1	3.0	272.9
Changes *													
1990	+ 6.4	+ 13.9	+ 112.8	+ 56.5	- 2.2	—	+ 57.6	+ 0.8	+ 219.9	+ 182.4	+ 2.3	+ 3.0	+ 30.4
1991	+ 1.7	- 6.6	+ 46.4	+ 13.4	+ 5.8	—	+ 26.5	+ 0.8	+ 285.7	+ 281.1	+ 1.3	- 8.0	+ 13.4
1992	+ 2.8	+ 6.3	+ 77.6	+ 61.0	- 3.5	—	+ 17.8	+ 2.3	+ 294.3	+ 249.2	- 10.4	- 2.2	+ 57.1
1993	- 0.1	- 12.9	+ 133.3	+ 75.2	- 4.3	+ 0.1	+ 61.5	+ 0.7	+ 339.8	+ 259.1	- 7.4	- 4.5	+ 102.0
1994	- 1.7	- 13.8	+ 99.1	+ 73.6	+ 2.7	+ 1.3	+ 21.3	+ 0.1	+ 320.5	+ 240.2	+ 1.2	- 3.3	+ 86.7
1995	+ 1.0	- 0.5	+ 193.5	+ 139.4	+ 0.1	- 0.5	+ 54.3	+ 0.2	+ 312.8	+ 303.6	+ 1.0	- 0.8	+ 2.9
1996	+ 2.9	- 1.3	+ 257.8	+ 161.8	+ 0.4	- 1.1	+ 95.8	+ 0.8	+ 336.3	+ 311.7	- 2.0	+ 4.7	+ 10.6
1997	+ 0.4	+ 0.5	+ 262.5	+ 160.7	+ 0.2	+ 0.2	+ 102.6	- 1.1	+ 285.2	+ 255.5	- 0.1	- 3.0	+ 36.5
1998	- 0.8	+ 3.4	+ 343.3	+ 210.3	- 3.6	+ 8.6	+ 130.0	- 2.0	+ 335.3	+ 302.1	- 11.9	+ 2.1	+ 52.1
1997 Sep.	+ 0.1	- 2.0	- 4.4	- 6.5	- 0.4	+ 0.1	+ 2.6	- 0.2	+ 13.3	+ 27.7	- 2.3	- 0.6	- 11.6
Oct.	- 0.1	+ 4.9	+ 48.2	+ 41.9	- 0.1	+ 0.9	+ 5.5	- 0.0	+ 31.3	+ 33.2	+ 0.9	+ 1.3	- 4.3
Nov.	- 0.3	+ 1.2	+ 58.6	+ 54.3	+ 0.7	+ 0.2	+ 3.6	- 0.2	+ 39.9	+ 35.2	+ 0.3	- 0.7	+ 5.8
Dec.	+ 6.2	+ 4.2	- 11.3	- 8.6	+ 0.3	+ 0.5	- 3.3	- 0.1	+ 17.1	+ 40.6	- 3.1	- 0.9	- 19.0
1998 Jan.	- 5.7	- 3.4	+ 14.5	- 0.1	+ 0.0	+ 0.6	+ 14.1	- 0.1	+ 23.6	- 9.8	+ 2.7	+ 2.0	+ 28.1
Feb.	+ 0.4	+ 4.8	+ 20.4	+ 12.5	- 0.1	+ 0.7	+ 7.9	- 0.5	+ 30.1	+ 28.4	+ 0.3	- 1.1	+ 2.5
Mar.	+ 0.5	- 3.6	+ 0.8	- 5.9	- 0.2	+ 0.2	+ 7.1	- 0.4	+ 49.6	+ 9.1	+ 0.7	- 0.2	+ 39.9
Apr.	- 0.2	- 3.4	+ 26.4	+ 12.1	- 0.4	- 0.3	+ 15.3	- 0.4	+ 43.4	+ 24.0	+ 0.7	+ 3.6	+ 15.7
May	+ 0.6	+ 1.8	+ 57.6	+ 45.4	- 0.3	- 0.2	+ 12.6	+ 0.2	+ 10.9	+ 5.9	+ 0.6	- 1.5	+ 6.6
June	- 0.2	+ 7.3	+ 35.0	+ 29.5	- 0.2	- 0.1	+ 6.1	- 0.2	+ 14.9	+ 24.5	- 0.6	- 0.2	- 8.1
July	- 1.0	- 10.7	+ 11.9	- 9.6	- 0.0	+ 1.8	+ 19.7	- 0.0	+ 13.6	+ 22.8	+ 1.5	- 0.2	- 9.2
Aug.	+ 0.8	+ 7.0	+ 70.5	+ 49.6	+ 0.1	+ 0.4	+ 20.6	- 0.2	+ 16.7	+ 19.1	- 0.8	- 1.5	- 0.0
Sep.	- 0.1	- 1.9	- 2.1	- 3.3	- 0.3	+ 0.8	+ 0.8	- 0.1	+ 12.5	+ 29.1	- 3.1	- 1.2	- 11.8
Oct.	- 0.0	- 7.2	+ 83.7	+ 63.5	- 0.3	+ 1.5	+ 19.0	+ 0.0	+ 32.7	+ 23.6	- 0.3	+ 5.6	+ 3.6
Nov.	- 0.6	+ 6.4	+ 53.2	+ 43.4	- 0.3	+ 2.5	+ 7.8	- 0.1	+ 49.9	+ 28.4	- 3.6	- 1.0	+ 26.0
Dec.	+ 4.6	+ 6.5	- 28.7	- 26.8	- 1.5	+ 0.7	- 1.0	- 0.2	+ 37.3	+ 97.1	- 10.0	- 2.0	- 41.2
1999 Jan.	- 1.8	+ 4.5	+ 17.7	+ 11.9	+ 0.1	- 0.2	+ 6.0	- 0.2	+ 18.3	+ 19.4	+ 3.2	+ 1.6	- 5.9
Feb.	- 0.4	+ 0.2	- 23.0	- 28.4	+ 0.0	- 0.4	+ 5.8	+ 0.0	+ 15.9	+ 10.8	+ 0.6	- 1.2	+ 5.7

\* See table IV.2, footnote\*; statistical breaks have been eliminated from the changes. The figures for the latest date are always to be regarded as provisional. Subsequent alterations, which will appear in the following Monthly Report, are not specially marked. — 1 Up to December 1998: domestic notes and coins. — 2 Up to December 1998, excluding loans to domestic building and loan associations. — 3 Up to December 1998, including loans on a trust basis; see also footnote 6. — 4 Up to December 1998, bill-based lending (bill holdings plus endorsement liabilities arising

from rediscounted bills and bills sent for collection from the banks' portfolios prior to maturity). — 5 Up to November 1993, included in securities (see also footnote 5). — 6 Up to November 1993, including negotiable money market paper; excluding registered debt securities. — 7 From 1999, no longer included in loans or deposits (see also footnote 2). — 8 Up to December 1998, including loans to domestic building and loan associations. — 9 Excluding debt securities arising from the exchange of equalisation claims; see also footnote 10. — 10 Including debt securities

IV. Banks

Equalisation claims 10	Memo item: Trust loans 7	Participating interests in domestic banks and enterprises	Deposits of domestic banks (MFIs) 3. 11, 12					Deposits of domestic non-banks (non-MFIs) 3. 17					Period	
			Total	Sight deposits 13, 14	Time deposits 3, 14, 15	Bills redis-counted 16	Memo item: Trust loans 7	Total	Sight deposits 13	Time deposits 3, 15	Savings deposits	Bank savings bonds 18		Memo item: Trust loans 7
End of year or month *														
1.9	71.9	31.0	902.8	110.4	697.8	73.7	20.9	2,028.2	303.0	756.6	705.6	202.5	60.5	1989
1.7	73.9	39.5	1,249.7	256.4	878.1	93.4	21.9	2,334.5	424.6	866.3	755.2	226.5	61.8	1990
2.4	75.1	41.3	1,249.6	226.9	913.1	87.8	21.7	2,462.7	431.3	976.6	754.1	236.7	64.0	1991
64.3	79.5	49.4	1,266.2	301.2	864.7	78.0	22.4	2,570.4	468.3	1,020.9	770.7	240.0	70.4	1992
75.3	81.6	59.5	1,395.2	380.2	917.9	69.2	27.9	2,788.1	513.6	1,123.6	859.4	219.1	72.4	1993
68.1	84.4	70.7	1,427.9	342.8	976.9	75.2	33.1	2,875.7	540.2	1,109.3	940.5	206.9	78.8	1994
71.3	88.1	83.2	1,539.4	363.9	1,065.1	75.5	35.0	3,021.1	579.9	1,086.1	1,046.1	227.4	81.6	1995
81.3	106.0	89.7	1,731.0	401.1	1,202.4	75.4	52.2	3,241.5	675.1	1,109.8	1,143.0	227.8	85.8	1996
76.0	107.6	95.1	1,902.3	427.6	1,349.1	75.6	50.0	3,341.9	689.8	1,146.9	1,182.1	236.9	86.1	1997
71.6	102.8	129.2	2,086.9	472.5	1,505.2	59.4	49.7	3,520.3	799.5	1,194.1	1,211.0	234.9	80.9	1998
77.6	106.9	93.2	1,802.2	406.9	1,266.7	76.1	52.4	3,216.1	627.4	1,122.8	1,148.7	232.0	85.2	1997 Sep.
77.5	107.2	93.6	1,854.0	430.1	1,294.8	76.5	52.5	3,224.9	627.7	1,130.0	1,148.8	233.0	85.4	Oct.
76.6	107.5	93.7	1,904.6	439.6	1,334.9	77.5	52.6	3,272.9	669.9	1,132.0	1,150.5	234.7	85.7	Nov.
76.0	107.6	95.1	1,902.3	427.6	1,349.1	75.6	50.0	3,341.9	689.8	1,146.9	1,182.1	236.9	86.1	Dec.
76.1	108.2	95.6	1,905.3	442.7	1,334.5	77.3	50.7	3,311.2	644.4	1,156.7	1,184.7	238.7	86.7	1998 Jan.
76.1	108.1	98.7	1,910.0	448.4	1,333.4	77.2	51.0	3,324.2	651.2	1,158.4	1,188.4	240.0	86.3	Feb.
76.4	108.0	99.2	1,910.4	440.6	1,342.2	77.2	50.4	3,318.4	652.8	1,152.3	1,185.9	241.0	86.6	Mar.
75.9	107.8	99.5	1,915.7	440.7	1,348.2	76.9	50.0	3,323.8	663.0	1,151.6	1,180.8	241.9	86.5	Apr.
75.9	107.2	99.5	1,939.6	435.7	1,377.3	76.8	49.8	3,334.5	665.4	1,162.3	1,178.1	242.3	86.4	May
75.4	107.1	99.5	1,970.5	460.4	1,385.2	75.8	49.1	3,337.7	680.2	1,153.6	1,175.2	242.0	86.6	June
73.9	107.3	99.4	1,956.3	423.6	1,407.5	76.1	49.1	3,330.8	665.2	1,163.9	1,173.1	241.7	86.8	July
73.7	107.4	99.8	2,016.2	464.5	1,426.6	76.2	48.9	3,358.1	684.9	1,173.1	1,172.3	241.2	86.8	Aug.
73.5	107.3	98.5	2,001.3	449.9	1,428.3	74.3	48.9	3,353.9	691.6	1,164.5	1,170.9	240.1	86.8	Sep.
73.5	107.5	98.8	2,049.1	456.7	1,469.3	74.4	48.8	3,370.4	705.0	1,165.6	1,174.0	238.5	87.3	Oct.
73.4	107.7	100.4	2,098.4	472.1	1,505.5	72.3	48.5	3,418.5	754.1	1,163.4	1,177.1	236.2	87.7	Nov.
71.6	102.8	129.2	2,086.9	472.5	1,505.2	59.4	49.7	3,520.3	799.5	1,194.1	1,211.0	234.9	80.9	Dec.
36.5	58.0	66.4	1,067.6	152.9	914.3	0.4	30.6	1,835.4	376.5	629.4	711.9	117.6	41.6	1999 Jan.
36.5	58.1	66.6	1,041.5	135.1	906.0	0.4	30.6	1,838.6	379.4	630.6	713.0	115.6	41.7	Feb.
Changes *														
- 0.3	+ 2.0	+ 7.2	+ 85.9	- 107.9	+ 173.1	+ 19.8	+ 0.9	+ 125.3	+ 32.4	+ 104.8	- 37.4	+ 24.0	+ 1.4	1990
- 0.3	- 1.9	+ 3.9	+ 37.8	- 7.9	+ 51.3	- 5.6	- 0.2	+ 125.0	+ 4.6	+ 110.2	+ 0.9	+ 10.2	- 0.9	1991
- 1.0	+ 1.5	+ 7.9	+ 39.7	+ 74.0	- 25.5	- 9.8	+ 1.0	+ 126.0	+ 33.6	+ 69.6	+ 16.3	+ 3.3	+ 3.2	1992
- 11.4	+ 2.1	+ 9.8	+ 145.3	+ 75.1	+ 77.1	- 8.8	+ 1.9	+ 216.7	+ 43.8	+ 96.9	+ 88.7	- 14.6	+ 2.0	1993
- 6.9	+ 2.6	+ 11.3	+ 32.4	- 31.4	+ 53.0	+ 6.0	+ 4.9	+ 85.0	+ 28.3	- 14.1	+ 81.2	- 12.2	+ 1.8	1994
- 1.2	+ 7.3	+ 12.5	+ 134.2	+ 20.4	+ 111.5	+ 0.4	+ 2.0	+ 158.3	+ 48.9	- 14.2	+ 105.6	+ 11.7	+ 6.3	1995
+ 8.0	+ 3.3	+ 6.5	+ 175.9	+ 36.6	+ 137.7	- 0.2	+ 1.7	+ 218.4	+ 94.3	+ 23.2	+ 96.9	+ 0.7	+ 3.3	1996
- 5.3	+ 1.6	+ 5.4	+ 175.9	+ 31.6	+ 146.7	+ 0.2	- 2.6	+ 100.5	+ 13.0	+ 37.1	+ 39.1	+ 9.2	+ 2.1	1997
- 4.4	- 4.8	+ 34.1	+ 179.0	+ 39.7	+ 156.4	- 16.2	- 0.9	+ 179.3	+ 110.6	+ 47.2	+ 28.9	- 2.1	- 5.3	1998
- 0.1	+ 0.1	+ 3.2	- 11.1	- 4.0	- 5.4	- 1.6	- 0.2	- 4.3	+ 3.3	- 6.7	- 0.6	- 0.3	- 0.0	1997 Sep.
- 0.1	+ 0.3	+ 0.4	+ 52.2	+ 23.6	+ 28.1	+ 0.4	+ 0.1	+ 9.1	+ 0.6	+ 7.1	+ 0.1	+ 1.1	+ 0.2	Oct.
- 0.9	+ 0.3	+ 0.1	+ 50.3	+ 9.1	+ 40.2	+ 1.0	+ 0.1	+ 47.7	+ 41.9	+ 2.1	+ 1.8	+ 1.7	+ 0.2	Nov.
- 0.6	+ 0.1	+ 1.4	+ 3.9	- 5.7	+ 14.2	- 1.9	- 2.6	+ 68.8	+ 19.6	+ 14.9	+ 31.5	+ 2.2	+ 0.5	Dec.
+ 0.0	+ 0.6	+ 0.4	- 3.9	+ 8.3	- 14.0	+ 1.7	+ 0.0	- 31.0	- 45.8	+ 9.8	+ 2.6	+ 1.8	+ 0.5	1998 Jan.
+ 0.0	- 0.0	+ 3.2	+ 4.9	+ 5.8	- 1.1	- 0.1	+ 0.3	+ 13.1	+ 6.9	+ 1.6	+ 3.7	+ 1.3	- 0.4	Feb.
+ 0.3	- 0.1	+ 0.4	+ 0.0	- 8.2	+ 8.9	+ 0.0	- 0.6	- 6.1	+ 1.3	- 6.1	- 2.5	+ 1.0	+ 0.3	Mar.
- 0.4	- 0.2	+ 0.3	+ 5.8	+ 0.6	+ 5.9	- 0.4	- 0.4	+ 5.9	+ 10.7	- 0.7	- 5.0	+ 1.0	- 0.0	Apr.
+ 0.0	- 0.7	+ 0.0	+ 24.3	- 4.6	+ 29.1	- 0.1	- 0.2	+ 10.9	+ 2.7	+ 10.7	- 2.7	+ 0.3	- 0.1	May
- 0.5	- 0.1	- 0.0	+ 28.4	+ 22.4	+ 7.6	- 1.0	- 0.6	+ 2.9	+ 14.5	- 8.6	- 2.9	- 0.2	+ 0.2	June
- 1.5	+ 0.2	- 0.1	- 12.1	- 34.7	+ 22.3	+ 0.4	- 0.1	- 6.5	- 14.6	+ 10.3	- 2.1	- 0.3	+ 0.2	July
- 0.2	+ 0.1	+ 0.4	+ 60.0	+ 41.0	+ 19.1	+ 0.0	- 0.1	+ 27.4	+ 19.7	+ 9.1	- 0.9	- 0.6	+ 0.0	Aug.
- 0.3	- 0.1	- 1.3	- 14.0	- 13.7	+ 1.7	- 1.8	- 0.1	- 3.4	+ 7.5	- 8.5	- 1.3	- 1.1	+ 0.0	Sep.
+ 0.0	+ 0.2	+ 0.4	+ 48.0	+ 7.0	+ 41.0	+ 0.0	- 0.1	+ 16.5	+ 13.4	+ 1.1	+ 3.1	- 1.5	+ 0.5	Oct.
- 0.0	+ 0.2	+ 1.6	+ 48.8	+ 14.9	+ 36.2	- 2.0	- 0.3	+ 47.7	+ 48.7	- 2.2	+ 3.2	- 2.3	+ 0.4	Nov.
- 1.8	- 4.9	+ 28.8	- 11.2	+ 0.8	- 0.4	- 12.9	+ 1.3	+ 101.9	+ 45.6	+ 30.7	+ 33.8	- 1.4	- 6.8	Dec.
- 0.1	+ 0.2	+ 0.0	+ 18.9	+ 39.2	- 9.4	- 10.9	- 0.1	- 1.0	- 9.6	+ 9.3	+ 1.7	- 2.4	+ 0.2	1999 Jan.
- 0.0	+ 0.1	+ 0.3	- 26.5	- 18.2	- 8.2	- 0.1	+ 0.1	+ 2.9	+ 2.6	+ 1.2	+ 1.1	- 2.0	+ 0.0	Feb.

arising from the exchange of equalisation claims. — 11 Including liabilities arising from registered debt securities, registered money market paper and non-negotiable bearer debt securities; including subordinated liabilities. — 12 Up to December 1998, excluding liabilities to domestic building and loan associations and money market funds. — 13 Up to December 1998, including time deposits for less than 1 month. — 14 Including liabilities arising from monetary policy operations with the Bundesbank. — 15 Up to December 1998, excluding time deposits for less than 1 month. — 16 Own

acceptances and promissory notes outstanding and, up to December 1998, including endorsement liabilities arising from rediscounted bills. — 17 Up to December 1998, including liabilities to domestic building and loan associations and money market funds. — 18 Including liabilities arising from non-negotiable bearer debt securities. — 19 See the note on the title page of the Statistical Section (page 1\*) and the footnotes to the changed items. Up to February 1999, this table was numbered IV.4.

IV. Banks

Table changed <sup>10</sup>

4. Assets and liabilities of banks (MFIs) in Germany vis-à-vis non-residents \*

Until the end of 1998 DM billion, from 1999 euro billion

Period	Cash in hand (non-euro-area notes and coins) <sup>1</sup>	Lending to foreign banks (MFIs) <sup>2</sup>							Lending to foreign non-banks (non-MFIs) <sup>2</sup>					
		Total	Balances and loans and advances not evidenced by certificates, bills <sup>3</sup>			Negotiable money market paper issued by banks <sup>4</sup>	Securities issued by banks <sup>5</sup>	Memo item: Trust loans <sup>6</sup>	Total	Loans and advances not evidenced by certificates, bills <sup>3</sup>			Treasury bills and negotiable money market paper issued by non-banks	Securities of non-banks
			Total	Short-term	Medium and long-term <sup>2</sup>					Total	Short-term	Medium and long-term <sup>2</sup>		
End of year or month *														
1989	0.8	358.6	345.2	270.9	74.3	-	9.8	3.6	137.8	110.9	20.0	90.8	1.0	18.3
1990	1.0	422.4	400.6	303.3	97.3	-	14.6	7.2	167.5	130.9	29.2	101.7	0.6	24.0
1991	1.1	419.6	395.8	266.5	129.3	-	17.5	6.4	188.7	142.6	27.7	114.8	1.4	31.3
1992	1.0	405.6	377.4	250.0	127.4	-	21.3	6.8	217.8	157.3	30.2	127.1	0.4	45.2
1993	1.2	533.8	498.3	360.5	137.7	0.1	24.3	11.2	262.5	184.0	48.3	135.7	0.0	63.0
1994	1.2	492.3	455.0	309.0	146.0	0.1	23.7	13.5	257.4	173.0	35.0	138.0	0.6	66.5
1995	1.2	538.4	500.8	349.7	151.1	0.1	25.6	11.8	289.2	191.1	42.1	148.9	1.7	79.7
1996	1.4	588.9	544.2	386.6	157.6	0.3	31.5	13.0	352.0	230.4	60.2	170.2	4.9	103.9
1997	1.5	689.1	635.3	456.1	179.2	0.2	43.1	10.5	474.8	312.7	96.2	216.5	6.0	140.3
1998	1.5	774.9	706.9	533.6	173.3	0.4	58.7	9.0	610.3	364.9	93.9	270.9	11.6	211.0
1997 Sep.	1.6	632.7	580.0	410.1	169.9	0.4	39.6	12.6	444.5	284.5	85.9	198.6	8.7	137.0
Oct.	1.5	653.9	599.4	426.1	173.4	0.5	41.3	12.7	452.5	286.5	85.7	200.8	6.6	144.5
Nov.	1.4	680.5	626.0	451.6	174.4	0.5	41.3	12.7	462.0	293.3	89.8	203.5	6.8	146.9
Dec.	1.5	689.1	635.3	456.1	179.2	0.2	43.1	10.5	474.8	312.7	96.2	216.5	6.0	140.3
1998 Jan.	1.4	688.2	632.2	452.9	179.3	0.3	44.5	11.1	478.9	312.6	88.1	224.5	4.1	146.1
Feb.	1.6	680.2	623.5	441.6	181.9	0.3	45.4	11.0	492.2	321.0	94.8	226.2	4.8	149.9
Mar.	1.7	704.3	642.5	455.7	186.8	1.9	49.1	10.8	504.8	328.3	98.3	230.0	5.0	154.3
Apr.	1.7	703.5	645.2	457.0	188.2	0.5	47.4	10.4	508.2	325.5	97.2	228.3	5.8	158.1
May	1.8	709.9	650.9	462.0	188.9	0.5	48.1	10.4	526.2	329.6	98.8	230.9	5.5	172.0
June	1.9	731.8	665.4	475.4	190.0	0.6	55.8	10.1	558.9	343.7	108.6	235.2	6.2	188.7
July	1.9	699.3	638.4	448.2	190.2	0.4	50.5	10.1	555.4	345.5	106.8	238.7	7.0	182.9
Aug.	1.7	740.4	678.4	485.9	192.5	0.2	51.8	10.0	565.0	355.6	113.3	242.3	6.9	180.1
Sep.	2.3	717.1	655.0	465.6	189.4	0.4	51.7	9.9	568.6	361.5	120.5	241.1	6.0	178.6
Oct.	1.5	732.2	667.0	478.6	188.4	0.5	54.9	9.9	576.8	348.5	105.6	242.9	9.2	196.7
Nov.	1.4	789.0	720.1	533.2	186.9	0.4	58.6	9.9	591.9	356.8	107.3	249.5	11.2	201.8
Dec.	1.5	774.9	706.9	533.6	173.3	0.4	58.7	9.0	610.3	364.9	93.9	270.9	11.6	211.0
1999 Jan.	0.5	455.7	426.6	336.6	90.1	0.2	28.9	4.9	307.2	192.6	49.7	142.9	7.2	107.4
Feb.	0.6	409.5	380.8	291.0	89.8	0.1	28.6	4.9	307.9	193.9	46.3	147.6	5.5	108.5
Changes *														
1990	- 0.3	+ 50.7	+ 41.5	+ 16.5	+ 25.0	-	+ 5.3	+ 3.9	+ 26.4	+ 15.9	+ 9.2	+ 6.7	- 0.2	+ 6.3
1991	+ 0.1	- 3.6	- 5.9	- 38.1	+ 32.2	-	+ 3.2	- 0.9	+ 22.6	+ 12.3	- 1.3	+ 13.7	+ 0.7	+ 8.0
1992	- 0.1	- 18.4	- 22.6	- 20.4	- 2.2	-	+ 3.8	+ 0.4	+ 28.6	+ 13.6	+ 2.5	+ 11.0	- 1.0	+ 14.1
1993	+ 0.1	+ 117.3	+ 117.2	+ 103.9	+ 13.3	- 0.0	+ 0.5	- 0.4	+ 31.9	+ 12.6	+ 6.2	+ 6.3	- 0.4	+ 19.5
1994	+ 0.0	- 24.0	- 27.5	- 41.4	+ 13.9	- 0.0	+ 0.1	+ 3.4	- 1.6	- 5.5	- 12.3	+ 6.7	+ 0.6	+ 5.1
1995	+ 0.1	+ 59.1	+ 57.6	+ 49.2	+ 8.4	+ 0.0	+ 2.9	- 1.4	+ 38.3	+ 21.3	+ 7.8	+ 13.6	+ 1.1	+ 16.1
1996	+ 0.2	+ 34.2	+ 29.9	+ 27.2	+ 2.7	+ 0.2	+ 5.2	- 1.1	+ 58.4	+ 36.2	+ 17.0	+ 19.2	+ 3.1	+ 21.4
1997	+ 0.1	+ 80.6	+ 71.5	+ 53.3	+ 18.2	- 0.1	+ 10.4	- 1.2	+ 109.3	+ 73.0	+ 33.7	+ 39.3	+ 0.7	+ 32.9
1998	- 0.0	+ 100.8	+ 89.5	+ 79.3	+ 10.2	+ 0.0	+ 13.1	- 1.8	+ 122.0	+ 42.7	- 6.4	+ 49.1	+ 5.5	+ 66.0
1997 Sep.	- 0.1	+ 5.1	+ 3.9	- 0.6	+ 4.6	- 0.1	+ 1.5	- 0.2	+ 2.8	+ 1.4	- 0.6	+ 2.1	+ 0.6	+ 0.8
Oct.	- 0.1	+ 25.5	+ 23.3	+ 19.0	+ 4.3	+ 0.1	+ 2.0	+ 0.1	+ 10.8	+ 4.0	+ 0.3	+ 3.7	- 1.9	+ 8.2
Nov.	- 0.1	+ 24.3	+ 24.5	+ 23.6	+ 0.8	+ 0.0	- 0.2	- 0.0	+ 6.9	+ 4.6	+ 3.7	+ 0.8	+ 0.3	+ 1.9
Dec.	+ 0.1	+ 6.0	+ 6.9	+ 2.5	+ 4.4	- 0.3	+ 1.7	- 2.3	+ 11.3	+ 18.3	+ 6.1	+ 12.2	- 0.8	- 6.9
1998 Jan.	- 0.1	- 5.1	- 6.7	- 6.4	- 0.2	+ 0.1	+ 1.4	+ 0.0	+ 1.5	- 2.0	- 8.6	+ 6.6	- 2.0	+ 5.3
Feb.	+ 0.2	- 6.4	- 7.4	- 10.3	+ 2.9	- 0.1	+ 1.1	- 0.0	+ 14.3	+ 9.2	+ 6.9	+ 2.4	+ 0.7	+ 4.0
Mar.	+ 0.1	+ 20.7	+ 15.9	+ 11.9	+ 4.0	+ 1.6	+ 3.5	- 0.2	+ 9.8	+ 5.0	+ 3.1	+ 1.9	+ 0.1	+ 4.1
Apr.	+ 0.1	+ 5.4	+ 8.3	+ 5.3	+ 2.9	- 1.4	- 1.1	- 0.3	+ 8.1	+ 0.6	- 0.4	+ 1.0	+ 0.8	+ 4.8
May	+ 0.1	+ 10.6	+ 9.5	+ 7.2	+ 2.3	+ 0.0	+ 1.0	+ 0.0	+ 20.1	+ 5.4	+ 1.9	+ 3.5	- 0.2	+ 14.7
June	+ 0.1	+ 10.4	+ 7.2	+ 7.1	+ 0.2	- 0.1	+ 3.6	- 0.4	+ 17.9	+ 6.6	+ 3.9	+ 2.7	+ 0.6	+ 9.5
July	- 0.0	- 27.2	- 22.1	- 23.5	+ 1.4	- 0.2	- 4.9	+ 0.0	+ 0.1	+ 4.1	- 1.2	+ 5.2	+ 0.8	- 4.6
Aug.	- 0.2	+ 41.6	+ 40.4	+ 38.0	+ 2.4	- 0.1	+ 1.3	- 0.0	+ 10.1	+ 10.5	+ 6.6	+ 3.9	- 0.1	- 2.7
Sep.	+ 0.6	- 13.7	- 14.6	- 14.0	- 0.6	+ 0.2	+ 0.7	+ 0.0	+ 12.0	+ 12.1	+ 8.4	+ 3.7	- 0.7	+ 0.1
Oct.	- 0.8	+ 13.1	+ 10.2	+ 11.0	- 0.8	+ 0.1	+ 2.8	- 0.0	+ 8.7	- 11.8	- 14.8	+ 3.1	+ 3.3	+ 17.2
Nov.	- 0.1	+ 52.6	+ 49.3	+ 52.0	- 2.7	- 0.1	+ 3.4	- 0.0	+ 11.2	+ 5.1	+ 1.1	+ 4.0	+ 2.0	+ 4.7
Dec.	+ 0.1	- 1.3	- 0.6	+ 0.9	- 1.5	+ 0.0	+ 0.2	- 0.9	+ 8.2	- 2.2	- 13.2	+ 11.1	+ 0.3	+ 9.0
1999 Jan.	- 0.2	+ 60.8	+ 62.0	+ 61.1	+ 0.9	- 0.0	- 1.2	+ 0.2	+ 11.0	+ 10.6	+ 7.7	+ 3.0	+ 1.2	- 0.8
Feb.	+ 0.1	- 48.9	- 48.4	- 47.5	- 0.8	- 0.1	- 0.5	+ 0.0	- 1.7	- 0.7	- 3.8	+ 3.2	- 1.8	+ 0.7

\* See table IV.2, footnote\*; statistical breaks have been eliminated from the changes. The figures for the latest date are always to be regarded as provisional. Subsequent alterations, which will appear in the following Monthly Report, are not specially marked. — 1 Up to December 1998: domestic notes and coins. — 2 Up to December 1998, including loans on a

trust basis; see also footnote 5. — 3 Up to December 1998, bill-based lending (bill holdings plus endorsement liabilities arising from rediscounted bills and bills sent for collection from the banks' portfolios prior to maturity). — 4 Up to November 1993, included in securities; see also

IV. Banks

Memo item: Trust loans 6	Participating interests in foreign banks and enterprises 7	Deposits of foreign banks (MFIs) 2						Deposits of foreign non-banks (non-MFIs) 2						Period
		Total	Sight deposits 8	Time deposits (including bank savings bonds)			Memo item: Trust loans 6	Total	Sight deposits 8	Time deposits (including savings deposits and bank savings bonds)			Memo item: Trust loans 6	
				Total 9	Short-term 9	Medium and long-term 2				Total 9	Short-term 9	Medium and long-term 2		
End of year or month *														
7.7	16.2	196.3	40.8	150.6	71.2	79.4	4.9	70.5	10.4	58.6	18.4	40.2	1.6	1989
11.9	20.9	246.0	54.6	182.1	74.5	107.5	9.3	83.0	11.6	65.9	21.6	44.2	5.5	1990
13.5	22.8	253.3	58.8	184.2	88.3	95.9	10.3	93.0	11.5	76.1	24.2	51.8	5.3	1991
14.8	25.8	297.0	66.7	219.7	119.2	100.5	10.5	125.8	15.8	103.6	34.4	69.2	6.4	1992
15.5	30.1	328.1	82.9	236.0	122.5	113.5	9.2	162.8	16.9	139.2	39.1	100.1	6.7	1993
17.3	34.0	402.3	111.6	283.7	150.8	132.9	7.1	181.5	20.6	155.3	41.7	113.6	5.6	1994
16.7	38.8	463.7	116.9	339.7	191.6	148.2	7.0	224.4	22.1	198.0	45.3	152.6	4.4	1995
12.7	45.8	486.5	147.1	335.7	172.0	163.7	3.8	273.5	34.3	237.2	50.0	187.2	2.1	1996
15.7	54.7	670.3	226.0	440.2	254.3	185.9	4.0	333.9	43.5	285.7	63.0	222.7	4.8	1997
22.9	62.9	875.7	309.5	562.5	359.1	203.4	3.7	390.3	51.3	329.6	71.8	257.8	9.5	1998
14.4	53.3	612.7	193.8	415.0	233.0	181.9	3.9	322.2	40.0	278.3	58.0	220.3	3.9	1997 Sep.
14.8	53.3	658.5	219.2	435.1	252.4	182.8	4.1	325.2	39.1	282.0	60.3	221.7	4.2	Oct.
15.0	53.5	670.2	221.5	444.8	259.3	185.5	3.9	335.5	41.6	289.6	65.5	224.1	4.3	Nov.
15.7	54.7	670.3	226.0	440.2	254.3	185.9	4.0	333.9	43.5	285.7	63.0	222.7	4.8	Dec.
16.1	54.7	690.4	236.6	449.4	260.2	189.2	4.3	340.7	44.7	291.3	64.0	227.3	4.8	1998 Jan.
16.5	54.8	696.0	234.6	457.6	267.4	190.2	3.8	348.8	42.9	300.7	62.1	238.6	5.2	Feb.
17.2	55.5	734.2	255.0	475.8	282.4	193.4	3.4	359.7	46.2	307.7	67.8	239.9	5.8	Mar.
18.9	55.6	729.5	243.1	483.3	289.8	193.5	3.1	373.2	55.6	310.2	66.3	243.9	7.4	Apr.
19.0	56.1	769.2	265.8	500.4	304.4	196.0	3.1	376.2	51.7	317.1	68.3	248.8	7.4	May
20.3	56.7	794.6	295.7	495.8	298.5	197.3	3.0	372.8	51.6	312.7	63.3	249.3	8.5	June
20.1	58.7	760.3	246.3	511.0	315.6	195.3	3.1	375.0	45.3	321.4	72.0	249.4	8.3	July
22.5	58.8	768.7	249.2	516.3	321.9	194.4	3.1	389.1	49.2	329.3	79.4	249.9	10.7	Aug.
22.5	64.0	777.8	254.2	520.5	325.5	195.0	3.1	375.0	46.9	317.7	69.5	248.3	10.4	Sep.
22.4	65.0	824.5	258.1	563.4	368.9	194.5	2.9	386.8	50.1	326.4	73.1	253.3	10.2	Oct.
22.0	65.2	895.8	288.1	605.0	408.8	196.2	2.7	396.5	53.7	332.6	76.4	256.2	10.2	Nov.
22.9	62.9	875.7	309.5	562.5	359.1	203.4	3.7	390.3	51.3	329.6	71.8	257.8	9.5	Dec.
11.6	22.4	491.5	152.4	339.1	241.9	97.2	1.9	217.4	25.8	191.6	49.6	142.0	4.9	1999 Jan.
11.8	22.7	449.0	112.6	336.4	248.6	87.8	1.9	237.9	27.0	210.9	54.5	156.4	5.1	Feb.
Changes *														
+ 4.5	+ 25.8	+ 14.1	+ 6.1	+ 6.5	- 0.4	+ 5.6	+ 12.8	+ 0.8	+ 8.7	+ 3.8	+ 4.9	+ 3.3	1990	
+ 1.6	+ 1.9	+ 6.3	+ 4.3	+ 1.2	+ 14.0	- 12.7	+ 0.8	+ 9.6	- 0.2	+ 10.0	+ 2.5	+ 7.5	- 0.2	1991
+ 1.9	+ 3.8	+ 41.3	+ 7.3	+ 33.2	+ 28.8	+ 4.4	+ 0.7	+ 32.5	+ 4.2	+ 27.0	+ 10.1	+ 16.9	+ 1.2	1992
+ 0.2	+ 4.1	+ 23.8	+ 14.1	+ 11.1	- 0.4	+ 11.5	- 1.4	+ 34.3	+ 1.0	+ 33.2	+ 4.0	+ 29.1	+ 0.2	1993
- 1.7	+ 4.2	+ 85.6	+ 31.3	+ 56.0	+ 33.9	+ 22.1	- 1.7	+ 23.1	+ 3.9	+ 19.8	+ 3.4	+ 16.4	- 0.7	1994
- 0.2	+ 5.2	+ 71.0	+ 7.9	+ 64.6	+ 45.9	+ 18.7	- 1.5	+ 47.8	+ 2.2	+ 46.5	+ 4.1	+ 42.4	- 0.9	1995
- 2.3	+ 5.9	+ 11.3	+ 27.1	- 13.9	- 26.6	+ 12.7	- 1.9	+ 44.7	+ 11.7	+ 35.0	+ 3.7	+ 31.3	- 2.0	1996
+ 2.7	+ 7.9	+ 157.3	+ 67.7	+ 89.5	+ 71.8	+ 17.7	+ 0.1	+ 51.0	+ 5.4	+ 43.3	+ 11.4	+ 31.9	+ 2.3	1997
+ 7.7	+ 8.8	+ 215.6	+ 87.7	+ 128.1	+ 108.1	+ 20.0	- 0.3	+ 64.7	+ 10.4	+ 48.9	+ 10.3	+ 38.6	+ 5.5	1998
+ 0.0	+ 1.0	- 8.5	- 3.7	- 4.6	- 5.5	+ 0.8	- 0.1	- 0.7	+ 0.5	- 1.1	- 1.5	+ 0.3	+ 0.0	1997 Sep.
+ 0.5	+ 0.1	+ 49.6	+ 26.4	+ 22.9	+ 21.3	+ 1.6	+ 0.3	+ 4.8	- 0.7	+ 5.2	+ 2.7	+ 2.5	+ 0.3	Oct.
+ 0.1	- 0.0	+ 8.2	+ 1.2	+ 7.3	+ 5.3	+ 1.9	- 0.3	+ 8.9	+ 2.3	+ 6.6	+ 4.8	+ 1.8	+ 0.0	Nov.
+ 0.7	+ 1.1	- 6.7	- 0.4	- 6.5	- 6.4	- 0.1	+ 0.1	- 4.9	- 0.8	- 4.5	- 2.8	- 1.7	+ 0.4	Dec.
+ 0.2	- 0.1	+ 20.2	+ 13.3	+ 6.6	+ 3.9	+ 2.7	+ 0.3	+ 7.4	+ 3.4	+ 4.1	+ 0.6	+ 3.5	- 0.1	1998 Jan.
+ 0.4	+ 0.1	+ 7.1	- 1.5	+ 9.1	+ 8.0	+ 1.2	- 0.5	+ 8.6	- 1.7	+ 9.9	- 1.7	+ 11.6	+ 0.4	Feb.
+ 0.6	+ 0.4	+ 34.3	+ 19.3	+ 15.4	+ 12.9	+ 2.5	- 0.4	+ 9.4	+ 3.1	+ 5.8	+ 5.4	+ 0.4	+ 0.6	Mar.
+ 1.8	+ 0.4	+ 1.9	- 9.6	+ 11.8	+ 10.5	+ 1.3	- 0.3	+ 16.4	+ 9.7	+ 5.0	- 1.0	+ 6.0	+ 1.7	Apr.
+ 0.2	+ 0.7	+ 42.6	+ 23.8	+ 18.8	+ 15.9	+ 2.9	- 0.0	+ 4.8	- 3.7	+ 8.4	+ 2.1	+ 6.3	+ 0.1	May
+ 1.2	+ 0.4	+ 14.6	+ 25.0	- 10.4	- 11.1	+ 0.7	- 0.0	- 5.7	- 0.9	- 5.8	- 5.2	- 0.6	+ 1.0	June
- 0.1	+ 2.2	- 29.1	- 47.3	+ 18.1	+ 19.3	- 1.2	+ 0.1	+ 4.7	- 6.0	+ 10.8	+ 8.9	+ 1.8	- 0.1	July
+ 2.4	+ 0.1	+ 8.8	+ 3.0	+ 5.7	+ 6.6	- 0.9	+ 0.1	+ 14.3	+ 3.9	+ 8.0	+ 7.5	+ 0.5	+ 2.4	Aug.
+ 0.5	+ 5.7	+ 19.8	+ 7.9	+ 11.8	+ 9.3	+ 2.5	+ 0.0	- 8.7	- 1.7	- 7.3	- 8.7	+ 1.3	+ 0.3	Sep.
+ 0.0	+ 1.1	+ 47.5	+ 3.5	+ 44.2	+ 44.3	- 0.1	- 0.2	+ 11.6	+ 3.3	+ 8.2	+ 4.0	+ 4.3	+ 0.0	Oct.
- 0.6	+ 0.1	+ 65.5	+ 28.5	+ 37.3	+ 36.5	+ 0.7	- 0.3	+ 7.4	+ 3.3	+ 4.4	+ 2.7	+ 1.8	- 0.4	Nov.
+ 1.0	- 2.3	- 17.5	+ 21.9	- 40.4	- 48.0	+ 7.7	+ 1.0	- 5.4	- 2.3	- 2.6	- 4.3	+ 1.7	- 0.5	Dec.
- 0.2	+ 0.3	+ 43.7	+ 79.8	- 36.1	- 30.6	- 5.4	- 0.0	+ 23.3	+ 10.0	+ 13.3	+ 3.3	+ 10.0	- 0.1	1999 Jan.
+ 0.1	+ 0.2	- 39.5	- 40.3	+ 0.8	+ 4.0	- 3.2	+ 0.0	+ 11.9	+ 1.0	+ 10.9	+ 4.3	+ 6.6	+ 0.1	Feb.

footnote 4. — 5 Up to November 1993, including negotiable money market paper; excluding registered debt securities. — 6 From 1999, no longer included in loans and deposits. — 7 Up to December 1998, including working capital supplied to branches abroad. — 8 Up to December 1998,

including time deposits for less than 1 month. — 9 Up to December 1998, excluding time deposits for less than 1 month. — 10 See the note on the title page of the Statistical Section (page 1\*) and the footnotes to the changed items. Up to February 1999, this table was numbered IV.5.

IV. Banks

Table changed 12

5. Lending of banks (MFIs) in Germany to domestic non-banks (non-MFIs) \*

Until the end of 1998 DM billion, from 1999 euro billion

Period	Lending to domestic non-banks, total 1, 2 including negotiable money market paper, securities, equalisation claims		Short-term lending						Medium and long-term		
			to enterprises and individuals 1			to public authorities			Total	to enter-Total	
			Total	Loans and advances not evidenced by certificates and bills 3, 4	Negotiable money market paper	Total	Loans and advances not evidenced by certificates	Treasury bills 5			
End of year or month *											
1989	2,470.1	2,320.1	385.6	375.2	374.7	0.5	10.5	6.9	3.5	2,084.4	1,547.6
1990	2,875.0	2,681.9	548.2	521.0	520.9	0.1	27.1	7.5	19.6	2,326.9	1,750.5
1991	3,147.0	2,951.4	602.0	575.8	575.5	0.4	26.1	14.7	11.4	2,545.0	1,941.8
1992	3,478.2	3,166.6	597.2	571.2	571.0	0.2	26.0	16.7	9.3	2,881.0	2,167.5
1993	3,826.4	3,417.8	563.2	544.2	540.8	3.4	19.0	16.8	2.2	3,263.2	2,441.8
1994	4,137.2	3,633.1	583.5	549.1	548.6	0.4	34.4	32.7	1.8	3,553.7	2,661.9
1995	4,436.9	3,936.9	615.2	584.0	583.3	0.7	31.3	30.5	0.8	3,821.7	2,785.5
1996	4,773.1	4,248.7	662.2	617.2	616.2	1.0	45.1	40.2	4.9	4,110.8	3,007.2
1997	5,058.4	4,506.2	667.8	625.8	624.8	1.0	41.9	40.1	1.9	4,390.6	3,223.4
1998	5,379.8	4,775.4	704.3	661.3	660.8	0.5	43.0	38.5	4.5	4,675.5	3,482.4
1997 Sep.	4,970.6	4,399.1	656.0	613.8	611.7	2.0	42.2	41.1	1.2	4,314.6	3,154.1
Oct.	5,001.6	4,433.1	659.4	606.8	605.0	1.7	52.7	49.9	2.8	4,342.1	3,170.5
Nov.	5,041.8	4,469.2	665.7	604.9	603.4	1.5	60.7	58.5	2.3	4,376.1	3,192.2
Dec.	5,058.4	4,506.2	667.8	625.8	624.8	1.0	41.9	40.1	1.9	4,390.6	3,223.4
1998 Jan.	5,081.6	4,499.4	649.8	609.1	606.9	2.3	40.6	38.0	2.6	4,431.9	3,248.8
Feb.	5,111.4	4,527.9	661.3	609.5	607.7	1.9	51.8	49.9	1.9	4,450.1	3,266.9
Mar.	5,161.0	4,537.5	662.2	617.6	615.9	1.7	44.6	42.8	1.8	4,498.8	3,296.2
Apr.	5,203.7	4,561.4	673.0	623.4	621.6	1.8	49.6	44.4	5.3	4,530.7	3,323.6
May	5,214.3	4,566.8	665.4	630.5	628.5	2.0	34.9	31.4	3.5	4,548.9	3,336.3
June	5,225.2	4,582.3	671.3	635.3	634.0	1.3	36.0	31.9	4.0	4,553.9	3,335.6
July	5,236.6	4,606.2	671.3	625.9	625.0	0.9	45.4	41.2	4.2	4,565.3	3,354.6
Aug.	5,253.3	4,624.6	673.6	627.0	626.0	0.9	46.6	44.0	2.7	4,579.7	3,367.9
Sep.	5,264.8	4,649.4	686.7	639.9	638.8	1.1	46.8	45.5	1.3	4,578.0	3,382.3
Oct.	5,297.6	4,673.1	690.3	636.7	635.2	1.4	53.6	47.1	6.6	4,607.3	3,404.7
Nov.	5,348.0	4,698.6	695.2	639.3	638.0	1.3	55.9	50.2	5.7	4,652.9	3,438.3
Dec.	5,379.8	4,775.4	704.3	661.3	660.8	0.5	43.0	38.5	4.5	4,675.5	3,482.4
1999 Jan.	2,764.9	2,456.9	347.9	321.0	320.0	1.1	26.9	23.7	3.2	2,417.0	1,816.8
Feb.	2,781.3	2,468.8	352.1	319.2	318.8	0.4	32.9	30.3	2.6	2,429.1	1,822.6
Changes *											
1990	+ 219.9	+ 186.7	+ 76.4	+ 73.5	+ 73.9	- 0.4	+ 3.0	- 0.4	+ 3.4	+ 143.4	+ 104.8
1991	+ 285.7	+ 280.5	+ 70.9	+ 72.0	+ 71.7	+ 0.2	- 1.0	+ 7.2	- 8.2	+ 214.7	+ 186.9
1992	+ 294.3	+ 240.3	+ 16.9	+ 18.1	+ 18.3	- 0.1	- 1.2	+ 0.8	- 2.0	+ 277.4	+ 229.7
1993	+ 339.8	+ 253.7	- 15.1	- 9.2	- 11.9	+ 2.7	- 5.9	+ 1.2	- 7.2	+ 354.9	+ 251.7
1994	+ 320.5	+ 244.0	+ 13.2	+ 7.0	+ 9.9	- 2.9	+ 6.2	+ 6.6	- 0.4	+ 307.2	+ 249.1
1995	+ 312.8	+ 311.9	+ 35.9	+ 37.9	+ 37.7	+ 0.2	- 1.9	- 1.0	- 1.0	+ 276.9	+ 185.1
1996	+ 336.3	+ 312.9	+ 44.3	+ 32.6	+ 32.2	+ 0.4	+ 11.7	+ 7.4	+ 4.3	+ 292.0	+ 221.5
1997	+ 285.2	+ 256.9	+ 2.7	+ 5.9	+ 5.9	+ 0.0	- 3.2	- 0.1	- 3.0	+ 282.5	+ 219.9
1998	+ 335.3	+ 285.5	+ 51.7	+ 50.6	+ 51.2	- 0.6	+ 1.1	- 1.6	+ 2.7	+ 283.6	+ 258.3
1997 Sep.	+ 13.3	+ 25.6	+ 8.3	+ 11.0	+ 11.0	- 0.0	- 2.7	- 2.1	- 0.6	+ 4.9	+ 12.1
Oct.	+ 31.3	+ 34.4	+ 3.9	- 6.5	- 6.2	- 0.3	+ 10.4	+ 8.8	+ 1.6	+ 27.4	+ 16.3
Nov.	+ 39.9	+ 35.8	+ 6.0	- 2.1	- 1.9	- 0.2	+ 8.1	+ 8.6	- 0.5	+ 34.0	+ 21.7
Dec.	+ 17.1	+ 37.6	+ 1.1	+ 19.9	+ 20.4	- 0.5	- 18.8	- 18.4	- 0.4	+ 16.0	+ 32.7
1998 Jan.	+ 23.6	- 6.5	- 17.7	- 16.4	- 17.6	+ 1.2	- 1.3	- 2.0	+ 0.7	+ 41.3	+ 25.4
Feb.	+ 30.1	+ 28.6	+ 11.7	+ 0.5	+ 0.9	- 0.4	+ 11.2	+ 11.9	- 0.7	+ 18.4	+ 18.1
Mar.	+ 49.6	+ 9.6	+ 0.0	+ 7.2	+ 7.4	- 0.2	- 7.1	- 7.1	- 0.1	+ 49.5	+ 30.1
Apr.	+ 43.4	+ 24.6	+ 11.5	+ 6.5	+ 6.4	+ 0.1	+ 5.0	+ 1.6	+ 3.5	+ 31.9	+ 27.5
May	+ 10.9	+ 5.8	- 7.3	+ 7.5	+ 7.2	+ 0.2	- 14.7	- 13.0	- 1.7	+ 18.2	+ 12.7
June	+ 14.9	+ 23.7	+ 14.2	+ 13.1	+ 13.8	- 0.7	+ 1.1	+ 0.6	+ 0.5	+ 0.7	- 4.0
July	+ 13.6	+ 24.5	+ 0.5	- 8.9	- 8.5	- 0.4	+ 9.4	+ 9.2	+ 0.2	+ 13.1	+ 20.6
Aug.	+ 16.7	+ 18.4	+ 2.3	+ 1.1	+ 1.1	+ 0.0	+ 1.3	+ 2.8	- 1.5	+ 14.4	+ 13.3
Sep.	+ 12.5	+ 25.8	+ 14.4	+ 14.2	+ 14.0	+ 0.2	+ 0.2	+ 1.5	- 1.4	- 1.8	+ 14.3
Oct.	+ 32.7	+ 23.5	+ 3.5	- 3.4	- 3.7	+ 0.4	+ 6.8	+ 1.6	+ 5.2	+ 29.3	+ 22.4
Nov.	+ 49.9	+ 25.0	+ 4.4	+ 2.1	+ 2.3	- 0.1	+ 2.2	+ 3.1	- 0.9	+ 45.6	+ 33.6
Dec.	+ 37.3	+ 82.2	+ 14.2	+ 27.1	+ 27.9	- 0.9	- 12.9	- 11.8	- 1.1	+ 23.1	+ 44.4
1999 Jan.	+ 18.3	+ 22.6	+ 4.5	- 0.8	- 1.7	+ 0.8	+ 5.3	+ 4.5	+ 0.8	+ 13.7	+ 14.1
Feb.	+ 15.9	+ 11.4	+ 3.6	- 2.4	- 1.8	- 0.6	+ 6.1	+ 6.6	- 0.6	+ 12.3	+ 5.9

\* See table IV.2, footnote\*; statistical breaks have been eliminated from the changes. The figures for the latest date are always to be regarded as provisional. Subsequent alterations, which will appear in the following Monthly Report, are not specially marked. — 1 Up to December 1998, including loans to domestic building and loan associations. — 2 Up to December 1998, including loans on a trust basis; see also footnote 9. — 3 Up

to December 1998, bill-based lending (bill holdings plus endorsement liabilities arising from rediscounted bills and bills sent for collection from the banks' portfolios prior to maturity). — 4 From 1999, including small amounts of medium-term series of bills. — 5 From December 1993, including other negotiable money market paper; excluding mobilisation and liquidity paper. — 6 From 1999, breakdown of lending against securities by medium

IV. Banks

Lending 2.6												Period
to private enterprises and individuals 1, 2					to public authorities 2							
Loans and advances not evidenced by certificates					Memo item: Trust loans 9	Loans and advances not evidenced by certificates					Memo item: Trust loans 9	
Total	Medium-term 7	Long-term 8	Securities 6	Total		Total	Medium-term 7	Long-term 8	Securities 6, 10	Equalisation claims 11		
End of year or month *												
1,446.4	138.6	1,307.9	41.2	60.0	536.8	420.3	30.7	389.6	102.8	1.9	11.8	1989
1,635.9	159.9	1,476.0	53.1	61.5	637.1	443.7	42.8	401.0	118.7	1.7	12.4	1990
1,814.1	213.7	1,600.3	65.8	62.0	682.9	472.0	51.3	420.8	115.5	2.4	13.1	1991
2,011.5	263.5	1,748.0	90.3	65.7	734.1	487.8	47.6	440.2	147.2	64.3	13.9	1992
2,241.5	253.9	1,987.5	134.2	66.1	821.4	537.1	36.8	500.3	193.5	75.3	15.5	1993
2,390.4	228.3	2,162.0	203.2	68.3	891.8	577.0	34.5	542.5	230.5	68.1	16.1	1994
2,522.0	214.1	2,307.9	192.9	70.6	1,036.2	713.0	74.5	638.4	234.4	71.3	17.5	1995
2,713.3	215.8	2,497.5	205.9	88.0	1,103.6	773.0	69.5	703.6	231.3	81.3	18.0	1996
2,900.0	216.2	2,683.8	234.1	89.3	1,167.2	833.8	53.0	780.8	239.2	76.0	18.3	1997
3,104.5	206.8	2,897.8	292.4	85.4	1,193.2	868.8	33.1	835.7	235.4	71.6	17.3	1998
2,831.6	215.1	2,616.5	233.5	88.9	1,160.6	807.8	56.6	751.2	257.1	77.6	18.0	1997 Sep.
2,851.6	215.2	2,636.4	229.8	89.1	1,171.7	819.3	54.9	764.5	256.7	77.5	18.1	Oct.
2,870.7	214.9	2,655.7	232.2	89.3	1,183.9	829.1	55.5	773.6	260.1	76.6	18.2	Nov.
2,900.0	216.2	2,683.8	234.1	89.3	1,167.2	833.8	53.0	780.8	239.2	76.0	18.3	Dec.
2,906.1	214.4	2,691.7	252.9	89.9	1,183.0	840.3	50.1	790.1	248.4	76.1	18.3	1998 Jan.
2,916.2	214.1	2,702.1	260.6	90.1	1,183.2	845.9	49.4	796.5	243.1	76.1	18.1	Feb.
2,924.1	213.3	2,710.7	282.1	90.0	1,202.6	846.8	43.8	803.0	261.5	76.4	18.0	Mar.
2,938.3	213.5	2,724.8	295.5	89.8	1,207.1	849.3	44.0	805.3	263.8	75.9	18.0	Apr.
2,949.3	213.2	2,736.0	297.8	89.3	1,212.6	850.6	42.9	807.7	268.2	75.9	17.9	May
2,959.3	212.3	2,747.0	287.0	89.3	1,218.3	849.9	41.2	808.7	275.2	75.4	17.8	June
2,982.7	213.9	2,768.9	282.2	89.7	1,210.8	850.1	38.1	812.0	269.2	73.9	17.6	July
2,996.4	213.0	2,783.4	281.6	89.8	1,211.9	850.8	36.0	814.8	269.7	73.7	17.6	Aug.
3,011.0	213.5	2,797.5	281.7	89.7	1,195.7	846.8	35.6	811.2	257.9	73.5	17.6	Sep.
3,031.9	213.0	2,818.9	283.0	89.9	1,202.6	851.4	35.8	815.6	260.1	73.5	17.6	Oct.
3,050.4	210.7	2,839.7	297.9	90.1	1,214.6	852.3	34.4	817.9	271.2	73.4	17.6	Nov.
3,104.5	206.8	2,897.8	292.4	85.4	1,193.2	868.8	33.1	835.7	235.4	71.6	17.3	Dec.
1,662.8	181.8	1,481.0	153.9	49.1	600.2	450.3	34.8	415.6	113.3	36.5	8.9	1999 Jan.
1,666.3	185.9	1,480.5	156.3	49.2	606.5	453.4	34.8	418.7	116.6	36.5	8.9	Feb.
Changes *												
+ 91.1	+ 19.0	+ 72.1	+ 12.2	+ 1.5	+ 43.7	+ 20.1	+ 12.1	+ 8.0	+ 18.2	- 0.3	+ 0.5	1990
+ 175.2	+ 39.4	+ 135.8	+ 14.2	- 2.4	+ 33.1	+ 28.3	+ 8.5	+ 19.8	- 0.9	- 0.3	+ 0.5	1991
+ 204.1	+ 29.6	+ 174.5	+ 24.8	+ 0.8	+ 41.2	+ 15.7	- 3.6	+ 19.3	+ 32.2	- 1.0	+ 0.7	1992
+ 214.1	- 28.9	+ 243.0	+ 37.1	+ 0.5	+ 104.1	+ 48.2	- 10.8	+ 59.0	+ 65.1	- 11.4	+ 1.6	1993
+ 198.7	- 29.2	+ 227.9	+ 48.5	+ 1.9	+ 58.2	+ 26.2	- 2.4	+ 28.5	+ 38.3	- 6.9	+ 0.7	1994
+ 176.0	- 1.9	+ 177.9	+ 3.3	+ 5.9	+ 91.8	+ 91.8	+ 15.3	+ 76.6	- 0.4	- 1.2	+ 1.5	1995
+ 204.4	+ 1.6	+ 202.8	+ 14.0	+ 3.1	+ 70.4	+ 65.7	- 5.5	+ 71.2	- 3.3	+ 8.0	+ 0.1	1996
+ 189.0	+ 0.3	+ 188.7	+ 29.5	+ 1.4	+ 62.6	+ 60.6	- 18.0	+ 78.6	+ 7.0	- 5.3	+ 0.2	1997
+ 205.7	- 8.9	+ 214.6	+ 56.5	- 3.9	+ 25.3	+ 35.0	- 20.0	+ 55.0	- 4.4	- 4.4	- 0.9	1998
+ 12.6	+ 0.8	+ 11.8	- 0.6	+ 0.0	- 7.1	+ 3.9	+ 0.0	+ 3.9	- 11.0	- 0.1	+ 0.1	1997 Sep.
+ 20.0	+ 0.1	+ 19.9	- 3.9	+ 0.2	+ 11.1	+ 11.6	- 1.8	+ 13.3	- 0.4	- 0.1	+ 0.1	Oct.
+ 19.1	- 0.3	+ 19.4	+ 2.4	+ 0.2	+ 12.3	+ 9.8	+ 0.6	+ 9.2	+ 3.3	- 0.9	+ 0.1	Nov.
+ 30.9	+ 1.1	+ 29.8	+ 1.8	+ 0.0	- 16.7	+ 4.6	- 2.6	+ 7.2	- 20.8	- 0.6	+ 0.1	Dec.
+ 6.1	- 1.9	+ 8.0	+ 18.7	+ 0.5	+ 16.0	+ 6.5	- 2.9	+ 9.4	+ 9.4	+ 0.0	+ 0.0	1998 Jan.
+ 10.2	- 0.3	+ 10.5	+ 7.7	+ 0.2	+ 0.3	+ 5.7	- 0.7	+ 6.4	- 5.2	+ 0.0	- 0.2	Feb.
+ 8.7	- 0.3	+ 9.0	+ 21.5	- 0.1	+ 19.4	+ 0.8	- 5.6	+ 6.5	+ 18.4	+ 0.3	- 0.1	Mar.
+ 14.2	+ 0.1	+ 14.1	+ 13.4	- 0.1	+ 4.5	+ 2.5	+ 0.2	+ 2.4	+ 2.4	- 0.4	- 0.0	Apr.
+ 11.0	- 0.2	+ 11.2	+ 2.3	- 0.5	+ 5.5	+ 1.3	- 1.1	+ 2.4	+ 4.3	+ 0.0	- 0.1	May
+ 10.1	- 0.9	+ 11.0	- 14.1	- 0.0	+ 4.7	- 0.7	- 1.7	+ 1.0	+ 6.0	- 0.5	- 0.1	June
+ 23.4	+ 1.6	+ 21.8	- 3.2	+ 0.4	- 7.6	+ 0.1	- 3.1	+ 3.3	- 6.0	- 1.5	- 0.2	July
+ 13.7	- 0.8	+ 14.5	- 0.6	+ 0.1	+ 1.1	+ 0.7	- 2.0	+ 2.8	+ 0.5	- 0.2	- 0.0	Aug.
+ 14.4	+ 0.5	+ 14.0	+ 0.0	- 0.1	- 16.1	- 4.0	- 0.4	- 3.6	- 11.9	- 0.3	+ 0.0	Sep.
+ 20.9	- 0.5	+ 21.4	+ 1.3	+ 0.2	+ 6.9	+ 4.6	+ 0.1	+ 4.4	+ 2.3	+ 0.0	- 0.0	Oct.
+ 18.5	- 2.3	+ 20.8	+ 14.9	+ 0.2	+ 12.0	+ 1.0	- 1.5	+ 2.5	+ 11.1	- 0.0	+ 0.0	Nov.
+ 54.5	- 3.8	+ 58.3	- 5.5	- 4.6	- 21.3	+ 16.5	- 1.2	+ 17.7	- 35.7	- 1.8	- 0.3	Dec.
+ 14.9	+ 16.1	- 1.3	- 0.8	+ 0.2	- 0.4	+ 4.8	+ 11.4	- 6.5	- 5.1	- 0.1	+ 0.0	1999 Jan.
+ 3.5	+ 5.7	- 2.2	+ 2.4	+ 0.0	+ 6.4	+ 3.1	- 0.0	+ 3.1	+ 3.3	- 0.0	+ 0.0	Feb.

and long-term lending no longer possible. — 7 Up to December 1998, maturity or period of notice of more than one year to less than 4 years; from 1999, more than 1 year up to and including 5 years. — 8 Up to December 1998, maturity or period of notice of 4 years and more; from 1999, of more than 5 years. — 9 From 1999, no longer included in

lending. — 10 Excluding debt securities arising from the exchange of equalisation claims, see also footnote 11. — 11 Including debt securities arising from the exchange of equalisation claims. — 12 See the note on the title page of the Statistical Section (page 1\*) and the footnotes to the changed items. Up to February 1999, this table was numbered IV.6.



IV. Banks

6. Lending to domestic enterprises and individuals, housing loans, sectors of economic activity \*

DM billion

Lending to domestic enterprises and individuals (excluding portfolios of negotiable money market paper and excluding securities portfolios)															
Period	of which Housing loans				Lending to enterprises and self-employed persons								Transport and telecommunications		Financial institutions <sup>3</sup> and insurance enterprises
	Total	Total	Mortgage loans secured by residential real estate	Other housing loans	Total	of which Housing loans	Manufacturing	Energy and water supply, mining <sup>1</sup>	Construction	Distribution <sup>2</sup>	Agriculture and forestry, fisheries	Total	of which German Railways, post office, Telekom		
														End of year or quarter *	
<b>Lending, total</b>															
1995	3,175.9	1,303.8	807.8	496.0	1,965.3	481.8	316.9	61.9	117.2	310.6	56.9	76.1	14.1	87.5	
1996	3,417.4	1,433.7	887.1	546.5	2,111.1	534.7	320.6	64.1	121.0	323.2	58.9	75.4	10.6	101.8	
1997 Dec.	3,614.1	1,543.9	968.2	575.7	2,225.2	574.4	318.5	66.6	122.7	334.9	60.5	77.2	8.0	116.0	
1998 Mar.	3,629.9	1,560.9	983.0	577.9	2,233.9	582.1	321.3	67.1	123.4	330.3	60.9	78.4	6.9	117.5	
June	3,682.6	1,579.2	993.7	585.5	2,266.6	589.1	324.5	69.0	124.9	333.7	62.1	80.1	6.6	120.4	
Sep.	3,739.5	1,606.5	1,012.4	594.1	2,297.0	598.3	324.4	67.9	125.3	336.4	63.8	80.6	6.7	124.9	
Dec.	3,850.8	1,654.9	1,040.9	614.0	2,367.1	614.9	331.5	70.7	124.2	343.1	63.7	80.9	5.9	132.8	
<b>Short-term lending</b>															
1995	583.3	33.4	-	33.4	495.3	24.4	116.9	5.7	39.6	122.3	9.1	12.7	1.9	17.6	
1996	616.2	35.9	-	35.9	524.5	26.8	116.2	6.5	38.7	126.1	9.2	11.7	0.4	23.3	
1997 Dec.	624.8	34.6	-	34.6	534.4	26.3	114.5	6.1	37.5	132.0	8.7	11.8	0.6	27.9	
1998 Mar.	615.9	33.2	-	33.2	528.8	25.2	117.0	6.3	38.5	128.7	8.8	12.4	0.8	27.7	
June	634.0	33.9	-	33.9	542.8	25.7	120.0	7.3	39.2	130.8	9.4	13.6	0.7	25.9	
Sep.	638.8	34.5	-	34.5	543.8	25.6	119.8	6.5	38.7	130.4	9.7	13.5	1.1	26.4	
Dec.	660.8	36.7	-	36.7	561.3	27.9	120.6	8.8	36.1	133.9	8.8	12.1	0.8	28.5	
<b>Medium-term lending</b>															
1995	214.1	39.7	-	39.7	135.2	16.6	18.4	2.2	11.3	18.0	4.4	8.1	1.3	15.3	
1996	215.8	41.5	-	41.5	135.6	17.3	18.4	1.8	10.5	17.4	4.7	8.0	0.6	15.8	
1997 Dec.	216.2	42.3	-	42.3	137.8	17.8	17.6	1.6	10.0	16.7	4.7	7.7	0.2	17.0	
1998 Mar.	213.3	42.3	-	42.3	135.9	18.2	16.9	1.4	9.8	16.9	4.6	7.5	0.2	16.9	
June	212.3	42.0	-	42.0	134.2	18.1	16.6	1.7	9.6	16.4	4.7	7.2	0.1	16.9	
Sep.	213.5	41.4	-	41.4	135.8	17.8	16.5	1.7	9.7	16.7	4.8	7.0	0.0	17.2	
Dec.	206.8	39.3	-	39.3	132.2	17.4	16.1	1.5	9.3	16.1	4.5	6.8	0.0	17.3	
<b>Long-term lending</b>															
1995	2,378.5	1,230.7	807.8	422.9	1,334.8	440.7	181.6	54.0	66.2	170.3	43.3	55.2	11.0	54.6	
1996	2,585.5	1,356.3	887.1	469.1	1,451.1	490.7	186.0	55.8	71.7	179.6	45.1	55.6	9.7	62.7	
1997 Dec.	2,773.1	1,467.0	968.2	498.8	1,553.0	530.3	186.5	58.9	75.2	186.1	47.2	57.7	7.2	71.1	
1998 Mar.	2,800.7	1,485.5	983.0	502.5	1,569.3	538.6	187.4	59.4	75.1	184.7	47.4	58.6	6.0	72.9	
June	2,836.3	1,503.3	993.7	509.5	1,589.6	545.2	187.8	60.0	76.1	186.5	48.1	59.3	5.8	77.6	
Sep.	2,887.2	1,530.7	1,012.4	518.3	1,617.5	554.8	188.1	59.6	76.8	189.4	49.3	60.1	5.6	81.4	
Dec.	2,983.2	1,578.9	1,040.9	538.0	1,673.5	569.6	194.8	60.4	78.8	193.1	50.4	62.0	5.1	87.0	
<b>Lending, total</b>															
<b>Change during quarter *</b>															
1998 1st qtr	+ 16.3	+ 13.8	+ 13.0	+ 0.8	+ 9.4	+ 5.6	+ 3.4	+ 0.6	+ 0.7	- 4.1	+ 0.4	+ 1.3	- 1.1	+ 1.6	
2nd qtr	+ 62.1	+ 21.2	+ 13.9	+ 7.3	+ 39.2	+ 7.1	+ 3.2	+ 1.8	+ 1.5	+ 3.5	+ 1.3	+ 1.7	- 0.3	+ 8.8	
3rd qtr	+ 58.5	+ 28.7	+ 19.0	+ 9.7	+ 30.3	+ 9.1	- 0.1	- 0.9	+ 0.3	+ 2.4	+ 1.7	+ 0.7	+ 0.2	+ 3.0	
4th qtr	+ 116.1	+ 49.0	+ 27.3	+ 21.7	+ 74.6	+ 17.0	+ 7.2	+ 2.9	- 0.8	+ 6.9	- 0.1	+ 0.3	- 0.8	+ 7.9	
<b>Short-term lending</b>															
1998 1st qtr	- 9.3	- 1.4	-	- 1.4	- 6.0	- 1.1	+ 2.6	+ 0.2	+ 1.1	- 3.8	+ 0.1	+ 0.5	+ 0.2	- 0.2	
2nd qtr	+ 27.5	+ 0.8	-	+ 0.8	+ 23.4	+ 0.5	+ 3.0	+ 1.0	+ 0.7	+ 2.2	+ 0.6	+ 1.3	- 0.1	+ 6.9	
3rd qtr	+ 6.6	+ 0.5	-	+ 0.5	+ 2.5	- 0.1	- 0.2	- 0.8	- 0.5	- 0.7	+ 0.3	- 0.1	+ 0.4	+ 0.5	
4th qtr	+ 26.5	+ 2.6	-	+ 2.6	+ 22.0	+ 2.3	+ 0.9	+ 2.3	- 2.4	+ 3.6	- 0.9	- 1.4	- 0.4	+ 2.1	
<b>Medium-term lending</b>															
1998 1st qtr	- 2.4	- 1.4	-	- 1.4	- 1.4	- 0.9	- 0.2	- 0.2	- 0.1	+ 0.2	- 0.1	- 0.1	- 0.1	- 0.0	
2nd qtr	+ 1.1	- 0.3	-	- 0.3	- 1.6	- 0.2	- 0.3	+ 0.2	- 0.2	- 0.4	+ 0.1	- 0.3	- 0.0	- 0.1	
3rd qtr	+ 1.2	- 0.6	-	- 0.6	+ 1.5	- 0.2	- 0.1	+ 0.1	+ 0.1	+ 0.2	+ 0.1	- 0.1	- 0.1	+ 0.3	
4th qtr	- 6.6	- 1.9	-	- 1.9	- 3.5	- 0.5	- 0.4	- 0.2	- 0.4	- 0.5	- 0.3	- 0.2	+ 0.0	+ 0.1	
<b>Long-term lending</b>															
1998 1st qtr	+ 28.1	+ 16.6	+ 13.0	+ 3.6	+ 16.8	+ 7.6	+ 1.0	+ 0.6	- 0.2	- 0.5	+ 0.3	+ 0.8	- 1.2	+ 1.8	
2nd qtr	+ 35.6	+ 20.8	+ 13.9	+ 6.9	+ 17.5	+ 6.7	+ 0.4	+ 0.6	+ 1.0	+ 1.8	+ 0.7	+ 0.7	- 0.2	+ 1.9	
3rd qtr	+ 50.7	+ 28.8	+ 19.0	+ 9.8	+ 26.3	+ 9.4	+ 0.2	- 0.2	+ 0.7	+ 2.9	+ 1.2	+ 0.9	- 0.2	+ 2.2	
4th qtr	+ 96.3	+ 48.3	+ 27.3	+ 21.0	+ 56.1	+ 15.1	+ 6.8	+ 0.7	+ 2.0	+ 3.8	+ 1.1	+ 1.9	- 0.5	+ 5.7	

\* Excluding lending of foreign branches and of building and loan associations; including lending to building and loan associations. From June 1990 including lending of east German credit institutions. Statistical alterations have been eliminated from the changes. From March 1995 the figures have been collected and published on the basis of the "Klassifikation der Wirt-

schaftszweige" ("Classification of economic activities") of the Federal Statistical Office, Edition 1993 (WZ 93). The switch from the "old" to the "new" classification of economic sectors has resulted in a multitude of changes between the individual areas and sectors. The statistical adjustment of the

IV. Banks

						Lending to employed and other individuals						Lending to non-commercial organisations		Period													
Services sector (including the professions)				Memorandum items		Total	Housing loans	Other lending			Total	of which Housing loans															
Total	of which			Lending to self-employed persons	Lending to craft enterprises			Total	Instalment credit 4	Debit balances on wage and salary accounts and pension accounts																	
	Housing enterprises	Investment companies	Other real estate enterprises																								
<b>End of year or quarter *</b>													<b>Lending, total</b>														
938.2	217.6	41.3	216.4	703.3	131.3	1,184.3	813.7	370.6	182.1	40.5	26.3	8.3	1995														
1,046.1	249.9	47.6	247.4	750.2	136.2	1,279.3	890.5	388.8	192.5	42.2	27.0	8.4	1996														
1,128.8	277.6	56.3	270.9	781.1	139.8	1,360.4	960.8	399.6	201.7	42.6	28.5	8.6	1997 Dec.														
1,134.9	285.0	61.0	266.8	782.8	141.0	1,368.1	970.1	398.0	203.2	41.9	27.9	8.7	1998 Mar.														
1,151.8	288.8	64.1	271.1	792.1	142.2	1,387.8	981.4	406.4	205.0	43.0	28.2	8.8	June														
1,173.7	296.4	63.4	277.0	801.1	142.8	1,413.4	999.6	413.9	206.9	44.9	29.1	8.7	Sep.														
1,220.2	305.9	70.1	285.8	821.2	143.6	1,455.0	1,031.2	423.7	207.7	44.6	28.8	8.8	Dec.														
													Short-term lending														
171.4	29.0	15.5	43.9	105.8	34.9	85.6	8.9	76.8	4.0	40.5	2.4	0.1	1995														
192.7	33.4	18.7	53.0	107.7	34.3	89.2	9.0	80.2	3.9	42.2	2.4	0.1	1996														
195.9	34.9	21.5	54.2	103.4	33.0	87.3	8.2	79.1	4.2	42.6	3.1	0.1	1997 Dec.														
189.5	35.8	23.9	49.0	100.4	34.0	84.6	7.9	76.8	4.3	41.9	2.5	0.1	1998 Mar.														
196.5	38.6	26.4	48.5	102.3	34.4	88.6	8.1	80.5	4.4	43.0	2.6	0.1	June														
198.8	39.1	24.1	50.8	102.7	34.0	92.1	8.8	83.3	4.1	44.9	3.0	0.0	Sep.														
212.6	41.5	26.6	54.2	106.6	32.3	97.0	8.8	88.2	4.4	44.6	2.5	0.0	Dec.														
													Medium-term lending														
57.3	8.3	3.8	12.4	40.9	6.7	78.2	23.0	55.1	41.4	-	0.8	0.1	1995														
58.9	8.9	3.9	13.3	41.2	6.9	79.3	24.1	55.2	41.2	-	0.9	0.1	1996														
62.6	10.8	5.1	13.5	40.2	6.6	77.8	24.3	53.4	39.3	-	0.7	0.1	1997 Dec.														
61.8	10.9	5.1	13.2	39.3	6.6	76.9	23.9	52.9	38.8	-	0.6	0.1	1998 Mar.														
61.2	10.8	4.8	12.8	39.0	6.5	77.4	23.8	53.6	38.9	-	0.6	0.1	June														
62.1	10.6	4.7	13.2	39.0	6.4	77.1	23.4	53.7	38.6	-	0.6	0.1	Sep.														
60.5	10.0	5.3	12.5	36.8	6.4	74.0	21.8	52.2	37.6	-	0.6	0.1	Dec.														
													Long-term lending														
709.5	180.2	22.1	160.1	556.6	89.7	1,020.5	781.9	238.7	136.6	-	23.1	8.1	1995														
794.5	207.7	25.0	181.1	601.3	95.1	1,110.8	857.4	253.4	147.5	-	23.6	8.2	1996														
870.4	231.8	29.8	203.2	637.5	100.2	1,195.4	928.3	267.1	158.3	-	24.7	8.5	1997 Dec.														
883.7	238.4	32.0	204.6	643.1	100.4	1,206.6	938.3	268.3	160.1	-	24.8	8.5	1998 Mar.														
894.1	239.4	32.9	209.8	650.8	101.3	1,221.7	949.4	272.3	161.7	-	25.0	8.6	June														
912.8	246.6	34.6	213.0	659.4	102.3	1,244.2	967.4	276.9	164.2	-	25.5	8.6	Sep.														
947.1	254.4	38.1	219.1	677.9	104.9	1,283.9	1,000.6	283.3	165.8	-	25.7	8.7	Dec.														
<b>Change during quarter *</b>													<b>Lending, total</b>														
+	5.6	+	5.5	+	3.9	-	1.9	+	2.5	+	1.2	+	7.5	+	8.1	-	0.6	+	1.5	-	0.8	-	0.6	+	0.1	1998 1st qtr	
+	17.5	+	4.5	+	3.1	+	3.4	+	9.3	+	1.1	+	22.5	+	14.1	+	8.4	+	1.8	+	1.1	+	0.3	+	0.1	2nd qtr	
+	23.2	+	7.7	-	0.9	+	6.0	+	9.0	+	0.6	+	27.4	+	19.7	+	7.7	+	1.9	+	2.0	+	0.8	-	0.1	3rd qtr	
+	50.2	+	9.7	+	6.6	+	12.8	+	20.6	+	0.8	+	41.8	+	31.9	+	9.9	+	1.4	-	0.3	+	0.3	+	0.1	4th qtr	
													Short-term lending														
-	6.5	-	0.5	+	2.4	-	3.5	-	2.6	+	1.0	-	2.7	-	0.3	-	2.3	+	0.1	-	0.8	-	0.7	-	0.0	1998 1st qtr	
+	7.8	+	2.8	+	2.5	-	0.5	+	1.9	+	0.3	+	4.0	+	0.2	+	3.8	+	0.1	+	1.1	+	0.1	+	0.0	2nd qtr	
+	3.9	+	0.5	-	2.3	+	2.4	+	0.4	-	0.4	+	3.7	+	0.7	+	3.1	+	0.0	+	2.0	+	0.4	-	0.0	3rd qtr	
+	17.6	+	2.7	+	2.6	+	7.0	+	4.2	-	1.6	+	5.0	+	0.3	+	4.7	+	0.3	-	0.3	-	0.5	-	0.0	4th qtr	
													Medium-term lending														
-	0.8	+	0.0	+	0.0	-	0.3	-	0.4	+	0.0	-	1.0	-	0.5	-	0.5	-	0.5	-	-	-	0.0	-	0.0	1998 1st qtr	
-	0.7	-	0.1	-	0.3	-	0.4	-	0.3	-	0.1	+	0.6	-	0.1	+	0.7	+	0.2	-	-	-	0.0	+	0.0	2nd qtr	
+	0.9	-	0.2	-	0.0	+	0.5	-	0.0	-	0.1	+	0.3	-	0.3	+	0.1	-	0.4	-	-	-	0.0	-	0.0	3rd qtr	
-	1.5	-	0.6	+	0.6	-	0.6	-	2.2	-	0.0	-	3.1	-	1.5	-	1.6	-	0.9	-	-	-	0.0	-	0.0	4th qtr	
													Long-term lending														
+	13.0	+	5.9	+	1.4	+	2.0	+	5.6	+	0.1	+	11.1	+	8.9	+	2.2	+	1.9	-	+	0.1	+	0.1	+	0.1	1998 1st qtr
+	10.4	+	1.7	+	0.9	+	4.4	+	7.7	+	0.9	+	17.9	+	14.0	+	4.0	+	1.5	-	+	0.2	+	0.1	+	0.1	2nd qtr
+	18.4	+	7.4	+	1.5	+	3.1	+	8.6	+	1.1	+	24.0	+	19.4	+	4.6	+	2.2	-	+	0.4	-	0.1	+	0.1	3rd qtr
+	34.1	+	7.6	+	3.4	+	6.4	+	18.6	+	2.5	+	39.9	+	33.1	+	6.8	+	2.1	-	+	0.3	+	0.1	+	0.1	4th qtr

consequent breaks was possible only in part. The figures for the latest date are always to be regarded as provisional; subsequent alterations, which will appear in the following Monthly Report, are not specially marked. — 1 Including the extraction of stones and earths. — 2 Including the mainten-

ance and repair of motor vehicles and consumer goods. — 3 Excluding credit institutions (with the exception of building and loan associations). — 4 Excluding mortgage loans and housing loans, even in the form of instalment credit.

IV. Banks

Table changed <sup>9</sup>

7. Deposits of domestic non-banks (non-MFIs) at banks (MFIs) in Germany \*

Until the end of 1998 DM billion, from 1999 euro billion

Period	Sight deposits <sup>2</sup>			Time deposits <sup>1, 3, 4</sup>						Savings deposits	Bank savings bonds <sup>5</sup>	Memo item:			
	Deposits, total <sup>1</sup>	Total	on demand	for less than 1 month	Total	for up to and including 1 year <sup>4</sup>	for more than 1 year					Loans on a trust basis <sup>6</sup>	Subordinated liabilities (excluding negotiable debt securities)	Included in time deposits: liabilities arising from repos <sup>7</sup>	
							Total	for up to 2 years	for less than 4 years						for 4 years and more <sup>1</sup>
<b>Domestic non-banks, total <sup>8</sup></b>													<b>End of year or month <sup>*</sup></b>		
1996	3,241.5	675.1	646.7	28.4	1,109.8	387.9	721.9	.	11.1	710.8	1,143.0	227.8	85.8	33.7	.
1997	3,341.9	689.8	659.7	30.2	1,146.9	382.0	765.0	.	10.9	754.0	1,182.1	236.9	86.1	40.9	.
1998	3,520.3	799.5	760.2	39.3	1,194.1	398.8	795.3	.	13.4	781.9	1,211.0	234.9	80.9	45.6	.
1998 Apr.	3,323.8	663.0	642.6	20.3	1,151.6	373.5	778.0	.	11.5	766.6	1,180.8	241.9	86.5	42.4	.
May	3,334.5	665.4	644.9	20.6	1,162.3	381.0	781.2	.	11.5	769.7	1,178.1	242.3	86.4	42.6	.
June	3,337.7	680.2	662.4	17.9	1,153.6	372.2	781.4	.	11.6	769.8	1,175.2	242.0	86.6	42.8	.
July	3,330.8	665.2	646.3	19.0	1,163.9	376.8	787.1	.	12.0	775.1	1,173.1	241.7	86.8	43.2	.
Aug.	3,358.1	684.9	666.0	18.9	1,173.1	380.8	792.3	.	12.4	779.8	1,172.3	241.2	86.8	43.5	.
Sep.	3,353.9	691.6	671.8	19.8	1,164.5	373.6	791.0	.	12.3	778.6	1,170.9	240.1	86.8	43.9	.
Oct.	3,370.4	705.0	684.4	20.6	1,165.6	374.1	791.4	.	13.2	778.3	1,174.0	238.5	87.3	44.2	.
Nov.	3,418.5	754.1	732.3	21.8	1,163.4	370.8	792.6	.	13.5	779.1	1,177.1	236.2	87.7	45.1	.
Dec.	3,520.3	799.5	760.2	39.3	1,194.1	398.8	795.3	.	13.4	781.9	1,211.0	234.9	80.9	45.6	.
1999 Jan.	1,835.4	376.5	376.5	.	629.4	228.5	400.9	3.8	.	.	711.9	117.6	41.6	23.6	0.1
Feb.	1,838.6	379.4	379.4	.	630.6	228.4	402.2	3.7	.	.	713.0	115.6	41.7	23.9	0.1
<b>Domestic public authorities</b>													<b>End of year or month <sup>*</sup></b>		
1996	280.5	36.3	30.5	5.8	158.9	34.7	124.2	.	1.4	122.8	5.4	5.3	74.5	2.5	.
1997	280.0	31.6	24.1	7.5	162.2	37.8	124.4	.	0.8	123.6	5.9	6.3	74.0	2.6	.
1998	288.3	36.7	29.1	7.6	170.3	44.8	125.5	.	1.0	124.5	6.4	6.3	68.7	2.6	.
1998 Apr.	265.9	22.9	19.4	3.4	156.6	32.6	124.1	.	0.9	123.2	5.9	6.5	74.1	2.5	.
May	273.2	23.5	19.4	4.0	162.8	38.4	124.4	.	0.8	123.6	6.5	6.4	73.9	2.5	.
June	272.8	24.7	21.3	3.4	161.3	38.0	123.4	.	0.9	122.5	6.5	6.2	74.2	2.6	.
July	271.6	22.0	18.5	3.6	162.2	37.3	124.9	.	1.0	124.0	6.7	6.2	74.4	2.6	.
Aug.	277.5	24.1	20.3	3.8	165.9	40.1	125.7	.	1.0	124.7	6.8	6.2	74.6	2.6	.
Sep.	273.6	23.6	19.4	4.3	162.4	37.8	124.6	.	1.0	123.6	6.7	6.2	74.6	2.6	.
Oct.	271.6	23.7	19.6	4.1	160.1	34.9	125.1	.	1.0	124.2	6.4	6.2	75.1	2.6	.
Nov.	278.0	26.6	22.4	4.2	163.3	37.9	125.4	.	0.9	124.4	6.2	6.2	75.6	2.6	.
Dec.	288.3	36.7	29.1	7.6	170.3	44.8	125.5	.	1.0	124.5	6.4	6.3	68.7	2.6	.
1999 Jan.	110.4	12.8	12.8	.	91.3	27.8	63.5	0.4	.	.	4.0	2.3	35.2	1.2	.
Feb.	111.9	14.6	14.6	.	91.2	28.0	63.2	0.4	.	.	4.0	2.1	35.3	1.2	.
<b>Domestic non-banks, total <sup>8</sup></b>													<b>Changes <sup>*</sup></b>		
1997	+ 100.5	+ 13.0	+ 11.3	+ 1.7	+ 37.1	- 6.0	+ 43.0	.	- 0.2	+ 43.2	+ 39.1	+ 9.2	+ 2.1	+ 7.3	.
1998	+ 179.3	+ 110.6	+ 101.5	+ 9.1	+ 47.2	+ 16.8	+ 30.4	.	+ 2.5	+ 27.9	+ 28.9	- 2.1	- 5.3	+ 4.7	.
1998 Apr.	+ 5.9	+ 10.7	+ 10.2	+ 0.5	- 0.7	- 3.7	+ 3.0	.	+ 0.0	+ 3.0	- 5.0	+ 1.0	- 0.0	+ 0.6	.
May	+ 10.9	+ 2.7	+ 2.5	+ 0.3	+ 10.7	+ 7.5	+ 3.2	.	+ 0.1	+ 3.2	- 2.7	+ 0.3	- 0.1	+ 0.2	.
June	+ 2.9	+ 14.5	+ 17.2	- 2.7	- 8.6	- 8.9	+ 0.2	.	+ 0.1	+ 0.1	- 2.9	- 0.2	+ 0.2	+ 0.2	.
July	- 6.5	- 14.6	- 15.7	+ 1.1	+ 10.3	+ 4.6	+ 5.7	.	+ 0.4	+ 5.3	- 2.1	- 0.3	+ 0.2	+ 0.4	.
Aug.	+ 27.4	+ 19.7	+ 19.8	- 0.1	+ 9.1	+ 4.0	+ 5.2	.	+ 0.5	+ 4.7	- 0.9	- 0.6	+ 0.0	+ 0.3	.
Sep.	- 3.4	+ 7.5	+ 6.7	+ 0.9	- 8.5	- 7.3	- 1.3	.	- 0.1	- 1.2	- 1.3	- 1.1	+ 0.0	+ 0.4	.
Oct.	+ 16.5	+ 13.4	+ 12.6	+ 0.8	+ 1.1	+ 0.6	+ 0.5	.	+ 0.8	- 0.4	+ 3.1	- 1.5	+ 0.5	+ 0.3	.
Nov.	+ 47.7	+ 48.7	+ 47.4	+ 1.2	- 2.2	- 3.3	+ 1.2	.	+ 0.3	+ 0.8	+ 3.2	- 2.3	+ 0.4	+ 0.9	.
Dec.	+ 101.9	+ 45.6	+ 28.1	+ 17.5	+ 30.7	+ 27.9	+ 2.7	.	- 0.1	+ 2.8	+ 33.8	- 1.4	- 6.8	+ 0.5	.
1999 Jan.	- 1.0	- 9.6	- 9.6	.	+ 9.3	+ 7.5	+ 1.9	.	.	.	+ 1.7	- 2.4	+ 0.2	+ 0.2	.
Feb.	+ 2.9	+ 2.6	+ 2.6	.	+ 1.2	- 0.1	+ 1.3	- 0.1	.	.	+ 1.1	- 2.0	+ 0.0	+ 0.3	+ 0.0

\* See table IV.2, footnote \*; statistical breaks have been eliminated from the changes. The figures for the latest date are always to be regarded as provisional. Subsequent alterations, which will appear in the following Monthly Report, are not specially marked. — 1 Up to December 1998, including deposits from loans on a trust basis; see also footnote 6. — 2 Up

to December 1998, including time deposits for less than 1 month. — 3 Including subordinated liabilities and liabilities arising from registered debt securities. — 4 Up to December 1998, excluding time deposits for less than 1 month; see also footnote 2. — 5 Including liabilities arising from

IV. Banks

7. Deposits of domestic non-banks (non-MFIs) at banks (MFIs) in Germany \* (cont'd)

Until the end of 1998 DM billion, from 1999 euro billion

Period	Sight deposits <sup>2</sup>				Time deposits <sup>1, 3, 4</sup>						Savings deposits	Bank savings bonds <sup>5</sup>	Loans on a trust basis <sup>6</sup>	Memo item:		
	Deposits, total <sup>1</sup>	Total	on demand	for less than 1 month	Total	for up to and including 1 year <sup>4</sup>	for more than 1 year			Subordinated liabilities (excluding negotiable debt securities)				Included in time deposits: liabilities arising from repos <sup>7</sup>		
							Total	for up to 2 years	for less than 4 years						for 4 years and more <sup>1</sup>	
																of which:
<b>Domestic enterprises and individuals <sup>8</sup></b>														<b>End of year or month <sup>*</sup></b>		
1996	2,961.1	638.8	616.2	22.6	950.9	353.2	597.7		9.7	588.0	1,137.6	222.5	11.3	31.1		
1997	3,061.8	658.2	635.5	22.7	984.7	344.2	640.5		10.1	630.4	1,176.2	230.6	12.1	38.3		
1998	3,231.9	762.8	731.2	31.7	1,023.8	354.0	669.8		12.4	657.4	1,204.6	228.6	12.1	43.0		
1998 Apr.	3,057.9	640.1	623.2	16.9	995.0	341.0	654.0		10.6	643.4	1,175.0	235.4	12.4	39.9		
May	3,061.2	642.0	625.4	16.5	999.4	342.6	656.8		10.7	646.1	1,171.6	235.8	12.5	40.0		
June	3,064.9	655.5	641.1	14.5	992.3	334.2	658.1		10.7	647.3	1,168.8	235.9	12.4	40.2		
July	3,059.2	643.2	627.8	15.4	1,001.7	339.5	662.2		11.0	651.2	1,166.4	235.5	12.4	40.6		
Aug.	3,080.7	660.8	645.7	15.1	1,007.2	340.7	666.5		11.4	655.1	1,165.5	235.0	12.2	40.9		
Sep.	3,080.3	667.9	652.4	15.5	1,002.1	335.7	666.4		11.4	655.1	1,164.2	233.8	12.2	41.3		
Oct.	3,098.8	681.2	664.8	16.4	1,005.5	339.2	666.3		12.2	654.1	1,167.6	232.3	12.2	41.6		
Nov.	3,140.6	727.5	709.9	17.6	1,000.1	332.9	667.2		12.6	654.7	1,170.9	230.0	12.1	42.5		
Dec.	3,231.9	762.8	731.2	31.7	1,023.8	354.0	669.8		12.4	657.4	1,204.6	228.6	12.1	43.0		
1999 Jan.	1,725.0	363.7	363.7		538.2	200.8	337.4	3.4			707.9	115.3	6.4	22.4	0.1	
Feb.	1,726.7	364.8	364.8		539.4	200.4	339.0	3.3			709.0	113.5	6.4	22.7	0.1	
														<b>Changes <sup>*</sup></b>		
1997	+ 99.6	+ 17.8	+ 17.7	+ 0.1	+ 34.2	- 9.0	+ 43.2		+ 0.4	+ 42.7	+ 38.6	+ 8.2	+ 0.9	+ 7.1		
1998	+ 171.0	+ 105.5	+ 96.5	+ 9.0	+ 38.8	+ 9.6	+ 29.3		+ 2.3	+ 26.9	+ 28.4	- 2.2	+ 0.4	+ 4.7		
1998 Apr.	+ 8.8	+ 11.8	+ 10.1	+ 1.7	+ 0.8	- 2.4	+ 3.2		+ 0.0	+ 3.2	- 4.9	+ 0.9	+ 0.1	+ 0.6		
May	+ 3.6	+ 2.1	+ 2.5	- 0.3	+ 4.5	+ 1.6	+ 2.8		+ 0.1	+ 2.7	- 3.4	+ 0.4	+ 0.0	+ 0.2		
June	+ 3.0	+ 13.3	+ 15.3	- 2.0	- 7.4	+ 8.4	+ 1.0		+ 0.1	+ 1.0	- 2.8	+ 0.0	- 0.1	+ 0.2		
July	- 5.0	- 11.9	- 12.9	+ 0.9	+ 9.7	+ 5.3	+ 4.3		+ 0.2	+ 4.1	- 2.3	- 0.3	- 0.0	+ 0.3		
Aug.	+ 21.5	+ 17.6	+ 17.9	- 0.3	+ 5.5	+ 1.1	+ 4.4		+ 0.5	+ 3.9	- 1.0	- 0.6	- 0.2	+ 0.3		
Sep.	+ 0.5	+ 7.9	+ 7.6	+ 0.4	- 5.1	- 4.9	- 0.1		- 0.1	- 0.0	- 1.2	- 1.1	- 0.0	+ 0.4		
Oct.	+ 18.5	+ 13.3	+ 12.4	+ 0.9	+ 3.4	+ 3.5	- 0.1		+ 0.8	- 0.9	+ 3.3	- 1.5	- 0.0	+ 0.3		
Nov.	+ 41.3	+ 45.8	+ 44.7	+ 1.2	- 5.4	- 6.3	+ 0.9		+ 0.4	+ 0.6	+ 3.3	- 2.3	- 0.0	+ 0.9		
Dec.	+ 91.3	+ 35.5	+ 21.4	+ 14.1	+ 23.5	+ 20.9	+ 2.6		- 0.1	+ 2.7	+ 33.7	- 1.4	+ 0.0	+ 0.6		
1999 Jan.	+ 0.6	- 7.5	- 7.5		+ 8.1	+ 6.5	+ 1.7				+ 1.5	- 1.5	+ 0.2	+ 0.3		
Feb.	+ 1.5	+ 0.9	+ 0.9		+ 1.2	- 0.3	+ 1.6	- 0.1			+ 1.1	- 1.8	- 0.0	+ 0.3	+ 0.0	
<b>of which: Domestic enterprises <sup>8</sup></b>														<b>End of year or month <sup>*</sup></b>		
1996	967.6	245.0	227.1	17.8	665.9	118.8	547.1		4.5	542.6	8.6	37.6	10.5	18.0		
1997	1,020.8	244.4	227.1	17.3	713.5	123.9	589.6		4.6	585.0	9.7	41.7	11.5	20.7		
1998	1,108.1	292.1	267.8	24.3	748.9	128.9	620.0		5.9	614.0	11.1	44.3	11.8	24.1		
1998 Apr.	1,007.7	217.3	204.8	12.5	725.2	121.9	603.2		4.8	598.5	10.2	43.2	11.8	21.6		
May	1,009.5	213.6	200.9	12.7	730.1	123.5	606.6		4.8	601.8	10.3	43.6	11.9	21.7		
June	1,011.5	219.8	209.4	10.4	726.1	118.1	608.0		4.9	603.1	10.2	43.6	11.8	21.9		
July	1,011.1	211.6	200.3	11.3	733.4	121.5	611.9		5.1	606.8	10.4	44.0	11.8	22.2		
Aug.	1,028.5	223.8	212.9	10.9	738.4	122.1	616.3		5.5	610.8	10.5	44.1	11.6	22.4		
Sep.	1,032.9	231.6	220.3	11.3	734.8	118.8	616.0		5.3	610.7	10.7	44.2	11.5	22.7		
Oct.	1,045.4	240.5	228.6	11.9	738.3	121.3	617.0		5.9	611.1	10.8	44.2	11.6	22.9		
Nov.	1,056.2	254.6	241.9	12.7	735.0	117.0	618.0		6.1	611.8	10.8	44.3	11.5	23.6		
Dec.	1,108.1	292.1	267.8	24.3	748.9	128.9	620.0		5.9	614.0	11.1	44.3	11.8	24.1		
1999 Jan.	545.7	126.1	126.1		389.8	79.1	310.8	1.4			6.4	23.3	6.2	12.6	0.1	
Feb.	543.7	122.8	122.8		391.2	78.8	312.4	1.3			6.3	23.5	6.2	12.8	0.1	
														<b>Changes <sup>*</sup></b>		
1997	+ 51.7	- 2.3	- 1.8	- 0.5	+ 47.8	+ 5.0	+ 42.8		+ 0.1	+ 42.8	+ 1.1	+ 4.2	+ 1.0	+ 2.7		
1998	+ 88.6	+ 48.5	+ 41.6	+ 7.0	+ 35.5	+ 5.0	+ 30.5		+ 1.3	+ 29.2	+ 1.4	+ 2.5	+ 0.6	+ 3.4		
1998 Apr.	+ 10.5	+ 6.9	+ 5.6	+ 1.3	+ 2.8	- 0.7	+ 3.6		+ 0.0	+ 3.6	+ 0.1	+ 0.4	+ 0.1	+ 0.2		
May	+ 2.0	- 3.5	- 3.6	+ 0.2	+ 4.9	+ 1.6	+ 3.4		+ 0.0	+ 3.3	+ 0.1	+ 0.4	+ 0.0	+ 0.2		
June	+ 1.7	+ 5.9	+ 8.2	- 2.3	- 4.0	- 5.4	+ 1.4		+ 0.0	+ 1.3	- 0.1	-	- 0.1	+ 0.1		
July	+ 0.2	- 7.8	- 8.7	+ 0.9	+ 7.5	+ 3.4	+ 4.1		+ 0.2	+ 3.9	+ 0.2	+ 0.4	- 0.0	+ 0.3		
Aug.	+ 17.4	+ 12.2	+ 12.6	- 0.4	+ 5.0	+ 0.6	+ 4.4		+ 0.4	+ 4.0	+ 0.2	+ 0.2	- 0.2	+ 0.2		
Sep.	+ 5.3	+ 8.6	+ 8.2	+ 0.4	- 3.6	- 3.3	- 0.2		- 0.2	- 0.1	+ 0.2	+ 0.1	- 0.1	+ 0.3		
Oct.	+ 12.5	+ 8.9	+ 8.3	+ 0.6	+ 3.5	+ 2.6	+ 0.9		+ 0.6	+ 0.3	+ 0.1	+ 0.0	+ 0.0	+ 0.3		
Nov.	+ 10.4	+ 13.7	+ 12.8	+ 0.9	- 3.4	- 4.4	+ 1.0		+ 0.3	+ 0.8	+ 0.0	+ 0.1	- 0.0	+ 0.7		
Dec.	+ 52.0	+ 37.6	+ 26.1	+ 11.6	+ 13.9	+ 11.9	+ 2.0		- 0.2	+ 2.2	+ 0.2	+ 0.0	+ 0.2	+ 0.5		
1999 Jan.	- 2.4	- 7.9	- 7.9		+ 4.8	+ 3.9	+ 0.9				- 0.1	+ 0.8	+ 0.2	+ 0.3		
Feb.	- 2.2	- 3.6	- 3.6		+ 1.3	- 0.3	+ 1.7	- 0.1			- 0.1	+ 0.1	- 0.0	+ 0.1	+ 0.0	

non-negotiable bearer debt securities. — <sup>6</sup> From 1999, no longer included in time deposits. — <sup>7</sup> Collected separately from 1999 only. — <sup>8</sup> Up to December 1998, including liabilities to domestic building and loan associations and money market funds. — <sup>9</sup> See the note on the title page

of the Statistical Section (page 1\*) and the footnotes to the changed items. Up to February 1999, this table was numbered IV.11. The former tables IV.8 to IV.10 have been discontinued (see the Statistical Supplement "Banking statistics").

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Table changed <sup>9</sup>

8. Deposits of domestic individuals and non-commercial organisations at banks (MFIs) in Germany \*

Until the end of 1998 DM billion, from 1999 euro billion

Period	Sight deposits <sup>2</sup>						Time deposits <sup>1, 3, 4</sup>						
	Deposits of domestic individuals and non-commercial organisations, total <sup>1</sup>	by creditor group					Total	by creditor group					
		Domestic individuals				Domestic non-commercial organisations		Domestic individuals				Domestic non-commercial organisations	
		Total	Self-employed	Employees	Other individuals			Total	Self-employed	Employees	Other individuals		
	End of year or month *												
1996	1,993.5	393.8	376.1	78.7	248.5	48.9	17.7	285.0	252.8	75.2	137.6	39.9	32.2
1997	2,041.0	413.8	396.5	79.7	264.3	52.4	17.3	271.2	240.9	73.3	129.8	37.8	30.3
1998	2,123.9	470.8	452.1	93.4	298.0	60.7	18.6	275.0	243.5	72.3	132.6	38.7	31.4
1998 Sep.	2,047.4	436.3	418.5	83.6	277.0	57.9	17.8	267.3	236.1	70.7	127.9	37.5	31.2
Oct.	2,053.4	440.7	423.0	86.8	279.2	56.9	17.8	267.2	236.8	70.9	128.3	37.6	30.4
Nov.	2,084.3	472.9	454.4	92.0	302.0	60.4	18.4	265.2	235.7	69.9	128.4	37.4	29.4
Dec.	2,123.9	470.8	452.1	93.4	298.0	60.7	18.6	275.0	243.5	72.3	132.6	38.7	31.4
1999 Jan.	1,179.3	237.5	228.5	45.5	151.4	31.7	9.0	148.3	131.7	38.9	72.6	20.2	16.6
Feb.	1,183.0	242.0	232.9	45.7	155.2	31.9	9.2	148.2	131.3	38.0	72.2	21.1	16.9
	Changes *												
1997	+ 47.9	+ 20.1	+ 20.3	+ 1.0	+ 15.5	+ 3.8	- 0.2	- 13.6	- 11.9	- 2.0	- 7.8	- 2.1	- 1.7
1998	+ 82.5	+ 57.0	+ 55.6	+ 13.7	+ 33.5	+ 8.4	+ 1.3	+ 3.3	+ 2.8	- 1.0	+ 2.7	+ 1.0	+ 0.6
1998 Sep.	- 4.8	- 0.7	- 1.4	- 2.6	- 0.7	+ 1.9	+ 0.7	- 1.5	- 1.3	- 0.6	- 0.7	- 0.0	- 0.2
Oct.	+ 6.0	+ 4.4	+ 4.5	+ 3.3	+ 2.2	- 1.0	- 0.1	- 0.1	+ 0.7	+ 0.2	+ 0.5	+ 0.0	- 0.8
Nov.	+ 30.9	+ 32.1	+ 31.5	+ 5.1	+ 22.8	+ 3.5	+ 0.7	- 2.0	- 1.1	- 1.0	+ 0.0	- 0.1	- 0.9
Dec.	+ 39.3	- 2.1	- 2.3	+ 1.4	- 4.2	+ 0.4	+ 0.2	+ 9.6	+ 7.8	+ 2.4	+ 4.1	+ 1.4	+ 1.8
1999 Jan.	+ 3.0	+ 0.4	+ 0.1	- 0.8	- 0.1	+ 1.0	+ 0.3	+ 3.3	+ 3.7	+ 1.1	+ 2.7	- 0.1	- 0.3
Feb.	+ 3.7	+ 4.5	+ 4.3	+ 0.2	+ 3.9	+ 0.3	+ 0.2	- 0.1	- 0.3	- 0.9	- 0.4	+ 0.9	+ 0.2

\* See table IV.2, footnote\*; statistical breaks have been eliminated from the changes. The figures for the latest date are always to be regarded as provisional. Subsequent alterations, which will appear in the following Monthly Report, are not specially marked. — 1 Up to December 1998,

including deposits arising from loans on a trust basis; see also footnote 6. — 2 Up to December 1998, including time deposits for less than 1 month. — 3 Including subordinated liabilities and liabilities arising from registered debt securities. — 4 Up to December 1998, excluding time deposits for less

Table changed <sup>7</sup>

9. Deposits of domestic public authorities at banks (MFIs) in Germany, by creditor group \*

Until the end of 1998 DM billion, from 1999 euro billion

Period	Deposits <sup>1</sup>												
	Domestic public authorities, total	Federal Government and its special funds <sup>2</sup>						Länder Governments					
		Total	Sight deposits <sup>3</sup>	Time deposits <sup>4</sup>		Savings deposits and bank savings bonds <sup>5</sup>	Memo item: Loans on a trust basis <sup>6</sup>	Total	Sight deposits <sup>3</sup>	Time deposits <sup>4</sup>		Savings deposits and bank savings bonds <sup>5</sup>	Memo item: Loans on a trust basis <sup>6</sup>
				for up to and including 1 year	for more than 1 year <sup>1</sup>					for up to and including 1 year	for more than 1 year <sup>1</sup>		
	End of year or month *												
1996	280.5	114.6	5.1	3.5	81.2	0.1	24.6	82.4	6.1	1.1	25.3	0.1	49.7
1997	280.0	108.3	1.9	3.6	79.8	0.1	23.0	83.0	4.5	1.1	26.5	0.1	50.8
1998	288.3	111.2	4.0	1.9	80.9	0.0	24.3	80.1	6.8	1.9	27.1	0.2	44.2
1998 Sep.	273.6	108.4	2.0	2.9	80.2	0.1	23.2	82.1	2.9	1.7	26.1	0.2	51.2
Oct.	271.6	107.7	1.4	2.2	80.7	0.0	23.4	82.5	3.0	1.7	26.1	0.2	51.5
Nov.	278.0	108.1	1.5	2.2	80.9	0.0	23.4	82.8	3.1	1.3	26.2	0.2	51.9
Dec.	288.3	111.2	4.0	1.9	80.9	0.0	24.3	80.1	6.8	1.9	27.1	0.2	44.2
1999 Jan.	110.4	45.2	1.9	1.7	41.5	0.0	12.4	17.6	2.4	1.4	13.8	0.1	22.7
Feb.	111.9	44.6	0.9	2.4	41.3	0.0	12.4	17.3	2.4	1.0	13.8	0.1	22.7
	Changes *												
1997	+ 0.9	- 4.9	- 3.3	+ 0.1	- 1.4	+ 0.0	- 0.3	+ 1.0	- 1.6	- 0.0	+ 1.2	+ 0.0	+ 1.5
1998	+ 8.3	+ 2.5	+ 2.2	- 1.7	+ 1.1	- 0.0	+ 0.9	- 2.9	+ 2.4	+ 0.8	+ 0.6	+ 0.0	- 6.6
1998 Sep.	- 3.9	+ 0.1	+ 0.4	+ 0.7	- 1.0	- 0.0	+ 0.0	+ 0.5	+ 0.3	+ 0.4	- 0.2	- 0.0	+ 0.0
Oct.	- 2.0	- 0.7	- 0.6	- 0.7	+ 0.5	- 0.0	+ 0.2	+ 0.5	+ 0.1	- 0.0	- 0.0	-	+ 0.3
Nov.	+ 6.4	+ 0.4	+ 0.1	+ 0.0	+ 0.3	- 0.0	+ 0.0	+ 0.2	+ 0.1	- 0.4	+ 0.1	-	+ 0.4
Dec.	+ 10.6	+ 3.1	+ 2.6	- 0.3	- 0.1	+ 0.0	+ 0.9	- 2.6	+ 3.7	+ 0.5	+ 0.9	+ 0.0	- 7.7
1999 Jan.	- 1.5	+ 0.7	+ 0.0	+ 0.5	+ 0.2	+ 0.0	- 0.1	- 0.8	- 0.9	+ 0.2	- 0.1	+ 0.0	+ 0.1
Feb.	+ 1.4	- 0.6	- 1.0	+ 0.6	- 0.2	+ 0.0	+ 0.1	- 0.3	+ 0.1	- 0.4	+ 0.0	- 0.0	- 0.0

\* See table IV.2, footnote\*; excluding deposits of the Treuhand agency and its successor organisations and of the Federal Railways, east German Railways and Federal Post Office, and, from 1995, of Deutsche Bahn AG, Deutsche Post AG and Deutsche Telekom AG, and of publicly-owned enterprises, which are included in "Enterprises". Statistical breaks have been

eliminated from the changes. The figures for the latest date are always to be regarded as provisional. Subsequent alterations, which will appear in the following Monthly Report, are not specially marked. — 1 Up to December 1998, including deposits arising from loans on a trust basis; see also footnote 6. — 2 Federal Railways Fund, Indemnification Fund,

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by maturity					Savings deposits			Memo item:				Period
up to and including 1 year 4	more than 1 year				Total	Domestic individuals	Domestic non-commercial organisations	Bank savings bonds 5	Loans on a trust basis 6	Subordinated liabilities (excluding negotiable debt securities) 7	Included in time deposits: liabilities arising from repos 8	
	Total	up to and including 2 years	less than 4 years	4 years and more 1								
<b>End of year or month *</b>												
234.4	50.6	.	5.1	45.5	1,129.0	1,112.1	16.8	184.9	0.8	13.2	.	1996
220.3	50.9	.	5.5	45.4	1,166.5	1,148.6	17.9	188.9	0.6	17.6	.	1997
225.1	49.9	.	6.5	43.4	1,193.5	1,174.1	19.4	184.2	0.4	18.9	.	1998
217.0	50.4	.	6.1	44.3	1,153.5	1,134.5	19.0	189.6	0.6	18.6	.	1998 Sep.
217.9	49.3	.	6.3	43.0	1,156.8	1,137.4	19.3	188.1	0.6	18.7	.	Oct.
215.9	49.2	.	6.4	42.8	1,160.0	1,141.1	19.0	185.7	0.6	18.8	.	Nov.
225.1	49.9	.	6.5	43.4	1,193.5	1,174.1	19.4	184.2	0.4	18.9	.	Dec.
121.7	26.7	2.0	.	.	701.5	691.3	10.2	91.9	0.2	9.7	.	1999 Jan.
121.7	26.5	2.0	.	.	702.7	692.4	10.3	90.0	0.2	9.9	.	Feb.
<b>Changes *</b>												
- 14.0	+ 0.4	.	+ 0.4	- 0.0	+ 37.5	+ 36.5	+ 1.0	+ 4.0	- 0.1	+ 4.4	.	1997
+ 4.6	- 1.3	.	+ 1.0	- 2.3	+ 27.1	+ 25.5	+ 1.6	- 4.7	- 0.3	+ 1.3	.	1998
- 1.6	+ 0.1	.	+ 0.1	+ 0.0	- 1.4	- 1.6	+ 0.1	- 1.2	+ 0.0	+ 0.1	.	1998 Sep.
+ 0.9	- 1.0	.	+ 0.2	- 1.3	+ 3.2	+ 3.0	+ 0.3	- 1.5	- 0.0	+ 0.1	.	Oct.
- 2.0	- 0.1	.	+ 0.1	- 0.2	+ 3.3	+ 3.6	- 0.3	- 2.5	- 0.0	+ 0.1	.	Nov.
+ 9.0	+ 0.6	.	+ 0.1	+ 0.5	+ 33.5	+ 33.0	+ 0.5	- 1.4	- 0.2	+ 0.1	.	Dec.
+ 2.6	+ 0.8	.	.	.	+ 1.6	+ 1.5	+ 0.1	- 2.3	+ 0.0	+ 0.1	.	1999 Jan.
- 0.0	- 0.1	+ 0.0	.	.	+ 1.2	+ 1.1	+ 0.1	- 1.9	- 0.0	+ 0.2	.	Feb.

than 1 month; see also footnote 2. — 5 Including liabilities arising from non-negotiable bearer debt securities. — 6 From 1999, no longer included in time deposits. — 7 Included in time deposits. — 8 Collected separately from 1999 only. — 9 See the note on the title page of the Statistical Section (page

1\*) and the footnotes to the changed items. Up to February 1999, this table was numbered IV.12. The former tables IV.8 to IV.10 have been discontinued (see the Statistical Supplement "Banking statistics").

Local authorities and local authority associations (including municipal special-purpose associations)						Social security funds						Period
Total	Sight deposits 3	Time deposits 4		Savings deposits and bank savings bonds 5	Memo item: Loans on a trust basis 6	Total	Sight deposits 3	Time deposits 4		Savings deposits and bank savings bonds 5	Memo item: Loans on a trust basis 6	
		for up to and including 1 year	for more than 1 year 1					for up to and including 1 year	for more than 1 year 1			
<b>End of year or month *</b>												
39.4	15.6	16.2	1.8	5.6	0.2	44.1	9.5	13.9	15.8	4.9	0.0	1996
39.8	14.5	17.0	2.0	6.1	0.0	48.9	10.8	16.0	16.2	5.8	0.2	1997
45.3	16.5	19.8	2.4	6.6	0.1	51.7	9.3	21.2	15.2	5.8	0.2	1998
40.4	12.1	19.6	2.2	6.5	0.1	42.6	6.7	13.6	16.0	6.2	0.2	1998 Sep.
40.4	13.3	18.3	2.3	6.4	0.1	41.0	6.0	12.7	16.1	6.0	0.2	Oct.
43.6	15.3	19.4	2.3	6.5	0.1	43.6	6.7	15.0	16.0	5.8	0.2	Nov.
45.3	16.5	19.8	2.4	6.6	0.1	51.7	9.3	21.2	15.2	5.8	0.2	Dec.
22.9	6.2	11.3	1.3	4.1	0.0	24.7	2.3	13.3	6.9	2.2	0.1	1999 Jan.
26.2	7.9	12.9	1.2	4.1	0.0	23.8	3.3	11.7	6.9	1.9	0.1	Feb.
<b>Changes *</b>												
+ 0.5	- 1.1	+ 0.8	+ 0.2	+ 0.5	± 0.0	+ 4.3	+ 1.2	+ 2.2	- 0.1	+ 1.0	- 0.0	1997
+ 5.5	+ 2.0	+ 2.7	+ 0.3	+ 0.5	+ 0.0	+ 3.1	- 1.4	+ 5.4	- 0.9	+ 0.1	+ 0.0	1998
- 3.1	- 2.2	- 1.0	- 0.0	+ 0.0	+ 0.0	- 1.4	+ 1.1	- 2.4	+ 0.0	- 0.1	- 0.0	1998 Sep.
- 0.0	+ 1.2	- 1.3	+ 0.0	- 0.0	+ 0.0	- 1.7	- 0.7	- 0.9	+ 0.1	- 0.2	- 0.0	Oct.
+ 3.2	+ 2.0	+ 1.1	- 0.0	+ 0.0	+ 0.0	+ 2.6	+ 0.6	+ 2.2	- 0.1	- 0.2	-	Nov.
+ 1.8	+ 1.2	+ 0.3	+ 0.1	+ 0.1	+ 0.0	+ 8.3	+ 2.7	+ 6.4	- 0.8	+ 0.0	- 0.0	Dec.
- 0.8	- 1.2	+ 0.3	+ 0.2	+ 0.0	+ 0.0	- 0.7	+ 0.0	- 0.0	+ 0.1	- 0.8	- 0.0	1999 Jan.
+ 3.2	+ 1.7	+ 1.6	- 0.1	+ 0.0	- 0.0	- 0.9	+ 0.9	- 1.6	- 0.0	- 0.3	-	Feb.

Redemption Fund for Inherited Liabilities, ERP Special Fund, "German Unity" Fund, Equalisation of Burdens Fund. — 3 Up to December 1998, including time deposits for less than 1 month. — 4 Up to December 1998, excluding time deposits for less than 1 month; see also footnote 3. — 5 Including liabilities arising from non-negotiable bearer debt securities. — 6 From 1999,

no longer included in time deposits. — 7 See the note on the title page of the Statistical Section (page 1\*) and the footnotes to the changed items. Up to February 1999, this table was numbered IV.13. The former tables IV.8 to IV.10 have been discontinued (see the Statistical Supplement "Banking statistics").

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Table changed <sup>4</sup>

10. Savings deposits and bank savings bonds of banks (MFIs) in Germany sold to non-banks (non-MFIs) \*

Until the end of 1998 DM billion, from 1999 euro billion

Period	Savings deposits								Memo item: Interest credited on savings deposits	Bank savings bonds, <sup>2</sup> sold to				
	of residents				of non-residents					non-banks, total	domestic non-banks			foreign non-banks
	Total	Total	at three months' notice		at over three months' notice		Total	of which: At three months' notice			Total	of which: With maturities of more than 2 years <sup>3</sup>		
			Total	of which: Special savings facilities <sup>1</sup>	Total	of which: Special savings facilities <sup>1</sup>								
<b>End of year or month *</b>														
1996	1,165.8	1,143.0	865.8	459.6	277.2	219.5	22.8	16.3	39.5	234.7	227.8	206.6	6.9	
1997	1,205.0	1,182.1	928.8	531.7	253.2	201.4	22.9	16.9	38.8	244.6	236.9	216.7	7.7	
1998	1,234.2	1,211.0	971.4	582.8	239.6	189.6	23.2	17.3	39.5	243.9	234.9	211.1	9.1	
1998 Oct.	1,196.5	1,174.0	938.0	560.7	235.9	188.1	22.5	16.7	1.0	247.4	238.5	215.5	8.9	
Nov.	1,199.7	1,177.1	941.1	563.3	236.0	187.9	22.6	16.7	1.1	245.1	236.2	212.8	8.9	
Dec.	1,234.2	1,211.0	971.4	582.8	239.6	189.6	23.2	17.3	29.8	243.9	234.9	211.1	9.1	
1999 Jan.	724.2	711.9	500.5	313.3	211.4	96.0	12.3	8.9	0.7	122.3	117.6	108.5	4.7	
Feb.	725.5	713.0	502.9	321.7	210.2	94.6	12.5	8.9	0.6	120.3	115.6	106.5	4.7	
<b>Changes *</b>														
1997	+ 39.2	+ 39.1	+ 60.0	+ 67.2	- 20.9	- 18.0	+ 0.2	+ 0.6	.	+ 10.0	+ 9.2	+ 10.2	+ 0.8	
1998	+ 29.2	+ 28.9	+ 41.6	+ 51.2	- 12.7	- 12.1	+ 0.3	+ 0.4	.	- 0.7	- 2.1	- 5.6	+ 1.4	
1998 Oct.	+ 3.2	+ 3.1	+ 3.3	+ 3.0	- 0.3	- 0.4	+ 0.1	+ 0.0	.	- 1.6	- 1.5	- 2.0	- 0.0	
Nov.	+ 3.2	+ 3.2	+ 3.1	+ 2.6	+ 0.1	- 0.2	+ 0.1	+ 0.0	.	- 2.3	- 2.3	- 2.7	+ 0.1	
Dec.	+ 34.5	+ 33.8	+ 29.6	+ 19.5	+ 4.2	+ 1.7	+ 0.6	+ 0.6	.	- 1.2	- 1.4	- 1.7	+ 0.1	
1999 Jan.	+ 1.7	+ 1.7	+ 3.7	+ 2.8	- 2.0	- 0.8	- 0.0	+ 0.0	.	- 2.3	- 2.4	- 2.2	+ 0.1	
Feb.	+ 1.3	+ 1.1	+ 2.4	+ 14.7	- 1.3	- 1.4	+ 0.2	+ 0.0	.	- 2.0	- 2.0	- 2.0	+ 0.0	

\* See table IV.2, footnote\*; statistical breaks have been eliminated from the changes. The figures for the latest date are always to be regarded as provisional. Subsequent alterations, which will appear in the following Monthly Report, are not specially marked. — 1 Savings deposits bearing interest at a rate which exceeds the minimum or basic rate of interest. — 2 Including liabilities arising from non-negotiable bearer debt securities. —

3 Up to December 1998, of 4 years and more. — 4 See the note on the title page of the Statistical Section (page 1\*) and the footnotes to the changed items. Up to February 1999, this table was numbered IV.14. The former tables IV.8 to IV.10 have been discontinued (see the Statistical Supplement "Banking statistics").

Table changed <sup>8</sup>

11. Debt securities and money market paper outstanding of banks (MFIs) in Germany \*

Until the end of 1998 DM billion, from 1999 euro billion

Period	Negotiable bearer debt securities and money market paper							Non-negotiable bearer debt securities and money market paper <sup>7</sup>					Subordinated	
	of which:							of which with maturities of						
	Total	Floating-rate notes <sup>1</sup>	Zero-coupon bonds <sup>1,2</sup>	Foreign currency bonds <sup>3,4</sup>	Certificates of deposit	with maturities of			Total	with maturities of				
						up to and including 1 year	over 2 years <sup>5</sup>	over 4 years <sup>6</sup>		up to and including 1 year	over 2 years <sup>5</sup>	over 4 years <sup>6</sup>	negotiable debt securities	non-negotiable debt securities
<b>End of year or month *</b>														
1996	1,756.3	184.0	6.9	103.9	6.0	18.6	1,734.4	1,362.7	6.3	0.6	5.6	2.2	38.9	0.4
1997	1,942.2	217.7	7.8	160.5	11.8	24.1	1,914.9	1,539.6	5.1	0.9	4.2	1.8	45.5	2.6
1998	2,200.4	289.2	10.6	204.3	14.3	47.2	2,147.0	1,787.7	4.7	1.0	3.6	1.5	46.6	2.9
1998 Oct.	2,177.3	270.5	10.6	202.1	16.0	37.0	2,135.6	1,772.1	4.7	1.0	3.7	1.6	45.4	2.8
Nov.	2,203.0	282.5	9.9	205.6	16.5	43.9	2,153.5	1,789.1	4.7	1.0	3.6	1.6	45.5	2.8
Dec.	2,200.4	289.2	10.6	204.3	14.3	47.2	2,147.0	1,787.7	4.7	1.0	3.6	1.5	46.6	2.9
1999 Jan.	1,148.3	151.0	7.1	79.3	2.3	21.9	1,110.6	.	2.3	0.5	1.2	.	24.2	1.5
Feb.	1,167.4	155.0	7.1	86.2	3.5	23.7	1,124.9	.	2.2	0.5	1.2	.	25.0	1.6
<b>Changes *</b>														
1997	+ 186.8	+ 30.9	+ 0.9	+ 51.0	+ 5.8	+ 5.3	+ 181.4	+ 177.5	- 1.2	+ 0.3	- 1.5	- 0.4	+ 6.6	+ 2.2
1998	+ 258.3	+ 67.5	+ 2.8	+ 38.8	+ 2.5	+ 23.1	+ 232.2	+ 250.1	- 0.3	+ 0.1	- 0.6	- 0.3	+ 1.2	+ 0.3
1998 Oct.	+ 10.4	+ 2.2	+ 1.6	+ 1.1	+ 0.8	+ 1.2	+ 8.9	+ 7.5	- 0.1	+ 0.0	- 0.1	- 0.0	- 0.5	+ 0.0
Nov.	+ 25.7	+ 12.0	- 0.7	+ 3.5	+ 0.5	+ 6.9	+ 17.9	+ 17.0	+ 0.1	- 0.0	- 0.1	- 0.0	+ 0.1	+ 0.0
Dec.	- 2.6	+ 6.7	+ 0.7	- 1.3	- 2.2	+ 3.4	- 6.5	- 1.4	- 0.0	- 0.0	- 0.1	- 0.1	+ 1.1	+ 0.1
1999 Jan.	+ 21.4	+ 2.5	+ 1.7	+ 0.7	- 5.0	- 2.3	+ 14.6	.	- 0.0	- 0.0	- 0.5	.	+ 0.4	+ 0.0
Feb.	+ 19.2	+ 4.0	- 0.0	+ 6.9	+ 1.1	+ 1.8	+ 14.4	.	- 0.1	- 0.0	- 0.1	.	+ 0.7	+ 0.2

\* See table IV.2, footnote\*; statistical breaks have been eliminated from the changes. The figures for the latest date are always to be regarded as provisional. Subsequent alterations, which will appear in the following Monthly Report, are not specially marked. — 1 Including debt securities denominated in foreign currencies. — 2 Issue value when floated. — 3 Including floating-rate notes and zero-coupon bonds denominated in

foreign currencies. — 4 From 1999, bonds denominated in non-euro-area currencies. — 5 Up to December 1998, 2 years and more. — 6 From 1999, no longer collected. — 7 Non-negotiable bearer debt securities are classified among bank savings bonds; see also table IV. 10, footnote 2. — 8 See the note on the title page of the Statistical Section (page 1\*) and the footnotes to the changed items. Up to February 1999, this table was numbered IV.15.

IV. Banks

12. Building and loan associations (MFIs) in Germany \*  
Interim statements

Until the end of 1998 DM billion, from 1999 euro billion

End of year or month	Number of associations	Balance sheet total	Lending to banks (MFIs)			Lending to non-banks (non-MFIs)				Deposits of banks (MFIs) 6		Deposits of non-banks (non-MFIs)		Bearer debt securities outstanding	Capital (including published reserves) 8	Memo item: New contracts entered into in year or month 9
			Balances and loans (except building loans) 1	Building loans 2	Bank debt securities 3	Building loans			Securities (including Treasury bills and Treasury discount paper) 5	Deposits under savings and loan contracts	Sight and time deposits	Deposits under savings and loan contracts	Sight and time deposits 7			
						Loans under savings and loan contracts	Interim and bridging loans	Other building loans 4								
<b>All building and loan associations</b>																
1998	34	272.3	31.8	0.3	20.2	95.9	83.3	19.8	15.7	2.4	50.9	178.9	5.9	3.5	12.5	153.0
1998 Dec.	34	272.3	31.8	0.3	20.2	95.9	83.3	19.8	15.7	2.4	50.9	178.9	5.9	3.5	12.5	20.1
1999 Jan.	34	138.7	16.0	0.2	10.3	48.9	42.5	4.9	8.3	1.3	20.2	91.5	2.8	1.7	6.4	6.1
Feb.	34	138.7	16.0	0.2	10.4	48.2	42.6	4.9	8.9	1.2	20.2	91.9	2.9	1.8	6.5	6.5
<b>Private building and loan associations</b>																
1998 Dec.	21	193.3	24.7	0.2	11.6	64.6	56.9	18.8	12.8	1.7	38.6	123.5	5.8	3.5	8.1	13.5
1999 Jan.	21	98.6	12.7	0.1	5.9	32.9	28.9	4.4	6.8	0.9	14.3	63.1	2.8	1.7	4.1	4.2
Feb.	21	98.8	12.7	0.1	5.9	32.4	29.0	4.4	7.4	0.9	14.5	63.4	2.8	1.8	4.2	4.4
<b>Public building and loan associations</b>																
1998 Dec.	13	79.0	7.1	0.1	8.5	31.4	26.4	1.0	2.8	0.7	12.4	55.4	0.1	-	4.4	6.7
1999 Jan.	13	40.0	3.3	0.1	4.4	16.0	13.5	0.5	1.5	0.4	5.9	28.4	0.0	-	2.3	1.9
Feb.	13	40.0	3.3	0.1	4.5	15.8	13.6	0.5	1.5	0.3	5.7	28.5	0.0	-	2.3	2.1

Trends in building and loan association business

Until the end of 1998 DM billion, from 1999 euro billion

Period	Changes in deposits under savings and loan contracts 10			Capital promised		Capital paid out						Outpayment commitments outstanding at end of period		Interest and repayments received on building loans 11		Memo item: Housing bonuses received 13
	Amounts paid into savings accounts under savings and loan contracts 10	Interest credited on deposits under savings and loan contracts	Repayments of deposits under cancelled savings and loan contracts	Total	of which: Net allocations 12	Total	Allocations				Newly granted interim and bridging loans and other building loans	Total	of which: Under allocated contracts	Total	of which: Repayments during quarter	
							Deposits under savings and loan contracts		Loans under savings and loan contracts 10							
							Total	of which: Applied to settlement of interim and bridging loans	Total	of which: Applied to settlement of interim and bridging loans						
<b>All building and loan associations</b>																
1998	44.4	5.2	8.5	99.2	65.0	92.8	37.8	10.4	23.4	7.9	31.6	19.0	13.1	31.9	26.1	0.6
1998 Dec.	5.1	4.5	0.8	7.9	4.6	8.2	2.9	0.8	1.8	0.6	3.5	19.0	13.1	3.5	6.9	0.1
1999 Jan.	1.9	0.0	0.3	3.7	2.7	3.5	1.5	0.5	0.8	0.3	1.2	9.6	6.9	1.2	0.0	0.0
Feb.	2.1	0.0	0.4	3.5	2.4	3.1	1.4	0.4	0.7	0.3	1.0	9.8	7.1	1.5	0.0	0.0
<b>Private building and loan associations</b>																
1998 Dec.	3.3	3.1	0.5	5.7	3.1	5.7	1.9	0.5	1.1	0.4	2.8	11.1	6.4	2.5	4.8	0.0
1999 Jan.	1.3	0.0	0.2	2.8	2.0	2.6	1.1	0.4	0.5	0.2	0.9	5.6	3.4	0.9	0.0	0.0
Feb.	1.5	0.0	0.3	2.5	1.6	2.2	1.0	0.3	0.5	0.2	0.8	5.7	3.5	1.0	0.0	0.0
<b>Public building and loan associations</b>																
1998 Dec.	1.8	1.4	0.3	2.2	1.5	2.5	1.0	0.2	0.7	0.2	0.7	7.9	6.7	0.9	2.1	0.0
1999 Jan.	0.6	0.0	0.1	0.9	0.7	0.9	0.4	0.1	0.2	0.1	0.2	4.0	3.5	0.4	0.0	0.0
Feb.	0.6	0.0	0.2	1.0	0.8	0.9	0.4	0.1	0.2	0.1	0.2	4.1	3.6	0.4	0.0	0.0

\* Excluding assets and liabilities and/or transactions of the foreign branches. From August 1990 including assets and liabilities and/or transactions with building and loan association savers in the former GDR. The figures for the latest date are always to be regarded as provisional; subsequent alterations, which will appear in the following Monthly Report, are not specially marked. — 1 Including postal giro account balances, claims on building and loan associations, claims arising from registered debt securities and central bank balances. — 2 Loans under savings and loan contracts and interim and bridging loans. — 3 Including money market paper and small amounts of other securities issued by banks. — 4 Up to December 1998 including loans on a trust basis. — 5 Including equalisation claims. — 6 Including liabilities to building and loan associations. — 7 Including small amounts of savings

deposits. — 8 Including participation rights capital; from December 1993 including fund for general banking risks. — 9 Total amount covered by the contracts; only contracts newly entered into, for which the contract fee has been fully paid. Increases in the sum contracted count as new contracts. — 10 For outpayments of deposits under savings and loan contracts arising from the allocation of contracts see "Capital paid out". — 11 Including housing bonuses credited. — 12 Only allocations accepted by the beneficiaries; including allocations applied to settlement of interim and bridging loans. — 13 The amounts already credited to the accounts of savers or borrowers are also included in "Amounts paid into savings accounts under savings and loan contracts" and "Interest and repayments received on building loans".



IV. Banks

Table changed 12

13. Assets and liabilities of the foreign branches and foreign subsidiaries of German banks (MFIs) \*

Until the end of 1998 DM billion, from 1999 euro billion

Period	Number of		Lending to banks (MFIs)						Lending to non-banks (non-MFIs)						Other assets 7
	German banks (MFIs) with foreign branches and/or foreign subsidiaries	foreign branches 1 and/or foreign subsidiaries	balance sheet total 2	Balances and loans and advances not evidenced by certificates 3			Money market paper, securities 5, 6	Loans and advances not evidenced by certificates 3			Money market paper, securities 5				
				Total	German banks (MFIs) 4	Foreign banks		Total	to residents			to foreign non-banks			
									Total	of which enterprises and individuals					
<b>Foreign branches</b>															
End of year or month *															
1996	61	162	1,305.6	784.5	670.3	140.7	529.6	114.2	498.0	371.4	63.8	30.3	307.5	126.6	23.1
1997	62	165	1,837.4	1,068.1	927.0	207.5	719.4	141.1	728.4	505.8	68.1	35.2	437.7	222.6	40.9
1998	68	183	2,195.3	1,230.0	1,069.2	279.2	789.9	160.8	875.7	624.7	66.1	37.0	558.6	251.0	89.6
1998 June	65	171	2,081.8	1,179.0	1,024.4	268.6	755.8	154.6	841.8	585.0	68.2	35.3	516.8	256.7	61.1
July	65	173	2,045.0	1,121.9	966.5	247.5	719.1	155.4	857.4	603.0	66.6	33.8	536.4	254.4	65.6
Aug.	65	174	2,051.5	1,119.3	961.6	227.6	733.9	157.8	863.1	611.0	65.9	33.6	545.1	252.1	69.0
Sep.	66	172	2,045.4	1,139.3	981.2	247.7	733.4	158.1	844.7	601.7	70.2	34.1	531.5	243.0	61.4
Oct.	66	174	2,231.8	1,249.1	1,080.9	277.7	803.2	168.2	915.5	641.3	73.5	34.8	567.8	274.2	67.2
Nov.	67	179	2,296.9	1,320.7	1,151.6	313.5	838.1	169.1	903.5	650.4	78.5	36.6	571.9	253.1	72.7
Dec.	68	183	2,195.3	1,230.0	1,069.2	279.2	789.9	160.8	875.7	624.7	66.1	37.0	558.6	251.0	89.6
1999 Jan.	65	180	1,127.9	631.9	544.3	142.9	401.4	87.6	452.0	331.7	31.4	18.4	300.3	120.3	44.0
Changes *															
1997	+ 1	+ 3	+442.8	+232.7	+212.8	+ 66.2	+146.6	+ 19.9	+192.8	+106.0	+ 3.4	+ 4.1	+102.5	+ 86.8	+ 17.3
1998	+ 6	+ 18	+406.2	+187.9	+163.5	+ 71.9	+ 91.5	+ 24.5	+168.5	+136.2	- 1.6	+ 2.1	+137.8	+ 32.3	+ 49.8
1998 June	-	-	+ 17.9	+ 8.8	+ 4.1	+ 11.8	- 7.7	+ 4.7	- 2.9	- 9.8	- 0.9	- 0.1	- 8.9	+ 6.9	+ 12.1
July	-	+ 2	- 7.5	- 43.4	- 45.7	- 21.0	- 24.8	+ 2.4	+ 31.0	+ 28.6	- 1.4	- 1.3	+ 29.9	+ 2.5	+ 4.9
Aug.	-	+ 1	+ 6.0	- 2.5	- 4.9	- 19.8	+ 14.9	+ 2.5	+ 5.1	+ 7.8	- 0.8	- 0.2	+ 8.5	- 2.7	+ 3.4
Sep.	+ 1	- 2	+ 41.3	+ 43.8	+ 39.5	+ 20.4	+ 19.2	+ 4.2	+ 4.3	+ 7.6	+ 4.6	+ 0.8	+ 3.0	- 3.3	- 6.8
Oct.	-	+ 2	+171.9	+105.6	+ 94.8	+ 29.9	+ 64.9	+ 10.8	+ 60.3	+ 34.3	+ 3.4	+ 0.7	+ 30.9	+ 26.0	+ 6.0
Nov.	+ 1	+ 5	+ 47.3	+ 61.2	+ 62.4	+ 35.6	+ 26.8	- 1.2	- 18.9	+ 3.4	+ 4.8	+ 1.7	- 1.4	- 22.3	+ 5.0
Dec.	+ 1	+ 4	-103.5	- 89.5	- 82.0	- 34.3	- 47.8	- 7.5	- 31.1	- 27.7	- 12.4	+ 0.4	- 15.4	- 3.4	+ 17.2
1999 Jan.	- 3	- 3	- 10.3	- 13.4	- 17.7	- 15.1	- 2.7	+ 4.3	+ 5.8	+ 15.8	- 2.5	- 0.6	+ 18.3	- 10.0	- 2.6
<b>Foreign subsidiaries</b>															
End of year or month *															
1996	39	125	673.8	392.3	333.7	102.5	231.3	58.5	251.9	183.3	63.9	45.8	119.4	68.6	29.6
1997	37	131	764.9	429.5	366.8	122.1	244.6	62.7	292.0	214.4	67.5	54.9	147.0	77.6	43.4
1998	37	137	830.8	469.0	373.1	160.1	213.0	95.9	311.0	237.5	71.4	62.3	166.1	73.5	50.8
1998 June	39	136	862.5	469.2	393.2	138.2	255.1	76.0	340.9	239.0	67.1	54.4	171.9	101.9	52.4
July	39	136	857.0	460.5	383.7	140.0	243.7	76.8	344.1	243.2	67.6	55.0	175.6	101.0	52.4
Aug.	39	137	860.8	467.2	389.4	138.4	251.0	77.8	341.4	246.4	68.1	55.6	178.3	95.0	52.2
Sep.	38	137	855.1	475.1	393.8	143.7	250.2	81.3	331.9	241.6	67.7	57.4	174.0	90.3	48.0
Oct.	38	138	859.1	489.3	404.1	153.6	250.5	85.3	324.0	245.7	71.2	59.5	174.4	78.4	45.7
Nov.	38	137	848.5	478.0	388.5	154.5	234.0	89.5	322.1	247.5	71.0	61.1	176.6	74.6	48.4
Dec.	37	137	830.8	469.0	373.1	160.1	213.0	95.9	311.0	237.5	71.4	62.3	166.1	73.5	50.8
1999 Jan.	36	135	442.8	232.0	185.6	72.7	112.8	46.5	165.6	117.1	37.1	33.0	80.0	48.5	45.2
Changes *															
1997	- 2	+ 6	+ 62.5	+ 19.8	+ 17.2	+ 16.9	+ 0.3	+ 2.6	+ 29.4	+ 23.3	+ 3.1	+ 8.7	+ 20.2	+ 6.1	+ 13.4
1998	± 0	+ 6	+ 79.5	+ 47.8	+ 13.7	+ 39.7	- 26.1	+ 34.1	+ 24.2	+ 27.0	+ 4.1	+ 7.5	+ 22.9	- 2.8	+ 7.5
1998 June	+ 1	+ 1	- 6.7	- 1.5	- 5.8	+ 3.3	- 9.2	+ 4.4	- 1.3	+ 1.1	- 1.0	- 2.2	+ 2.1	- 2.4	- 3.9
July	-	-	- 0.1	- 5.5	- 6.7	+ 2.4	- 9.1	+ 1.2	+ 5.4	+ 5.8	+ 0.6	+ 0.7	+ 5.1	- 0.4	+ 0.0
Aug.	-	+ 1	+ 4.0	+ 6.8	+ 5.9	- 1.6	+ 7.4	+ 1.0	- 2.7	+ 3.2	+ 0.5	+ 0.6	+ 2.7	- 6.0	- 0.1
Sep.	- 1	-	+ 4.9	+ 14.3	+ 10.1	+ 6.6	+ 3.5	+ 4.2	- 5.4	- 1.6	- 0.3	+ 1.9	- 1.3	- 3.8	- 4.0
Oct.	-	+ 1	+ 5.2	+ 15.2	+ 11.0	+ 10.3	+ 0.7	+ 4.2	- 7.7	+ 4.2	+ 3.4	+ 2.1	+ 0.8	- 11.9	- 2.3
Nov.	-	- 1	- 15.5	- 14.5	- 18.3	+ 0.1	- 18.4	+ 3.9	- 3.6	+ 0.5	- 0.3	+ 1.5	+ 0.9	- 4.1	+ 2.6
Dec.	- 1	-	- 16.0	- 7.8	- 14.4	+ 5.9	- 20.3	+ 6.6	- 10.6	- 9.6	+ 0.4	+ 1.2	- 10.1	- 1.0	+ 2.4
1999 Jan.	- 1	- 2	+ 15.7	+ 5.4	+ 8.4	+ 1.0	+ 7.4	- 3.0	+ 6.6	- 4.4	+ 0.7	+ 1.3	- 5.0	+ 11.0	+ 3.7

\* In this table "foreign" also includes the country of domicile of the foreign branches and foreign subsidiaries. Statistical alterations have been eliminated from the changes. The figures for the latest date are always to be regarded as provisional; subsequent alterations, which will appear in the following Monthly Report, are not specially marked. — 1 Several branches in a given country of domicile are regarded as a single branch. — 2 Up to December 1998, volume of business (balance sheet total plus endorsement liabilities arising from rediscounted bills and bills sent for collection from

the banks' portfolios prior to maturity); for foreign subsidiaries, volume of business even after 1998. — 3 For foreign branches: up to December 1998, including bill-based lending (bill holdings plus endorsement liabilities and bills sent for collection from the banks' portfolios prior to maturity); from 1999, including bill holdings; up to December 1998, including loans on a trust basis. For foreign subsidiaries, bill-based lending included even after 1998; up to December 1998, including loans on a trust basis (see

IV. Banks

Deposits <sup>8</sup>														Money market paper and debt securities outstanding <sup>10</sup>	Working capital and own funds	Other liabilities <sup>11</sup>	Period
of banks (MFIs)				of non-banks (non-MFIs)						Foreign non-banks							
Total	Total	German banks <sup>4</sup>	foreign banks	Total	German non-banks (non-MFIs) <sup>9</sup>												
					Total	Short-term		Medium and long-term									
							of which enterprises and individuals		of which enterprises and individuals								
End of year or month *														Foreign branches			
1,091.2	718.1	203.1	515.0	373.1	163.3	159.7	135.4	3.6	3.5	209.8	156.1	13.5	44.8	1996			
1,518.6	1,002.8	221.3	781.5	515.7	164.9	161.2	136.1	3.7	3.6	350.9	198.0	17.3	103.5	1997			
1,756.4	1,181.3	259.6	921.7	575.1	173.6	171.1	145.9	2.5	2.2	401.5	270.0	20.0	148.8	1998			
1,724.4	1,047.3	235.4	811.9	677.1	204.0	200.0	167.7	4.1	4.0	473.0	208.7	18.2	130.6	1998 June			
1,693.1	1,031.2	218.6	812.6	661.9	200.9	197.1	167.9	3.8	3.7	461.0	204.1	18.8	129.0	July			
1,697.3	1,041.3	222.2	819.1	656.0	195.7	191.7	161.8	4.0	3.8	460.4	210.1	19.0	125.1	Aug.			
1,667.8	1,016.7	218.3	798.3	651.1	201.8	197.7	168.7	4.1	3.8	449.3	218.7	23.8	135.1	Sep.			
1,827.2	1,153.1	227.9	925.1	674.2	211.0	205.5	178.4	5.5	5.2	463.2	235.0	24.0	145.6	Oct.			
1,880.9	1,235.8	264.9	971.0	645.1	200.7	197.0	167.7	3.7	3.4	444.4	258.3	24.1	133.5	Nov.			
1,756.4	1,181.3	259.6	921.7	575.1	173.6	171.1	145.9	2.5	2.2	401.5	270.0	20.0	148.8	Dec.			
913.7	610.4	126.3	484.1	303.2	81.1	79.8	69.8	1.3	1.2	222.2	158.7	10.4	45.2	1999 Jan.			
Changes *														Foreign subsidiaries			
+ 355.6	+238.8	+ 17.0	+221.8	+116.8	+ 0.2	+ 0.0	- 0.8	+ 0.1	+ 0.1	+116.6	+ 41.9	+ 3.9	+ 41.5	1997			
+ 278.4	+202.7	+ 39.3	+163.5	+ 75.6	+ 9.2	+ 10.4	+ 10.3	- 1.2	- 1.4	+ 66.5	+ 72.0	+ 2.7	+ 53.2	1998			
+ 14.6	- 13.9	+ 10.1	- 24.0	+ 28.5	- 2.1	- 2.3	- 5.0	+ 0.1	+ 0.1	+ 30.7	- 0.5	+ 0.1	+ 3.7	1998 June			
- 9.3	- 3.5	- 16.5	+ 13.0	- 5.8	- 2.9	- 2.6	+ 0.5	- 0.3	- 0.3	- 2.9	- 4.6	+ 0.7	+ 5.8	July			
+ 4.5	+ 10.9	+ 3.6	+ 7.3	- 6.4	- 5.2	- 5.4	- 6.1	+ 0.2	+ 0.2	- 1.2	+ 6.0	+ 0.2	- 4.7	Aug.			
+ 9.1	- 1.1	- 3.1	+ 2.0	+ 10.2	+ 6.6	+ 6.4	+ 7.3	+ 0.2	+ 0.0	+ 3.6	+ 8.6	+ 4.8	+ 18.8	Sep.			
+ 152.5	+131.8	+ 9.8	+122.0	+ 20.7	+ 9.2	+ 7.8	+ 9.7	+ 1.4	+ 1.4	+ 11.5	+ 16.3	+ 0.2	+ 2.9	Oct.			
+ 36.2	+ 72.0	+ 36.5	+ 35.4	- 35.8	- 10.6	- 8.8	- 11.0	- 1.8	- 1.8	- 25.2	+ 23.3	+ 0.1	- 12.3	Nov.			
- 122.1	- 52.4	- 5.0	- 47.4	- 69.7	- 27.1	- 25.8	- 21.8	- 1.2	- 1.2	- 42.7	+ 11.7	- 4.1	+ 11.0	Dec.			
+ 4.0	- 2.1	- 6.9	+ 4.8	+ 6.1	- 7.7	- 7.7	- 4.8	+ 0.1	+ 0.1	+ 13.7	+ 20.7	+ 0.1	- 35.0	1999 Jan.			
540.3	349.2	48.9	300.3	191.1	59.6	52.1	48.9	7.6	7.4	131.4	74.0	22.6	36.9	1996			
600.8	412.3	58.2	354.1	188.5	52.1	45.0	42.0	7.1	7.0	136.4	84.4	27.0	52.7	1997			
638.7	450.5	85.5	365.0	188.2	50.2	44.2	41.6	6.0	5.9	138.1	87.7	33.8	70.6	1998			
689.4	489.1	66.2	422.8	200.3	49.7	43.7	42.1	6.0	6.0	150.6	84.3	29.9	59.0	1998 June			
673.6	477.5	62.0	415.5	196.1	51.6	45.4	43.4	6.2	6.2	144.6	87.9	30.3	65.2	July			
675.2	475.3	64.1	411.3	199.9	51.2	44.9	42.6	6.3	6.3	148.7	90.2	30.2	65.2	Aug.			
674.7	482.7	70.9	411.7	192.1	48.9	42.5	40.3	6.4	6.4	143.2	84.3	30.0	66.0	Sep.			
681.2	488.8	77.7	411.1	192.5	50.4	44.0	41.9	6.5	6.5	142.1	81.6	30.1	66.2	Oct.			
664.1	474.0	80.5	393.5	190.1	48.7	42.9	41.1	5.7	5.7	141.5	83.3	30.8	70.2	Nov.			
638.7	450.5	85.5	365.0	188.2	50.2	44.2	41.6	6.0	5.9	138.1	87.7	33.8	70.6	Dec.			
331.7	243.3	50.5	192.8	88.4	22.5	21.5	21.2	1.0	0.9	65.9	45.9	17.0	48.2	1999 Jan.			
Changes *														Foreign subsidiaries			
+ 35.2	+ 46.0	+ 8.4	+ 37.6	- 10.8	- 8.4	- 7.8	- 7.6	- 0.6	- 0.5	- 2.4	+ 10.4	+ 4.4	+ 12.5	1997			
+ 51.6	+ 48.4	+ 28.1	+ 20.3	+ 3.2	- 1.4	- 0.4	- 0.0	- 1.0	- 1.1	+ 4.6	+ 3.2	+ 6.8	+ 17.9	1998			
- 6.4	- 3.0	+ 3.0	- 6.0	- 3.3	- 3.1	- 3.1	- 3.1	+ 0.0	+ 0.0	- 0.3	+ 1.7	+ 0.1	- 2.1	1998 June			
- 10.5	- 7.9	- 3.9	- 4.0	- 2.6	+ 2.0	+ 1.9	+ 1.4	+ 0.1	+ 0.1	- 4.6	+ 3.6	+ 0.4	+ 6.4	July			
+ 1.6	- 2.0	+ 2.1	- 4.1	+ 3.6	- 0.3	- 0.5	- 0.7	+ 0.1	+ 0.1	+ 3.9	+ 2.3	- 0.1	+ 0.1	Aug.			
+ 9.8	+ 15.0	+ 7.5	+ 7.5	- 5.2	- 2.0	- 2.1	- 2.0	+ 0.1	+ 0.1	- 3.2	- 6.0	- 0.1	+ 1.2	Sep.			
+ 8.7	+ 8.0	+ 6.8	+ 1.2	+ 0.7	+ 1.6	+ 1.5	+ 1.6	+ 0.1	+ 0.1	- 0.9	- 2.7	+ 0.1	- 0.9	Oct.			
- 22.3	- 18.9	+ 2.4	- 21.4	- 3.4	- 1.9	- 1.2	- 1.0	- 0.7	- 0.7	- 1.4	+ 1.8	+ 0.7	+ 4.3	Nov.			
- 23.4	- 21.8	+ 5.3	- 27.1	- 1.6	+ 1.6	+ 1.4	+ 0.6	+ 0.2	+ 0.2	- 3.2	+ 4.3	+ 3.0	+ 0.1	Dec.			
+ 18.3	+ 15.4	+ 7.5	+ 7.9	+ 3.0	- 1.4	- 1.1	- 0.1	- 0.3	- 0.3	+ 4.3	+ 1.1	- 0.3	- 3.4	1999 Jan.			

also footnote 7). — 4 In the case of foreign branches, from December 1993 including transactions with the head office and with other branches in Germany; in the case of foreign subsidiaries, including transactions with the parent institution. — 5 Treasury bills, Treasury discount paper and other money market paper, debt securities. — 6 Including own debt securities. — 7 From 1999, including loans on a trust basis. — 8 Up to December 1998, including liabilities arising from

loans on a trust basis (see also footnote 11). — 9 Excluding subordinated liabilities and non-negotiable debt securities and money market paper. — 10 Issues of negotiable and non-negotiable debt securities and money market paper. — 11 Including subordinated liabilities. From 1999, including liabilities arising from loans on a trust basis. — 12 See the note on the title page of Statistical Section (page 1\*) and the footnotes to the changed items.

## V. Minimum reserves

### 1. Reserve ratios Germany

% of liabilities subject to reserve requirements

Applicable from	Sight liabilities	Time liabilities	Savings deposits
1995 August 1	2	2	1.5

### European monetary union

% of reserve base 1

Applicable from	Ratio
1999 January 1	2

1 Article 3 of the ECB Regulation governing minimum reserves (excluding liabilities to which a reserve ratio of 0% applies, pursuant to article 4 (1)).

### 2. Reserve maintenance in Germany up to the end of 1998 – pursuant to the Minimum Reserves Order of the Bundesbank –

DM million

Monthly  
average 1

	Liabilities subject to reserve requirements				Required reserves 2	Actual reserves 3	Excess reserves 4		Shortfall, total
	Total	Sight liabilities	Time liabilities	Savings deposits			Level	as % of the required reserves	
1995 Dec.	2,066,565	579,337	519,456	967,772	36,492	37,337	845	2.3	3
1996 Dec.	2,201,464	655,483	474,342	1,071,639	38,671	39,522	851	2.2	4
1997 Dec.	2,327,879	734,986	476,417	1,116,477	40,975	41,721	745	1.8	3
1998 Dec.	2,576,889	865,444	564,878	1,146,567	45,805	46,432	627	1.4	4

1 Pursuant to sections 5 to 7 of the Minimum Reserves Order. — 2 Amount after applying the reserve ratios to the liabilities subject to reserve requirements (section 5 (1) of the Minimum Reserves Order). — 3 Average credit

balances of the credit institutions subject to reserve requirements on their giro accounts at the Bundesbank. — 4 Actual reserves less required reserves.

### 3. Reserve maintenance in the European monetary union – from 1999, pursuant to the ECB Regulation governing minimum reserves according to article 19.1 of the ECB/ESCB Statute –

Maintenance  
period  
beginning in 1

	Reserve base 2	Required reserves before deduction of lump-sum allowance 3	Lump-sum allowance 4	Required reserves after deduction of lump-sum allowance	Actual reserves 5	Excess reserves 6	Shortfall, total 7
<b>European monetary union (euro billion)</b>							
1999 Jan. r	4,947.1	.	.	98.3	99.3	1.0	0.1
Feb. p	5,057.7	.	.	100.6	101.5	0.9	0.1
Mar.	.	.	.	.	.	.	.
Apr.	.	.	.	.	.	.	.
May	.	.	.	.	.	.	.
June	.	.	.	.	.	.	.
July	.	.	.	.	.	.	.
Aug.	.	.	.	.	.	.	.
Sep.	.	.	.	.	.	.	.
<b>Of which: Germany (euro million)</b>							
1999 Jan. r	1,499,039	29,981	317	29,664	29,961	297	17
Feb. p	1,524,794	30,496	318	30,178	30,452	273	17
Mar.	.	.	.	.	.	.	.
Apr.	.	.	.	.	.	.	.
May	.	.	.	.	.	.	.
June	.	.	.	.	.	.	.
July	.	.	.	.	.	.	.
Aug.	.	.	.	.	.	.	.
Sep.	.	.	.	.	.	.	.

1 The reserve maintenance period of the ESCB minimum reserve system starts on the 24th of each month and ends on the 23rd of the following month (the first reserve maintenance period lasted from January 1, 1999 to February 23, 1999). — 2 Article 3 of the ECB Regulation governing minimum reserves (excluding liabilities to which a reserve ratio of 0% applies, pursuant to article 4 (1)). — 3 Amount after applying the reserve ratios to the

reserve base. — 4 Article 5 (2) of the ECB Regulation governing minimum reserves. — 5 Average credit balances of the credit institutions subject to minimum reserve requirements on their reserve accounts at the respective national central bank. — 6 Actual reserves less required reserves after the deduction of the lump-sum allowance. — 7 Required reserves after the deduction of the lump-sum allowance.

VI. Interest rates

1. ECB interest rates  
on standing facilities

% p.a.		
Applicable from	Interest rates for	
	Deposit facility	Marginal lending facility
1999 Jan. 1 <sup>1</sup>	2.00	4.50
Jan. 4	2.75	3.25
Jan. 22	2.00	4.50
Apr. 9	1.50	3.50

2. Discount and lombard rates  
of the Bundesbank

% p.a.		
Applicable from	Discount rate	Lombard rate 2, 3
1993 Feb. 5	8	9
Mar. 19	7 1/2	9
Apr. 23	7 1/4	8 1/2
July 2	6 3/4	8 1/4
July 30	6 3/4	7 3/4
Sep. 10	6 1/4	7 1/4
Oct. 22	5 3/4	6 3/4
1994 Feb. 18	5 1/4	6 3/4
Apr. 15	5	6 1/2
May 13	4 1/2	6
1995 Mar. 31	4	6
Aug. 25	3 1/2	5 1/2
Dec. 15	3	5
1996 Apr. 19	2 1/2	4 1/2
to		
1998 Dec. 31		

3. Base rate per Discount  
Rate Transition Act

% p.a.	
Applicable from	Base rate <sup>4</sup>
1999 Jan. 1	2.50

<sup>1</sup> On December 22, 1998 the European Central Bank (ECB) announced that at the beginning of Stage Three the interest rate for the deposit facility would be set at a level of 2.00 % and the interest rate for the marginal lending facility at a level of 4.50 %. As a transitional measure – between January 4 and 21, 1999 – a narrow band of 50 basis points was applied by way of exception. This was designed to ease the transition to the new system for market participants. — <sup>2</sup> From August 1, 1990 to December 31, 1993 this was also the rate for cash advances; since January 1, 1994 cash advances have no longer been granted. Wherever reference is made in an Act to the interest rate applicable for cash advances of the Federal Government, the rate will be replaced by the base rate increased by 1.5 percentage points pursuant to the Discount Rate Transition Act (see footnote 4). — <sup>3</sup> Pursuant to the Discount Rate Transition Act, read in conjunction with the Lombard

Rate Transition Regulation, the lombard rate is replaced from January 1, 1999 by the rate applied by the ECB for its marginal lending facility wherever the lombard rate is used as a reference variable for interest and other payments. — <sup>4</sup> Pursuant to the Discount Rate Transition Act, read in conjunction with Regulation Governing the Use of the Base Rate as a Reference Variable, this rate replaces the discount rate from January 1, 1999 until December 31, 2001 wherever the latter is used in contracts and regulations as a reference variable for interest and other payments. This base rate is the discount rate of the bundesbank which applied on December 31, 1998. It changes from January 1, May 1 and September 1 of each year, and will change for the first time on May 1, 1999 if the interest rate applied by the ECB to its longer-term refinancing operations has changed by at least 0.5 percentage points.

4. Eurosystem monetary policy operations executed through tenders \*  
Main refinancing operations

Date of settlement	Bids Amount	Allotment Amount	Fixed rate tenders		Variable rate tenders		Running for ... days
			Fixed rate	Marginal rate	Weighted average rate		
EUR millions			% . p.a.				
1999 Jan. 7	481,625	75,000	3.00	—	—	—	13
Jan. 13	563,409	48,000	3.00	—	—	—	14
Jan. 20	593,418	59,000	3.00	—	—	—	14
Jan. 27	689,467	69,000	3.00	—	—	—	14
Feb. 3	757,724	62,000	3.00	—	—	—	14
Feb. 10	911,302	65,000	3.00	—	—	—	14
Feb. 17	896,138	62,000	3.00	—	—	—	14
Feb. 24	991,109	78,000	3.00	—	—	—	14
Mar. 3	1,100,797	67,000	3.00	—	—	—	14
Mar. 10	950,369	75,000	3.00	—	—	—	14
Mar. 17	335,249	44,000	3.00	—	—	—	14
Mar. 24	372,647	102,000	3.00	—	—	—	14
Mar. 31	118,683	39,000	3.00	—	—	—	14
Apr. 7	67,353	67,353	3.00	—	—	—	14
Apr. 14	781,721	67,000	2.50	—	—	—	14

Longer-term refinancing operations

Date of settlement	Bids Amount	Allotment Amount	Fixed rate tenders		Variable rate tenders		Running for ... days
			Fixed rate	Marginal rate	Weighted average rate		
EUR millions			% . p.a.				
1999 Jan. 14	79,846	15,000	—	—	3.13	—	42
Jan. 14	39,343	15,000	—	—	3.10	—	70
Jan. 14	46,152	15,000	—	—	3.08	—	105
Feb. 25	77,300	15,000	—	—	3.04	—	91
Mar. 25	53,659	15,000	—	—	—	2.97	98

\* Source: ECB.

VI. Interest rates

5. Money market rates, by month

% p.a.

Period	Money market rates reported by Frankfurt banks 1				FIBOR 2, 3					Old-style FIBOR 2, 4	
	Day-to-day money		Three-month funds		Day-to-day money (overnight)	One-month funds	Three-month funds	Six-month funds	Twelve-month funds	Three-month funds	Six-month funds
	Monthly averages	Lowest and highest rates	Monthly averages	Lowest and highest rates	Monthly averages						
1998 Mar.	3.45	3.36 - 4.15	3.50	3.45 - 3.58	3.49	3.48	3.52	3.60	3.77	3.60	3.68
Apr.	3.41	3.25 - 3.52	3.61	3.55 - 3.65	3.44	3.57	3.63	3.73	3.93	3.68	3.79
May	3.41	3.34 - 3.70	3.60	3.52 - 3.64	3.44	3.55	3.63	3.73	3.94	3.71	3.81
June	3.47	3.38 - 4.40	3.54	3.51 - 3.57	3.51	3.48	3.56	3.66	3.88	3.65	3.74
July	3.39	2.50 - 4.20	3.52	3.48 - 3.55	3.43	3.49	3.54	3.64	3.82	3.62	3.72
Aug.	3.48	3.32 - 4.50	3.48	3.43 - 3.51	3.51	3.46	3.50	3.59	3.73	3.57	3.68
Sep.	3.48	3.36 - 4.40	3.46	3.42 - 3.55	3.51	3.46	3.49	3.56	3.59	3.51	3.58
Oct.	3.41	3.38 - 3.70	3.54	3.50 - 3.59	3.44	3.50	3.57	3.55	3.50	3.65	3.60
Nov.	3.42	3.38 - 3.65	3.61	3.55 - 3.65	3.44	3.54	3.63	3.59	3.53	3.72	3.60
Dec.	3.14	2.96 - 4.00	3.36	3.17 - 3.64	3.17	3.43	3.38	3.29	3.25	3.39	3.33
					EURIBOR 7						
					One-week funds	One-month funds	Three-month funds	Six-month funds	Nine-month funds	Twelve-month funds	
					Monthly averages						
1999 Jan.	3.14	2.96 - 3.28	3.11	3.02 - 3.21	3.14	3.17	3.16	3.13	3.09	3.07	3.06
Feb.	3.11	3.00 - 3.20	3.07	3.03 - 3.11	3.12	3.13	3.13	3.09	3.04	3.03	3.03
Mar.	2.93	2.05 - 3.13	3.03	2.94 - 3.11	2.93	3.05	3.05	3.05	3.02	3.02	3.05

1 Money market rates are not fixed or quoted officially; the monthly averages computed from daily quotations are unweighted. — 2 Frankfurt Interbank Offered Rate. Pursuant to the Discount Rate Transition Act, read in conjunction with the FIBOR Transition Regulation, these FIBOR rates have been replaced as a reference variable for interest and other payments by the corresponding EURIBOR rates (old-style FIBOR rates are additionally adjusted by applying a conversion factor). — 3 Day-to-day money (overnight): since July 1, 1996 rate ascertained by Telerate; time deposits: from July 2, 1990 until December 30, 1998 rate ascertained by Telerate on a broader basis than before and calculated by the method of computing interest on the

basis of act/360. — 4 Rate calculated since August 1985 by Privatdiskont AG, and from January 1996 until December 30, 1998 by Telerate, by the method of computing interest on the basis of 360/360 days (from July 1990 only as a basis for maturing transactions). — 5 At the end of December 3.50% to 4.00%. — 6 Euro OverNight Index Average: weighted average overnight rate for interbank operations calculated by the European Central Bank since January 4, 1999 on the basis of real turnover according to the act/360 method and published via Bridge Telerate. — 7 Euro Interbank Offered Rate: unweighted average rate calculated by Bridge Telerate since December 30, 1998 according to the act/360 method.

6. Euro area retail bank interest rates \*, °

% p.a.; period averages; lending interest rates are provisional

Period	Deposit interest rates					Lending interest rates				
	Overnight	With agreed maturity			Redeemable at notice		To enterprises		To households	
		Up to 1 year	Up to 2 years	Over 2 years	Up to 3 months	Over 3 months	Up to 1 year	Over 1 year	Consumer lending	For house purchase
1996	1.94	4.09	4.69	5.04	3.05	3.16	8.64		11.03	7.76
1997	1.47	3.41	3.63	4.40	2.80	3.09	7.27	6.69	9.97	6.81
1998	1.11	3.20	3.22	4.06	2.61	3.25	6.42	5.94	9.39	5.98
1998 Feb.	1.25	3.32	3.36	4.31	2.76	3.30	6.76	6.30	9.69	6.41
Mar.	1.25	3.30	3.33	4.26	2.74	3.32	6.73	6.19	9.63	6.31
Apr.	1.20	3.27	3.30	4.26	2.71	3.30	6.62	6.12	9.49	6.17
May	1.12	3.24	3.26	4.27	2.71	3.33	6.55	6.09	9.46	6.15
June	1.12	3.27	3.28	4.19	2.58	3.34	6.47	6.04	9.46	6.08
July	1.08	3.25	3.26	4.15	2.56	3.29	6.35	6.00	9.39	5.94
Aug.	1.06	3.23	3.24	4.05	2.55	3.30	6.31	5.91	9.39	5.88
Sep.	1.05	3.17	3.18	3.88	2.53	3.21	6.30	5.78	9.37	5.75
Oct.	1.04	3.12	3.13	3.75	2.49	3.14	6.19	5.65	9.15	5.58
Nov.	0.94	3.06	3.05	3.70	2.48	3.12	6.07	5.57	9.03	5.52
Dec.	0.87	2.81	2.81	3.56	2.44	3.03	5.91	5.26	8.92	5.38
1999 Jan.	0.79	2.67	2.67	3.43	2.36	2.86	5.77	5.17	8.89	5.20
Feb.	0.74	2.60	2.59	3.38	2.33	2.78	5.68	5.09	8.82	5.12

\* These euro area retail bank interest rates should be used with caution and for statistical purposes only, primarily for analysing their development over time rather than their level. They are calculated as the weighted average of national interest rates provided by the national central banks. The national rates represent those rates that are currently available from national sources and which are judged to fit the standard categories. These national rates have been aggregated to derive information for the euro area, in some cases relying on proxies and working assumptions due to the heterogeneity observed in the national financial instruments across MU

Member States. Furthermore, the national interest rates are not harmonised in terms of their coverage (new business and/or outstanding amounts), the nature of the data (nominal or effective) or the compilation method. The country weights for the euro area retail bank interest rates are derived from the monthly MFI balance sheet statistics or close proxies. The weights reflect the country-specific proportions of the relevant instruments within the euro area, measured as outstanding amounts. The weights are adjusted monthly, so that interest rates and weights always refer to the same month.

° Tables and notes taken from the ECB.

VI. Interest rates

7. Lending and deposit rates of banks (MFIs) in Germany \*  
Lending rates

% p.a.

Reporting period 1	Current account credit						Bills discounted	
	less than DM 200,000		DM 200,000 and more but less than DM 1 million		DM 1 million and more but less than DM 5 million		Bills of less than DM 100,000 rediscountable at the Bundesbank	
	Average interest rate	Spread	Average interest rate	Spread	Average interest rate	Spread	Average interest rate	Spread
1998 May	10.02	7.75 - 11.75	9.05	6.90 - 11.25	7.68	6.00 - 10.50	4.72	3.10 - 7.00
June	10.03	7.75 - 11.75	9.00	6.50 - 11.25	7.65	6.00 - 10.50	4.73	3.10 - 7.00
July	10.03	7.75 - 11.75	9.02	6.90 - 11.25	7.65	6.00 - 10.50	4.75	3.15 - 7.00
Aug.	9.99	7.75 - 11.75	9.00	6.75 - 11.25	7.59	6.00 - 10.50	4.76	3.15 - 7.00
Sep.	9.99	7.75 - 11.75	8.99	6.75 - 11.25	7.65	6.00 - 10.50	4.73	3.15 - 7.00
Oct.	9.98	7.75 - 11.75	8.98	6.75 - 11.50	7.58	6.00 - 10.50	4.77	3.20 - 7.00
Nov.	9.97	7.75 - 11.75	8.95	6.75 - 11.25	7.57	6.00 - 10.50	4.88	3.25 - 7.25
Dec.	9.94	7.75 - 11.75	8.89	6.50 - 11.25	7.56	6.00 - 10.50	4.94	3.25 - 7.00
1999 Jan.	9.93	7.75 - 11.75	8.87	6.75 - 11.25	7.54	6.00 - 10.50	5.26	3.50 - 8.25
Feb.	9.92	7.50 - 11.75	8.89	6.75 - 11.25	7.53	6.00 - 10.50	5.32	3.50 - 8.50
Mar.	9.89	7.50 - 11.75	8.86	6.75 - 11.25	7.52	5.80 - 10.50	5.36	3.75 - 8.50

Reporting period 1	Personal credit lines (overdraft facilities granted to individuals)										
	Instalment credits						Long-term fixed-rate loans to enterprises and self-employed persons (excluding lending to the housing sector) 5				
	DM 10,000 and more but not more than DM 30,000 2		DM 200,000 and more but less than DM 1 million		DM 1 million and more but less than DM 10 million		Effective interest rate				
Monthly rate 3		Effective annual interest rate 4		Effective interest rate							
Average interest rate	Spread	Average interest rate	Spread	Average interest rate	Spread	Average interest rate	Spread	Average interest rate	Spread	Average interest rate	Spread
1998 May	11.26	9.75 - 12.25	0.41	0.32 - 0.49	10.60	8.42 - 12.63	6.44	5.54 - 7.91	6.18	5.47 - 7.61	
June	11.26	9.75 - 12.25	0.41	0.32 - 0.49	10.65	8.42 - 12.63	6.38	5.49 - 7.91	6.14	5.30 - 7.61	
July	11.25	9.75 - 12.25	0.41	0.34 - 0.49	10.76	8.90 - 12.63	6.33	5.46 - 7.91	6.12	5.30 - 7.60	
Aug.	11.24	9.75 - 12.25	0.41	0.34 - 0.49	10.69	8.86 - 12.59	6.24	5.25 - 7.91	6.01	5.20 - 7.39	
Sep.	11.26	9.75 - 12.25	0.41	0.32 - 0.49	10.63	8.42 - 12.63	6.08	5.04 - 7.88	5.83	4.96 - 7.25	
Oct.	11.23	9.75 - 12.25	0.40	0.32 - 0.49	10.49	8.42 - 12.63	5.99	4.95 - 7.77	5.72	4.70 - 7.23	
Nov.	11.23	9.75 - 12.25	0.40	0.32 - 0.49	10.43	8.26 - 12.73	5.94	4.84 - 7.75	5.69	4.70 - 7.39	
Dec.	11.22	9.75 - 12.25	0.40	0.31 - 0.49	10.42	8.20 - 12.61	5.79	4.55 - 7.75	5.50	4.49 - 7.10	
1999 Jan.	11.22	9.75 - 12.25	0.39	0.31 - 0.49	10.36	8.20 - 12.58	5.56	4.45 - 7.50	5.34	4.39 - 6.80	
Feb.	11.22	9.75 - 12.25	0.39	0.31 - 0.48	10.30	8.20 - 12.58	5.54	4.50 - 7.50	5.27	4.32 - 6.72	
Mar.	11.22	9.75 - 12.25	0.39	0.31 - 0.48	10.29	8.17 - 12.58	5.59	4.55 - 7.60	5.35	4.47 - 6.80	

Reporting period 1	Mortgage loans secured by residential real estate							
	with interest rates fixed (effective interest rate) 6						with variable interest rates (effective interest rate) 6	
	for 2 years		for 5 years		for 10 years		with variable interest rates (effective interest rate) 6	
Average interest rate	Spread	Average interest rate	Spread	Average interest rate	Spread	Average interest rate	Spread	
1998 May	5.42	5.03 - 5.96	5.64	5.40 - 6.06	6.07	5.85 - 6.52	6.14	5.12 - 7.61
June	5.38	5.01 - 5.91	5.58	5.38 - 6.06	6.00	5.80 - 6.43	6.14	5.12 - 7.61
July	5.35	4.96 - 5.91	5.53	5.33 - 6.06	5.93	5.75 - 6.38	6.11	5.12 - 7.61
Aug.	5.28	4.89 - 5.91	5.41	5.17 - 5.91	5.81	5.60 - 6.31	6.08	5.07 - 7.61
Sep.	5.05	4.59 - 5.75	5.19	4.80 - 5.85	5.63	5.36 - 6.28	5.98	4.91 - 7.50
Oct.	4.88	4.44 - 5.64	5.02	4.70 - 5.75	5.49	5.22 - 6.12	5.88	4.76 - 7.50
Nov.	4.87	4.44 - 5.57	4.99	4.73 - 5.64	5.48	5.27 - 6.01	5.86	4.76 - 7.23
Dec.	4.70	4.18 - 5.48	4.80	4.47 - 5.64	5.29	5.01 - 5.91	5.78	4.60 - 7.23
1999 Jan.	4.52	4.01 - 5.38	4.60	4.31 - 5.38	5.11	4.91 - 5.61	5.67	4.41 - 7.18
Feb.	4.46	4.01 - 5.12	4.53	4.23 - 5.12	5.05	4.80 - 5.54	5.61	4.35 - 7.16
Mar.	4.51	4.01 - 5.07	4.64	4.32 - 5.16	5.20	4.80 - 5.54	5.63	4.40 - 7.01

\* The average rates are calculated as unweighted arithmetic means from the interest rates reported to be within the spread. The spread is ascertained by eliminating the reports in the top 5% and the bottom 5% of the interest rate range. The figures for the latest date are always to be regarded as provisional; subsequent alterations, which will appear in the following Monthly Report, are not specially marked. — 1 Second and third weeks of the months indicated. — 2 With maturities between 36 months and 60 months. — 3 Interest rates as % per month of original amount of credit taken up. Besides interest, most banks charge a one-off processing fee (generally 2%, in some cases 3%, of the credit amount). — 4 Calculated on the basis of reported monthly rates (see footnote 3) and reported annual

rates on the respective amount of debt and on the basis of the respective processing fees, taking due account of reported maturities. — 5 Lending to enterprises (with agreed maturities of more than five years) with agreed interest rates locked in for more than five years. Up to and including December 1998: with agreed maturities and interest rates locked in for four years and more. — 6 The figures refer to the time when the contract was concluded and not to the entire duration of the contract. The calculation of the effective interest rate is based on an annual redemption rate of 1% plus interest saved; the repayment conditions agreed upon in each case by the credit institutions involved are taken into account (at present mostly monthly payment and inclusion).

VI. Interest rates

7. Lending and deposit rates of banks (MFIs) in Germany \* (cont'd)  
Deposit rates

% p.a.

Reporting period 1	Higher-yielding sight deposits of individuals 7									
	Time deposits with agreed maturities									
			of 1 month				of 3 months			
		less than DM 100,000		DM 100,000 and more but less than DM 1 million		DM 1 million and more but less than DM 5 million		DM 100,000 and more but less than DM 1 million		
Average interest rate	Spread	Average interest rate	Spread	Average interest rate	Spread	Average interest rate	Spread	Average interest rate	Spread	
1998 May	1.98	0.50 - 3.00	2.57	2.01 - 3.00	2.91	2.50 - 3.25	3.17	2.75 - 3.50	3.02	2.50 - 3.35
June	2.00	0.50 - 3.00	2.54	2.00 - 3.00	2.89	2.45 - 3.25	3.14	2.75 - 3.40	3.02	2.50 - 3.40
July	1.99	0.50 - 3.00	2.55	2.00 - 3.00	2.89	2.50 - 3.25	3.14	2.75 - 3.40	3.01	2.50 - 3.38
Aug.	2.01	0.50 - 3.00	2.54	2.00 - 3.00	2.88	2.40 - 3.25	3.14	2.70 - 3.40	2.99	2.50 - 3.35
Sep.	2.00	0.50 - 3.00	2.52	2.00 - 3.00	2.87	2.50 - 3.20	3.11	2.70 - 3.35	2.96	2.50 - 3.30
Oct.	1.98	0.50 - 3.00	2.54	2.10 - 3.00	2.87	2.45 - 3.20	3.13	2.70 - 3.40	2.98	2.50 - 3.30
Nov.	1.99	0.50 - 3.00	2.53	2.00 - 3.00	2.87	2.50 - 3.25	3.12	2.70 - 3.40	3.00	2.50 - 3.40
Dec.	1.98	0.50 - 3.00	2.51	2.00 - 3.00	2.85	2.40 - 3.20	3.09	2.65 - 3.40	2.90	2.50 - 3.29
1999 Jan.	1.93	0.50 - 3.00	2.40	2.00 - 2.85	2.72	2.30 - 3.00	2.94	2.50 - 3.20	2.76	2.30 - 3.13
Feb.	1.90	0.50 - 3.00	2.33	1.90 - 2.75	2.63	2.25 - 3.00	2.82	2.50 - 3.10	2.70	2.25 - 3.00
Mar.	1.88	0.50 - 2.80	2.33	1.90 - 2.75	2.64	2.25 - 2.90	2.84	2.50 - 3.10	2.70	2.30 - 3.00

Reporting period 1	Bank savings bonds with regular interest payments									
	Savings deposits									
			with minimum rates of return 8		with higher rates of return 9 (without a duration of contract being agreed)		with agreed notice of 3 months		with agreed notice of 3 months	
				less than DM 10,000		DM 10,000 and more but less than DM 20,000		DM 20,000 and more but less than DM 50,000		
Average interest rate	Spread	Average interest rate	Spread	Average interest rate	Spread	Average interest rate	Spread	Average interest rate	Spread	
1998 May	4.23	3.81 - 4.55	1.57	1.50 - 2.00	2.42	1.75 - 3.00	2.63	2.00 - 3.25	2.79	2.25 - 3.38
June	4.21	3.80 - 4.50	1.57	1.50 - 2.00	2.42	1.75 - 3.04	2.63	2.00 - 3.25	2.78	2.25 - 3.38
July	4.19	3.75 - 4.50	1.56	1.50 - 2.00	2.41	1.75 - 3.04	2.62	2.00 - 3.25	2.77	2.25 - 3.30
Aug.	4.09	3.71 - 4.50	1.55	1.50 - 2.00	2.41	1.75 - 3.00	2.60	2.00 - 3.23	2.75	2.25 - 3.25
Sep.	3.88	3.40 - 4.50	1.54	1.50 - 2.00	2.37	1.75 - 3.00	2.56	2.00 - 3.10	2.72	2.25 - 3.25
Oct.	3.69	3.25 - 4.25	1.53	1.25 - 2.00	2.35	1.75 - 3.00	2.55	2.00 - 3.10	2.71	2.25 - 3.25
Nov.	3.64	3.25 - 4.25	1.52	1.25 - 2.00	2.36	1.75 - 3.34	2.55	2.00 - 3.09	2.71	2.20 - 3.20
Dec.	3.49	3.00 - 4.10	1.51	1.25 - 2.25	2.32	1.75 - 3.00	2.51	2.00 - 3.09	2.67	2.20 - 3.15
1999 Jan.	3.30	3.00 - 4.00	1.49	1.25 - 2.00	2.23	1.50 - 3.00	2.42	2.00 - 3.00	2.57	2.00 - 3.00
Feb.	3.20	2.87 - 3.90	1.45	1.00 - 2.00	2.19	1.50 - 2.85	2.37	1.80 - 2.80	2.51	2.00 - 3.00
Mar.	3.21	2.90 - 3.75	1.41	1.00 - 2.00	2.16	1.50 - 3.00	2.34	1.75 - 2.85	2.48	2.00 - 3.00

Reporting period 1	Savings deposits with higher rates of return 9 and with duration of contract being agreed for DM 20,000 and more but less than DM 50,000 (total rate of return) 10									
	with agreed notice of 3 months and a duration of contract of									
	up to and including 1 year		more than 1 year and up to and including 4 years		more than 4 years		up to and including 1 year		more than 4 years	
Average interest rate	Spread	Average interest rate	Spread	Average interest rate	Spread	Average interest rate	Spread	Average interest rate	Spread	
1998 May	3.23	2.68 - 3.75	3.86	3.00 - 4.83	4.51	3.30 - 5.75	3.33	2.50 - 3.80	4.31	3.40 - 4.79
June	3.23	2.60 - 3.75	3.88	3.00 - 4.70	4.50	3.30 - 5.60	3.34	2.70 - 3.80	4.31	3.40 - 4.75
July	3.22	2.68 - 3.75	3.82	3.00 - 4.31	4.46	3.30 - 5.60	3.29	2.70 - 3.65	4.28	3.40 - 4.79
Aug.	3.19	2.70 - 3.75	3.71	2.80 - 4.25	4.37	3.10 - 5.60	3.30	2.70 - 3.75	4.18	3.40 - 4.79
Sep.	3.11	2.60 - 3.50	3.60	3.00 - 4.25	4.27	3.10 - 5.60	3.21	2.70 - 3.50	4.07	3.45 - 4.79
Oct.	3.06	2.50 - 3.50	3.48	2.77 - 4.25	4.11	3.10 - 5.60	3.14	2.70 - 3.50	3.86	3.00 - 4.65
Nov.	3.05	2.50 - 3.50	3.47	2.77 - 4.25	4.09	3.33 - 5.60	3.12	2.50 - 3.50	3.84	3.10 - 4.58
Dec.	2.96	2.45 - 3.50	3.34	2.53 - 4.00	4.00	3.10 - 5.40	3.03	2.50 - 3.50	3.70	3.10 - 4.58
1999 Jan.	2.85	2.35 - 3.30	3.10	2.50 - 4.00	3.96	2.90 - 5.40	2.86	2.50 - 3.25	3.47	2.78 - 4.58
Feb.	2.75	2.25 - 3.25	3.01	2.43 - 4.00	3.90	2.85 - 5.40	2.78	2.25 - 3.00	3.32	2.82 - 4.58
Mar.	2.73	2.25 - 3.25	2.98	2.50 - 4.00	3.89	2.90 - 5.32	2.79	2.25 - 3.25	3.30	2.75 - 4.58

For footnotes \*,1 to 6 see page 43\*. — 7 Only such interest rates are taken into account as are above the relevant standard terms of the banks included in the survey. — 8 Only a minimum rate of return is granted, but no premium or bonus. — 9 An interest rate above the minimum rate of return

and/or a premium or a bonus is granted. — 10 Rate of return which is paid when savings plans are held until maturity or when savings objectives have been achieved.

VI. Interest rates

8. Selected central bank rates abroad

Country/Interest rate	New rate		Previous rate		Country/Interest rate	New rate		Previous rate	
	% p.a.	Applicable from	% p.a.	Applicable from		% p.a.	Applicable from	% p.a.	Applicable from
<b>1. EU-countries <sup>1</sup></b>					<b>3. Non-European countries</b>				
Denmark					Canada <sup>4</sup>				
Discount rate	2 3/4	Apr. 9, '99	3 1/4	Feb. 4, '99	Discount rate	5	Mar. 31, '99	5 1/4	Nov. 18, '98
Repurchase/CD selling rate	2.90	Apr. 9, '99	3.40	Mar. 1, '99	Japan				
Greece					Discount rate	1/2	Sep. 8, '95	1	Apr. 14, '95
Deposit rate <sup>2</sup>	11.50	Jan. 14, '99	11.60	Dec. 10, '98	United States				
Repurchase rate	12	Jan. 13, '99	12 1/4	Dec. 9, '98	Discount rate	4 1/2	Nov. 17, '98	4 3/4	Oct. 15, '98
Lombard rate	13 1/2	Jan. 14, '99	15 1/2	Dec. 10, '98	Federal funds rate <sup>5</sup>	4 3/4	Nov. 17, '98	5	Oct. 15, '98
Sweden									
Deposit rate	2 3/4	Feb. 17, '99	3 1/4	Nov. 12, '98					
Repurchase rate	2.90	Mar. 25, '99	3.15	Feb. 17, '99					
Lombard rate	4 1/4	Feb. 17, '99	4 3/4	Nov. 12, '98					
United Kingdom									
Repurchase rate <sup>3</sup>	5 1/4	Apr. 8, '99	5 1/2	Feb. 4, '99					
<b>2. Switzerland</b>									
Discount rate	1/2	Apr. 9, '99	1	Sep. 27, '96					

<sup>1</sup> Only those member countries which are not participating in the euro area for the time being. — <sup>2</sup> Basic tranche. — <sup>3</sup> Bank of England key rate. —

<sup>4</sup> Bank of Canada's ceiling rate for call money. — <sup>5</sup> Rate targeted for inter-bank trade in central bank money.

9. Money market rates abroad

Monthly or weekly averages of daily figures <sup>1</sup>  
% p.a.

Month or week	London		New York		Tokyo		Zurich	Hong Kong		Euro-Dollar market			Memorandum item			
	Day-to-day money <sup>2</sup>	Treasury bills (three months) Tender rate <sup>3</sup>	Federal funds <sup>4</sup>	Treasury bills (three months) Tender rate <sup>3</sup>	Day-to-day money	Gensaki rate (three months)	Three-month funds <sup>5</sup>	Day-to-day money <sup>6</sup>	Exchange fund bills <sup>7</sup>	Day-to-day money <sup>8</sup>	One-month funds <sup>9</sup>	Three-month funds <sup>9</sup>	US\$/DM Euro/US-\$	£/DM Euro/£		
1997 Jan.	5.94	6.01	5.25	5.05	0.48	0.26	1.09	4.87	4.53	5.30	5.40	5.51	-	2.39	-	3.19
Feb.	6.10	5.81	5.19	5.00	0.50	0.24	1.09	5.28	4.69	5.29	5.33	5.41	-	2.26	-	2.99
Mar.	5.86	5.92	5.39	5.14	0.51	0.25	1.28	5.27	5.04	5.38	5.41	5.55	-	2.32	-	2.93
Apr.	5.98	6.09	5.51	5.17	0.50	0.29	1.19	5.65	5.36	5.56	5.61	5.73	-	2.57	-	3.13
May	6.20	6.15	5.50	5.13	0.49	0.30	0.63	5.57	5.40	5.55	5.59	5.74	-	2.62	-	3.27
June	6.40	6.37	5.56	4.92	0.50	0.32	0.78	5.65	5.66	5.59	5.58	5.72	-	2.63	-	3.53
July	6.68	6.58	5.51	5.06	0.49	0.36	0.94	5.79	6.01	5.54	5.58	5.66	-	2.53	-	3.78
Aug.	6.88	6.84	5.54	5.13	0.49	0.36	0.81	6.50	6.61	5.54	5.54	5.65	-	2.40	-	3.87
Sep.	6.93	6.89	5.54	4.97	0.50	0.33	0.88	6.76	6.51	5.60	5.58	5.62	-	2.39	-	3.90
Oct.	6.91	6.94	5.50	4.95	0.48	0.33	1.31	11.23	8.63	5.53	5.58	5.68	-	2.15	-	3.67
Nov.	7.11	7.09	5.52	5.15	0.49	0.31	1.38	5.43	9.11	5.59	5.64	5.80	-	2.08	-	3.77
Dec.	7.17	7.02	5.50	5.16	0.39	0.23	1.00	4.53	7.39	5.60	5.85	5.82	-	2.12	-	3.84
1998 Jan.	7.13	6.80	5.56	5.09	0.44	0.24	0.71	7.06	9.47	5.53	5.54	5.58	-	2.05	-	3.89
Feb.	7.15	6.88	5.51	5.11	0.43	0.26	0.46	4.68	7.02	5.54	5.54	5.58	-	2.09	-	3.93
Mar.	7.09	6.98	5.49	5.03	0.43	0.26	0.77	4.43	6.30	5.53	5.58	5.58	-	2.12	-	3.91
Apr.	7.09	7.02	5.45	5.00	0.44	0.27	0.88	4.47	5.84	5.55	5.55	5.65	-	2.02	-	3.78
May	7.13	6.99	5.49	5.03	0.43	0.28	1.08	5.13	6.47	5.53	5.58	5.63	-	2.04	-	3.76
June	7.47	7.29	5.56	4.99	0.44	0.28	1.44	6.72	9.07	5.61	5.56	5.63	-	2.09	-	4.04
July	7.29	7.22	5.54	4.96	0.41	0.29	1.31	5.78	7.86	5.58	5.59	5.63	-	2.14	-	4.13
Aug.	7.37	7.19	5.55	4.94	0.43	0.29	1.00	9.84	9.78	5.56	5.59	5.63	-	2.14	-	4.11
Sep.	7.44	6.95	5.51	4.74	0.32	0.18	0.84	5.83	8.37	5.58	5.52	5.45	-	2.00	-	3.89
Oct.	7.44	6.54	5.07	4.08	0.24	0.11	0.50	4.52	6.33	5.30	5.27	5.22	-	1.69	-	3.52
Nov.	6.55	6.31	4.83	4.44	0.20	0.11	0.94	4.61	5.60	5.13	5.20	5.28	-	1.67	-	3.21
Dec.	6.21	5.71	4.68	4.42	0.25	0.12	0.69	4.23	5.22	4.95	5.54	5.20	-	1.89	-	3.04
1999 Jan.	5.87	5.28	4.63	4.34	0.23	0.14	0.56	4.09	5.64	4.79	4.98	5.00	+	1.85	+	2.61
Feb.	5.63	5.08	4.76	4.45	0.18	0.13	0.56	4.99	5.63	4.74	4.94	5.00	+	1.87	+	2.27
Mar. p	5.43	5.07	4.81	4.48	0.04	0.08	0.56	4.56	5.28	4.83	4.94	5.01	+	1.95	+	2.24
week ending P																
1999 Feb. 26	5.64	5.19	4.75	4.53	0.12	0.11	0.56	5.51	5.64	4.80	4.95	5.01	+	1.90	+	2.24
Mar. 5	5.65	5.21	4.85	4.57	0.05	0.11	.	4.99	5.41	4.85	4.97	5.03	+	1.90	+	2.23
12	5.33	5.12	4.80	4.51	0.04	0.08	.	4.15	5.24	4.79	4.94	5.00	+	1.91	+	2.26
19	5.25	5.08	4.79	4.47	0.03	0.07	.	3.66	5.17	4.79	4.94	5.00	+	1.92	+	2.23
26	5.49	4.87	4.79	4.38	0.03	0.07	0.56	4.99	5.29	4.81	4.94	5.00	+	2.01	+	2.25

<sup>1</sup> Unless stated otherwise. — <sup>2</sup> Overnight money rate in the interbank market. — <sup>3</sup> Months: average of the tender rates in the weekly Treasury bill auctions; weeks: average of the tender rates on the day of issue. — <sup>4</sup> Weekly average (Thursday to Wednesday) — <sup>5</sup> Three month deposits with big banks in Zurich; months: average of end-of-month figures. Figure for the fourth week is that for the last day of the month. — <sup>6</sup> Hong Kong dollar-denominated Hong Kong Interbank Offered Rates (HIBOR). — <sup>7</sup> Money market paper issued regularly by the Hong Kong Monetary Authority; maturity of 91 days. — <sup>8</sup> From January 1999 rates for overnight

deposits. — <sup>9</sup> From January 1999 US dollar-denominated London Interbank Offered Rate (LIBOR). Previously the rates were based on quotations reported by Frankfurt and Luxemburg banks. — <sup>10</sup> Rates for three-month contracts. Owing to the indirect quotation, the forward points between the euro and the foreign currency for the repurchase date of the swap are calculated in the foreign currency as from January 1999; previously the calculation was expressed in DM. As a result the previous discount (-) changes into a premium (+).



## VII. Capital market

### 1. Sales and purchases of debt securities and shares in Germany \*)

Debt securities											
Period	Sales						Purchases				
	Sales = total purchases	Domestic debt securities 1				Foreign debt securities 3	Residents				Non-residents 7
		Total	Bank debt securities	Industrial bonds	Public debt securities 2		Total 4	Credit institutions including building and loan assoc. 5	Non-banks 6	Bundesbank open market operations 5	
DM million											
1986	103,497	87,485	29,509	200	57,774	16,012	45,927	31,192	13,667	1,068	57,570
1987	112,285	88,190	28,448	27	59,768	24,095	78,193	45,305	33,599	711	34,093
1988	88,425	35,100	11,029	100	46,228	53,325	86,657	36,838	49,417	402	1,769
1989	118,285	78,409	52,418	344	25,649	39,876	96,073	20,311	76,448	686	22,212
1990	244,827	220,340	136,799	67	83,609	24,487	225,066	91,833	133,266	33	19,763
1991	231,965	219,346	131,670	667	87,011	12,619	173,099	45,095	127,310	694	58,866
1992	291,762	284,054	106,857	175	177,376	7,708	170,873	132,236	37,368	1,269	120,887
1993	395,110	382,571	151,812	200	230,560	12,539	183,195	164,436	20,095	1,336	211,915
1994	303,339	276,058	117,185	65	158,939	27,281	279,989	126,808	154,738	1,557	23,349
1995	227,099	203,029	162,538	350	40,839	24,070	141,282	49,193	94,409	2,320	85,815
1996	254,092	233,519	191,341	649	41,529	20,573	147,266	117,352	30,767	853	106,826
1997	327,315	250,688	184,911	1,563	64,214	76,627	198,471	144,177	54,294	—	128,845
1998	417,435	308,201	254,367	3,143	50,691	109,234	249,935	203,342	46,593	—	167,500
1998 Aug.	25,627	27,280	23,025	—	4,256	—	1,653	—	17,715	—	28,815
Sep.	16,642	11,125	16,804	19	5,699	—	5,517	—	8,515	—	8,633
Oct.	27,105	16,822	3,213	130	13,479	10,283	37,100	41,179	—	—	9,995
Nov.	47,705	34,387	23,539	154	10,695	13,318	27,558	24,409	3,149	—	20,147
Dec.	6,327	—	6,548	500	8,258	12,875	—	10,771	—	—	17,098
Euro million											
1999 Jan.	38,961	30,946	19,953	51	11,044	8,015	22,630	—	5,132	—	16,331
Feb.	30,989	14,494	16,234	—	1,740	16,495	24,881	—	9,089	—	6,108

Shares								
Period	Sales			Purchases				
	Sales = total purchases	Domestic shares 8	Foreign shares 9	Residents				Non-residents 12
				Total 10	Credit institutions 5. 11	Non-banks 6	Non-residents 12	
DM million								
1986	32,371	16,394	15,976	17,195	5,022	12,173	15,174	
1987	15,845	11,889	3,955	16,439	2,153	14,286	594	
1988	21,390	7,528	13,862	18,436	1,177	17,259	2,953	
1989	35,511	19,365	16,147	10,231	4,913	5,318	25,277	
1990	50,070	28,021	22,048	52,631	7,215	45,416	2,561	
1991	33,478	13,317	20,161	32,247	2,466	29,781	1,230	
1992	32,595	17,226	15,370	40,651	2,984	37,667	8,055	
1993	39,355	19,512	19,843	30,871	4,133	26,738	8,485	
1994	55,125	29,160	25,966	54,466	1,622	52,844	659	
1995	46,422	23,600	22,822	49,354	11,945	37,409	2,931	
1996	71,693	34,212	37,481	55,164	12,627	42,537	16,529	
1997	114,694	22,239	92,454	91,876	8,547	83,329	22,818	
1998	235,597	48,796	186,800	134,422	20,252	114,170	101,176	
1998 Aug.	12,186	6,858	5,328	12,626	—	15,153	440	
Sep.	9,794	876	8,918	9,647	—	14,218	147	
Oct.	11,170	1,300	9,870	20,213	168	20,045	9,043	
Nov.	62,288	1,460	60,828	10,849	15,554	4,705	51,439	
Dec.	14,125	5,820	8,305	18,387	—	30,868	4,262	
Euro million								
1999 Jan.	10,299	1,341	8,958	10,228	3,425	6,803	71	
Feb.	4,411	617	3,794	2,920	1,498	1,422	1,491	

\* Excluding investment fund certificates (see Table VII.6). — 1 Net sales at market values plus/less changes in issuers' portfolios of their own debt securities. — 2 Including Federal Railways Fund, Federal Post Office and Treuhand agency. — 3 Net purchases or net sales (–) of foreign debt securities by residents; transaction values. — 4 Domestic and foreign debt securities. — 5 Book values; statistically adjusted. — 6 Residual; also including purchases of domestic and foreign securities by domestic investment funds. — 7 Net purchases or net sales (–) of domestic debt securities (including money market paper issued by banks) by non-residents; transac-

tion values. — 8 At issue prices. — 9 Net purchases or net sales (–) of foreign shares (including direct investment) by residents; transaction values. — 10 Domestic and foreign shares. — 11 Up to the end of 1998, excluding shares under syndicate agreement. — 12 Net purchases or net sales (–) of domestic shares (including direct investment) – before 1989 also including domestic investment fund certificates – by non-residents; transaction values. — The figures for the latest data are to be regarded as provisional; corrections are not specially marked.

VII. Capital market

2. Sales of debt securities issued by borrowers domiciled in Germany \*

DM million nominal value, as from 1999 euro million nominal value

Period	Total	Bank debt securities 1					Industrial bonds 2	Public debt securities 3	Memorandum item DM debt securities issued by non-residents
		All bank debt securities	Mortgage bonds (Hypotheken-pfandbriefe)	Communal bonds (Öffentliche Pfandbriefe)	Debt securities issued by specialised credit institutions	Other bank debt securities			
<b>Gross sales 4</b>									
1990	428,698	286,709	14,923	70,701	89,755	111,326	-	141,990	35,168
1991	442,089	292,092	19,478	91,489	80,738	100,386	707	149,288	32,832
1992	572,767	318,522	33,633	134,363	49,195	101,333	-	254,244	57,282
1993	733,126	434,829	49,691	218,496	34,028	132,616	457	297,841	87,309
1994	627,331	412,585	44,913	150,115	39,807	177,750	486	214,261	61,465
1995	620,120	470,583	43,287	208,844	41,571	176,877	200	149,338	102,719
1996	731,992	563,076	41,439	246,546	53,508	221,582	1,742	167,173	112,370
1997	846,567	621,683	53,168	276,755	54,829	236,933	1,915	222,972	114,813
1998	1,030,827	789,035	71,371	344,609	72,140	300,920	3,392	238,400	149,542
1998 June	71,790	59,633	8,463	19,941	3,830	27,399	305	11,852	19,920
July	108,229	84,972	4,972	37,207	8,791	34,003	786	22,471	23,151
Aug.	78,317	61,014	4,336	28,564	6,146	21,969	-	17,304	9,845
Sep.	85,972	72,315	8,961	29,343	9,629	24,383	20	13,637	1,875
Oct.	76,432	50,026	5,798	22,177	3,830	18,222	130	26,276	2,483
Nov.	83,731	59,239	6,026	27,668	2,445	23,100	150	24,342	11,986
Dec.	77,539	58,540	3,365	25,443	5,496	24,237	500	18,499	10,674
<b>Euro million</b>									
1999 Jan.	68,192	46,904	3,390	29,019	4,238	10,257	-	21,288	5,319
Feb.	47,787	40,901	2,477	21,003	3,461	13,961	-	6,886	8,419
<b>of which: Debt securities with a maturity of over 4 years 5</b>									
1990	272,642	133,347	10,904	43,250	26,767	52,425	-	139,295	29,791
1991	303,326	172,171	11,911	65,642	54,878	39,741	707	130,448	22,772
1992	430,479	211,775	28,594	99,627	40,267	43,286	-	218,703	51,939
1993	571,533	296,779	43,365	160,055	26,431	66,923	230	274,524	82,049
1994	429,369	244,806	36,397	109,732	29,168	69,508	306	184,255	53,351
1995	409,469	271,763	30,454	141,629	28,711	70,972	200	137,503	85,221
1996	473,560	322,720	27,901	167,811	35,522	91,487	1,702	149,139	92,582
1997	563,333	380,470	41,189	211,007	41,053	87,220	1,820	181,047	98,413
1998	694,414	496,444	59,893	288,619	54,385	93,551	2,847	195,122	139,645
1998 June	38,360	34,282	7,693	17,771	2,790	6,028	305	3,773	19,213
July	77,582	55,554	4,572	34,104	7,146	9,733	241	21,786	22,805
Aug.	52,573	36,725	2,745	23,722	4,100	6,158	-	15,848	9,089
Sep.	53,954	48,574	7,802	25,192	8,256	7,323	20	5,360	1,221
Oct.	52,003	27,040	3,651	13,499	2,967	6,924	130	24,833	2,418
Nov.	58,166	34,431	4,701	22,527	1,338	5,866	150	23,585	10,922
Dec.	43,638	33,330	2,860	18,185	3,817	8,468	500	9,808	9,637
<b>Euro million</b>									
1999 Jan.	53,031	32,724	1,657	24,729	3,242	3,097	-	20,306	5,205
Feb.	31,501	25,451	1,991	14,266	3,024	6,170	-	6,050	5,754
<b>Net sales 6</b>									
1990	226,707	140,327	- 3,922	- 72	73,287	71,036	- 67	86,449	21,717
1991	227,822	139,396	4,729	22,290	65,985	46,390	558	87,868	18,583
1992	304,751	115,786	13,104	58,235	19,585	24,864	- 175	189,142	34,114
1993	403,212	159,982	22,496	122,917	- 13,156	27,721	- 180	243,049	43,701
1994	270,088	116,519	18,184	54,316	- 6,897	50,914	- 62	153,630	21,634
1995	205,482	173,797	18,260	96,125	3,072	56,342	- 354	32,039	61,020
1996	238,427	195,058	11,909	121,929	6,020	55,199	585	42,788	69,951
1997	257,521	188,525	16,471	115,970	12,476	43,607	1,560	67,437	63,181
1998	327,991	264,627	22,538	162,519	18,461	61,111	3,118	60,243	84,308
1998 June	22,520	20,709	4,323	8,693	1,158	6,535	- 818	2,629	16,781
July	61,028	45,809	325	27,155	4,883	13,446	1,745	13,474	18,677
Aug.	26,871	25,178	1,782	15,575	1,706	6,116	-	1,693	6,750
Sep.	16,306	20,626	2,520	12,086	3,425	2,596	20	4,341	2,009
Oct.	19,244	6,900	1,121	6,626	- 961	114	130	12,214	- 6,064
Nov.	38,809	25,347	4,272	14,504	- 1,481	8,050	150	13,312	6,931
Dec.	- 13,235	- 2,831	- 1,632	- 1,271	- 1,776	1,849	500	- 10,904	4,304
<b>Euro million</b>									
1999 Jan.	31,337	20,888	1,664	17,625	2,838	-1,240	-51	10,500	3,377
Feb.	14,850	16,378	778	9,434	1,752	4,414	-	-1,529	4,444

\* For definitions see the notes in the Statistical Supplement to the Monthly Report 2, Capital market statistics. — 1 Excluding registered bank debt securities. — 2 Debt securities of private enterprises. — 3 Including Federal

Railways Fund, Federal Post Office and Treuhand agency. — 4 Gross sales means only initial sales of newly issued securities. — 5 Maximum maturity according to the terms of issue. — 6 Gross sales less redemptions.

## VII. Capital market

### 3. Outstanding amount of debt securities issued by borrowers domiciled in Germany \*

DM million nominal value, as from 1999 euro million nominal value

End of year or month	Bank debt securities <sup>1</sup>						Industrial bonds	Public debt securities	Memo item DM debt securities issued by non-residents
	Total	All bank debt securities	Mortgage bonds (Hypothekendarlehen)	Communal bonds (Öffentliche Pfandbriefe)	Debt securities of specialised credit institutions	Other bank debt securities			
DM million									
1990	1,458,943	900,977	138,025	369,901	155,045	238,005	2,604	555,362	223,176
1991	1,686,765	1,040,374	142,757	392,190	221,031	284,396	3,161	643,230	241,760
1992	1,991,515	1,156,162	155,862	450,424	240,616	309,259	2,983	832,370	275,873
1993	2,394,728	1,316,142	178,357	573,341	227,463	336,981	3,163	1,075,422	319,575
1994	2,664,814	1,432,661	196,541	627,657	219,214	389,249	3,101	1,229,053	341,210
1995	2,870,295	1,606,459	214,803	723,781	222,286	445,589	2,746	1,261,090	402,229
1996	3,108,724	1,801,517	226,711	845,710	228,306	500,790	3,331	1,303,877	472,180
1997	3,366,245	1,990,041	243,183	961,679	240,782	544,397	4,891	1,371,313	535,359
1998	3,694,234	2,254,668	265,721	1,124,198	259,243	605,507	8,009	1,431,558	619,668
1998 Aug.	3,633,111	2,204,626	259,439	1,092,253	260,037	592,897	7,209	1,421,276	616,505
Sep.	3,649,416	2,225,252	261,959	1,104,339	263,461	595,493	7,229	1,416,935	614,496
Oct.	3,668,660	2,232,152	263,081	1,110,965	262,500	595,607	7,359	1,429,149	608,432
Nov.	3,707,469	2,257,499	267,353	1,125,469	261,019	603,658	7,509	1,442,461	615,363
Dec.	3,694,234	2,254,668	265,721	1,124,198	259,243	605,507	8,009	1,431,558	619,668
Euro million									
1999 Jan.	1,920,169	1,173,681	133,635	592,418	134,367	313,262	4,044	742,444	320,208
Feb.	1,935,019	1,190,060	134,413	601,852	136,119	317,676	4,044	740,915	324,652

#### Breakdown by remaining period to maturity <sup>2</sup>

#### Position at end-February 1999

Maturity in years	Total	All bank debt securities	Mortgage bonds (Hypothekendarlehen)	Communal bonds (Öffentliche Pfandbriefe)	Debt securities of specialised credit institutions	Other bank debt securities	Industrial bonds	Public debt securities	Memo item DM debt securities issued by non-residents
less than 2	541,916	372,002	40,366	156,450	42,475	132,712	568	169,346	76,257
2 to less than 4	509,575	327,167	36,903	164,277	39,034	86,953	1,568	180,841	77,504
4 to less than 6	388,080	244,808	30,203	141,631	22,580	50,397	500	142,771	66,212
6 to less than 8	195,761	118,923	11,617	71,903	11,795	23,607	838	76,000	29,867
8 to less than 10	175,674	102,719	14,468	58,815	14,656	14,781	467	72,488	50,568
10 to less than 15	23,568	18,634	843	8,442	3,938	5,411	102	4,832	16,256
15 to less than 20	48,064	2,357	9	277	582	1,488	-	45,708	2,515
20 and more	52,379	3,450	5	56	1,059	2,329	-	48,929	5,474

\* Including debt securities temporarily held in the issuers' portfolios. — <sup>1</sup> Excluding debt securities handed to the trustee for temporary safe custody. — <sup>2</sup> Calculated from month under review until final maturity for

debt securities falling due en bloc and until mean maturity of the residual amount outstanding for debt securities not falling due en bloc.

### 4. Circulation of shares issued by residents of Germany

DM million nominal value, as from 1999 euro million nominal value

Period	Share capital = circulation at end of period under review	Net increase or net decrease (-) during period under review	Change in domestic public limited companies' capital due to						
			cash payment and exchange of convertible bonds <sup>1</sup>	issue of bonus shares	contribution of claims and other real assets	contribution of shares, mining shares, GmbH shares, etc.	merger and transfer of assets	change of legal form	reduction of capital and liquidation
DM million									
1990	144,686	12,650	7,362	751	3,715	1,049	- 43	1,284	- 1,466
1991	151,618	6,932	3,656	610	2,416	407	- 182	411	- 386
1992	160,813	9,198	4,295	728	1,743	1,073	- 732	3,030	- 942
1993	168,005	7,190	5,224	772	387	876	10	707	- 783
1994	190,012	14,237	6,114	1,446	1,521	1,883	- 447	5,086	- 1,367
1995	211,231	21,217	5,894	1,498	1,421	1,421	- 623	13,739	- 2,133
1996	216,461	7,131	8,353	1,355	396	1,684	- 3,056	833	- 2,432
1997	221,575	5,115	4,164	2,722	370	1,767	- 2,423	197	- 1,678
1998	238,156	16,578	6,086	2,566	658	8,607	- 4,055	3,905	- 1,188
1998 Aug.	230,200	1,359	550	46	5	205	- 501	66	- 13
Sep.	233,360	3,160	276	323	5	508	- 617	2,717	- 51
Oct.	233,286	- 73	479	274	51	21	- 894	7	- 12
Nov.	239,147	5,860	651	99	17	5,067	- 57	167	- 85
Dec.	238,156	- 991	638	640	20	362	- 2,526	- 10	- 114
Euro million									
1999 Jan.	122,487	720	805	43	19	5	- 162	- 257	- 57
Feb.	122,876	390	197	42	11	114	- 340	374	- 7

o From January 1994 including the shares of east German companies (resultant increase in share circulation: DM 7,771 million). — <sup>1</sup> Including

share issues out of company profits. — <sup>2</sup> Figure reduced by DM 1,902 million owing to revisions.

VII. Capital market

5. Yields and indices on German securities

Yields on bonds outstanding issued by residents <sup>1</sup>										Price indices <sup>2,3</sup>		
Period	Public bonds				Bank debt securities			Memo- randum item DM bonds issued by non- residents <sup>1,5</sup>	Bonds		Shares	
	Total	Listed Federal securities	With re- sidual matur- ities of over 9 to 10 years <sup>4</sup>	Total	With re- sidual matur- ities of over 9 to 10 years	Industrial bonds	German bond index (REX)		CDAX share price index	German share index (DAX)		
											Average daily rate	End- 1987=100
% p.a.												
1990	8.9	8.8	8.8	8.7	9.0	8.9	9.0	9.2	93.50	145.00	1,398.23	
1991	8.7	8.6	8.6	8.5	8.9	8.6	8.9	9.2	96.35	148.16	1,577.98	
1992	8.1	8.0	8.0	7.8	8.3	8.1	8.7	8.8	101.54	134.92	1,545.05	
1993	6.4	6.3	6.3	6.5	6.5	6.8	6.9	6.8	109.36	191.13	2,266.68	
1994	6.7	6.7	6.7	6.9	6.8	7.2	7.0	6.9	99.90	176.87	2,106.58	
1995	6.5	6.5	6.5	6.9	6.5	7.2	6.9	6.8	109.18	181.47	2,253.88	
1996	5.6	5.6	5.6	6.2	5.5	6.4	5.8	5.8	110.37	217.47	2,888.69	
1997	5.1	5.1	5.1	5.6	5.0	5.9	5.2	5.5	111.01	301.47	4,249.69	
1998	4.5	4.4	4.4	4.6	4.5	4.9	5.0	5.3	118.18	343.64	5,002.39	
1998 Aug.	4.4	4.3	4.3	4.4	4.4	4.8	5.0	5.3	116.13	334.70	4,833.89	
1998 Sep.	4.1	4.0	4.0	4.1	4.1	4.6	4.8	5.6	117.23	311.18	4,474.51	
1998 Oct.	4.0	4.0	4.0	4.1	4.1	4.5	4.7	5.6	116.72	322.83	4,671.12	
1998 Nov.	4.1	4.0	4.0	4.1	4.1	4.6	4.7	5.3	117.57	343.90	5,022.70	
1998 Dec.	3.8	3.7	3.7	3.9	3.8	4.3	4.7	5.1	118.18	343.64	5,002.39	
1999 Jan.	3.6	3.6	3.5	3.7	3.6	4.1	4.4	4.9	119.48	354.47	5,159.96	
1999 Feb.	3.7	3.7	3.7	3.9	3.7	4.2	4.4	5.0	117.60	341.57	4,911.81	
1999 Mar.	3.8	3.8	3.8	4.0	3.8	4.4	4.5	5.2	118.20	337.39	4,884.20	

<sup>1</sup> Bearer debt securities with maximum maturities according to the terms of issue of over 4 years, if their mean residual maturities exceed 3 years. Convertible debt securities, etc., debt securities with unscheduled redemption, zero-coupon bonds, floating-rate notes and bonds not denominated in DM or euros are not included. Group yields for the various categories of securities are weighted with the amounts outstanding of the debt securities

included in the calculation. Monthly figures are calculated on the basis of the yields on all the business days of a month. The annual figures are the unweighted means of the monthly figures. — <sup>2</sup> End of year or month. — <sup>3</sup> Source: German Stock Exchange plc. — <sup>4</sup> Only bonds eligible as underlying instruments for futures contracts are included; calculated as unweighted averages. — <sup>5</sup> As far as quoted on German stock exchanges.

6. Sales and purchases of investment fund certificates in Germany

Period	Sales of investment fund certificates							Purchases						
	Domestic funds (sales receipts)							Residents						
	Sales = total purchases	Total	Investment funds open to the general public <sup>1</sup>				Foreign funds <sup>4</sup>	Total	Credit institutions including building and loan associations <sup>2</sup>		Non-banks <sup>3</sup>		Non-residents <sup>5</sup>	
			of which	Money market funds	Securities-based funds	Open-end real estate funds			Specialised investment funds	Total	of which Foreign investment fund certificates	Total		of which Foreign investment fund certificates
DM million														
1990	25,788	26,857	7,904	-	8,032	- 128	18,952	- 1,069	25,766	4,296	- 362	21,470	- 707	22
1991	50,064	37,492	13,738	-	11,599	2,144	23,754	12,572	49,890	8,594	- 5	41,296	12,577	174
1992	81,514	20,474	- 3,102	-	9,189	6,087	23,575	61,040	81,518	10,495	2,152	71,023	58,888	- 4
1993	80,259	61,672	20,791	-	6,075	14,716	40,881	18,587	76,258	16,982	2,476	59,276	16,111	4,001
1994	130,995	108,914	63,263	31,180	24,385	7,698	45,650	22,081	125,943	9,849	- 689	116,094	22,770	5,052
1995	55,246	54,071	16,777	6,147	3,709	6,921	37,294	1,175	56,295	12,172	188	44,123	987	- 1,049
1996	83,386	79,110	16,517	- 4,706	7,273	13,950	62,592	4,276	85,704	19,924	1,685	65,780	2,591	- 2,318
1997	153,879	138,945	31,501	- 5,001	30,066	6,436	107,445	14,934	158,022	35,924	340	122,098	14,594	- 4,143
1998	190,794	169,748	38,998	5,772	27,814	4,690	130,750	21,046	193,563	43,937	961	149,626	20,085	- 2,769
1998 Aug.	17,151	15,991	3,838	1,266	2,491	81	12,153	1,160	16,771	4,074	- 15	12,697	1,175	380
1998 Sep.	9,642	9,005	73	- 192	281	- 16	8,932	637	11,011	2,796	- 301	8,215	938	- 1,369
1998 Oct.	10,224	8,486	744	847	- 771	317	7,742	1,738	10,173	2,904	166	7,269	1,572	51
1998 Nov.	12,832	10,889	5,781	20	4,919	594	5,109	1,943	15,862	1,881	- 169	13,981	2,112	- 3,030
1998 Dec.	27,099	28,019	1,679	- 391	1,464	483	26,340	- 920	25,535	8,390	2,031	17,145	- 2,951	1,564
Euro million														
1999 Jan.	14,757	14,020	6,523	1,447	3,162	1,870	7,497	737	13,468	437	- 727	13,031	1,464	1,289
1999 Feb.	9,924	8,782	4,597	673	2,894	954	4,185	1,142	9,516	2,227	693	7,289	449	408

<sup>1</sup> From October 1998 including pension investment mutual funds (Altersvorsorgefonds). — <sup>2</sup> Book values. — <sup>3</sup> Residual. — <sup>4</sup> Net purchases or net sales (-) of foreign investment fund certificates by residents; transaction values. — <sup>5</sup> Net purchases or net sales (-) of domestic investment fund

certificates by non-residents; transaction values (before 1989 classified as shares). — The figures for the latest data are to be regarded as provisional; corrections are not specially marked.

## VIII. Public finance in Germany

### 1. Finances of the public sector \*

DM billion

Period	Central, regional and local authorities 1										Social security funds 2			Public sector, total			
	Receipts		Expenditure								Balance of receipts and expenditure	Re-ceipts 6	Ex-pend-iture	Balance of receipts and expenditure	Re-ceipts	Ex-pend-iture	Balance of receipts and expenditure
	Total	of which Taxes 3	Total 4	of which	Person-nel ex-pend-iture	Other operat-ing ex-pend-iture	Current grants	Interest paid	Capital forma-tion	Finan-cial aid 5							
1987	602.0	468.7	653.0	211.1	103.4	182.4	58.6	57.2	39.9	- 51.0	374.2	370.7	+ 3.5	933.7	981.3	- 47.6	
1988	620.3	488.1	673.6	216.5	105.0	192.6	60.4	58.2	40.4	- 53.3	393.3	394.8	- 1.5	966.9	1,021.7	- 54.8	
1989	678.6	535.5	700.8	222.8	110.5	202.6	61.2	62.2	41.1	- 22.2	413.7	400.5	+ 13.2	1,042.8	1,051.8	- 9.0	
1990	703.1	549.7	749.4	236.1	118.5	214.9	64.7	66.7	47.9	- 46.3	442.7	426.5	+ 16.2	1,094.3	1,124.4	- 30.1	
1991 7	849.5	661.9	971.3	294.7	143.5	294.0	77.3	90.6	71.3	- 121.8	562.8	549.6	+ 13.1	1,342.6	1,451.3	- 108.7	
1992	957.9	731.7	1,068.3	324.5	153.5	299.8	100.9	107.5	81.4	- 110.4	621.0	628.8	- 7.9	1,501.6	1,619.9	- 118.3	
1993	987.6	749.1	1,119.6	339.2	156.9	334.8	102.3	103.5	82.4	- 132.0	673.0	670.2	+ 2.8	1,563.1	1,692.3	- 129.2	
1994	1,057.0	786.2	1,163.2	358.8	159.1	346.5	114.2	99.7	82.2	- 106.1	706.2	705.4	+ 0.9	1,670.2	1,775.5	- 105.2	
1995 p	1,090.8	814.2	1,201.1	370.3	158.4	360.7	129.1	96.9	82.0	- 110.3	744.1	754.7	- 10.6	1,740.7	1,861.6	- 120.8	
1996 pe	1,065.5	800.0	1,188.3	372.2	159.7	355.6	130.9	91.5	76.0	- 122.8	784.0	795.5	- 11.5	1,744.0	1,878.5	- 134.5	
1997 pe	1,080.5	797.2	1,177.5	372.5	159.5	348.0	132.5	87.5	73.0	- 97.0	810.5	806.0	+ 4.5	1,784.5	1,875.5	- 91.0	
1997 1st qtr	229.9	187.1	262.0	75.0	30.9	93.0	37.5	11.9	15.1	- 32.1	197.1	199.5	- 2.3	397.7	432.0	- 34.4	
2nd qtr	238.7	187.4	255.6	74.8	31.6	89.9	27.9	15.9	14.0	- 16.9	200.8	201.1	- 0.3	410.0	427.2	- 17.2	
3rd qtr	246.3	192.8	267.9	77.2	32.3	88.4	33.0	19.6	17.7	- 21.5	199.3	200.0	- 0.7	420.7	443.0	- 22.2	
4th qtr	293.6	230.1	315.8	94.9	40.2	85.6	33.1	29.3	31.0	- 22.2	214.0	205.5	+ 8.4	485.2	499.0	- 13.8	
1998 1st qtr	241.0	188.3	271.4	74.0	31.2	99.6	41.0	11.9	14.6	- 30.4	199.3	199.0	+ 0.3	408.0	438.1	- 30.1	
2nd qtr	263.5	199.1	255.6	75.6	30.2	92.3	24.9	15.9	15.3	+ 8.0	203.2	205.9	- 2.7	435.3	430.0	+ 5.3	
3rd qtr	250.8	204.6	273.4	77.2	32.3	91.2	34.4	19.7	18.6	- 22.6	204.5	203.4	+ 1.1	425.8	447.3	- 21.4	

Source: Bundesbank calculations based on data from the Federal Statistical Office. — \* The budgetary definition used here differs from the methods employed for the government account of the national accounts and, in case of the quarterly figures, in some respects also from the financial statistics. — 1 Incl. subsidiary budgets. The quarterly figures, unlike the annual figures based on the annual accounts statistics of the Federal Statistical Office, do not include municipal special-purpose associations, hospitals keeping commercial accounts and various special accounts. For the receipts of Bundesbank profit see footnote 1 to Table VIII. 2. — 2 The annual figures

differ from the sum of the quarterly figures, as the latter are all provisional. The quarterly figures for some fields of insurance are estimated. — 3 The tax revenue shown here is taken from the budget statistics and may differ from the data given in Table VIII. 4, which are based on the tax statistics. 4 Including discrepancies in clearing transactions between the central, regional and local authorities. — 5 Expenditure on investment grants, loans and acquisition of participating interests. — 6 Including Federal Government liquidity assistance to the Federal Labour Office. — 7 From 1991 including public authorities in eastern Germany.

### 2. Finances of the Federal Government, Länder Governments and local authorities \*

DM billion

Period	Federal Government		Länder Governments				Local authorities			
	Receipts 1	Expenditure	Western 2, 3		Eastern 3		Western 3		Eastern 3	
			Receipts	Expenditure	Receipts	Expenditure	Receipts	Expenditure	Receipts	Expenditure
1987	243.6	271.5	244.4	263.9	.	.	176.7	179.2	.	.
1988	242.2	278.2	253.7	270.1	.	.	185.1	184.4	.	.
1989	277.9	292.9	275.1	282.7	.	.	196.0	194.3	.	.
1990	290.5	311.4	280.2	299.6	.	.	205.8	209.9	.	.
1991	354.1	406.1	312.5	330.8	67.4	77.9	222.9	228.9	50.2	48.2
1992	398.4	431.7	334.9	353.0	75.2	88.2	241.4	250.8	57.4	64.9
1993	401.6	462.5	342.7	369.0	79.4	95.5	252.7	261.6	63.1	67.5
1994	439.6	478.9	347.6	375.6	82.4	99.1	260.9	266.8	63.1	67.8
1995	439.3	489.9	357.8	389.8	91.8	104.9	258.3	270.6	68.5	70.4
1996	411.9	490.4	364.4	399.8	96.9	108.7	259.8	265.9	65.2	67.9
1997 pe	415.5	479.0	372.0	398.5	97.5	107.5	255.5	262.5	62.0	63.5
1998 pe	438.5	495.0	.	.	.	.	.	.	.	.
1997 1st qtr	86.8	116.5	80.3	87.5	23.3	21.3	49.5	53.0	10.9	11.2
2nd qtr	101.6	114.7	79.6	87.1	21.0	22.6	53.3	53.2	12.4	12.5
3rd qtr	98.6	115.0	87.3	90.3	22.9	25.1	54.1	55.6	12.8	13.0
4th qtr	128.7	132.9	100.4	110.2	26.9	34.7	65.2	64.7	15.7	16.8
1998 1st qtr	92.8	118.7	83.4	89.0	21.2	20.7	49.2	52.6	10.4	11.0
2nd qtr	104.5	119.3	85.5	87.2	22.0	25.3	55.3	52.5	11.8	12.1
3rd qtr	101.5	121.8	87.1	91.5	24.2	25.3	57.8	54.9	13.0	12.8
4th qtr p	139.5	135.2	102.9	111.8	28.3	33.4	.	.	.	.

Source: Bundesbank calculations based on data from the Federal Statistical Office. — \* See corresponding footnote to Table VIII. 1. — 1 The Bundesbank profit transfer is shown in full until 1994; from 1995 only the DM 7 billion scheduled in the budget is shown. Since that time, receipts over and above the scheduled amount accrue directly to the Redemption

Fund for Inherited Liabilities. — 2 Including Berlin, Bremen, Hamburg. From 1991 including Berlin (East). — 3 The quarterly figures, unlike the annual figures based on the annual accounts statistics of the Federal Statistical Office, do not include hospitals keeping commercial accounts and various special accounts.

VIII. Public finance in Germany

3. Finances of the Government in the national accounts

DM billion

Item	1990	1991 1	1991 2	1992	1993	1994	1995 3, p	1996 p	1997 p	1998 p
Receipts	1 068.4	1 197.7	1 300.4	1 438.0	1 488.2	1 580.8	1 631.2	1 646.8	1 674.7	1 724.3
of which										
Taxes	573.2	653.3	689.2	754.7	772.9	811.5	838.8	819.2	822.4	861.6
Social security contributions	410.5	450.3	513.0	562.9	596.4	642.6	672.7	706.4	730.1	736.9
Expenditure	1 118.1	1 287.4	1 395.0	1 525.2	1 600.0	1 668.0	1 751.6	1 771.6	1 776.2	1 803.2
Government consumption	444.1	466.5	556.7	616.4	634.9	658.6	686.6	705.1	703.4	710.1
Interest	63.4	74.5	76.7	100.4	104.2	112.2	131.1	131.8	135.9	134.5
Current transfers	521.7	620.3	621.7	665.3	720.6	765.0	801.3	812.5	821.9	836.8
Capital transfers	33.3	66.2	64.9	55.9	53.5	45.9	50.1	45.4	45.5	54.1
Gross capital formation	55.5	59.9	75.0	87.2	86.8	86.4	82.5	76.8	69.5	67.7
Financial balance	- 49.7	- 89.7	- 94.7	- 87.2	- 111.8	- 87.3	- 120.4	- 124.8	- 101.5	- 78.9
as a percentage of the gross domestic product	- 2.1	- 3.4	- 3.3	- 2.8	- 3.5	- 2.6	- 3.5	- 3.5	- 2.8	- 2.1
Memo item										
Deficit of the Treuhand agency	- 4.3	- 19.9	- 19.9	- 29.6	- 38.1	- 37.1	.	.	.	.
Items as defined in Maastricht Treaty										
as a percentage of the gross domestic product 4										
Financial balance	.	.	- 3.1	- 2.6	- 3.2	- 2.4	- 3.3	- 3.4	- 2.7	- 2.0
Debt	.	.	41.4	44.0	48.0	50.2	58.3	60.8	61.5	61.1

Source: Federal Statistical Office. — 1 Western Germany. — 2 Germany as a whole. — 3 Adjusted for the balance of notional capital transfers between the public sector and the corporate sector, mainly in connection with the winding-up of the Treuhand agency. In unadjusted terms, the deficit amounted to 10.1% of GDP. — 4 The financial balance shown here deviates

from the figures shown above, mainly because of the transfer of hospitals from one sector to another; owing to some conversions, indebtedness deviates from the debt level shown in tables VIII. 7 and VIII. 8. Level according to the figures of the national accounts of March 1999.

4. Tax revenue of the central, regional and local authorities

Period	Federal and Länder Governments and European Union						Local authorities 4		Balance of untransferred tax shares 5
	Total	Total 1	Federal Government 2	Länder Governments		European Union 3	Total	of which in the New Länder	
				Total	of which New Länder				
DM million									
1997 6	797,154	700,739	368,244	290,771	.	41,724	96,531	7,703	- 117
1998	.	727,887	379,499	306,116	.	42,271	.	.	+ 291
1998 4th qtr	.	214,584	118,100	87,315	.	9,170	.	.	- 7,412
1998 Nov.	.	50,904	26,046	21,185	.	3,673	.	.	.
Dec.	.	111,564	65,276	44,469	.	1,818	.	.	.
1999 Jan.	.	55,648	22,035	25,965	.	7,648	.	.	.
Feb.	.	50,549	26,521	21,045	.	2,983	.	.	.
Euro million									
1999 Jan.	.	28,452	11,266	13,276	.	3,910	.	.	.
Feb.	.	25,845	13,560	10,760	.	1,525	.	.	.

Source: Federal Ministry of Finance. — 1 Including receipts from the Equalisation of Burdens levies. — 2 Before deduction of supplementary Federal grants and shares in the revenue of mineral oil tax remitted to the Länder Governments. — 3 Including the (GNP-related) receipts accruing to the EU from 1988 to the detriment of the Federal Government's tax revenue. — 4 Including local authority taxes of Berlin, Bremen and

Hamburg. — 5 Difference between the local authorities' share in the income taxes received by the Länder cash offices in the period in question (see Table VIII. 5) and the amounts passed on to the local authorities during the same period. — 6 From 1991 including the tax revenue in the new Länder.

VIII. Public finance in Germany

5. Tax revenue, by type

Period	Joint taxes										Federal taxes 8, 9	Länder taxes 8	EU customs duties 9	Memo item Local authorities' share in income taxes 10
	Income taxes 2					Turnover taxes 5, 6								
	Total 1	Wage tax 3	As-sessed income tax	Corporation tax	Investment income taxes 4	Total	Value-added tax	Turnover tax on imports	Share in trade tax 6, 7					
<b>Old Länder</b>														
DM million														
1997	319,461	250,231	11,079	32,719	25,432	223,127	183,251	39,875	8,710		29,859			3,919,644
1998	346,038	260,191	16,837	35,113	33,897	231,588	186,317	45,270	10,226		32,457			4,155,413
1998 4th qtr	103,677	77,186	9,304	11,635	5,551	60,504	48,488	12,016	4,963		7,432			1,297,358
1998 Nov.	18,761	19,442	- 1,645	- 520	1,483	21,010	17,077	3,933	679		2,386			266,958
1998 Dec.	65,536	38,350	12,438	12,555	2,194	20,171	15,950	4,222	2,446		2,496			761,816
1999 Jan.	30,885	23,706	25	342	6,813	20,935	17,591	3,344	10		2,824			355,956
1999 Feb.	18,822	19,483	- 2,298	- 54	1,692	22,220	19,070	3,149	139		2,759			257,768
Euro million														
1999 Jan.	15,791	12,121	13	175	3,483	10,704	8,994	1,710	5		1,444			181,997
1999 Feb.	9,624	9,961	- 1,175	- 28	865	11,361	9,750	1,610	71		1,411			131,794
<b>Germany as a whole</b>														
DM million														
1997	740,272	313,794	248,672	5,764	33,267	26,092	240,900	199,934	40,966	8,732	135,264	34,682	6,900	39,533
1998	775,027	340,231	258,276	11,116	36,200	34,640	250,214	203,684	46,530	10,283	130,513	37,300	6,486	47,140
1998 4th qtr	229,272	104,317	78,043	8,540	12,024	5,709	65,652	53,292	12,361	5,000	44,013	8,614	1,677	14,688
1998 Nov.	54,044	18,034	19,200	- 2,144	- 541	1,519	22,853	18,786	4,067	685	9,178	2,746	548	3,140
1998 Dec.	120,029	67,752	39,729	12,763	13,017	2,243	21,866	17,532	4,334	2,473	24,431	2,932	576	8,466
1999 Jan.	59,802	29,317	22,325	- 371	- 322	7,042	22,543	19,131	3,412	14	3,563	3,270	1,095	4,153
1999 Feb.	53,424	16,607	17,637	- 2,688	- 65	1,722	24,337	21,124	3,213	139	8,806	3,135	401	2,876
Euro million														
1999 Jan.	30,576	14,989	11,414	- 190	164	3,600	11,526	9,782	1,744	7	1,822	1,672	560	2,124
1999 Feb.	27,315	8,491	9,018	- 1,374	- 33	880	12,443	10,801	1,643	71	4,502	1,603	205	1,470

Source: Federal Ministry of Finance. — 1 This total, unlike that in Table VIII. 4, includes neither the revenue from Equalisation of Burdens levies, trade tax on returns and capital (less Federal and Länder shares in trade tax), the taxes on land and buildings and other local authority taxes, nor the balance of untransferred tax shares. — 2 The yield of wage tax and assessed income tax was distributed among the Federal Government, the Länder Governments and the local authorities in the ratio of 42.5 : 42.5 : 15 from 1980, and the yield of corporation tax and investment income tax between the Federal Government and the Länder Governments in the ratio of 50 : 50 from 1970. — 3 From 1996, after deduction of child benefit which, in part, is shown only for the whole of Germany. — 4 From February 1993 including revenue from the tax on interest income, in which the local authorities have a share of 12%. — 5 The Federal Government's share: 63% in both 1993 and 1994, 56% in 1995, 50.5% in both 1996 and 1997; the remainder went to the

Länder Governments. From 1998 3.64% and from 1999 5.63% went to the Federal Government in advance to finance the supplementary Federal grant to the pension insurance funds; 2.2% of the balance went to the local authorities, of the new balance: 50.5% to the Federal Government, 49.5% to the Länder Governments. The EU share must likewise be deducted from the Federal Government's share stated. — 6 Since 1991 the distribution of turnover tax and the level and distribution of the share in trade tax have been affected by the financing of the debt service of the "German Unity" Fund. — 7 Federal Government and Länder Governments 50% each. From 1998 Federal Government 42.2%, Länder Governments 57.8%. — 8 For breakdown see Table VIII. 6. — 9 Receipts from Federal taxes and from customs duties accruing to the EU are only recorded for the whole of Germany. — 10 From 1998 including the share in turnover taxes.

6. Individual taxes of the Federal Government, Länder Governments and local authorities

Period	Federal taxes					Länder taxes					Local authority taxes			
	Mineral oil tax	Tobacco tax	Spirits tax	Insurance tax	Other capital transaction taxes 1	Other Federal taxes 2	Motor vehicle tax	Property tax	Inheritance tax	Beer tax	Other Länder taxes	Trade tax 3	Taxes on land and buildings	Other local taxes 4
DM million														
1997	66,008	21,155	4,662	14,127	-	29,312	14,418	1,757	4,061	1,698	12,749	48,601	15,503	1,509
1998	66,677	21,652	4,426	13,951	-	23,807	15,171	1,063	4,810	1,662	14,594		16,237	1,529
1998 4th qtr	25,753	7,594	1,635	2,141	-	6,890	3,008	253	1,275	375	3,703		3,551	340
1998 Nov.	5,682	1,014	255	916	-	1,311	986	78	407	122	1,153			
1998 Dec.	14,744	3,841	996	609	-	4,241	961	87	458	121	1,305			
1999 Jan.	245	513	110	774	-	1,921	1,365	96	409	147	1,253			
1999 Feb.	2,036	914	52	4,511	-	1,293	1,034	64	458	107	1,472			
Euro million														
1999 Jan.	125	262	56	396	-	982	698	49	209	75	641			
1999 Feb.	1,041	467	26	2,306	-	661	529	33	234	55	753			

Source: Federal Ministry of Finance. — 1 Revenue from the capital transfer taxes (levied until the end of 1990 and 1991, respectively). — 2 Other excise taxes and the income and corporation tax surcharge ("solidarity surcharge")

levied from mid-1991 until mid-1992, and again since the beginning of 1995. — 3 On returns and capital. — 4 Including tax-like receipts. — 5 From the beginning of 1991 including tax receipts in the new Länder.

VIII. Public finance in Germany

7. Indebtedness of the public sector \*

DM million

End of year or month	Total	Bundes- bank advances	Treasury discount paper	Treasury notes <sup>1</sup>	5-year special Federal bonds <sup>1</sup>	Federal savings bonds	Debt secur- ities <sup>1</sup>	Direct lending by credit institu- tions <sup>2</sup>	Loans from non-banks		Old debt		
									Social security funds	Other <sup>2</sup>	owing to German unifica- tion <sup>3</sup>	Equalisa- tion claims	Other <sup>4</sup>
<b>Public authorities</b>													
1992	1,345,224	4,542	36,186	109,733	153,825	35,415	362,230	539,235	7,021	18,132	1,451	77,269	188
1993	1,509,150	-	30,589	150,138	188,767	46,093	402,073	578,352	6,076	19,267	1,421	86,181	196
1994	1,662,150	-	20,506	169,181	181,737	59,334	465,408	646,855	5,329	25,127	1,391	87,098	184
1995	1,995,974	-	8,072	219,864	170,719	78,456	607,224	767,253	4,971	37,033	1,360	87,079	198
1996	2,129,344	-	27,609	217,668	176,164	96,391	631,696	839,501	4,168	36,157	1,330	89,826	203
1997 Sep.	2,197,884	-	24,923	234,556	187,862	99,633	655,378	872,500	3,935	29,483	1,337	88,062	216
Dec.	2,219,163	-	26,336	241,268	177,721	99,317	670,755	882,190	3,715	26,956	1,315	89,376	216
1998 Mar.	2,249,630	-	25,631	239,755	172,919	97,182	692,381	902,120	3,512	25,218	1,268	89,427	218
June	2,252,436	-	25,721	245,081	181,627	97,547	690,601	893,744	3,475	23,672	1,283	89,471	214
Sep.	2,269,989	-	24,885	233,880	189,693	96,664	705,134	905,857	3,435	21,546	1,280	87,409	205
<b>Federal Government <sup>5</sup></b>													
1993	685,283	-	23,276	60,565	188,767	46,093	325,201	26,129	730	3,211	1,421	9,698	194
1994	712,488	-	15,870	66,987	181,737	59,334	359,833	16,654	63	862	1,391	9,576	183
1995	756,834	-	8,072	52,354	170,719	78,456	402,307	26,572	23	8,111	1,360	8,684	176
1996	839,883	-	26,789	55,289	176,164	96,391	434,295	32,988	10	7,761	1,330	8,684	183
1997 Sep.	902,329	-	24,573	73,556	187,862	99,633	465,014	39,012	10	2,468	1,322	8,684	197
Dec.	905,691	-	25,286	78,848	177,721	99,317	481,619	31,845	10	865	1,300	8,684	197
1998 Mar.	932,277	-	25,021	85,443	172,419	97,182	500,252	41,435	10	340	1,292	8,684	201
June	946,364	-	24,986	95,495	181,127	97,547	501,046	33,053	10	2,928	1,292	8,684	197
Sep.	964,454	-	24,685	91,104	189,193	96,664	508,272	41,185	-	3,188	1,292	8,684	189
Dec.	957,983	-	24,666	84,760	199,274	92,698	519,718	24,125	-	2,603	1,270	8,684	186
<b>West German Länder Governments</b>													
1993	393,577	-	-	62,585	-	-	22,450	293,845	1,733	10,399	-	2,563	2
1994	415,052	-	-	68,643	-	-	20,451	311,622	1,632	10,444	-	2,259	2
1995	442,536	-	-	72,001	-	-	19,151	339,084	1,333	10,965	-	-	2
1996	477,361	-	320	80,036	-	-	11,934	372,449	874	11,747	-	-	2
1997 Sep.	493,144	-	150	78,048	-	-	7,059	395,871	716	11,298	-	-	2
Dec.	505,297	-	350	79,901	-	-	6,739	406,499	705	11,102	-	-	2
1998 Mar.	510,857	-	-	78,902	-	-	5,304	415,098	575	10,976	-	-	2
June	514,028	-	-	81,427	-	-	4,208	417,764	539	10,088	-	-	2
Sep.	516,586	-	-	80,259	-	-	4,130	422,974	526	8,697	-	-	2
Dec. p	525,598	-	520	79,242	-	-	4,489	431,559	410	9,376	-	-	2
<b>East German Länder Governments</b>													
1993	40,263	-	-	18,115	-	-	1,000	21,003	5	140	-	-	-
1994	55,650	-	-	19,350	-	-	1,000	35,065	5	230	-	-	-
1995	69,151	-	-	23,845	-	-	1,500	43,328	17	461	-	-	-
1996	80,985	-	500	25,320	-	-	1,500	53,483	-	182	-	-	-
1997 Sep.	84,324	-	200	26,013	-	-	1,500	56,384	15	212	-	-	-
Dec.	90,174	-	700	26,040	-	-	1,500	61,697	15	222	-	-	-
1998 Mar.	90,372	-	610	24,925	-	-	1,500	63,100	15	222	-	-	-
June	92,573	-	735	25,695	-	-	1,500	64,406	15	222	-	-	-
Sep.	94,555	-	200	27,160	-	-	1,500	65,468	15	212	-	-	-
Dec. p	98,192	-	445	25,778	-	-	1,500	70,242	15	212	-	-	-
<b>West German local authorities <sup>6</sup></b>													
1992	140,132	-	-	-	-	-	150	134,618	3,516	1,848	-	-	-
1993	149,211	-	-	-	-	-	-	143,940	3,264	2,007	-	-	-
1994	155,663	-	-	-	-	-	100	149,745	3,186	2,632	-	-	-
1995	159,575	-	-	-	-	-	1,000	153,323	3,006	2,246	-	-	-
1996	161,395	-	-	200	-	-	1,280	154,989	2,746	2,180	-	-	-
1997 Sep.	161,100	-	-	300	-	-	1,330	154,570	2,720	2,180	-	-	-
Dec.	163,141	-	-	300	-	-	1,330	157,024	2,537	1,950	-	-	-
1998 Mar.	163,200	-	-	300	-	-	1,330	157,120	2,500	1,950	-	-	-
June	162,600	-	-	300	-	-	1,330	156,520	2,500	1,950	-	-	-
Sep.	161,700	-	-	300	-	-	1,330	155,620	2,500	1,950	-	-	-
<b>East German local authorities <sup>6</sup></b>													
1992	14,462	-	-	-	-	-	-	14,031	313	118	-	-	-
1993	23,648	-	-	-	-	-	300	22,727	339	282	-	-	-
1994	32,465	-	-	125	-	-	400	31,046	371	523	-	-	-
1995	37,024	-	-	225	-	-	400	35,609	349	441	-	-	-
1996	39,218	-	-	225	-	-	400	38,163	309	121	-	-	-
1997 Sep.	40,050	-	-	225	-	-	400	39,025	300	100	-	-	-
Dec.	38,979	-	-	225	-	-	400	37,913	274	167	-	-	-
1998 Mar.	39,000	-	-	225	-	-	400	37,955	250	170	-	-	-
June	39,100	-	-	225	-	-	400	38,055	250	170	-	-	-
Sep.	39,300	-	-	225	-	-	400	38,255	250	170	-	-	-

For footnotes see end of the table.



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7. Indebtedness of the public sector \* (cont 'd)

DM million

End of year or month	Total	Bundes- bank advances	Treasury discount paper	Treasury notes 1	5-year special Federal bonds 1	Federal savings bonds	Debt secur- ities 1	Direct lending by credit institu- tions 2	Loans from non-banks		Old debt		
									Social security funds	Other 2	owing to German unifica- tion 3	Equalisa- tion claims	Other 4
<b>Federal Railways Fund 5</b>													
1994	71,173	.	.	5,208	.	.	29,467	29,232	65	7,200	.	.	
1995	78,400	.	.	3,848	.	.	28,992	39,005	140	6,415	.	.	
1996	77,785	.	.	1,882	.	.	28,749	41,537	130	5,489	.	.	
1997 Sep.	78,078	.	.	1,860	-	.	26,825	44,432	116	4,845	.	.	
Dec.	77,254	.	.	1,927	-	.	25,634	44,807	115	4,772	.	.	
1998 Mar.	77,445	.	.	1,874	500	.	26,427	44,440	103	4,101	.	.	
June	76,391	.	.	-	500	.	26,468	45,771	102	3,550	.	.	
Sep.	78,276	.	.	-	500	.	28,105	46,549	86	3,037	.	.	
Dec.	77,247	.	.	-	500	.	31,648	42,488	79	2,532	.	.	
<b>"German Unity" Fund 5</b>													
1993	87,676	.	1,876	8,873	.	.	43,804	31,566	5	1,552	.	.	
1994	89,187	.	897	8,867	.	.	43,859	33,744	5	1,816	.	.	
1995	87,146	.	-	8,891	.	.	44,398	31,925	5	1,927	.	.	
1996	83,547	.	-	-	.	.	44,312	38,020	5	1,210	.	.	
1997 Sep.	81,333	.	-	-	.	.	44,293	36,390	5	645	.	.	
Dec.	79,663	.	-	-	.	.	44,293	34,720	5	645	.	.	
1998 Mar.	79,530	.	-	-	.	.	48,135	30,755	5	635	.	.	
June	79,323	.	-	-	.	.	47,988	30,705	5	625	.	.	
Sep.	79,475	.	-	-	.	.	48,240	30,625	5	605	.	.	
Dec.	79,270	.	-	-	.	.	47,855	30,975	-	440	.	.	
<b>ERP Special Fund 5</b>													
1993	28,263	.	.	.	.	.	9,318	18,945	.	-	.	.	
1994	28,043	.	.	.	.	.	10,298	17,745	.	-	.	.	
1995	34,200	.	.	.	.	.	10,745	23,455	.	-	.	.	
1996	34,135	.	.	.	.	.	10,750	23,385	.	-	.	.	
1997 Sep.	33,491	.	.	.	.	.	10,746	22,745	.	-	.	.	
Dec.	33,650	.	.	.	.	.	10,810	22,840	.	-	.	.	
1998 Mar.	34,720	.	.	.	.	.	10,810	23,910	.	-	.	.	
June	34,660	.	.	.	.	.	10,700	23,960	.	-	.	.	
Sep.	34,696	.	.	.	.	.	11,921	22,775	.	-	.	.	
Dec.	34,159	.	.	.	.	.	11,944	20,988	.	1,227	.	.	
<b>Debt-Processing Fund / Redemption Fund for Inherited Liabilities 5</b>													
1993	101,230	.	5,437	.	.	.	.	20,197	-	1,676	.	73,921	
1994	102,428	.	3,740	.	.	.	.	22,003	2	1,420	.	75,263	
1995	328,888	.	-	58,699	.	.	98,731	72,732	98	6,468	13,745	78,395	21
1996	331,918	.	-	54,718	.	.	98,468	81,380	95	7,468	8,630	81,142	19
1997 Sep.	320,773	.	-	54,554	.	.	98,170	80,851	54	7,735	15	79,378	17
Dec.	322,032	.	-	54,028	.	.	98,377	81,616	54	7,233	15	80,692	17
1998 Mar.	318,915	.	-	48,085	.	.	98,150	85,066	54	6,825	-24	80,743	16
June	303,976	.	-	41,939	.	.	96,874	80,176	54	4,140	-9	80,788	15
Sep.	297,370	.	-	34,833	.	.	101,120	78,946	54	3,689	-11	78,726	14
Dec.	304,978	.	-	31,633	.	.	110,006	79,226	54	4,167	-20	79,899	15
<b>"Use of Hard Coal" Equalisation Fund / Indemnification Fund 5</b>													
1995	2,220	.	.	.	.	.	.	2,220	-	-	.	.	
1996	3,117	.	.	.	.	.	.	3,108	-	-	.	.	
1997 Sep.	3,261	.	.	.	.	.	.	3,221	-	-	.	.	
Dec.	3,283	.	.	.	.	.	.	3,229	-	-	.	.	
1998 Mar.	3,314	.	.	.	.	.	.	3,241	-	-	.	.	
June	3,420	.	.	.	.	.	.	3,334	-	-	.	.	
Sep.	3,577	.	.	.	.	.	.	3,460	-	-	.	.	
Dec.	4,114	.	.	.	.	.	443	3,671	-	-	.	.	

Source: Bundesbank calculations based on data from the Federal Statistical Office. — \* Excluding public authorities' mutual indebtedness. — 1 Excluding paper in the issuers' portfolios. — 2 Mainly loans against borrowers' notes. Including loans raised abroad. Other loans from non-banks, including liabilities arising from the investment assistance levy. — 3 Old liabilities arising from residential construction and liabilities arising from residential construction by the former GDR's armed forces and from residential construction in connection with the return of the troops of

the former USSR in eastern Germany to their home country. — 4 Old debt mainly expressed in foreign currency, in accordance with the London Debts agreement; excluding debt securities in own portfolios. — 5 The debt incurred through the joint issue of Federal securities is recorded here - in contrast to the capital market statistics - under the Federal Government and its special funds in accordance with the agreed distribution ratios. — 6 Data other than end-of-year figures have been estimated. Including indebtedness of municipal special-purpose associations and municipal hospitals.

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8. Changes in public sector indebtedness \*

Item	Level at end of			Net borrowing <sup>1</sup>						
	1996	1997	Sep. 1998	1997			1998			
				Total	1st-3rd qtr	1st half	3rd qtr	1st-3rd qtr	1st half	3rd qtr
<b>Borrowers</b>										
Federal Government	839,883	905,691	964,454	+ 65,808	+ 62,446	+ 47,335	+ 15,112	+ 58,763	+ 40,673	+ 18,091
"German Unity" Fund	83,547	79,663	79,475	- 3,884	- 2,214	- 1,677	- 537	- 188	- 340	+ 152
ERP Special Fund	34,135	33,650	34,696	- 485	- 644	- 500	- 144	+ 1,047	+ 1,010	+ 36
Federal Railways Fund	77,785	77,254	78,276	- 531	+ 293	+ 277	+ 16	+ 1,022	- 863	+ 1,885
Inherited Liabilities Fund	331,918	322,032	297,370	- 11,037	- 11,430	- 11,028	- 402	- 24,753	- 18,094	- 6,660
"Use of Hard Coal" Equalisation Fund	3,108	3,229	3,460	+ 121	+ 113	+ 64	+ 49	+ 231	+ 105	+ 126
Indemnification Fund	9	54	117	+ 45	+ 31	+ 20	+ 11	+ 63	+ 33	+ 30
West German Länder Governments	477,361	505,297	516,586	+ 27,936	+ 15,783	+ 14,177	+ 1,605	+ 11,289	+ 8,731	+ 2,558
East German Länder Governments	80,985	90,174	94,555	+ 9,189	+ 3,339	+ 239	+ 3,100	+ 4,382	+ 2,400	+ 1,982
West German local authorities <sup>2</sup>	161,395	163,141	161,700	+ 6,129	+ 3,420	+ 2,470	+ 950	- 185	+ 715	- 900
East German local authorities <sup>2</sup>	39,218	38,979	39,300	+ 2,477	+ 832	+ 482	+ 350	+ 321	+ 121	+ 200
<b>Total</b>	<b>2,129,344</b>	<b>2,219,163</b>	<b>2,269,989</b>	<b>+ 95,769</b>	<b>+ 71,970</b>	<b>+ 51,860</b>	<b>+ 20,110</b>	<b>+ 51,991</b>	<b>+ 34,491</b>	<b>+ 17,500</b>
<b>Types of debt</b>										
Treasury discount paper <sup>3</sup>	27,609	26,336	24,885	- 1,273	- 2,686	- 833	- 1,852	- 1,451	- 614	- 837
Treasury notes <sup>4</sup>	217,668	241,268	233,880	+ 23,600	+ 16,887	+ 10,811	+ 6,077	- 7,388	+ 3,813	- 11,201
Five-year special Federal bonds <sup>4</sup>	176,164	177,721	189,693	+ 1,557	+ 11,697	+ 19,276	- 7,579	+ 11,973	+ 3,906	+ 8,067
Federal savings bonds	96,391	99,317	96,664	+ 2,927	+ 3,242	+ 3,483	- 242	- 2,654	- 1,770	- 883
Debt securities <sup>4</sup>	631,696	670,755	705,134	+ 39,059	+ 23,682	+ 24,377	- 696	+ 34,380	+ 19,846	+ 14,533
Direct lending by credit institutions <sup>5</sup>	839,501	882,190	905,857	+ 49,788	+ 36,714	+ 9,147	+ 27,567	+ 24,923	+ 12,811	+ 12,113
Loans from social security funds	4,168	3,715	3,435	- 454	- 233	- 162	- 71	- 280	- 240	- 40
Other loans <sup>5</sup>	36,078	26,877	21,467	- 9,201	- 6,674	- 5,626	- 1,047	- 5,409	- 3,283	- 2,126
Old debt <sup>6</sup>	10,163	1,531	1,485	- 8,633	- 8,611	- 8,622	+ 12	- 45	- 34	- 12
Equalisation claims	89,826	89,376	87,409	- 1,600	- 2,049	+ 10	- 2,059	- 2,058	+ 57	- 2,115
Investment assistance levy	79	79	79	- 0	- 0	- 0	- 0	- 0	+ 0	- 0
<b>Total</b>	<b>2,129,344</b>	<b>2,219,163</b>	<b>2,269,989</b>	<b>+ 95,769</b>	<b>+ 71,970</b>	<b>+ 51,860</b>	<b>+ 20,110</b>	<b>+ 51,991</b>	<b>+ 34,491</b>	<b>+ 17,500</b>
<b>Creditors</b>										
<b>Banking system</b>										
Bundesbank	8,684	8,684	8,684	-	-	-	-	-	-	-
Credit institutions	1,133,500	1,172,400	1,213,200	+ 43,900	+ 58,300	+ 31,600	+ 26,700	+ 42,000	+ 52,500	- 10,500
<b>Domestic non-banks</b>										
Social security funds <sup>7</sup>	4,200	3,700	3,400	- 500	- 300	- 200	- 100	- 300	- 200	- 100
Other <sup>8</sup>	358,660	329,380	289,706	- 28,332	- 38,930	- 16,140	- 22,790	- 39,709	- 22,709	- 17,000
Foreign creditors <sup>pe</sup>	624,300	705,000	755,000	+ 80,700	+ 52,900	+ 36,600	+ 16,300	+ 50,000	+ 4,900	+ 45,100
<b>Total</b>	<b>2,129,344</b>	<b>2,219,163</b>	<b>2,269,989</b>	<b>+ 95,769</b>	<b>+ 71,970</b>	<b>+ 51,860</b>	<b>+ 20,110</b>	<b>+ 51,991</b>	<b>+ 34,491</b>	<b>+ 17,500</b>

Source: Bundesbank calculations based on data from the Federal Statistical Office. — \* Excluding public authorities' mutual indebtedness. — <sup>1</sup> Net borrowing differs from the change in indebtedness, which includes the assumption and reduction of debts. — <sup>2</sup> Data other than end-of-year figures have been estimated. Including indebtedness of municipal special-purpose associations and municipal hospitals. — <sup>3</sup> Excluding mobilisation and liquidity paper. — <sup>4</sup> Excluding paper in the issuers' portfolios. — <sup>5</sup> Including loans raised abroad. — <sup>6</sup> Old liabilities arising

from residential construction and liabilities arising from the residential construction of the former GDR's armed forces and from residential construction in connection with the return of the troops of the former USSR based in eastern Germany to their home country, and old debt in accordance with the London Debts Agreement. — <sup>7</sup> Excluding public bonds acquired by supplementary pension funds for government employees. — <sup>8</sup> Ascertained as a difference.

9. Loans raised by public authorities against borrowers' notes

End of year or month	DM million									
	Total <sup>1</sup>	Federal Government <sup>2</sup>	"German Unity" Fund	Debt-Processing Fund	ERP Special Fund	Länder Governments <sup>3</sup>	Local authorities <sup>3, 4, 5</sup>	Federal Railways Fund	Inherited Liabilities Fund	"Use of Hard Coal" Equalisation Fund
1994	661,675	17,428	35,565	23,425	17,745	349,377	181,638	36,497	-	-
1995	790,631	31,807	33,857	-	23,455	387,309	187,125	45,560	79,297	2,220
1996	853,533	33,817	39,235	-	23,385	428,292	189,599	47,155	88,942	3,108
1997 Sep.	872,036	23,099	37,040	-	22,745	458,334	189,565	49,393	88,639	3,221
Dec.	885,840	25,914	35,370	-	22,840	471,224	188,667	49,694	88,902	3,229
1998 Mar.	895,614	22,394	31,395	-	23,910	485,451	188,635	48,644	91,944	3,241
June	893,250	23,669	31,335	-	23,910	489,191	188,019	49,423	84,369	3,334
Sep.	895,378	23,659	31,235	-	22,775	493,518	188,372	49,671	82,688	3,460

Source: Bundesbank calculations based on data from the Federal Statistical Office. — <sup>1</sup> Excluding Debt Register claims and cash advances. Including small amounts of: mortgage loans, land charges in annuity and other forms, and debts outstanding. — <sup>2</sup> Including Equalisation of Burdens Fund. —

<sup>3</sup> From 1991, in the whole of Germany. — <sup>4</sup> Data other than end-of-year figures have been estimated. Including municipal special-purpose associations and municipal hospitals. — <sup>5</sup> Including contractually agreed loans.

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10. Indebtedness of the Federal Government

End of year or month	Total	Bundes- bank advances	Treasury discount paper 1		Federal Treasury paper 2	5-year special Federal bonds 2	Federal savings bonds	Debt secur- ities 2, 3	Direct lending by credit institu- tions 4	Indebtedness to non-banks		Old debt		
			Total	of which Treasury financing paper						Social security funds 5	Other 4, 6	owing to German unifica- tion 7	Equal- isation claims	Other 8
DM million														
1993 9	685,283	-	23,276	22,904	60,565	188,767	46,093	325,201	26,129	730	3,211	1,421	9,698	194
1994	712,488	-	15,870	14,578	66,987	181,737	59,334	359,833	16,654	63	862	1,391	9,576	183
1995	756,834	-	8,072	7,681	52,354	170,719	78,456	402,307	26,572	23	8,111	1,360	8,684	176
1996	839,883	-	26,789	7,166	55,289	176,164	96,391	434,295	32,988	10	7,761	1,330	8,684	183
1997	905,691	-	25,286	5,221	78,848	177,721	99,317	481,619	31,845	10	865	1,300	8,684	197
1998	957,983	-	24,666	4,558	84,760	199,274	92,698	519,718	24,125	-	2,603	1,270	8,684	186
1998 Mar.	932,277	-	25,021	5,124	85,443	172,419	97,182	500,252	41,435	10	340	1,292	8,684	201
Apr.	942,079	-	25,058	4,899	86,985	174,121	97,535	504,502	40,849	10	2,847	1,292	8,684	197
May	936,754	-	25,003	4,844	87,724	180,295	97,700	501,520	30,596	10	3,735	1,292	8,684	195
June	946,364	-	24,986	4,827	95,495	181,127	97,547	501,046	33,053	10	2,928	1,292	8,684	197
July	956,484	-	24,735	4,737	95,743	182,024	96,973	503,829	40,129	10	2,873	1,292	8,684	195
Aug.	958,085	-	24,751	4,754	92,826	187,432	96,505	505,240	37,792	-	3,368	1,292	8,684	195
Sep.	964,454	-	24,685	4,688	91,104	189,193	96,664	508,272	41,185	-	3,188	1,292	8,684	189
Oct.	975,098	-	24,759	4,652	92,525	187,787	96,001	521,638	39,508	-	2,723	1,290	8,684	185
Nov.	977,714	-	24,727	4,620	93,495	196,193	93,898	520,117	36,398	-	2,723	1,290	8,684	187
Dec.	957,983	-	24,666	4,558	84,760	199,274	92,698	519,718	24,125	-	2,603	1,270	8,684	186
Euro million														
1999 Jan.	503,655	-	12,254	2,197	44,077	103,276	46,678	274,373	16,581	-	1,230	649	4,440	96
Feb. p	505,807	-	12,151	2,094	42,990	105,561	45,438	273,077	20,175	-	1,230	649	4,440	96
Mar. p	506,319	-	12,077	2,019	41,245	106,040	45,425	277,684	17,438	-	1,230	645	4,440	96

1 Excluding mobilisation and liquidity paper. — 2 Excluding paper in the issuers' portfolios. — 3 From January 1991 including debt securities taken over from the Federal Railways totalling DM 12,622 million. — 4 Including loans raised abroad; including money market debt. — 5 Including loans granted by supplementary pension funds for government employees. — 6 Including liabilities arising from the investment assistance levy. — 7 Assumption of liabilities arising from residential construction of the

former GDR's armed forces and from residential construction in connection with the return of the troops of the former USSR based in eastern Germany to their home country. — 8 Commutation and compensation debt and old debt mainly expressed in foreign currency. — 9 In 1980 the Federal Government took over the debts of the Equalisation of Burdens Fund. Since then they have been recorded among the Federal Government's figures together with the Federal debt proper.

11. Federal finance on a cash basis

Period	Cash receipts 1	Cash expenditure 1, 2	Cash surplus (+) or deficit (-)	Financing 3					Cash surplus (+) or deficit (-), cumulative from beginning of year
				Change					
				in cash resources 4 (a)	in Bundes-bank advances (b)	in market debt (c)	Items in course of settlement (d)	Seigniorage (e)	
DM billion									
1993	450.28	512.30	- 62.01	+ 12.95	- 4.35	+ 78.54	-	0.78	- 62.01
1994	463.72	497.55	- 33.83	+ 6.12	-	+ 27.21	-	0.50	- 33.83
1995	501.56	549.77	- 48.20	+ 3.49	-	+ 44.35	-	0.37	- 48.20
1996	532.67	609.26	- 76.60	+ 6.62	-	+ 83.05	-	0.17	- 76.60
1997	568.83	638.04	- 69.21	+ 3.33	-	+ 65.81	-	0.07	- 69.21
1998	597.48	655.33	- 57.84	+ 5.43	-	+ 52.29	-	0.12	- 57.84
1998 Mar.	50.28	55.05	- 4.78	+ 2.11	-	+ 2.63	-	0.04	- 30.20
Apr.	35.09	42.37	- 7.28	+ 2.55	-	+ 9.80	-	0.03	- 37.48
May	46.89	45.37	+ 1.52	+ 3.80	-	+ 5.32	-	0.00	- 35.96
June	52.75	62.35	- 9.60	+ 0.04	-	+ 9.61	-	0.03	- 45.56
July	47.06	55.51	- 8.45	+ 1.67	-	+ 10.12	-	0.00	- 54.01
Aug.	45.04	48.90	- 3.87	+ 2.27	-	+ 1.60	-	0.00	- 57.88
Sep.	51.58	54.58	- 3.00	+ 3.40	-	+ 6.37	-	0.03	- 60.88
Oct.	40.43	54.28	- 13.86	+ 3.22	-	+ 10.64	-	0.01	- 74.73
Nov.	55.64	57.88	- 2.23	+ 0.38	-	+ 2.62	-	0.00	- 76.96
Dec.	90.69	71.57	+ 19.12	- 0.63	-	- 19.73	-	0.02	- 57.84
Euro billion									
1999 Jan.	25.48	35.10	- 9.62	+ 4.22	-	+ 13.85	-	0.00	- 9.62
Feb. p	20.47	24.99	- 4.52	+ 2.38	-	+ 2.15	-	0.01	- 14.14
Mar. p	28.93	30.96	- 2.04	+ 1.54	-	+ 0.51	-	0.01	- 16.18

1 The cash transactions recorded as cash receipts and cash expenditure comprise payments into and out of the accounts carried by the Bundesbank for the Federal Government. The cash receipts and cash expenditure differ from those shown in the official financial statistics primarily because these transactions are recorded not at the time they are entered in the budgetary accounts but at the time of the actual inflow or outflow, and because trans-

actions on behalf of the European Communities (which are not entered in the Federal budget) are conducted through the accounts of the Federal Government. — 2 Including small amounts of special transactions. — 3 Cash balance = column (a) less (b) less (c) less (d) less (e). — 4 Deposits at the Bundesbank and in the money market.

VIII. Public finance in Germany

12. Receipts, expenditure and assets of the wage and salary earners' pension insurance funds

DM million

Period	Receipts 1			Expenditure 1				Balance of receipts and expenditure	Assets 5				Memorandum item Administrative assets
	Total	of which		Total	of which		Total		Deposits 6	Securities	Mortgage and other loans 7	Real estate	
		Contributions 2	Federal payments		Pension payments 3	Pensioners' health insurance 4							
<b>Western Germany</b>													
1993	243,119	196,357	41,837	248,866	207,633	13,064	- 5,747	39,786	29,957	8,499	1,100	229	6,297
1994	267,265	215,758	48,108	266,443	220,744	14,375	+ 822	33,578	24,194	8,170	909	305	6,890
1995	276,302	225,324	47,979	279,226	230,222	15,923	- 2,924	21,756	16,801	3,948	746	262	7,800
1996 B	288,761	236,036	50,478	288,716	237,464	16,809	+ 45	14,456	9,608	2,119	2,500	229	8,863
1997 P	305,606	248,463	54,896	295,635	245,857	17,892	+ 9,971	14,659	10,179	1,878	2,372	230	9,261
1998 ts	317,465	250,066	65,312	304,415	254,552	18,613	+ 13,050	18,197	14,201	1,493	2,278	225	9,595
1998 1st qtr	74,315	59,036	14,827	75,224	63,105	4,561	- 909	11,808	7,507	1,720	2,351	230	9,297
2nd qtr	77,581	60,111	16,902	74,398	63,175	4,565	+ 3,183	11,657	7,506	1,584	2,330	237	9,324
3rd qtr	79,131	61,935	16,766	76,389	64,145	4,746	+ 2,742	11,040	6,993	1,511	2,303	233	9,437
4th qtr	85,689	68,984	16,117	77,405	64,127	4,741	+ 8,284	18,197	14,201	1,493	2,278	225	9,595
<b>Eastern Germany</b>													
1993	53,241	36,051	10,834	55,166	45,287	2,834	- 1,925	.	.	.	.	.	.
1994	63,001	40,904	13,783	65,811	53,136	3,376	- 2,810	.	.	.	.	.	.
1995	70,774	44,970	16,408	77,780	63,812	4,362	- 7,006	.	.	.	.	.	.
1996	74,790	46,580	17,910	83,830	68,316	4,851	- 9,040	.	.	.	.	.	.
1997 P	79,351	48,939	20,065	87,424	70,585	5,388	- 8,073	.	.	.	.	.	.
1998 ts	80,942	47,757	23,555	90,608	73,156	5,738	- 9,666	.	.	.	.	.	.
1998 1st qtr	19,582	11,559	5,457	22,489	18,239	1,415	- 2,907	.	.	.	.	.	.
2nd qtr	18,861	11,417	6,044	22,591	18,194	1,420	- 3,730	.	.	.	.	.	.
3rd qtr	19,979	11,788	5,994	22,698	18,390	1,455	- 2,719	.	.	.	.	.	.
4th qtr	22,020	12,993	6,060	22,830	18,333	1,448	- 810	.	.	.	.	.	.

Source: Federal Minister of Labour and Social Affairs and Association of German Pension Insurance Funds. — 1 The annual figures differ from the sum of the quarterly figures, as the latter are all provisional. From 1993 including financial compensation payments. — 2 Including contributions for recipients of public financial benefits. — 3 Payments by pension insurance funds to health insurance institutions under section 50 of the Social Security Code V have been deducted from pension payments. — 4 From 1995

including nursing insurance scheme for pensioners. — 5 Largely corresponds to fluctuation reserves. Level at the end of the year or quarter. From 1992 figures for the whole of Germany. — 6 Including cash resources. — 7 Excluding loans to other social security funds; including participating interests. — 8 Excluding receipts arising from the higher valuation of participating interests.

13. Receipts and expenditure of the Federal Labour Office

DM million

Period	Receipts			Expenditure							Balance of receipts and expenditure	Subsidies or working fund credits of the Federal Government	
	Total 1	of which		Total	of which			Total	Promotion of vocational training 4, 5				Promotion of winter construction
		Contributions	Levies 2		Total	Western Germany	Eastern Germany		Western Germany	Eastern Germany			
<b>Germany</b>													
1993	85,109	79,895	1,829	109,536	48,005	34,149	13,856	36,891	15,895	20,996	1,919	-24,426	24,419
1994	89,658	81,536	3,822	99,863	48,342	35,163	13,179	31,273	14,382	16,891	1,822	-10,205	10,142
1995	90,211	84,354	2,957	97,103	49,254	36,161	13,094	34,441	16,745	17,696	1,586	-6,892	6,887
1996	91,825	85,073	3,346	105,588	57,123	40,186	16,938	36,478	18,368	18,111	903	-13,763	13,756
1997	93,149	85,793	2,959	102,723	60,273	40,309	19,964	31,418	16,117	15,301	443	-9,574	9,574
1998	91,088	86,165	2,868	98,852	53,483	35,128	18,355	34,279	16,784	17,496	471	-7,764	7,719
1998 1st qtr	20,507	19,894	152	21,882	13,687	8,849	4,838	5,582	3,008	2,573	261	-1,375	6,157
2nd qtr	21,716	20,448	653	25,347	14,786	9,506	5,280	7,814	4,011	3,804	191	-3,631	2,668
3rd qtr	22,886	21,496	856	23,992	12,525	8,314	4,211	8,832	4,095	4,737	14	-1,106	854
4th qtr	25,978	24,328	1,207	27,631	12,486	8,460	4,026	12,051	5,670	6,381	6	-1,653	-1,960

Source: Federal Labour Office. — 1 Excluding Federal Government liquidity assistance. — 2 Levies to promote winter construction and to pay bankruptcy compensation to employees. — 3 Unemployment benefits, short-time-working benefits. Including the integration allowance paid to resettlers from eastern Europe and emigrants from the GDR as a

replacement for the unemployment benefits. — 4 Including contributions to the statutory health insurance, and to the pension insurance funds. — 5 Vocational training, measures to foster the commencement of work, rehabilitation and job creation measures.

IX. Economic conditions

1. Origin and expenditure of domestic product, distribution of national income  
Germany

Item	1994	1995	1996 P	1997 P	1998 P	1995	1996 P	1997 P	1998 P	1995	1996 P	1997 P	1998 P
	DM billion					Change from previous year in %				Percentage of total			
<b>at current prices</b>													
<b>I. Origin of domestic product</b>													
Agriculture and forestry 1	36.1	36.3	38.7	39.4	40.1	0.8	6.5	1.7	1.8	1.1	1.1	1.1	1.1
Producing sector	1,116.7	1,133.3	1,123.9	1,144.5	1,192.8	1.5	- 0.8	1.8	4.2	32.9	31.9	31.6	31.7
Distribution, transportation 2	478.4	494.6	496.2	508.7	522.5	3.4	0.3	2.5	2.7	14.4	14.1	14.0	13.9
Services 3	1,110.0	1,169.3	1,245.7	1,305.1	1,368.5	5.3	6.5	4.8	4.9	34.0	35.4	36.0	36.4
Enterprises	2,741.1	2,833.5	2,904.5	2,997.6	3,123.9	3.4	2.5	3.2	4.2	82.3	82.4	82.7	83.1
Government, households, etc. 4	461.7	479.8	489.2	492.3	495.7	3.9	2.0	0.6	0.7	13.9	13.9	13.6	13.2
Gross value added do. adjusted 5	3,202.8	3,313.3	3,393.6	3,489.9	3,619.6	3.4	2.4	2.8	3.7	96.2	96.3	96.3	96.3
Gross domestic product	3,063.2	3,176.1	3,253.7	3,346.6	3,472.6	3.7	2.4	2.9	3.8	92.3	92.3	92.3	92.4
Gross domestic product	3,328.2	3,442.8	3,523.5	3,624.0	3,758.1	3.4	2.3	2.9	3.7	100	100	100	100
<b>II. Expenditure of domestic product</b>													
Private consumption	1,906.0	1,975.3	2,046.4	2,095.2	2,156.1	3.6	3.6	2.4	2.9	57.4	58.1	57.8	57.4
Government consumption	658.6	686.6	705.1	703.4	710.1	4.2	2.7	- 0.2	1.0	19.9	20.0	19.4	18.9
Machinery and equipment	258.1	262.3	267.9	279.5	307.2	1.6	2.1	4.3	9.9	7.6	7.6	7.7	8.2
Construction	468.1	473.3	455.5	443.5	421.5	1.1	- 3.8	- 2.7	- 4.9	13.7	12.9	12.2	11.2
Increase in stocks	16.4	18.3	5.9	47.6	97.3	.	.	.	.	0.5	0.2	1.3	2.6
Domestic expenditure	3,307.2	3,415.7	3,480.8	3,569.1	3,692.2	3.3	1.9	2.5	3.4	99.2	98.8	98.5	98.2
Foreign balance	21.0	27.1	42.7	54.9	65.9	.	.	.	.	0.8	1.2	1.5	1.8
Exports	757.0	821.2	866.2	971.8	1,028.2	8.5	5.5	12.2	5.8	23.9	24.6	26.8	27.4
Imports	735.9	794.2	823.5	916.9	962.3	7.9	3.7	11.3	4.9	23.1	23.4	25.3	25.6
Gross domestic product	3,328.2	3,442.8	3,523.5	3,624.0	3,758.1	3.4	2.3	2.9	3.7	100	100	100	100
<b>III. Distribution of national income</b>													
Compensation of employees 6	1,824.1	1,883.4	1,902.5	1,907.0	1,933.0	3.3	1.0	0.2	1.4	72.5	71.6	69.7	68.2
Entrepreneurial and property income	685.9	715.6	754.5	828.7	900.4	4.3	5.4	9.8	8.6	27.5	28.4	30.3	31.8
National income	2,510.0	2,599.0	2,657.0	2,735.7	2,833.4	3.5	2.2	3.0	3.6	100	100	100	100
Memorandum item													
Gross national product	3,320.2	3,426.6	3,497.5	3,600.1	3,719.4	3.2	2.1	2.9	3.3				
<b>at 1991 prices</b>													
<b>IV. Origin of domestic product</b>													
Agriculture and forestry 1	43.8	42.5	46.2	45.4	46.9	- 3.0	8.6	- 1.6	3.3	1.4	1.5	1.5	1.5
Producing sector	1,033.2	1,036.8	1,022.8	1,048.9	1,084.9	0.4	- 1.4	2.6	3.4	34.6	33.7	33.8	34.0
Distribution, transportation 2	432.9	438.2	442.4	453.3	469.1	1.2	1.0	2.5	3.5	14.6	14.6	14.6	14.7
Services 3	950.8	982.7	1,034.6	1,075.6	1,126.3	3.4	5.3	4.0	4.7	32.8	34.1	34.7	35.3
Enterprises	2,460.7	2,500.2	2,545.8	2,623.2	2,727.2	1.6	1.8	3.0	4.0	83.4	83.9	84.6	85.6
Government, households, etc. 4	401.3	403.0	405.6	404.2	403.4	0.4	0.6	- 0.3	- 0.2	13.5	13.4	13.0	12.7
Gross value added do. adjusted 5	2,862.0	2,903.2	2,951.4	3,027.4	3,130.7	1.4	1.7	2.6	3.4	96.9	97.3	97.6	98.2
Gross domestic product	2,730.6	2,767.4	2,803.9	2,866.6	2,954.8	1.3	1.3	2.2	3.1	92.4	92.4	92.4	92.7
Gross domestic product	2,960.2	2,996.2	3,034.6	3,101.4	3,186.7	1.2	1.3	2.2	2.8	100	100	100	100
<b>V. Expenditure of domestic product</b>													
Private consumption	1,699.0	1,730.2	1,757.6	1,765.7	1,800.1	1.8	1.6	0.5	1.9	57.7	57.9	56.9	56.5
Government consumption	588.9	600.5	616.9	612.7	616.3	2.0	2.7	- 0.7	0.6	20.0	20.3	19.8	19.3
Machinery and equipment	251.0	255.0	260.0	270.1	297.3	1.6	1.9	3.9	10.1	8.5	8.6	8.7	9.3
Construction	413.2	409.0	396.1	386.4	369.7	- 1.0	- 3.1	- 2.5	- 4.3	13.6	13.1	12.5	11.6
Increase in stocks	19.4	18.5	4.1	41.9	88.3	.	.	.	.	0.6	0.1	1.3	2.8
Domestic expenditure	2,971.4	3,013.2	3,034.6	3,076.8	3,171.8	1.4	0.7	1.4	3.1	100.6	100.0	99.2	99.5
Foreign balance	- 11.2	- 17.0	0.0	24.6	15.0	.	.	.	.	- 0.6	0.0	0.8	0.5
Exports	742.8	791.8	832.5	924.8	974.4	6.6	5.1	11.1	5.4	26.4	27.4	29.8	30.6
Imports	754.0	808.9	832.5	900.2	959.4	7.3	2.9	8.1	6.6	27.0	27.4	29.0	30.1
Gross domestic product	2,960.2	2,996.2	3,034.6	3,101.4	3,186.7	1.2	1.3	2.2	2.8	100	100	100	100

Source: Federal Statistical Office. — 1 Including fishing. — 2 Including tele-communications. — 3 Credit institutions, insurance enterprises, letting of dwellings and other services. — 4 Including private non-commercial organisations. — 5 Gross value added by all economic sectors less imputed re-

muneration for bank services. — 6 Including employers' contributions to social security funds and other social security expenditure by employers (inter alia on company old-age pension schemes).

IX. Economic conditions

2. Output in the producing sector <sup>1</sup>

Adjusted for working-day variations

Period	Producing sector, total		of which:												
			Manufacturing sector												
			Total		Intermediate goods industries <sup>2</sup>		Capital goods industries		Durable consumer goods industries		Other consumer goods industries		Construction		
	Change from previous year in %	1995 = 100	Change from previous year in %	1995 = 100	Change from previous year in %	1995 = 100	Change from previous year in %	1995 = 100	Change from previous year in %	1995 = 100	Change from previous year in %	1995 = 100	Change from previous year in %	1995 = 100	Change from previous year in %
<b>Germany</b>															
1995 3 r	100.0	+ 0.8	100.0	+ 1.2	100.0	+ 0.2	100.0	+ 5.4	100.0	- 6.5	100.0	+ 1.0	100.2	- 1.4	
1996 r	99.8	- 0.2	100.4	+ 0.4	99.8	- 0.2	101.0	+ 1.0	101.1	+ 1.1	100.6	+ 0.6	93.5	- 6.7	
1997 r	102.5	+ 2.7	104.5	+ 4.1	106.0	+ 6.2	105.2	+ 4.2	101.9	+ 0.8	100.9	+ 0.3	89.6	- 4.2	
1998 r	106.3	+ 3.7	109.9	+ 5.2	111.5	+ 5.2	113.2	+ 7.6	108.2	+ 6.2	100.6	- 0.3	86.8	- 3.1	
1998 Feb. r	98.3	+ 5.2	103.6	+ 6.9	106.5	+ 8.7	102.9	+ 8.7	108.5	+ 5.9	94.4	- 1.9	61.3	- 2.4	
Mar. r	114.3	+ 9.3	119.2	+ 11.8	120.5	+ 12.4	124.4	+ 16.5	122.4	+ 12.6	104.9	+ 1.7	86.9	- 4.0	
Apr. r	106.2	+ 1.5	109.4	+ 3.8	112.7	+ 4.4	110.1	+ 5.7	107.7	+ 0.8	100.0	+ 0.5	91.5	- 7.9	
May r	104.2	+ 7.3	107.3	+ 9.7	110.9	+ 10.0	108.0	+ 12.4	105.4	+ 13.5	97.9	+ 1.7	92.6	- 1.5	
June r	110.2	+ 1.8	114.2	+ 3.3	115.9	+ 4.3	120.0	+ 3.5	110.8	+ 2.8	100.9	- 0.2	99.4	- 4.5	
July r	109.1	+ 3.6	112.0	+ 5.0	114.6	+ 4.7	116.3	+ 8.2	104.6	+ 3.6	101.2	+ 0.4	100.7	- 3.3	
Aug. r	97.2	+ 5.5	98.7	+ 6.8	103.8	+ 6.0	98.0	+ 10.6	81.0	+ 15.1	95.2	- 0.3	90.8	- 1.7	
Sep. r	113.7	+ 2.9	117.1	+ 3.8	117.9	+ 3.8	122.1	+ 5.3	121.0	+ 7.5	104.3	- 1.0	103.3	- 3.8	
Oct. r	113.8	+ 1.6	116.8	+ 2.8	118.4	+ 0.8	117.9	+ 6.6	124.1	+ 10.8	106.8	- 2.6	100.1	- 4.8	
Nov. r	112.4	+ 1.0	115.8	+ 2.0	114.8	+ 0.8	120.5	+ 4.8	121.1	+ 3.2	106.6	- 1.0	91.5	- 5.9	
Dec. r	100.5	- 0.5	105.4	+ 0.8	97.0	- 2.6	126.3	+ 5.1	95.0	+ 3.5	96.2	- 1.2	63.0	- 10.0	
1999 Jan. p	96.2	+ 0.7	99.8	+ 0.6	103.8	- 0.7	93.8	+ 2.0	99.6	+ 3.5	99.5	+ 0.8	63.4	+ 4.4	
Feb. p	96.7	- 1.6	102.5	- 1.1	103.6	- 2.7	101.5	- 1.4	109.2	+ 0.6	97.6	+ 3.4	55.4	- 9.6	
<b>Western Germany</b>															
1995 3 r	100.0	+ 0.2	100.0	+ 0.5	100.0	- 0.9	100.1	+ 5.3	100.0	- 7.2	100.0	+ 0.4	100.2	- 3.4	
1996 r	99.5	- 0.5	100.0	± 0.0	99.5	- 0.5	100.8	+ 0.7	100.8	+ 0.8	99.7	- 0.3	92.5	- 7.7	
1997 r	102.2	+ 2.7	103.9	+ 3.9	105.4	+ 5.9	104.9	+ 4.1	101.3	+ 0.5	99.4	- 0.3	88.9	- 3.9	
1998 r	106.1	+ 3.8	108.9	+ 4.8	110.3	+ 4.6	112.9	+ 7.6	107.2	+ 5.8	99.0	- 0.4	87.4	- 1.7	
1998 Feb. r	98.7	+ 5.1	103.0	+ 6.4	105.8	+ 8.1	102.8	+ 8.8	107.6	+ 5.6	93.3	- 2.0	61.8	- 1.3	
Mar. r	114.5	+ 9.5	118.3	+ 11.3	119.4	+ 11.8	124.3	+ 16.7	121.2	+ 12.1	103.6	+ 1.8	88.3	- 1.6	
Apr. r	106.1	+ 1.8	108.5	+ 3.3	111.6	+ 3.9	109.9	+ 5.4	107.8	+ 0.7	98.3	+ 0.1	93.2	- 5.7	
May r	103.9	+ 7.8	106.3	+ 9.4	109.7	+ 9.7	107.8	+ 12.4	104.6	+ 13.2	96.0	+ 1.8	94.2	+ 1.4	
June r	109.7	+ 1.8	113.0	+ 2.8	114.5	+ 3.8	119.8	+ 3.5	109.8	+ 2.4	98.9	- 0.4	100.1	- 3.1	
July r	108.7	+ 3.5	111.0	+ 4.5	113.2	+ 3.9	116.3	+ 7.9	103.8	+ 2.8	99.9	+ 0.3	101.4	- 2.2	
Aug. r	96.3	+ 5.9	97.4	+ 6.6	102.4	+ 5.5	97.4	+ 10.8	79.8	+ 15.0	93.9	- 0.1	89.6	+ 0.4	
Sep. r	113.1	+ 3.1	115.8	+ 3.8	116.3	+ 3.2	121.4	+ 5.8	119.9	+ 7.1	102.7	- 1.1	103.9	- 2.7	
Oct. r	113.3	+ 1.5	115.6	+ 2.3	117.1	+ 0.3	117.4	+ 6.4	123.1	+ 10.4	105.0	- 2.7	100.9	- 4.1	
Nov. r	111.9	+ 1.0	114.5	+ 1.7	113.4	+ 0.4	120.1	+ 4.9	119.7	+ 2.7	104.9	- 0.8	91.6	- 5.4	
Dec. r	100.7	- 0.2	104.4	+ 0.6	96.0	- 3.0	126.5	+ 5.6	93.5	+ 3.1	94.1	- 1.3	63.3	- 9.3	
1999 Jan. p	96.2	+ 0.5	98.9	+ 0.4	102.8	- 1.2	93.2	+ 1.7	98.0	+ 2.8	98.9	+ 1.4	63.2	+ 4.8	
Feb. p	97.2	- 1.5	101.9	- 1.1	102.7	- 2.9	101.4	- 1.4	108.2	+ 0.6	97.1	+ 4.1	56.0	- 9.4	
<b>Eastern Germany</b>															
1995 3 r	100.0	+ 4.9	100.0	+ 9.6	100.1	+ 16.3	100.0	+ 3.2	100.1	+ 12.9	100.1	+ 5.0	100.1	+ 5.5	
1996 r	102.0	+ 2.0	105.9	+ 5.9	104.4	+ 4.3	103.9	+ 3.9	108.7	+ 8.6	110.5	+ 10.4	96.8	+ 3.3	
1997 r	105.6	+ 3.5	115.8	+ 9.3	116.5	+ 11.6	110.9	+ 6.7	121.4	+ 11.7	118.9	+ 7.6	92.2	- 4.8	
1998 r	108.9	+ 3.1	127.0	+ 9.7	133.3	+ 14.4	119.9	+ 8.1	142.3	+ 17.2	120.4	+ 1.3	84.9	- 7.9	
1998 Feb. r	93.0	+ 6.2	113.5	+ 12.5	119.0	+ 21.4	106.0	+ 8.7	136.5	+ 15.9	106.9	- 0.2	59.7	- 5.2	
Mar. r	112.4	+ 6.7	133.9	+ 17.3	141.1	+ 26.4	128.0	+ 13.7	161.1	+ 28.4	121.4	+ 2.3	81.9	- 11.7	
Apr. r	107.8	+ 0.4	124.9	+ 9.8	132.8	+ 12.2	114.4	+ 10.7	134.7	+ 5.0	120.2	+ 5.1	85.3	- 15.4	
May r	107.3	+ 2.8	124.2	+ 11.7	132.8	+ 16.4	111.6	+ 10.8	131.1	+ 22.2	121.1	+ 1.7	86.8	- 11.4	
June r	115.8	+ 2.6	134.0	+ 9.4	142.4	+ 14.4	125.7	+ 6.3	142.8	+ 14.5	125.5	+ 2.2	96.9	- 9.3	
July r	113.6	+ 4.9	128.8	+ 12.3	140.3	+ 15.5	118.7	+ 13.6	133.7	+ 29.6	118.5	+ 1.9	98.5	- 6.7	
Aug. r	107.8	+ 2.2	120.4	+ 8.5	129.9	+ 13.8	111.7	+ 7.1	121.2	+ 17.9	113.1	- 1.6	95.4	- 8.4	
Sep. r	121.1	+ 1.3	139.8	+ 5.8	146.9	+ 12.3	137.2	- 1.6	158.7	+ 14.6	125.5	+ 1.0	101.4	- 7.6	
Oct. r	119.0	+ 2.6	136.8	+ 8.5	143.2	+ 9.3	130.6	+ 12.5	155.7	+ 22.8	128.5	- 0.4	97.4	- 6.9	
Nov. r	117.1	+ 0.2	136.3	+ 4.8	141.4	+ 7.9	130.9	+ 5.0	163.5	+ 13.1	127.7	- 2.7	91.2	- 7.7	
Dec. r	98.6	- 2.5	121.1	+ 1.9	115.7	+ 5.3	124.7	- 2.3	140.8	+ 10.0	122.8	- 0.3	61.9	- 12.3	
1999 Jan. p	96.1	+ 2.8	114.8	+ 3.9	121.2	+ 5.8	104.8	+ 6.2	149.8	+ 17.7	107.3	- 5.5	63.9	+ 2.4	
Feb. p	90.3	- 2.9	112.3	- 1.1	119.1	+ 0.1	103.4	- 2.5	142.9	+ 4.7	103.3	- 3.4	53.3	- 10.7	

Source: Federal Statistical Office. — 1 The index of output has been revised by the Federal Statistical Office from the beginning of 1995. It is now based on the quarterly recorded total output of all firms employing 20 persons or more. To calculate the index, these quarterly figures are converted into monthly figures with the aid of monthly data collected from larger enterprises, and are updated each month at the end of the current series. The resultant latest index figures are then revised on the basis of the quarterly

data obtained later from the smaller enterprises. For details see "Wirtschaft und Statistik", April 1999. — 2 Excluding electricity and gas supply and excluding mining and quarrying. — 3 Figures not fully comparable with those for earlier periods in the producing sector as a whole and in manufacturing, owing to the switch in data collection to an EU-consistent industrial and goods classification.

IX. Economic conditions

3. Orders received by the manufacturing sector \*)

Adjusted for working-day variations °

Period	Manufacturing											
	Total		Domestic orders		Foreign orders		Intermediate goods industries		Capital goods industries		Durable and non-durable consumer goods industries	
	1995=100	Change from previous year in %	1995=100	Change from previous year in %	1995=100	Change from previous year in %	1995=100	Change from previous year in %	1995=100	Change from previous year in %	1995=100	Change from previous year in %
<b>Germany</b>												
1995 1	100.0	+ 3.4	100.0	+ 3.4	100.0	+ 3.2	100.0	+ 2.5	100.0	+ 5.9	99.9	+ 0.8
1996	99.8	- 0.2	96.8	- 3.2	105.4	+ 5.4	98.1	- 1.9	101.5	+ 1.5	101.3	+ 1.4
1997	107.0	+ 7.2	99.0	+ 2.3	121.5	+ 15.3	107.1	+ 9.2	108.8	+ 7.2	103.3	+ 2.0
1998 r	110.8	+ 3.6	102.8	+ 3.8	125.3	+ 3.1	108.5	+ 1.3	115.9	+ 6.5	107.0	+ 3.6
1998 Feb. r	111.5	+ 9.5	102.4	+ 8.0	127.9	+ 11.3	109.5	+ 7.7	113.7	+ 15.2	112.5	+ 3.8
Mar. r	124.5	+ 8.2	114.6	+ 7.2	142.0	+ 9.3	120.0	+ 6.9	129.6	+ 12.1	126.1	+ 3.9
Apr. r	112.7	+ 5.4	103.0	+ 4.3	130.1	+ 7.1	112.2	+ 5.6	116.0	+ 6.4	107.5	+ 2.9
May r	108.0	+ 6.5	100.2	+ 5.8	122.0	+ 7.5	107.8	+ 4.7	112.9	+ 10.3	98.7	+ 3.7
June r	114.0	+ 4.3	104.0	+ 3.1	132.1	+ 6.3	113.4	+ 1.6	120.2	+ 8.6	103.1	+ 2.8
July r	111.9	+ 4.3	105.8	+ 5.1	122.7	+ 3.3	108.9	+ 0.1	118.9	+ 9.2	105.8	+ 6.4
Aug. r	100.3	+ 1.2	96.5	+ 4.0	107.2	- 3.2	99.0	- 1.1	102.2	+ 2.4	100.3	+ 5.4
Sep. r	117.3	+ 1.2	109.6	+ 4.1	131.2	- 2.8	111.2	- 1.3	125.8	+ 3.8	116.7	+ 2.5
Oct. r	110.4	- 1.7	102.6	- 0.7	124.4	- 3.5	107.6	- 5.4	114.4	+ 1.1	109.7	+ 2.0
Nov. r	106.7	- 2.2	101.1	- 0.8	117.1	- 4.1	104.7	- 6.1	110.3	+ 0.0	105.0	+ 5.0
Dec. r	101.5	- 3.5	90.8	- 3.4	120.7	- 3.7	95.8	- 6.3	112.9	- 2.4	94.3	+ 2.1
1999 Jan. p	106.1	- 4.7	98.3	- 4.7	120.1	- 4.8	105.7	- 5.5	107.2	- 6.0	105.1	+ 1.4
Feb. p	105.3	- 5.6	95.5	- 6.7	123.0	- 3.8	100.7	- 8.0	109.0	- 4.1	110.0	- 2.2
<b>Western Germany</b>												
1995 1	100.0	+ 2.7	100.0	+ 2.6	100.0	+ 2.6	100.0	+ 1.6	100.0	+ 4.9	99.9	+ 0.8
1996	100.1	+ 0.1	96.9	- 3.1	105.6	+ 5.6	97.8	- 2.2	102.7	+ 2.7	101.2	+ 1.3
1997	107.0	+ 6.9	98.7	+ 1.9	121.1	+ 14.7	106.3	+ 8.7	110.0	+ 7.1	103.0	+ 1.8
1998 r	110.1	+ 2.9	102.3	+ 3.6	123.4	+ 1.9	107.1	+ 0.8	116.3	+ 5.7	105.9	+ 2.8
1998 Feb. r	111.1	+ 8.6	101.8	+ 7.0	126.9	+ 10.6	108.6	+ 7.0	113.9	+ 13.7	112.0	+ 3.3
Mar. r	123.5	+ 7.3	114.5	+ 6.9	139.0	+ 7.9	118.5	+ 6.0	129.3	+ 11.3	125.5	+ 3.3
Apr. r	112.4	+ 5.0	102.6	+ 3.7	129.3	+ 7.2	110.9	+ 4.9	117.4	+ 6.5	107.0	+ 2.8
May r	107.3	+ 6.0	99.5	+ 5.6	120.6	+ 6.5	106.4	+ 4.2	113.4	+ 9.8	98.0	+ 3.4
June r	113.3	+ 3.8	103.0	+ 2.6	130.7	+ 5.4	111.9	+ 1.5	121.0	+ 7.8	101.9	+ 1.9
July r	111.5	+ 3.9	105.5	+ 4.9	121.5	+ 2.3	107.4	- 0.6	120.4	+ 8.9	104.7	+ 5.4
Aug. r	98.8	- 0.4	95.9	+ 3.7	104.2	- 5.7	97.5	- 1.7	100.7	- 0.6	99.3	+ 4.5
Sep. r	116.7	+ 1.0	109.1	+ 4.6	129.5	- 3.9	109.1	- 2.2	127.5	+ 4.6	115.5	+ 1.7
Oct. r	108.9	- 3.3	102.0	- 1.1	120.5	- 6.3	106.2	- 6.0	112.8	- 1.9	108.2	+ 1.2
Nov. r	105.7	- 2.6	100.1	- 1.0	115.2	- 5.1	103.1	- 6.6	110.4	- 0.5	103.2	+ 4.2
Dec. r	100.4	- 4.5	89.9	- 3.9	118.1	- 5.4	94.6	- 6.9	112.1	- 3.9	92.9	+ 1.0
1999 Jan. p	105.0	- 5.7	97.4	- 5.6	117.9	- 5.8	104.0	- 6.2	106.8	- 8.1	103.9	+ 0.8
Feb. p	104.9	- 5.6	95.1	- 6.6	121.6	- 4.2	99.3	- 8.6	110.2	- 3.2	109.1	- 2.6
<b>Eastern Germany</b>												
1995 1	99.7	+ 16.1	99.7	+ 12.8	99.8	+ 29.6	99.9	+ 18.2	99.4	+ 19.2	99.9	+ 1.4
1996	95.8	- 3.9	95.2	- 4.5	98.4	- 1.4	103.4	+ 3.5	84.6	- 14.9	105.4	+ 5.5
1997	107.4	+ 12.1	101.5	+ 6.6	137.2	+ 39.4	120.2	+ 16.2	91.8	+ 8.5	112.8	+ 7.0
1998 r	123.9	+ 15.4	109.6	+ 8.0	196.0	+ 42.9	132.7	+ 10.4	111.8	+ 21.8	132.2	+ 17.2
1998 Feb. r	119.0	+ 25.4	110.2	+ 23.0	163.5	+ 35.6	125.2	+ 19.4	110.4	+ 39.7	125.0	+ 13.0
Mar. r	139.3	+ 21.2	116.2	+ 11.7	255.6	+ 50.8	143.9	+ 19.7	134.1	+ 25.0	140.2	+ 15.7
Apr. r	117.1	+ 10.1	108.1	+ 11.2	162.2	+ 6.5	134.8	+ 16.0	96.3	+ 4.2	121.5	+ 3.8
May r	120.1	+ 13.7	109.6	+ 8.5	172.8	+ 34.5	132.3	+ 10.6	107.2	+ 19.5	117.7	+ 10.2
June r	127.5	+ 13.3	117.0	+ 8.4	180.1	+ 32.4	141.0	+ 5.1	110.5	+ 23.5	134.9	+ 23.2
July r	119.2	+ 13.8	109.4	+ 8.4	167.8	+ 35.7	134.8	+ 9.5	98.0	+ 15.3	132.3	+ 29.2
Aug. r	123.5	+ 24.9	104.8	+ 10.5	217.2	+ 82.5	123.5	+ 5.8	122.5	+ 57.5	126.9	+ 23.1
Sep. r	127.3	+ 4.8	114.8	- 2.2	190.3	+ 33.5	146.7	+ 12.2	100.4	- 9.0	146.7	+ 17.5
Oct. r	137.1	+ 24.2	109.9	+ 4.8	273.7	+ 99.6	133.1	+ 4.2	139.1	+ 57.5	145.3	+ 21.1
Nov. r	125.5	+ 6.6	113.8	+ 2.2	184.0	+ 23.9	133.5	+ 2.1	110.7	+ 10.3	146.0	+ 15.1
Dec. r	121.7	+ 13.6	101.7	+ 1.2	222.3	+ 58.7	116.2	+ 3.8	125.7	+ 22.9	129.2	+ 22.8
1999 Jan. p	125.7	+ 14.5	110.3	+ 11.0	202.1	+ 24.8	133.4	+ 4.5	113.5	+ 30.6	138.2	+ 14.1
Feb. p	113.8	- 4.4	101.4	- 8.0	176.1	+ 7.7	127.0	+ 1.4	94.2	- 14.7	131.2	+ 5.0

Source of unadjusted figures: Federal Statistical Office. — \* Excluding food, drink and tobacco industry; results for kinds of activity units; figures excluding value-added tax. — ° Bundesbank calculation. — 1 Figures not

fully comparable with previous periods owing to the switch in data collections to an EU-consistent industrial classification.

IX. Economic conditions

4. Orders received by construction \*

Adjusted for working-day variations °

Period	Germany					Western Germany					Eastern Germany				
	Total		Housing construction	Industrial construction 1	Public construction	Total		Housing construction	Industrial construction 1	Public construction	Total		Housing construction	Industrial construction 1	Public construction
	1995 = 100	Change from previous year in %	1995 = 100	1995 = 100	1995 = 100	1995 = 100	Change from previous year in %	1995 = 100	1995 = 100	1995 = 100	1995 = 100	Change from previous year in %	1995 = 100	1995 = 100	1995 = 100
1995	99.9	- 2.9	99.9	99.9	100.0	99.9	- 5.4	99.9	99.9	100.0	100.0	+ 3.6	99.9	99.9	100.0
1996	92.0	- 7.9	101.3	89.0	88.5	90.9	- 9.0	97.6	90.8	86.2	94.7	- 5.3	108.7	85.0	95.0
1997	84.4	- 8.3	87.4	81.0	86.3	86.1	- 5.3	87.7	85.5	85.7	80.4	- 15.1	86.9	70.9	87.7
1998	83.9	- 0.6	82.3	79.9	90.1	86.6	+ 0.6	83.3	86.7	88.8	77.7	- 3.4	80.3	64.6	93.8
1998 Jan.	58.3	- 6.1	63.0	55.7	57.9	60.5	- 4.3	58.7	60.0	62.4	53.1	- 10.9	71.7	46.0	45.1
Feb.	67.8	- 9.5	73.4	70.0	60.8	70.3	- 9.5	73.0	77.4	60.2	61.9	- 9.1	74.1	53.1	62.4
Mar.	94.0	+ 0.3	99.2	89.8	95.1	96.9	+ 1.9	99.7	96.8	95.1	87.1	- 3.9	98.3	73.9	95.0
Apr.	85.5	+ 2.8	80.7	84.8	90.1	90.3	+ 6.5	82.5	93.3	92.4	74.1	- 6.8	76.9	65.6	83.6
May	86.5	- 3.0	86.5	79.1	95.5	89.8	- 2.6	87.4	85.2	96.8	78.8	- 4.3	84.8	65.4	92.1
June	99.2	- 1.9	97.6	82.6	120.8	101.5	- 2.6	97.4	87.3	120.8	93.6	- 0.1	97.9	71.8	120.7
July	94.6	+ 5.5	91.2	84.4	109.7	97.3	+ 6.7	87.4	92.0	110.5	88.0	+ 2.0	99.0	67.0	107.4
Aug.	85.1	- 2.9	80.3	79.1	96.0	85.9	- 2.7	86.5	80.1	92.1	83.1	- 3.4	67.7	76.8	107.3
Sep.	102.0	+ 5.2	91.8	94.9	118.8	104.7	+ 5.0	95.0	105.8	110.4	95.7	+ 5.5	85.3	70.4	142.2
Oct.	84.2	- 2.0	77.1	86.3	87.4	89.0	+ 3.4	83.0	96.5	84.8	72.8	- 14.8	65.0	63.0	94.6
Nov.	74.1	+ 5.3	68.7	73.3	79.5	74.0	+ 4.4	69.7	80.0	70.2	74.4	+ 7.7	66.8	58.0	105.5
Dec.	75.8	- 3.1	78.5	79.2	69.7	78.6	- 2.0	79.5	85.7	69.9	69.3	- 5.5	76.5	64.3	69.3
1999 Jan.	61.5	+ 5.5	63.6	65.5	54.8	66.0	+ 9.1	65.3	73.2	58.2	50.9	- 4.1	60.2	48.2	45.4

Source of unadjusted figures: Federal Statistical Office. — \* Values exclusive of value-added tax. The figures refer to the economic classifications "Site preparation" and "Building of complete constructions or

parts thereof; civil engineering". — ° Bundesbank calculation. — 1 Including the railways and post office.

5. Retail turnover \*  
Germany

Period	Retail trade, total						of which: By enterprises' main product range:									
	including retail sales of motor vehicles and motorcycles and of automotive fuel			excluding retail sales of motor vehicles and motorcycles and of automotive fuel			Food, beverages, tobacco 2		Pharmaceutical and medical goods, cosmetic and toilet articles 2		Clothing, footwear and leather goods 2		Furniture and lighting equipment 2		Motor vehicles 3	
	1995 = 100	Change from previous year in %	not adjusted	price-adjusted 1	1995 = 100	Change from previous year in %	not adjusted	price-adjusted 1	1995 = 100	Change from previous year in %	1995 = 100	Change from previous year in %	1995 = 100	Change from previous year in %	1995 = 100	Change from previous year in %
1996	101.3	+ 1.3	+ 0.3	100.2	+ 0.2	- 0.8	99.9	- 0.1	103.9	+ 3.9	99.2	- 0.8	98.4	- 1.6	105.6	+ 5.6
1997	100.9	- 0.4	- 0.9	99.1	- 1.1	- 1.9	98.6	- 1.3	105.9	+ 1.9	97.2	- 2.0	95.8	- 2.6	109.1	+ 3.3
1998	101.9	+ 1.0	+ 0.7	99.5	+ 0.4	+ 0.4	99.1	+ 0.5	111.7	+ 5.5	95.8	- 1.4	98.6	+ 2.9	113.8	+ 4.3
1997 July	102.5	+ 1.0	+ 0.4	97.9	- 0.6	- 1.4	98.4	- 1.2	103.8	- 1.0	94.6	+ 2.6	94.6	- 0.7	122.2	+ 7.6
Aug.	91.2	- 4.8	- 5.7	89.7	- 7.0	- 7.9	96.4	- 4.0	94.7	- 5.7	75.1	-15.0	78.2	- 8.0	96.3	+ 4.9
Sep.	98.2	+ 1.4	+ 0.9	96.8	+ 0.2	- 0.3	94.2	+ 2.8	102.1	+ 2.2	100.1	- 9.9	93.2	+ 1.3	104.6	+ 7.3
Oct.	106.7	+ 2.2	+ 1.7	105.5	+ 1.5	+ 1.0	102.5	+ 1.4	109.7	+ 3.0	116.0	+ 4.4	104.5	- 1.5	113.5	+ 6.5
Nov.	102.6	- 3.9	- 4.5	102.8	- 4.6	- 5.4	98.4	- 4.9	104.3	+ 3.4	102.3	- 9.1	106.7	- 6.0	103.6	+ 0.2
Dec.	119.8	+ 1.9	+ 1.4	124.2	+ 0.6	+ 0.1	116.6	+ 1.0	126.8	+ 8.7	128.1	- 1.7	120.4	- 3.4	103.9	+ 9.9
1998 Jan.	93.2	- 1.4	- 1.3	93.0	- 1.8	- 1.6	92.6	- 1.7	105.0	+ 1.2	91.3	+ 2.8	89.0	+ 1.3	94.9	+ 0.3
Feb.	88.8	+ 0.2	+ 0.1	86.4	- 0.2	- 0.4	88.1	+ 0.5	100.8	+ 2.5	71.0	- 3.4	91.4	+ 1.2	99.5	+ 1.8
Mar.	109.7	+ 8.3	+ 8.1	100.4	+ 2.7	+ 2.6	96.8	- 2.1	112.7	+11.0	90.3	- 9.5	113.7	+18.3	151.2	+30.2
Apr.	101.4	- 4.5	- 5.2	100.3	- 0.9	- 1.7	103.4	+ 3.8	109.0	- 0.4	99.8	- 0.5	95.2	- 5.1	106.6	-16.3
May	101.0	+ 1.5	+ 0.7	97.6	+ 0.3	- 0.4	100.3	- 0.8	106.2	+ 4.1	100.5	+ 0.6	89.2	+ 1.7	115.5	+ 7.3
June	97.2	- 2.3	- 3.0	92.2	- 2.1	- 2.6	94.5	- 0.3	107.7	- 5.8	81.5	- 7.4	89.1	- 1.1	118.8	- 2.5
July	104.6	+ 2.0	+ 1.5	100.1	+ 2.2	+ 2.1	101.1	+ 2.7	116.1	+11.8	94.9	+ 0.3	95.2	+ 0.6	124.6	+ 2.0
Aug.	93.1	+ 2.1	+ 2.0	91.4	+ 1.9	+ 2.2	94.6	- 1.9	103.8	+ 9.6	83.4	+11.1	82.7	+ 5.8	100.2	+ 4.0
Sep.	99.1	+ 0.9	+ 0.7	97.4	+ 0.6	+ 0.5	94.0	- 0.2	110.0	+ 7.7	101.7	+ 1.6	95.0	+ 1.9	108.3	+ 3.5
Oct.	104.8	- 1.8	- 1.9	103.5	- 1.9	- 1.7	101.1	- 1.4	116.1	+ 5.8	108.8	- 6.2	107.2	+ 2.6	113.0	- 0.4
Nov.	107.5	+ 4.8	+ 4.6	105.9	+ 3.0	+ 3.3	101.7	+ 3.4	114.3	+ 9.6	104.5	+ 2.2	111.2	+ 4.2	117.2	+13.1
Dec.	122.7	+ 2.4	+ 2.2	126.0	+ 1.4	+ 1.5	120.4	+ 3.3	138.2	+ 9.0	121.6	- 5.1	123.8	+ 2.8	115.7	+11.4
1999 Jan.	91.4	- 1.9	- 2.2	91.3	- 1.8	- 1.9	90.7	- 2.1	110.1	+ 4.9	86.4	- 5.4	86.7	- 2.6	95.1	+ 0.2
Feb.	87.2	- 1.8	- 2.1	85.2	- 1.4	- 1.5	86.9	- 1.4	111.2	+10.3	65.3	- 8.0	88.6	- 3.1	98.6	- 0.9

Source: Federal Statistical Office. — \* Excluding value-added tax; figures from 1998 provisional. — 1 At 1991 prices. — 2 Retail sales in stores. —

3 Including motor vehicle parts and accessories.



IX. Economic conditions

6. Labour market \*

Period	Employed 1			Employees 1		Persons in employment 2		Short-time workers	Persons employed under employment promotion schemes 4	Persons under-going vocational further training	Unemployed			Vacancies, thousands		
	Thousands	Change from previous year		Thousands	Change from previous year in %	Mining and manufacturing sector	Construction 3				Thousands	Thousands	Thousands		Change from previous year, thousands	Unemployment rate 5 in %
		in %	Thousands													
<b>Germany</b>																
1996	34,423	- 1.3	- 437	30,801	- 1.4	6,531	1,316	277	354	546	3,965	+ 353	10.4	327		
1997	33,962	- 1.3	- 461	30,314	- 1.6	6,316	1,225	183	302	431	4,384	+ 419	11.4	337		
1998	33,970	± 0.0	+ 8	30,283	- 0.1	6,400	1,159	115	385	343	4,279	- 105	11.1	422		
1998 Mar.	33,629	- 0.5	- 159			6,368	1,150	170	250	302	4,623	+ 146	12.1	446		
Apr.	33,745	- 0.4	- 133			6,371	1,168	143	308	318	4,421	+ 74	11.4	469		
May	33,856	- 0.2	- 67	30,182	- 0.3	6,374	1,172	119	348	341	4,197	- 58	10.9	484		
June	34,021	- 0.0	- 7			6,398	1,177	102	396	352	4,075	- 147	10.5	483		
July	33,992	+ 0.2	+ 56			6,435	1,177	83	437	335	4,134	- 220	10.7	467		
Aug.	34,075	+ 0.3	+ 93	30,481	+ 0.2	6,464	1,183	65	468	341	4,095	- 277	10.6	466		
Sep.	34,458	+ 0.4	+ 154			6,474	1,186	77	496	384	3,965	- 343	10.3	432		
Oct.	34,459	+ 0.6	+ 191			6,447	1,176	90	520	412	3,892	- 399	10.1	393		
Nov.	34,317	+ 0.5	+ 175	30,601	+ 0.4	6,435	1,163	108	528	411	3,946	- 376	10.2	364		
Dec.	34,121	+ 0.5	+ 159			6,400	1,129	107	505	369	4,197	- 324	10.9	345		
1999 Jan.	...	...	...			6,376	1,062	145	465	371	4,455	- 368	11.5	395		
Feb.	...	...	...			...	...	161	465	373	4,455	- 354	11.6	451		
Mar.	...	...	...			...	...	167	467	376	4,288	- 335	11.1	496		
<b>Western Germany</b>																
1996	28,156	- 1.1	- 308	25,052	- 1.2	5,943	897	206	76	308	2,796	+ 231	9.1	270		
1997	27,884	- 1.0	- 272	24,770	- 1.1	5,753	836	133	68	248	3,021	+ 225	9.8	282		
1998	27,915	+ 0.1	+ 31	24,785	+ 0.1	5,813	804	81	71	193	2,904	- 117	9.4	342		
1998 Mar.	27,712	- 0.1	- 34			5,790	797	117	60	177	3,075	- 36	10.0	363		
Apr.	27,778	- 0.1	- 20			5,790	812	98	63	185	2,952	- 63	9.5	377		
May	27,849	+ 0.1	+ 15	24,725	- 0.0	5,791	815	81	65	193	2,825	- 119	9.1	383		
June	27,956	+ 0.1	+ 29			5,812	817	69	70	194	2,774	- 134	8.9	384		
July	27,913	+ 0.2	+ 59			5,845	816	56	74	184	2,818	- 171	9.1	378		
Aug.	27,974	+ 0.2	+ 64	24,913	+ 0.2	5,870	820	42	77	187	2,802	- 190	9.0	376		
Sep.	28,248	+ 0.3	+ 90			5,875	821	53	80	210	2,734	- 199	8.8	350		
Oct.	28,249	+ 0.4	+ 110			5,847	815	66	85	228	2,704	- 219	8.7	319		
Nov.	28,137	+ 0.3	+ 91	24,997	+ 0.3	5,837	807	82	86	229	2,745	- 197	8.8	301		
Dec.	28,001	+ 0.3	+ 84			5,806	788	81	83	210	2,885	- 180	9.3	290		
1999 Jan.	...	...	...			5,788	747	114	83	214	3,025	- 210	9.7	331		
Feb.	...	...	...			...	...	123	83	218	3,023	- 191	9.7	372		
Mar.	...	...	...			...	...	125	86	224	2,897	- 178	9.3	409		
<b>Eastern Germany</b>																
1996	6,267	- 2.0	- 129	5,749	- 2.2	589	419	71	278	238	1,169	+ 122	15.7	57		
1997	6,078	- 3.0	- 189	5,544	- 3.6	564	389	49	235	184	1,363	+ 194	18.1	56		
1998	6,055	- 0.4	- 23	5,498	- 0.8	586	355	34	314	149	1,375	+ 12	18.2	79		
1998 Mar.	5,917	- 2.1	- 125			578	353	53	190	125	1,548	+ 182	20.6	83		
Apr.	5,967	- 1.9	- 113			581	356	46	245	133	1,469	+ 137	19.4	92		
May	6,007	- 1.3	- 82	5,457	- 1.8	583	357	38	283	147	1,372	+ 60	18.1	101		
June	6,065	- 0.6	- 36			585	360	33	327	157	1,302	- 13	17.2	99		
July	6,079	- 0.0	- 3			591	361	28	363	150	1,316	- 48	17.4	88		
Aug.	6,101	+ 0.5	+ 29	5,568	+ 0.1	594	362	23	391	154	1,294	- 87	17.1	90		
Sep.	6,210	+ 1.0	+ 64			600	365	24	416	174	1,232	- 143	16.3	81		
Oct.	6,210	+ 1.3	+ 81			600	361	24	435	184	1,188	- 180	15.7	73		
Nov.	6,180	+ 1.4	+ 84	5,604	+ 1.0	598	355	25	442	181	1,201	- 179	15.9	64		
Dec.	6,120	+ 1.2	+ 75			594	342	26	421	159	1,313	- 144	17.4	55		
1999 Jan.	...	...	...			587	315	31	382	158	1,430	- 158	18.9	63		
Feb.	...	...	...			...	...	39	381	155	1,442	- 163	19.1	79		
Mar.	...	...	...			...	...	42	382	153	1,392	- 157	18.4	87		

Source: Federal Statistical Office; Federal Labour Office. — \* Monthly figures: levels at end of month; employed persons and employees: averages; short-time workers: levels at mid-month; annual and quarterly figures: averages. — 1 Work-place concept; from 1996 provisional. — 2 Including active proprietors. — 3 The figures refer to the economic classifications "Site preparation" and "Building of complete constructions or parts thereof; civil engineering". — 4 Employees involved in job creation schemes and receiving productive grants towards labour costs (up to December 1997 approved cases) and (from January 1998 approved, but from April 1998 statistically recorded) structural adjustment measures (SAM). — 5 Relative to the total

labour force. — 6 From March 1997, figures favourably affected by including, for the first time, building contractors who were identified in the 1995 survey of craft enterprises and are now required to report. — 7 Comparison with previous periods not possible because of the deletion of payments towards on-the-job training, vocational assistance measures and methodological changes in the collection of statistics. — 8 First preliminary estimate. — 9 From January 1998, figures favourably affected by including, for the first time, enterprises which were identified in the 1995 survey of craft enterprises and which are now required to report. — 10 From April 1998 calculated on the basis of new labour force figures.

IX. Economic conditions

7. Prices  
Germany

Period	Consumer price index for all households							Overall construction price level 2	Index of producer prices of industrial products sold on the domestic market 2	Index of producer prices of farm products	Indices of foreign trade prices		Index of world market prices of raw materials 3
	Total	By region		By product group 1			Exports				Imports		
		Western Germany	Eastern Germany	Food	Other durable and non-durable consumer goods	Services excluding house rents						House rents	
	1995 = 100									1991 = 100			
	Index level												
1995	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	91.6	103.3	97.3	90.5
1996	101.4	101.3	101.9	100.9	100.5	101.6	103.4	99.8	98.8	91.1	103.5	97.8	98.2
1997	103.3	103.2	104.2	102.1	101.8	104.1	106.3	99.0	99.9	92.5	105.1	100.9	111.1
1998	104.3	104.1	105.3	103.0	101.9	106.1	108.0	98.8	99.5	87.1	105.2	98.0	87.8
1997 May	103.0	102.8	103.9	103.0	101.4	103.0	106.3	99.1	99.9	96.6	104.9	100.8	112.4
June	103.1	103.0	104.0	103.4	101.2	103.6	106.3		100.0	93.1	105.2	100.6	108.8
July	103.9	103.7	104.8	102.8	101.9	105.8	106.5		100.1	92.4	105.4	101.2	111.7
Aug.	104.0	103.9	104.9	101.7	102.2	106.1	106.6	99.0	100.3	93.5	105.7	102.1	116.5
Sep.	103.8	103.6	104.8	101.5	102.2	105.3	106.6		100.4	94.2	105.6	101.6	113.1
Oct.	103.7	103.5	104.7	101.4	102.4	104.5	106.7		100.3	92.4	105.6	101.5	114.7
Nov.	103.7	103.6	104.6	101.6	102.3	104.6	106.8	98.7	100.3	93.2	105.6	101.2	110.0
Dec.	103.9	103.8	104.8	102.3	102.1	105.3	106.9		100.2	93.0	105.6	101.0	106.1
1998 Jan.	103.9	103.7	104.8	103.5	101.8	104.9	107.3		100.1	92.2	105.7	100.9	99.1
Feb.	104.1	103.9	105.1	103.5	101.6	105.9	107.5	98.4	100.1	93.3	105.8	100.6	96.4
Mar.	104.0	103.8	104.9	103.0	101.7	105.6	107.6		100.0	92.7	105.8	100.0	93.9
Apr.	104.1	103.9	105.0	103.6	101.9	105.1	107.8		100.0	90.9	105.7	99.8	95.1
May	104.4	104.2	105.4	104.3	102.0	105.7	107.9	99.1	100.0	88.8	105.5	99.2	92.1
June	104.5	104.4	105.5	104.5	101.9	106.2	108.0		99.9	89.3	105.5	98.3	88.8
July	104.8	104.6	105.7	103.6	102.2	107.2	108.1		99.7	88.2	105.4	97.9	87.9
Aug.	104.6	104.5	105.6	102.5	101.8	107.6	108.1	99.0	99.5	86.7	105.2	97.3	85.6
Sep.	104.4	104.2	105.4	101.9	102.0	106.5	108.3		99.4	85.8	104.9	96.5	84.5
Oct.	104.2	104.0	105.2	101.4	101.9	106.1	108.3		98.9	84.2	104.6	95.7	79.2
Nov.	104.2	104.1	105.3	101.7	102.0	105.9	108.3	98.7	98.5	82.7	104.5	95.3	78.0
Dec.	104.3	104.1	105.3	102.1	101.9	106.2	108.4		98.3	86.2	104.2	94.9	72.4
1999 Jan.	104.1	103.9	105.0	103.1	101.6	105.2	108.7		97.8 P	83.6	104.0	94.9	75.2
Feb.	104.3	104.1	105.3	103.1	101.4	106.2	108.8	98.5	97.7 P	84.2	104.2	95.0	75.7
Mar.	104.4	104.3	105.3	103.0	101.6	106.2	108.9		...	...	...	...	85.0
	Change from previous year in %												
1995	+ 1.7	+ 1.6	+ 1.9	+ 0.5	+ 0.7	+ 2.4	+ 4.2	+ 2.0	+ 1.7	- 0.1	+ 1.7	+ 0.4	- 2.4
1996	+ 1.4	+ 1.3	+ 1.9	+ 0.9	+ 0.5	+ 1.6	+ 3.4	- 0.2	- 1.2	- 0.5	+ 0.2	+ 0.5	+ 8.5
1997	+ 1.9	+ 1.9	+ 2.3	+ 1.2	+ 1.3	+ 2.5	+ 2.8	- 0.8	+ 1.1	+ 1.5	+ 1.5	+ 3.2	+ 13.1
1998	+ 1.0	+ 0.9	+ 1.1	+ 0.9	+ 0.1	+ 1.9	+ 1.6	- 0.2	- 0.4	- 5.8	+ 0.1	- 2.9	- 21.0
1997 May	+ 1.6	+ 1.5	+ 2.1	+ 1.0	+ 0.9	+ 1.7	+ 3.1	- 0.8	+ 1.2	+ 2.0	+ 1.1	+ 2.8	+ 15.2
June	+ 1.6	+ 1.6	+ 2.1	+ 1.4	+ 0.8	+ 1.8	+ 2.9		+ 1.4	- 1.2	+ 1.5	+ 3.3	+ 14.3
July	+ 2.2	+ 2.1	+ 2.5	+ 0.9	+ 1.6	+ 3.1	+ 2.9		+ 1.5	- 1.2	+ 1.9	+ 4.2	+ 17.1
Aug.	+ 2.4	+ 2.4	+ 2.6	+ 1.0	+ 1.9	+ 3.3	+ 2.9	- 0.8	+ 1.7	+ 1.3	+ 2.4	+ 5.4	+ 21.1
Sep.	+ 2.2	+ 2.1	+ 2.6	+ 1.7	+ 1.5	+ 3.0	+ 2.7		+ 1.6	+ 3.2	+ 2.2	+ 4.1	+ 10.7
Oct.	+ 2.1	+ 2.0	+ 2.7	+ 2.0	+ 1.3	+ 3.0	+ 2.5		+ 1.2	+ 3.7	+ 2.0	+ 3.4	+ 7.5
Nov.	+ 2.2	+ 2.1	+ 2.5	+ 2.3	+ 1.3	+ 3.6	+ 2.4	- 0.8	+ 1.2	+ 6.3	+ 2.1	+ 3.1	+ 6.5
Dec.	+ 2.0	+ 2.0	+ 2.3	+ 2.6	+ 0.8	+ 3.4	+ 2.3		+ 1.1	+ 4.6	+ 2.0	+ 2.0	- 1.6
1998 Jan.	+ 1.3	+ 1.3	+ 1.5	+ 1.6	+ 0.1	+ 2.6	+ 1.9		+ 0.7	+ 3.2	+ 1.7	+ 0.9	- 11.6
Feb.	+ 1.2	+ 1.2	+ 1.4	+ 1.4	± 0.0	+ 2.5	+ 1.7	- 0.9	+ 0.7	+ 4.1	+ 1.5	+ 0.1	- 12.8
Mar.	+ 1.2	+ 1.1	+ 1.3	+ 1.4	+ 0.3	+ 2.2	+ 1.6		+ 0.7	+ 2.0	+ 1.3	- 0.5	- 14.5
Apr.	+ 1.5	+ 1.5	+ 1.4	+ 1.5	+ 0.5	+ 2.8	+ 1.7		+ 0.3	- 3.4	+ 1.0	- 0.5	- 11.5
May	+ 1.4	+ 1.4	+ 1.4	+ 1.3	+ 0.6	+ 2.6	+ 1.5	± 0.0	+ 0.1	- 8.1	+ 0.6	- 1.6	- 18.1
June	+ 1.4	+ 1.4	+ 1.4	+ 1.1	+ 0.7	+ 2.5	+ 1.6		- 0.1	- 4.1	+ 0.3	- 2.3	- 18.4
July	+ 0.9	+ 0.9	+ 0.9	+ 0.8	+ 0.3	+ 1.3	+ 1.5		- 0.4	- 4.5	± 0.0	- 3.3	- 21.3
Aug.	+ 0.6	+ 0.6	+ 0.7	+ 0.8	- 0.4	+ 1.4	+ 1.4	± 0.0	- 0.8	- 7.3	- 0.5	- 4.7	- 26.5
Sep.	+ 0.6	+ 0.6	+ 0.6	+ 0.4	- 0.2	+ 1.1	+ 1.6		- 1.0	- 8.9	- 0.7	- 5.0	- 25.3
Oct.	+ 0.5	+ 0.5	+ 0.5	± 0.0	- 0.5	+ 1.5	+ 1.5		- 1.4	- 8.9	- 0.9	- 5.7	- 31.0
Nov.	+ 0.5	+ 0.5	+ 0.7	+ 0.1	- 0.3	+ 1.2	+ 1.4	± 0.0	- 1.8	- 11.3	- 1.0	- 5.8	- 29.1
Dec.	+ 0.4	+ 0.3	+ 0.5	- 0.2	- 0.2	+ 0.9	+ 1.4		- 1.9	- 7.3	- 1.3	- 6.0	- 31.8
1999 Jan.	+ 0.2	+ 0.2	+ 0.2	- 0.4	- 0.2	+ 0.3	+ 1.3		- 2.3 P	- 9.3	- 1.6	- 5.9	- 24.1
Feb.	+ 0.2	+ 0.2	+ 0.2	- 0.4	- 0.2	+ 0.3	+ 1.2	+ 0.1	- 2.4 P	- 9.8	- 1.5	- 5.6	- 21.5
Mar.	+ 0.4	+ 0.5	+ 0.4	± 0.0	- 0.1	+ 0.6	+ 1.2		...	...	...	...	- 9.5

Source: Federal Statistical Office; for index of world market prices: HWWA Institute. — 1 Calculated by the Bundesbank on the basis of figures provided by the Federal Statistical Office. — 2 Excluding value-added tax. — 3 HWWA index of raw material prices, on a Deutsche Mark basis.

IX. Economic conditions

8. Households' income  
Germany

Period	Gross wages and salaries <sup>1</sup>		Net wages and salaries <sup>o, 2</sup>		Government current transfers <sup>o, 3</sup>		"Mass income" <sup>o, 4</sup>		Disposable income <sup>5</sup>		Private Saving <sup>6</sup>		Saving ratio <sup>7</sup>
	DM billion	Change from previous year in %	DM billion	Change from previous year in %	DM billion	Change from previous year in %	DM billion	Change from previous year in %	DM billion	Change from previous year in %	DM billion	Change from previous year in %	%
1994	1,512.2	1.6	1,015.7	- 0.2	515.8	4.0	1,531.5	1.2	2,173.4	3.4	267.4	- 1.7	12.3
1995	1,560.9	3.2	1,024.0	0.8	542.2	5.1	1,566.2	2.3	2,254.2	3.7	278.9	4.3	12.4
1996 P	1,572.2	0.7	1,047.5	2.3	540.3	- 0.3	1,587.8	1.4	2,339.7	3.8	293.3	5.2	12.5
1997 P	1,565.3	- 0.4	1,030.3	- 1.6	551.7	2.1	1,582.1	- 0.4	2,382.7	1.8	287.5	- 2.0	12.1
1998 P	1,587.7	1.4	1,043.4	1.3	562.7	2.0	1,606.1	1.5	2,445.5	2.6	289.3	0.6	11.8
1996 1st qtr P	364.1	2.1	247.4	3.3	135.8	1.0	383.1	2.4	575.2	4.8	81.8	9.1	14.2
2nd qtr P	375.9	0.7	248.9	2.9	133.3	0.8	382.2	2.2	566.6	3.2	62.3	5.3	11.0
3rd qtr P	390.0	0.6	265.6	2.5	134.5	- 1.2	400.1	1.2	568.8	3.7	59.5	1.8	10.5
4th qtr P	442.1	- 0.2	285.6	0.7	136.8	- 1.8	422.4	- 0.1	629.0	3.5	89.7	4.0	14.3
1997 1st qtr P	362.8	- 0.4	242.9	- 1.8	139.6	2.8	382.5	- 0.2	582.7	1.3	80.2	- 1.9	13.8
2nd qtr P	375.5	- 0.1	244.8	- 1.6	136.4	2.3	381.2	- 0.3	580.3	2.4	61.0	- 2.1	10.5
3rd qtr P	386.3	- 1.0	260.0	- 2.1	136.9	1.8	396.9	- 0.8	577.5	1.5	58.6	- 1.5	10.2
4th qtr P	440.8	- 0.3	282.6	- 1.1	138.8	1.5	421.4	- 0.2	642.3	2.1	87.7	- 2.3	13.7
1998 1st qtr P	365.1	0.6	244.6	0.7	139.1	- 0.3	383.7	0.3	597.1	2.5	79.5	- 0.9	13.3
2nd qtr P	381.1	1.5	247.9	1.3	139.7	2.4	387.6	1.7	592.2	2.1	63.5	4.1	10.7
3rd qtr P	394.3	2.1	265.2	2.0	140.4	2.5	405.6	2.2	595.2	3.1	59.0	0.6	9.9
4th qtr P	447.2	1.4	285.7	1.1	143.5	3.3	429.2	1.8	660.9	2.9	87.4	- 0.4	13.2

Source: Calculated by the Bundesbank on the basis of figures provided by the Federal Statistical Office. — <sup>o</sup> Modified definition as a result of the revision of the accounting of child benefit. — <sup>1</sup> Including employers' other social security expenditure (inter alia on company old-age pension schemes but excluding employers' contributions to social security funds); residence concept. — <sup>2</sup> After deducting wage tax payable on gross wages and salaries and employees' contributions to social security funds. From the beginning of 1996 including the child benefit payable to employees. — <sup>3</sup> Social

security pensions, maintenance payments and civil servants' pensions (net), less households' transfers to government. From the beginning of 1996 excluding the child benefit paid to employees, but including, as before, the child benefit paid to non-tax-payers. — <sup>4</sup> Net wages and salaries plus government current transfers. — <sup>5</sup> "Mass income" plus all households' property income and plus self-employed persons' private withdrawals from entrepreneurial income, less current transfers to non-residents. — <sup>6</sup> Including claims on company pension funds. — <sup>7</sup> Saving as a percentage of disposable income.

9. Pay rates and actual earnings  
Germany

Period	Overall economy						Producing sector (including construction)					
	Negotiated wage and salary level <sup>1</sup>				Wages and salaries per employee (work-place concept) <sup>2</sup>		Negotiated wage and salary level <sup>1</sup>				Wages and salaries per employee (work-place concept) <sup>3</sup>	
	on an hourly basis		on a monthly basis		1991=100	% from previous year	on an hourly basis		on a monthly basis		1991=100	% from previous year
	1991=100	% from previous year	1991=100	% from previous year			1991=100	% from previous year	1991=100	% from previous year		
1991	100.0	.	100.0	.	100.0	.	100.0	.	100.0	.	100.0	.
1992	111.9	11.9	111.0	11.0	110.5	10.5	112.7	12.7	111.5	11.5	113.9	13.9
1993	120.2	7.5	118.1	6.5	115.5	4.6	123.2	9.3	119.5	7.1	118.9	4.4
1994	124.3	3.4	121.6	2.9	118.3	2.4	128.2	4.1	123.1	3.0	123.8	4.1
1995	130.4	4.9	127.2	4.6	122.6	3.6	136.0	6.1	129.9	5.5	128.9	4.1
1996 P	133.9	2.7	130.2	2.4	125.3	2.2	141.2	3.8	133.6	2.9	132.6	2.9
1997 P	135.7	1.4	132.0	1.3	126.7	1.2	144.0	2.0	136.0	1.8	134.9	1.7
1998 P	138.0	1.7	134.2	1.7	128.7	1.6	146.5	1.7	138.2	1.6	137.1	1.6
1998 1st qtr P	126.3	1.4	122.8	1.3	119.8	1.3	132.5	0.6	125.1	0.5	127.8	1.2
2nd qtr P	127.2	1.8	123.6	1.7	123.9	1.9	134.7	2.1	127.0	2.0	137.8	1.9
3rd qtr P	142.2	1.9	138.2	1.8	127.1	1.9	156.7	2.1	147.7	2.0	132.0	1.5
4th qtr P	156.4	1.8	152.1	1.7	143.5	1.0	162.3	2.1	153.0	2.0	149.8	1.8
1998 Mar. P	126.3	1.3	122.9	1.2	.	.	132.7	0.6	125.2	0.5	129.0	1.6
Apr. P	127.1	1.8	123.5	1.7	.	.	134.7	2.1	127.0	2.0	132.6	1.9
May P	127.2	1.8	123.6	1.7	.	.	134.7	2.1	127.0	2.0	136.4	1.0
June P	127.3	1.9	123.8	1.8	.	.	134.7	2.1	127.0	2.0	144.2	2.7
July P	171.2	1.8	166.4	1.7	.	.	200.2	1.9	188.7	1.8	135.1	1.1
Aug. P	127.6	2.0	124.1	1.9	.	.	134.9	2.2	127.2	2.0	130.3	1.8
Sep. P	127.8	2.0	124.2	1.9	.	.	134.9	2.2	127.2	2.1	130.7	1.6
Oct. P	127.9	2.0	124.3	1.9	.	.	135.1	2.0	127.4	1.9	134.1	0.8
Nov. P	213.5	1.6	207.5	1.6	.	.	216.6	2.1	204.2	2.0	172.1	1.1
Dec. P	127.9	1.9	124.4	1.8	.	.	135.2	2.1	127.5	2.0	142.9	3.5
1999 Jan. P	129.5	2.6	125.8	2.5	.	.	137.8	4.0	129.9	3.9	128.0	0.0
Feb. P	129.5	2.6	125.9	2.5	.	.	137.9	4.1	130.1	4.0	.	.

<sup>1</sup> Current data are normally revised upwards on account of additional reports. — <sup>2</sup> Source: Federal Statistical Office. — <sup>3</sup> Producing sector, excluding electricity, gas, steam and hot water supply, and excluding installation

and building completion work. Calculated by the Bundesbank on the basis of data from the Federal Statistical Office, using the old and new classifications of the economic sectors.

X. Foreign trade and payments

1. Major items of the balance of payments of the Federal Republic of Germany  
(Balances)

Period	Current account						Capital transfers	Financial account 6	Change in the monetary reserves at transaction values 7	Balance of unclassifiable transactions	Memo item: Change in the Bundesbank's net external assets at transaction values 7
	Balance of on current account	Foreign trade 1 2	Supplementary trade items 3 4	Services 5	Factor income	Current transfers					
DM million											
1981	- 7,195	+ 27,720	- 3,492	- 9,312	+ 3,388	- 25,498	- 1,843	+ 7,654	+ 633	+ 751	+ 2,283
1982	+ 14,305	+ 51,277	- 2,070	- 8,351	+ 22	- 26,573	- 1,902	+ 2,542	- 8,381	- 6,564	- 3,078
1983	+ 14,410	+ 42,089	- 2,258	- 7,259	+ 7,488	- 25,651	- 2,033	- 17,566	+ 5,359	- 170	+ 4,074
1984	+ 30,627	+ 53,966	- 3,040	- 3,232	+ 13,569	- 30,636	- 1,992	- 36,261	+ 2,056	+ 5,570	+ 3,099
1985	+ 54,226	+ 73,353	- 1,848	- 1,345	+ 13,638	- 29,572	- 2,501	- 53,373	- 5,043	+ 6,690	- 1,843
1986	+ 88,214	+ 112,619	- 3,520	- 4,736	+ 11,381	- 27,530	- 2,147	- 76,783	- 11,187	+ 1,904	- 5,964
1987	+ 83,864	+ 117,735	- 4,288	- 9,426	+ 9,378	- 29,535	- 2,186	- 40,282	- 37,901	- 3,495	- 41,219
1988	+ 94,395	+ 128,045	- 2,791	- 14,555	+ 16,630	- 32,933	- 2,029	- 122,721	+ 27,662	+ 2,693	+ 34,676
1989	+ 109,234	+ 134,576	- 4,107	- 13,323	+ 26,872	- 34,784	- 2,064	- 110,286	- 5,405	+ 8,521	+ 18,997
1990 o	+ 81,428	+ 105,382	- 3,833	- 17,711	+ 32,859	- 35,269	- 4,975	- 89,497	- 11,611	+ 24,655	- 10,976
1991	- 28,374	+ 21,899	- 2,804	- 22,800	+ 33,144	- 57,812	- 4,565	+ 12,614	+ 9,605	+ 10,720	- 319
1992	- 21,064	+ 33,656	- 1,426	- 36,035	+ 33,962	- 51,221	- 1,963	+ 69,792	- 52,888	+ 6,123	- 68,745
1993 8	- 14,887	+ 60,304	- 3,038	- 43,812	+ 27,373	- 55,714	- 1,915	+ 21,442	+ 22,795	- 27,435	+ 35,766
1994 8	- 36,532	+ 71,762	- 1,104	- 52,102	+ 4,852	- 59,940	- 2,637	+ 57,871	+ 2,846	- 21,548	- 12,242
1995 8	- 27,159	+ 85,303	- 4,722	- 52,361	+ 332	- 55,710	- 3,845	+ 63,492	- 10,355	- 22,134	- 17,754
1996 8	- 8,447	+ 98,538	- 4,209	- 53,145	+ 1,688	- 51,318	- 3,283	+ 23,244	+ 1,882	- 13,397	+ 1,610
1997 8	- 2,434	+ 116,467	- 6,149	- 56,928	- 3,022	- 52,801	+ 51	- 709	+ 6,640	- 3,549	+ 8,468
1998 8	- 6,249	+ 128,579	- 3,659	- 61,796	- 16,123	- 53,250	+ 1,293	+ 23,487	- 7,128	- 11,403	- 8,231
1997 2nd qtr 8	+ 3,700	+ 29,986	- 1,657	- 13,142	+ 645	- 12,133	- 543	+ 9,014	- 28	- 12,143	+ 461
3rd qtr 8	- 5,458	+ 31,909	- 1,847	- 19,319	- 746	- 15,454	+ 1,391	- 22,349	+ 6,001	+ 20,413	+ 6,537
4th qtr 8	+ 7,575	+ 33,102	- 1,014	- 10,471	- 1,572	- 12,471	- 926	- 7,282	- 1,159	+ 1,792	- 431
1998 1st qtr 8	- 6,571	+ 28,084	- 274	- 14,507	- 4,050	- 15,825	+ 534	+ 25,339	- 2,531	- 16,771	- 982
2nd qtr 8	+ 5,071	+ 34,979	- 1,318	- 15,226	- 3,984	- 9,380	- 139	+ 4,515	- 2,199	- 7,248	- 1,989
3rd qtr 8	- 5,730	+ 32,601	- 1,005	- 19,786	- 3,178	- 14,362	+ 996	+ 20,722	- 1,134	- 14,854	- 484
4th qtr 8	+ 981	+ 32,915	- 1,062	- 12,278	- 4,911	- 13,683	- 97	- 27,089	- 1,264	+ 27,469	- 4,777
1997 May 8	- 3,123	+ 8,424	- 340	- 4,771	- 2,984	- 3,451	- 362	+ 4,621	- 1,010	- 125	- 839
June 8	+ 2,961	+ 11,852	- 733	- 5,388	+ 1,659	- 4,428	+ 85	+ 4,202	+ 712	- 7,960	+ 1,000
July 8	- 1,859	+ 10,905	- 641	- 5,864	- 1,166	- 5,094	+ 423	- 22,688	+ 3,289	+ 20,835	+ 3,392
Aug. 8	- 4,401	+ 7,503	- 833	- 6,767	+ 846	- 5,149	+ 549	+ 6,070	+ 1,960	- 4,177	+ 2,298
Sep. 8	+ 803	+ 13,501	- 373	- 6,689	- 426	- 5,211	+ 420	- 5,730	+ 752	+ 3,755	+ 847
Oct. 8	- 3,736	+ 9,794	- 332	- 5,605	- 2,159	- 5,436	- 71	+ 10,029	+ 505	- 6,727	+ 669
Nov. 8	+ 1,732	+ 11,388	- 508	- 3,515	- 504	- 5,129	- 386	- 6,521	- 252	+ 5,427	- 111
Dec. 8	+ 9,579	+ 11,920	- 174	- 1,352	+ 1,091	- 1,906	- 468	- 10,790	- 1,413	+ 3,091	- 988
1998 Jan. 8	- 12,235	+ 5,126	- 194	- 7,064	- 4,680	- 5,423	+ 452	+ 8,075	+ 63	+ 3,645	+ 428
Feb. 8	- 788	+ 11,085	- 283	- 3,949	- 1,612	- 6,029	- 238	+ 523	- 1,471	+ 1,974	- 1,051
Mar. 8	+ 6,452	+ 11,873	+ 203	- 3,493	+ 2,242	- 4,372	+ 321	+ 16,742	- 1,124	- 22,391	- 359
Apr. 8	+ 1,594	+ 10,705	- 351	- 5,731	+ 900	- 3,929	+ 265	- 21,558	- 984	+ 20,684	- 910
May 8	+ 789	+ 13,674	- 959	- 5,375	- 3,631	- 2,920	- 40	+ 7,865	- 1,037	- 7,577	- 1,094
June 8	+ 2,689	+ 10,600	- 8	- 4,120	- 1,253	- 2,531	- 365	+ 18,209	- 178	- 20,355	+ 15
July 8	- 1,214	+ 13,623	- 732	- 6,768	- 3,462	- 3,875	+ 415	+ 10,808	+ 742	- 10,751	+ 856
Aug. 8	- 2,852	+ 8,012	- 211	- 6,387	+ 1,328	- 5,594	+ 594	+ 4,120	- 1,155	- 707	- 327
Sep. 8	- 1,664	+ 10,966	- 62	- 6,631	- 1,044	- 4,893	- 14	+ 5,795	- 722	- 3,395	- 1,012
Oct. 8	- 1,476	+ 12,016	- 74	- 6,388	- 1,810	- 5,220	- 83	- 12,029	- 763	+ 14,351	+ 173
Nov. 8	+ 3,653	+ 15,309	- 300	- 3,664	- 2,142	- 5,550	+ 275	+ 18,759	- 7,211	- 15,476	- 12,471
Dec. 8	- 1,196	+ 5,590	- 689	- 2,226	- 959	- 2,913	- 289	- 33,819	+ 6,711	+ 28,594	+ 7,522
1999 Jan. 8	- 8,394	+ 8,800	- 456	- 6,681	- 7,329	- 2,728	+ 960	- 73,553	+ 24,340	+ 56,646	- 27,072
Feb. 8	+ 350	+ 11,500	- 278	- 4,379	- 1,339	- 5,154	- 300	+ 8,718	+ 1,948	- 10,716	+ 3,634
Euro million											
1999 Jan. 8	- 4,292	+ 4,499	- 233	- 3,416	- 3,747	- 1,395	+ 491	- 37,607	+ 12,445	+ 28,963	- 13,841
Feb. 8	+ 179	+ 5,880	- 142	- 2,239	- 685	- 2,635	- 153	+ 4,458	+ 996	- 5,479	+ 1,858

o From July 1990 including the external transactions of the former GDR. — 1 Special trade according to the official foreign trade statistics: imports c.i.f., exports f.o.b. — 2 From January 1993 including additional estimates for external transactions which do not have to be reported and which are included up to December 1992 in Supplementary trade items. — 3 Mainly

warehouse transactions for account of residents and deduction of goods returned. — 4 See footnote 2. — 5 Excluding the expenditure on freight and insurance included in the c.i.f. import value. — 6 Capital exports: — . — 7 Increase: — . — 8 Figures subject to significant uncertainty owing to changes in the method of data collection in foreign trade.

X.Foreign trade and payments

2. Foreign trade (special trade) of the Federal Republic of Germany,  
by group of countries and country \*

Up to end-1998 in DM million , from 1999 in euro million

Group of countries / Country		1996	1997	1998 1	1998 1				1999 p	
					September	October	November	December	January	February
All countries 2	Exports	788,937	888,616	949,675	76,957	83,976	82,495	75,553	35,381	39,012
	Imports	690,399	772,149	821,096	65,991	71,960	67,186	69,963	30,882	33,132
	Balance	+ 98,538	+ 116,467	+ 128,579	+ 10,966	+ 12,016	+ 15,309	+ 5,590	+ 4,499	+ 5,880
I. Industrialised countries	Exports	602,346	667,038	723,708	58,028	64,663	63,235	57,046	...	...
	Imports	530,496	585,621	615,213	47,826	53,126	50,309	52,754	...	...
	Balance	+ 71,850	+ 81,417	+ 108,495	+ 10,202	+ 11,537	+ 12,927	+ 4,292	...	...
1. EU member countries	Exports	453,715	493,554	535,475	42,514	48,198	46,347	41,855	...	...
	Imports	388,558	424,430	440,746	33,211	38,060	35,883	37,580	...	...
	Balance	+ 65,157	+ 69,124	+ 94,729	+ 9,304	+ 10,138	+ 10,464	+ 4,275	...	...
of which										
EMU member countries	Exports	350,928	375,758	408,655	32,583	37,014	35,626	31,610	...	...
	Imports	310,391	337,439	352,012	26,855	30,030	29,065	29,814	...	...
	Balance	+ 40,537	+ 38,319	+ 56,643	+ 5,728	+ 6,984	+ 6,561	+ 1,796	...	...
of which										
Austria	Exports	45,506	46,680	50,101	3,981	4,670	4,356	3,979	...	...
	Imports	27,275	29,082	32,055	2,442	3,021	2,789	2,723	...	...
	Balance	+ 18,231	+ 17,598	+ 18,046	+ 1,540	+ 1,649	+ 1,567	+ 1,255	...	...
Belgium and Luxemburg	Exports	49,832	51,666	53,896	4,591	4,838	4,648	4,190	...	...
	Imports	43,906	47,421	45,915	3,846	4,022	3,879	3,771	...	...
	Balance	+ 5,926	+ 4,245	+ 7,981	+ 745	+ 817	+ 770	+ 418	...	...
France	Exports	87,911	94,420	105,775	8,376	9,833	9,441	8,246	...	...
	Imports	73,681	81,090	90,145	6,964	7,466	7,550	7,644	...	...
	Balance	+ 14,230	+ 13,330	+ 15,630	+ 1,413	+ 2,367	+ 1,891	+ 602	...	...
Italy	Exports	59,271	65,053	70,355	5,636	6,210	6,137	5,015	...	...
	Imports	58,343	61,074	63,307	4,515	5,699	5,091	5,362	...	...
	Balance	+ 928	+ 3,978	+ 7,048	+ 1,121	+ 512	+ 1,046	- 347	...	...
Netherlands	Exports	60,277	63,054	65,062	4,995	5,695	5,251	5,017	...	...
	Imports	61,097	67,537	65,561	4,826	5,500	5,255	5,627	...	...
	Balance	- 819	- 4,483	- 499	+ 169	+ 195	- 5	- 610	...	...
Spain	Exports	28,959	33,071	38,414	3,026	3,507	3,382	3,080	...	...
	Imports	22,856	25,941	28,290	2,251	2,041	2,235	2,356	...	...
	Balance	+ 6,103	+ 7,130	+ 10,124	+ 775	+ 1,466	+ 1,147	+ 724	...	...
Sweden	Exports	19,042	20,630	21,722	1,895	2,025	1,929	1,768	...	...
	Imports	14,589	14,819	15,990	1,236	1,411	1,292	1,329	...	...
	Balance	+ 4,453	+ 5,812	+ 5,732	+ 660	+ 613	+ 637	+ 439	...	...
United Kingdom	Exports	63,667	74,962	81,850	6,175	6,829	6,796	6,653	...	...
	Imports	47,486	54,342	56,226	3,851	5,138	4,244	5,203	...	...
	Balance	+ 16,181	+ 20,620	+ 25,623	+ 2,324	+ 1,691	+ 2,552	+ 1,450	...	...
2. Other European industrial countries	Exports	57,088	62,869	66,591	5,446	5,759	6,317	5,264	...	...
	Imports	50,631	56,705	57,843	5,017	5,051	4,747	4,978	...	...
	Balance	+ 6,456	+ 6,164	+ 8,748	+ 429	+ 708	+ 1,570	+ 287	...	...
of which										
Switzerland	Exports	37,791	39,847	42,636	3,428	3,767	4,287	3,406	...	...
	Imports	27,397	29,858	32,487	2,810	2,962	2,729	2,948	...	...
	Balance	+ 10,395	+ 9,989	+ 10,149	+ 618	+ 806	+ 1,558	+ 458	...	...
3. Non-European industrial countries	Exports	91,544	110,615	121,643	10,068	10,706	10,571	9,927	...	...
	Imports	91,307	104,487	116,624	9,599	10,016	9,678	10,196	...	...
	Balance	+ 237	+ 6,128	+ 5,018	+ 469	+ 690	+ 892	- 270	...	...
of which										
Japan	Exports	21,191	20,476	18,294	1,427	1,593	1,600	1,451	...	...
	Imports	34,440	37,478	40,651	3,287	3,534	3,620	3,190	...	...
	Balance	- 13,248	- 17,002	- 22,357	- 1,861	- 1,941	- 2,020	- 1,739	...	...
United States	Exports	60,114	76,617	89,303	7,442	7,973	7,901	7,467	...	...
	Imports	49,488	59,039	67,311	5,702	5,697	5,433	6,323	...	...
	Balance	+ 10,626	+ 17,578	+ 21,992	+ 1,739	+ 2,276	+ 2,469	+ 1,144	...	...
II. Countries in transition	Exports	82,665	102,960	115,191	9,264	9,646	9,579	9,193	...	...
	Imports	80,347	96,792	108,441	9,765	9,901	9,039	9,630	...	...
	Balance	+ 2,317	+ 6,168	+ 6,750	- 501	- 255	+ 539	- 437	...	...
of which										
Central and east European countries in transition	Exports	70,024	90,282	101,227	8,038	8,423	8,512	7,839	...	...
	Imports	61,846	74,304	84,130	7,556	7,669	6,976	7,578	...	...
	Balance	+ 8,179	+ 15,978	+ 17,097	+ 482	+ 754	+ 1,536	+ 262	...	...
China 3	Exports	10,887	10,629	11,900	1,071	1,055	916	1,227	...	...
	Imports	18,012	21,534	22,965	2,118	2,118	1,965	1,974	...	...
	Balance	- 7,124	- 10,906	- 11,065	- 1,047	- 1,062	- 1,049	- 747	...	...
III. Developing countries	Exports	101,677	116,124	108,921	9,140	9,097	9,125	9,068	...	...
	Imports	78,699	88,792	89,332	7,501	7,931	6,898	7,413	...	...
	Balance	+ 22,978	+ 27,332	+ 19,589	+ 1,639	+ 1,166	+ 2,227	+ 1,656	...	...
of which										
Newly industrialising countries in south-east Asia 4	Exports	44,456	48,444	36,658	2,951	2,775	2,916	2,705	...	...
	Imports	35,725	40,094	41,678	3,576	3,889	3,460	3,464	...	...
	Balance	+ 8,730	+ 8,350	- 5,020	- 624	- 1,114	- 544	- 759	...	...
OPEC-countries	Exports	16,708	20,024	19,214	1,713	1,597	1,788	1,657	...	...
	Imports	12,525	13,932	11,201	942	1,001	820	946	...	...
	Balance	+ 4,183	+ 6,092	+ 8,013	+ 771	+ 596	+ 967	+ 712	...	...

\* Source: Federal Statistical Office. Exports (f.o.b.) by country of destination, imports (c.i.f.) by country of origin. Inclusion of individual countries in groups of countries according to the current position. — 1 The figures on "All countries" include revisions which have not yet been broken down by

region. — 2 Including fuel and other supplies for ships and aircraft and other data not classifiable by region. — 3 Excluding Hong Kong. — 4 Brunei, Hong Kong, Indonesia, Malaysia, Philippines, Singapore, South Korea, Taiwan and Thailand.

X. Foreign trade and payments

3. Services and factor income of the Federal Republic of Germany  
(Balances)

Until the end of 1998 DM million, from 1999 euro million

Period	Services							Other services				
	Total	Travel	Trans- portation 1	Financial services	Patents and licences	Government transactions 2	Total	of which			Compen- sation of employees 4	Investment income
								Services of selfemployed persons 3	Construction and assembly work, repairs			
1994	- 52,102	- 49,310	+ 4,963	+ 1,650	- 3,421	+ 8,771	- 14,756	- 1,680	- 1,254	+ 347	+ 4,506	
1995	- 52,361	- 49,046	+ 5,064	+ 2,675	- 4,020	+ 6,848	- 13,883	- 1,765	- 955	- 1,417	+ 1,749	
1996	- 53,145	- 50,527	+ 4,840	+ 2,652	- 3,774	+ 6,699	- 13,036	- 2,180	- 1,216	- 1,779	+ 3,467	
1997	- 56,928	- 51,723	+ 6,211	+ 2,310	- 2,603	+ 6,634	- 17,757	- 2,405	- 2,044	- 1,764	- 1,258	
1998	- 61,796	- 53,666	+ 5,908	+ 3,062	- 2,879	+ 5,572	- 19,793	- 2,600	- 3,039	- 1,821	- 14,302	
1997 2nd qtr	- 13,142	- 13,090	+ 1,877	+ 513	- 608	+ 1,897	- 3,731	- 694	- 619	- 486	+ 1,131	
3rd qtr	- 19,319	- 18,138	+ 1,532	+ 737	- 380	+ 1,935	- 5,005	- 574	- 296	- 873	+ 127	
4th qtr	- 10,471	- 9,976	+ 1,724	+ 361	- 786	+ 1,187	- 2,981	- 623	- 272	- 502	- 1,069	
1998 1st qtr	- 14,507	- 10,445	+ 1,266	+ 898	- 577	+ 1,996	- 7,646	- 583	- 718	+ 139	- 4,189	
2nd qtr	- 15,226	- 13,391	+ 1,530	+ 871	- 766	+ 1,040	- 4,510	- 715	- 1,031	- 513	- 3,471	
3rd qtr	- 19,786	- 19,060	+ 1,426	+ 558	- 770	+ 1,272	- 3,212	- 629	- 554	- 911	- 2,267	
4th qtr	- 12,278	- 10,770	+ 1,685	+ 735	- 767	+ 1,264	- 4,425	- 674	- 735	- 537	- 4,375	
1998 Apr.	- 5,731	- 4,452	+ 378	+ 590	- 305	+ 344	- 2,287	- 234	- 442	- 164	+ 1,065	
May	- 5,375	- 4,012	+ 608	+ 108	- 331	+ 321	- 2,069	- 236	- 632	- 175	- 3,457	
June	- 4,120	- 4,927	+ 544	+ 173	- 129	+ 375	- 155	- 245	+ 43	- 174	- 1,078	
July	- 6,768	- 5,710	+ 517	+ 237	- 229	+ 436	- 2,019	- 223	- 628	- 302	- 3,160	
Aug.	- 6,387	- 6,955	+ 355	+ 221	- 247	+ 405	- 166	- 248	- 33	- 305	+ 1,632	
Sep.	- 6,631	- 6,395	+ 554	+ 99	- 294	+ 430	- 1,027	- 157	+ 108	- 304	- 740	
Oct.	- 6,388	- 4,918	+ 430	+ 155	- 291	+ 485	- 2,250	- 163	- 446	- 177	- 1,634	
Nov.	- 3,664	- 2,876	+ 427	+ 215	- 287	+ 409	- 1,552	- 268	- 347	- 210	- 1,931	
Dec.	- 2,226	- 2,977	+ 829	+ 366	- 189	+ 370	- 624	- 242	+ 57	- 150	- 810	
1999 Jan.	- 3,416	- 2,211	- 34	+ 18	- 107	+ 218	- 1,300	- 176	- 134	+ 18	- 3,765	
Feb.	- 2,239	- 1,686	+ 210	+ 35	- 132	+ 165	- 831	- 133	- 121	- 6	- 679	

1 Excluding the expenditure on freight included in the c.i.f. import value. —  
2 Including the receipts from foreign military agencies for goods and ser-

vices supplied. — 3 Engineering and other technical services, research and  
development, commercial services etc. — 4 Wages and salaries.

4. Current transfers of the Federal Republic of Germany  
(Balances)

Until the end of 1998 DM million, from 1999 euro million

Period	Public 1					Private 1			DM million / euro million		
	Total	Total	International Organisations 2		Other current public transfers 3	Total	Remittances by foreign workers	Other current private transfers	Total 4	Public 1	Private 1
			Total	of which European Communities							
1994	- 59,940	- 44,588	- 34,904	- 31,698	- 9,684	- 15,352	- 7,500	- 7,852	- 2,637	- 2,323	- 314
1995	- 55,710	- 40,247	- 33,188	- 29,961	- 7,060	- 15,463	- 7,600	- 7,863	- 3,845	- 4,394	+ 549
1996	- 51,318	- 35,306	- 30,699	- 27,576	- 4,607	- 16,013	- 7,401	- 8,612	- 3,283	- 2,617	- 666
1997	- 52,801	- 36,849	- 31,534	- 28,525	- 5,315	- 15,952	- 7,519	- 8,433	+ 51	- 2,821	+ 2,873
1998	- 53,250	- 37,381	- 33,184	- 30,407	- 4,198	- 15,869	- 6,936	- 8,933	+ 1,293	- 2,442	+ 3,735
1997 2nd qtr	- 12,133	- 8,236	- 7,225	- 6,806	- 1,011	- 3,897	- 1,880	- 2,017	- 543	- 531	- 12
3rd qtr	- 15,454	- 11,276	- 9,747	- 8,886	- 1,529	- 4,178	- 1,880	- 2,299	+ 1,391	- 560	+ 1,952
4th qtr	- 12,471	- 8,747	- 7,482	- 6,695	- 1,266	- 3,723	- 1,880	- 1,844	- 926	- 799	- 127
1998 1st qtr	- 15,825	- 11,895	- 10,310	- 9,232	- 1,585	- 3,929	- 1,734	- 2,195	+ 534	- 579	+ 1,113
2nd qtr	- 9,380	- 5,463	- 6,114	- 5,804	+ 650	- 3,917	- 1,734	- 2,183	- 139	- 484	+ 344
3rd qtr	- 14,362	- 10,155	- 8,502	- 7,631	- 1,653	- 4,207	- 1,734	- 2,473	+ 996	- 506	+ 1,502
4th qtr	- 13,683	- 9,868	- 8,258	- 7,740	- 1,610	- 3,816	- 1,734	- 2,082	- 97	- 873	+ 776
1998 Apr.	- 3,929	- 2,685	- 2,417	- 2,302	- 268	- 1,245	- 578	- 667	+ 265	- 167	+ 432
May	- 2,920	- 1,503	- 1,643	- 1,535	+ 140	- 1,417	- 578	- 839	- 40	- 156	+ 116
June	- 2,531	- 1,276	- 2,054	- 1,967	+ 779	- 1,255	- 578	- 677	- 365	- 161	- 204
July	- 3,875	- 2,391	- 1,976	- 1,406	- 414	- 1,484	- 578	- 906	+ 415	- 189	+ 604
Aug.	- 5,594	- 4,259	- 3,466	- 3,205	- 792	- 1,336	- 578	- 758	+ 594	- 156	+ 750
Sep.	- 4,893	- 3,506	- 3,059	- 3,020	- 447	- 1,387	- 578	- 809	- 14	- 161	+ 148
Oct.	- 5,220	- 3,922	- 3,386	- 3,244	- 535	- 1,298	- 578	- 720	- 83	- 193	+ 109
Nov.	- 5,550	- 4,257	- 3,664	- 3,356	- 593	- 1,293	- 578	- 715	+ 275	- 246	+ 521
Dec.	- 2,913	- 1,689	- 1,208	- 1,140	- 481	- 1,224	- 578	- 646	- 289	- 434	+ 145
1999 Jan.	- 1,395	- 794	- 563	- 388	- 231	- 601	- 286	- 315	+ 491	- 59	+ 549
Feb.	- 2,635	- 1,926	- 1,626	- 1,321	- 300	- 710	- 286	- 424	- 153	- 75	- 78

1 The classification of "public" and "private" transfers depends on which  
sector the participating domestic body belongs to. — 2 Current contribu-  
tions to the budgets of international organisations and to the EU budget

(excluding capital transfers). — 3 Payments to developing countries, pension  
payments, tax revenue and refunds, etc. — 4 Where identifiable; in  
particular, debt forgiveness.

X. Foreign trade and payments

6. Financial account of the Federal Republic of Germany

Until the end of 1998 DM million, from 1999 euro million

Item	1996	1997	1998	1998					1999	
				1st qtr	2nd qtr	3rd qtr	4th qtr	Dec.	Jan.	Feb.
<b>I. Net German investment abroad (Increase/capital exports: -)</b>	- 192,463	- 382,252	- 559,297	- 164,518	- 150,409	- 58,758	- 185,612	- 16,629	- 123,522	+ 21,136
1. Direct investment <sup>1</sup>	- 76,483	- 69,859	- 152,401	- 53,387	- 22,054	- 6,914	- 70,045	- 1,884	- 3,937	- 1,959
Equity capital	- 35,614	- 41,913	- 104,975	- 9,530	- 18,037	- 13,637	- 63,771	- 3,950	- 1,104	- 1,167
Reinvested earnings <sup>2</sup>	- 9,155	- 6,200	- 6,000	- 1,500	- 1,500	- 1,500	- 1,500	- 500	- 256	- 256
Other capital <sup>3</sup>	- 31,714	- 21,746	- 41,427	- 42,358	- 2,518	+ 8,223	- 4,774	+ 2,566	- 2,578	- 536
2. Portfolio investment	- 46,018	- 154,081	- 246,021	- 65,715	- 77,850	- 37,514	- 64,942	- 19,378	- 17,707	- 20,215
Equities <sup>4</sup>	- 21,931	- 62,598	- 108,493	- 33,130	- 32,955	- 23,030	- 19,379	- 6,542	- 8,247	- 3,510
Investment fund certificates <sup>5</sup>	- 4,274	- 14,935	- 21,045	- 6,882	- 7,794	- 3,608	- 2,761	+ 920	- 737	- 1,142
Bonds and notes <sup>6</sup>	- 20,572	- 76,627	- 109,234	- 23,996	- 37,244	- 11,518	- 36,476	- 12,875	- 8,015	- 16,495
Money market instruments	+ 759	+ 78	+ 7,249	+ 1,708	+ 142	+ 643	+ 6,326	- 881	- 708	+ 932
3. Financial derivatives <sup>7</sup>	- 8,842	- 15,062	- 11,982	- 4,351	- 7,418	+ 4,178	- 4,390	+ 1,243	- 666	+ 1,101
4. Credit transactions	- 57,105	- 138,896	- 141,324	- 39,471	- 41,769	- 14,946	- 45,138	+ 3,955	- 101,056	+ 42,286
Credit institutions <sup>8</sup>	- 60,710	- 141,136	- 140,352	+ 1,346	- 40,639	- 20,374	- 80,686	- 28,620	- 76,470	+ 50,064
Long-term	- 16,107	- 54,128	- 66,270	- 18,434	- 15,454	- 18,879	- 13,502	- 10,609	- 8,355	- 1,391
Short-term	- 44,603	- 87,008	- 74,082	+ 19,780	- 25,184	- 1,495	- 67,183	- 18,011	- 68,115	+ 51,455
Enterprises and individuals <sup>8</sup>	+ 3,686	+ 5,759	+ 115	- 38,204	+ 3,036	+ 2,969	+ 32,084	+ 29,017	+ 6,318	- 9,484
Long-term	- 1,766	- 562	+ 4,590	+ 495	+ 2,152	+ 933	+ 1,009	- 987	- 163	- 170
Short-term <sup>10</sup>	+ 5,452	+ 6,321	- 4,705	- 38,698	+ 884	+ 2,036	+ 31,074	+ 30,004	+ 6,481	- 9,314
General government	- 595	- 4,019	- 706	- 2,864	- 4,166	+ 2,209	+ 4,115	+ 4,208	+ 2,707	+ 456
Long-term	- 1,326	- 3,110	- 1,722	- 573	- 149	- 695	- 305	- 113	- 59	+ 11
Short-term	+ 730	- 910	+ 1,016	- 2,291	- 4,016	+ 2,904	+ 4,419	+ 4,320	+ 2,766	+ 445
Bundesbank	+ 515	+ 500	+ 151	+ 250	-	+ 250	- 651	- 651	- 33,611	+ 1,250
5. Other investment <sup>9</sup>	- 4,015	- 4,354	- 7,569	- 1,593	- 1,317	- 3,562	- 1,097	- 564	- 157	- 76
<b>II. Net foreign investment in Germany (Increase/capital imports: +)</b>	+ 215,707	+ 381,543	+ 582,784	+ 189,857	+ 154,924	+ 79,480	+ 158,522	- 17,191	+ 85,915	- 16,679
1. Direct investment <sup>1</sup>	+ 8,482	+ 16,656	+ 34,983	+ 48,026	+ 11,221	- 18,956	- 5,308	- 1,417	+ 2,618	- 146
Equity capital	+ 3,604	+ 6,155	+ 12,374	+ 3,453	+ 6,280	- 1,356	+ 3,997	+ 1,006	+ 110	+ 61
Reinvested earnings <sup>2</sup>	- 6,818	- 800	-	-	-	-	-	-	-	-
Other capital <sup>3</sup>	+ 11,695	+ 11,301	+ 22,610	+ 44,573	+ 4,941	- 17,600	- 9,305	- 2,423	+ 2,508	- 206
2. Portfolio investment	+ 142,060	+ 158,462	+ 255,465	+ 44,504	+ 72,751	+ 85,524	+ 52,686	+ 5,866	+ 16,380	+ 8,391
Equities <sup>4</sup>	+ 22,064	+ 27,450	+ 97,192	+ 200	+ 49,351	+ 10,086	+ 37,954	- 4,243	+ 85	+ 1,494
Investment fund certificates	- 2,319	- 4,142	- 2,768	+ 312	- 1,199	- 466	- 1,415	+ 1,564	+ 1,289	+ 408
Bonds and notes <sup>6</sup>	+ 102,850	+ 122,912	+ 147,873	+ 36,320	+ 21,568	+ 68,424	+ 21,560	+ 14,677	+ 16,606	+ 3,624
Money market instruments	+ 19,465	+ 12,242	+ 13,169	+ 8,072	+ 3,030	+ 7,480	- 5,414	- 6,132	- 1,601	+ 2,866
3. Credit transactions	+ 65,143	+ 207,193	+ 292,399	+ 97,414	+ 70,963	+ 12,874	+ 111,148	- 21,633	+ 66,923	- 24,909
Credit institutions <sup>8</sup>	+ 55,681	+ 205,009	+ 281,202	+ 86,783	+ 76,955	+ 9,178	+ 108,286	- 23,292	+ 62,964	- 26,370
Long-term	+ 39,236	+ 50,231	+ 63,035	+ 21,276	+ 20,253	+ 6,529	+ 14,977	+ 9,475	+ 3,457	+ 3,384
Short-term	+ 16,445	+ 154,778	+ 218,167	+ 65,507	+ 56,702	+ 2,649	+ 93,309	- 32,768	+ 59,507	- 29,754
Enterprises and individuals <sup>8</sup>	+ 5,712	+ 15,865	+ 10,076	+ 11,262	- 4,853	+ 3,025	+ 642	- 1,631	+ 693	+ 2,531
Long-term	+ 623	- 959	+ 9,179	- 693	+ 3,704	+ 6,485	- 317	+ 1,740	+ 323	- 24
Short-term <sup>10</sup>	+ 5,089	+ 16,823	+ 897	+ 11,955	- 8,557	- 3,459	+ 959	- 3,371	+ 370	+ 2,555
General Government	+ 5,523	- 13,038	- 2,466	- 560	- 1,028	+ 573	- 1,452	- 5,593	- 4,059	- 682
Long-term	+ 2,211	- 7,351	- 8,361	- 512	- 1,516	- 950	- 5,383	- 6,014	- 1,040	- 843
Short-term	+ 3,312	- 5,687	+ 5,895	- 48	+ 488	+ 1,523	+ 3,932	+ 421	- 3,019	+ 161
Bundesbank	- 1,773	- 643	+ 3,588	- 71	+ 111	+ 98	+ 3,672	+ 8,883	+ 7,325	- 388
4. Other investment	+ 22	- 768	- 63	- 87	- 11	+ 38	- 4	- 5	- 5	- 15
<b>III. Balance of all statistically recorded financial movements (Net capital exports: -)</b>	+ 23,244	- 709	+ 23,487	+ 25,339	+ 4,515	+ 20,722	- 27,089	- 33,819	- 37,607	+ 4,458

1 From 1996, new definition for direct investment. — 2 Estimated. — 3 Loans and real property. — 4 Including participation rights. — 5 From 1991 including accumulated earnings. — 6 From 1975 excluding accrued interest. — 7 Options, whether or not evidenced by securities, and financial futures contracts. — 8 The transaction values shown here are mostly derived from changes in stocks. As far as possible, purely statistical changes have

been eliminated. The transaction values of the balance of payments in short-term credit transactions may therefore deviate from the changes in stocks shown in Table X.9. — 9 In particular, subscriptions of the Federal Government to International Organisations. — 10 The figure for the latest month mentioned includes financing and trade credit flows that are attributable to direct investment.

X. Foreign trade and payments

7. External position of the Bundesbank \*

DM million

End of year or month	Monetary reserves and other claims on non-residents						Liabilities to non-residents				Net external position (col. 1 less col. 8)
	Total	Monetary reserves			Reserve position in the Inter- national Monetary Fund and special drawing rights	Claims on the ECB <sup>2</sup> (net)	Loans and other claims on non- residents <sup>3</sup>	Total	Liabilities arising from external trans- actions <sup>4</sup>	Liabilities arising from liquidity Treasury discount paper	
		Total	Gold	Foreign currency balances <sup>1</sup>							
1	2	3	4	5	6	7	8	9	10	11	
1993	122,763	120,143	13,688	61,784	8,496	36,176	2,620	39,541	23,179	16,362	83,222
1994	115,965	113,605	13,688	60,209	7,967	31,742	2,360	24,192	19,581	4,611	91,774
1995	123,261	121,307	13,688	68,484	10,337	28,798	1,954	16,390	16,390	-	106,871
1996	120,985	119,544	13,688	72,364	11,445	22,048	1,441	15,604	15,604	-	105,381
1997	127,849	126,884	13,688	76,673	13,874	22,649	966	16,931	16,931	-	110,918
1998	135,085	134,005	17,109	100,363	16,533	-	1,079	15,978	15,978	-	119,107
1997 Sep.	114,457	113,517	13,688	67,287	11,179	21,363	941	16,203	16,203	-	98,254
Oct.	114,100	113,159	13,688	67,903	11,139	20,430	941	16,367	16,367	-	97,733
Nov.	114,367	113,427	13,688	67,687	11,622	20,430	941	16,506	16,506	-	97,861
Dec.	127,849	126,884	13,688	76,673	13,874	22,649	966	16,931	16,931	-	110,918
1998 Jan.	127,904	126,939	13,688	75,841	14,842	22,568	966	17,296	17,296	-	110,608
Feb.	128,968	128,252	13,688	76,819	15,178	22,568	716	17,466	17,466	-	111,502
Mar.	130,030	129,315	13,688	77,882	15,177	22,568	716	18,230	18,230	-	111,800
Apr.	130,743	130,028	13,688	78,267	15,248	22,825	716	18,305	18,305	-	112,438
May	131,839	131,123	13,688	79,189	15,347	22,900	716	18,248	18,248	-	113,590
June	132,198	131,483	13,688	78,771	16,125	22,900	716	18,440	18,440	-	113,758
July	131,745	131,029	13,688	77,094	17,184	23,064	716	18,554	18,554	-	113,191
Aug.	132,596	132,130	13,688	78,143	17,236	23,064	466	19,131	19,131	-	113,465
Sep.	133,401	132,936	13,688	78,525	17,659	23,064	466	18,840	18,840	-	114,561
Oct.	134,128	133,662	13,688	79,380	17,473	23,122	466	19,776	19,776	-	114,351
Nov.	140,284	139,818	13,688	85,429	17,580	23,122	466	14,516	14,516	-	125,768
Dec.	135,085	134,005	17,109	100,363	16,533	-	1,079	15,978	15,978	-	119,107

\* Valuation of the gold holdings and the claims on non-residents according to section 26 (2) of the Bundesbank Act and the provisions of the Commercial Code, especially section 253. In the course of the year, valuation at the balance sheet rates of the preceding year. — 1 Mainly US dollar assets. — 2 European Central Bank (until 1993 claims on the European

Monetary Cooperation Fund – EMCF). — 3 Including loans to the World Bank. — 4 Including liquidity paper sold to non-residents by the Bundesbank; excluding the liquidity Treasury discount paper sold to non-residents between March 1993 and March 1995, as shown in column 10.

New table<sup>1</sup>

8. External position of the Bundesbank in the European monetary union \*

Euro million

End of year or month	Monetary reserves and other claims on non-residents						Other claims on residents in other EMU member countries	Liabilities to non-residents	Net external position of the Bundesbank (col.1 less col.9)	
	Total	Monetary reserves			Other claims on non-euro- area residents <sup>2</sup>					
		Total	Gold and gold receivables	Reserve position in the Inter- national Monetary Fund and special drawing rights		Foreign currency reserves				
1	2	3	4	5	6	7	8	9	10	
1998 Dec. <sup>3</sup>	95,316	93,940	29,312	8,461	56,167	140	1,225	11	8,169	87,146
1999 Jan.	116,482	81,495	27,475	8,458	45,562	4,506	30,460	21	15,494	100,988
Feb.	114,235	80,499	27,475	7,146	45,878	3,730	30,000	6	15,106	99,129

\* Assets and liabilities vis-à-vis all EMU member countries and non-EMU member countries. Within a quarter the stock figures are computed on the basis of cumulative transaction values. At the end of each quarter the stock figures are shown on the basis of revaluation at market rates. — 1 See note

on the title page of the Statistical Section. — 2 Including loans to the World Bank. — 3 Based on the euro opening balance sheet of the Bundesbank as at January 1, 1999.



X. Foreign trade and payments

9. Assets and liabilities of enterprises in Germany (other than banks)  
vis-à-vis non-residents \*

Until the end of 1998 DM million, from 1999 euro million

End of year or month	Claims on non-residents							Liabilities to non-residents						
	Total	Balances with foreign banks	Claims on foreign non-banks					Total	Loans from foreign banks	Liabilities to foreign non-banks				
			Total	from financial operations	from trade credits					Total	from financial operations	from trade credits		
					Total	Credit terms granted	Advance payments effected					Total	Credit terms used	Advance payments received
<b>All countries</b>														
1995	398,987	150,756	248,231	86,727	161,504	146,910	14,594	322,819	73,813	249,006	137,314	111,692	73,315	38,377
1996	441,888	155,956	285,932	114,420	171,512	155,722	15,790	351,943	73,713	278,230	162,435	115,795	75,721	40,074
1997	461,760	141,722	320,038	132,372	187,666	172,843	14,823	392,071	80,743	311,328	181,987	129,341	85,746	43,595
1998	502,610	140,729	361,881	169,889	191,992	176,485	15,507	424,140	81,092	343,048	215,528	127,520	87,576	39,944
1998 Nov.	535,288	167,093	368,195	169,797	198,398	182,554	15,844	426,815	82,994	343,821	214,308	129,513	86,601	42,912
Dec.	502,610	140,729	361,881	169,889	191,992	176,485	15,507	424,140	81,092	343,048	215,528	127,520	87,576	39,944
1999 Jan.	251,064	66,585	184,479	88,083	96,396	88,413	7,983	219,970	42,908	177,062	113,559	63,503	42,350	21,153
Feb. p	...	68,593	...	...	...	...	...	...	41,925	...	...	...	...	...
<b>EU countries</b>														
1995	262,908	138,155	124,753	44,757	79,996	71,388	8,608	190,620	62,867	127,753	77,164	50,589	41,405	9,184
1996	287,183	141,428	145,755	63,748	82,007	73,261	8,746	204,124	62,940	141,184	89,223	51,961	41,443	10,518
1997	287,024	130,611	156,413	68,161	88,252	80,199	8,053	236,747	68,777	167,970	110,157	57,813	46,097	11,716
1998	307,523	130,398	177,125	84,422	92,703	83,927	8,776	265,214	68,873	196,341	137,494	58,847	46,896	11,951
1998 Nov.	340,045	157,475	182,570	85,604	96,966	88,201	8,765	269,111	70,949	198,162	138,920	59,242	46,688	12,554
Dec.	307,523	130,398	177,125	84,422	92,703	83,927	8,776	265,214	68,873	196,341	137,494	58,847	46,896	11,951
1999 Jan.	152,176	61,487	90,689	43,570	47,119	42,424	4,695	135,857	35,736	100,121	71,327	28,794	22,534	6,260
Feb. p	...	63,456	...	...	...	...	...	...	34,829	...	...	...	...	...
<b>of which: EMU member countries</b>														
1995	167,412	72,365	95,047	34,713	60,334	54,020	6,314	145,198	46,143	99,055	60,018	39,037	31,982	7,055
1996	171,830	74,597	97,233	36,309	60,924	54,529	6,395	153,278	48,060	105,218	66,594	38,624	30,771	7,853
1997	174,416	66,022	108,394	42,064	66,330	60,694	5,636	177,629	51,339	126,290	82,879	43,411	35,206	8,205
1998	190,953	68,418	122,535	54,167	68,368	62,491	5,877	197,566	50,579	146,987	103,899	43,088	35,021	8,067
1998 Nov.	204,153	79,355	124,798	52,464	72,334	66,259	6,075	197,587	53,069	144,518	101,087	43,431	34,979	8,452
Dec.	190,953	68,418	122,535	54,167	68,368	62,491	5,877	197,566	50,579	146,987	103,899	43,088	35,021	8,067
1999 Jan.	95,970	32,613	63,357	28,216	35,141	31,948	3,193	101,918	27,074	74,844	53,766	21,078	16,836	4,242
Feb. p	...	31,653	...	...	...	...	...	...	26,676	...	...	...	...	...
<b>Other industrial countries</b>														
1995	66,890	5,661	61,229	30,752	30,477	27,863	2,614	81,187	8,342	72,845	46,460	26,385	20,998	5,387
1996	78,545	8,212	70,333	37,293	33,040	30,219	2,821	93,654	7,181	86,473	57,768	28,705	22,731	5,974
1997	89,482	6,436	83,046	45,814	37,232	34,050	3,182	95,662	7,884	87,778	55,306	32,472	26,280	6,192
1998	109,682	8,246	101,436	61,999	39,437	36,162	3,275	96,958	7,655	89,303	56,641	32,662	26,292	6,370
1998 Nov.	108,229	7,238	100,991	60,731	40,260	36,850	3,410	94,575	7,374	87,201	54,374	32,827	25,565	7,262
Dec.	109,682	8,246	101,436	61,999	39,437	36,162	3,275	96,958	7,655	89,303	56,641	32,662	26,292	6,370
1999 Jan.	56,467	4,118	52,349	32,588	19,761	18,047	1,714	52,278	4,715	47,563	31,248	16,315	12,843	3,472
Feb. p	...	4,021	...	...	...	...	...	...	4,608	...	...	...	...	...
<b>Countries in transition</b>														
1995	17,524	101	17,423	2,577	14,846	13,600	1,246	9,998	33	9,965	450	9,515	3,556	5,959
1996	22,025	200	21,825	4,092	17,733	16,123	1,610	9,342	45	9,297	613	8,684	3,458	5,226
1997	27,427	296	27,131	5,916	21,215	19,487	1,728	10,690	90	10,600	595	10,005	4,007	5,998
1998	30,107	360	29,747	7,914	21,833	20,218	1,615	11,383	135	11,248	657	10,591	4,941	5,650
1998 Nov.	31,628	610	31,018	7,950	23,068	21,295	1,773	11,900	132	11,768	630	11,138	5,069	6,069
Dec.	30,107	360	29,747	7,914	21,833	20,218	1,615	11,383	135	11,248	657	10,591	4,941	5,650
1999 Jan.	15,012	179	14,833	3,991	10,842	10,124	718	5,920	59	5,861	330	5,531	2,380	3,151
Feb. p	...	194	...	...	...	...	...	...	67	...	...	...	...	...
<b>Developing countries</b>														
1995	51,665	6,839	44,826	8,641	36,185	34,059	2,126	41,014	2,571	38,443	13,240	25,203	7,356	17,847
1996	54,135	6,116	48,019	9,287	38,732	36,119	2,613	44,823	3,547	41,276	14,831	26,445	8,089	18,356
1997	57,827	4,379	53,448	12,481	40,967	39,107	1,860	48,972	3,992	44,980	15,929	29,051	9,362	19,689
1998	55,298	1,725	53,573	15,554	38,019	36,178	1,841	50,585	4,429	46,156	20,736	25,420	9,447	15,973
1998 Nov.	55,386	1,770	53,616	15,512	38,104	36,208	1,896	51,229	4,539	46,690	20,384	26,306	9,279	17,027
Dec.	55,298	1,725	53,573	15,554	38,019	36,178	1,841	50,585	4,429	46,156	20,736	25,420	9,447	15,973
1999 Jan.	27,409	801	26,608	7,934	18,674	17,818	856	25,915	2,398	23,517	10,654	12,863	4,593	8,270
Feb. p	...	922	...	...	...	...	...	...	2,421	...	...	...	...	...

\* Including the assets and liabilities vis-à-vis non-residents of individuals in Germany. The assets and liabilities vis-à-vis non-residents of banks (MFIs) in Germany are shown in Table 4 of Section IV, "Banks". Statistical increases

and decreases have not been eliminated; to this extent the changes in totals are not comparable with the figures shown in Table X, 6.

X. Foreign trade and payments

10. Deutsche Mark exchange rates for the national currencies of the EMU countries,  
the Deutsche Mark value of the ECU \* and euro conversion rates

Yearly or monthly average	France 100 FRF	Italy 1,000 ITL	Netherlands 100 NLG	Belgium/ Luxembourg 100 BEF/LUF	Austria 100 ATS	Spain 100 ESP	Finland 100 FIM	Ireland 1 IEP	Portugal 100 PTE	ECU values <sup>1</sup> 1 ECU = ... DM
<b>Spot middle rates on the Frankfurt exchange in DM</b>										
1991	29.409	1.3377	88.742	4.857	14.211	1.597	41.087	2.671	1.149	2.05076
1992	29.500	1.2720	88.814	4.857	14.211	1.529	34.963	2.656	1.157	2.02031
1993	29.189	1.0526	89.017	4.785	14.214	1.303	28.915	2.423	1.031	1.93639
1994	29.238	1.0056	89.171	4.8530	14.214	1.2112	31.108	2.4254	0.9774	1.92452
1995	28.718	0.8814	89.272	4.8604	14.214	1.1499	32.832	2.2980	0.9555	1.87375
1996	29.406	0.9751	89.243	4.8592	14.214	1.1880	32.766	2.4070	0.9754	1.90954
1997	29.705	1.0184	88.857	4.8464	14.210	1.1843	33.414	2.6297	0.9894	1.96438
1998	29.829	1.0132	88.714	4.8476	14.213	1.1779	32.920	2.5049	0.9763	1.96913
1997 Nov.	29.864	1.0207	88.727	4.8481	14.208	1.1842	33.182	2.6035	0.9797	1.97368
Dec.	29.871	1.0202	88.739	4.8471	14.212	1.1824	33.102	2.5926	0.9785	1.97583
1998 Jan.	29.861	1.0160	88.737	4.8476	14.214	1.1798	33.047	2.5113	0.9776	1.97581
Feb.	29.833	1.0134	88.722	4.8456	14.213	1.1800	32.977	2.4970	0.9768	1.97517
Mar.	29.831	1.0156	88.726	4.8476	14.214	1.1794	32.957	2.4987	0.9772	1.98022
Apr.	29.832	1.0125	88.806	4.8458	14.213	1.1778	32.949	2.5205	0.9761	1.97947
May	29.821	1.0141	88.740	4.8477	14.211	1.1772	32.907	2.5177	0.9762	1.96831
June	29.825	1.0151	88.720	4.8480	14.212	1.1782	32.905	2.5203	0.9767	1.97348
July	29.828	1.0143	88.705	4.8492	14.213	1.1784	32.902	2.5158	0.9775	1.97320
Aug.	29.828	1.0135	88.676	4.8492	14.213	1.1783	32.887	2.5103	0.9770	1.96980
Sep.	29.823	1.0122	88.650	4.8476	14.212	1.1776	32.858	2.5035	0.9756	1.96381
Oct.	29.824	1.0108	88.677	4.8472	14.213	1.1767	32.868	2.4942	0.9751	1.95626
Nov.	29.823	1.0105	88.693	4.8478	14.214	1.1760	32.890	2.4870	0.9751	1.95791
Dec.	29.820	1.0099	88.734	4.8482	14.214	1.1754	32.895	2.4838	0.9753	1.95733
<b>Irrevocable euro conversion rates (EUR 1 = ... currency units) <sup>2</sup></b>										
	6.55957	1936.27	2.20371	40.3399	13.7603	166.386	5.94573	0.787564	200.482	<sup>3</sup> 1.95583

\* Calculated from daily quotations. — <sup>1</sup> According to data from the Euro- conversion rate.  
pean Commission. — <sup>2</sup> Applicable from January 1, 1999. — <sup>3</sup> Deutsche Mark

11. Exchange rates of the Deutsche Mark and the euro against other currencies \*

Yearly or monthly average	United States USD	Japan JPY	Denmark DKK	Sweden SEK	United Kingdom GBP	Norway NOK	Switzerland CHF	Canada CAD	Australia AUD <sup>1</sup>	New Zealand NZD <sup>1</sup>
<b>Spot middle rates on the Frankfurt exchange (1 or 100 currency units = ... DM)</b>										
1991	1.6612	1.2346	25.932	27.421	2.926	25.580	115.740	1.4501	1.2942	0.9589
1992	1.5595	1.2313	25.869	26.912	2.753	25.143	111.198	1.2917	1.1476	0.8406
1993	1.6544	1.4945	25.508	21.248	2.483	23.303	111.949	1.2823	1.1235	0.8940
1994	1.6218	1.5870	25.513	21.013	2.4816	22.982	118.712	1.1884	1.1848	0.9605
1995	1.4338	1.5293	25.570	20.116	2.2620	22.614	121.240	1.0443	1.0622	0.9399
1996	1.5037	1.3838	25.945	22.434	2.3478	23.292	121.891	1.1027	1.1782	1.0357
1997	1.7348	1.4378	26.249	22.718	2.8410	24.508	119.508	1.2533	1.2889	1.1453
1998	1.7592	1.3484	26.258	22.128	2.9142	23.297	121.414	1.1884	1.1070	0.9445
1997 Oct.	1.7567	1.4518	26.263	23.213	2.8677	24.822	120.969	1.2670	1.2672	1.1020
Nov.	1.7331	1.3844	26.272	22.909	2.9252	24.544	123.135	1.2271	1.2035	1.0809
Dec.	1.7767	1.3732	26.252	22.840	2.9525	24.522	123.608	1.2466	1.1789	1.0491
1998 Jan.	1.8167	1.4032	26.254	22.669	2.9707	24.235	123.133	1.2620	1.1895	1.0574
Feb.	1.8142	1.4435	26.240	22.460	2.9746	24.009	123.953	1.2647	1.2211	1.0511
Mar.	1.8267	1.4160	26.234	22.925	3.0341	24.085	122.703	1.2896	1.2224	1.0426
Apr.	1.8147	1.3732	26.223	23.200	3.0338	24.084	120.461	1.2698	1.1833	0.9931
May	1.7746	1.3153	26.243	23.068	2.9057	23.816	120.031	1.2285	1.1204	0.9515
June	1.7917	1.2780	26.254	22.660	2.9604	23.656	119.901	1.2228	1.0806	0.9123
July	1.7979	1.2784	26.243	22.508	2.9553	23.585	118.794	1.2110	1.1114	0.9276
Aug.	1.7887	1.2363	26.254	21.991	2.9209	23.136	119.651	1.1674	1.0554	0.8883
Sep.	1.7030	1.2648	26.257	21.531	2.8614	22.469	121.424	1.1187	1.0031	0.8583
Oct.	1.6378	1.3623	26.301	20.894	2.7760	22.048	122.618	1.0625	1.0135	0.8767
Nov.	1.6816	1.3973	26.302	21.040	2.7928	22.567	121.490	1.0920	1.0660	0.9021
Dec.	1.6686	1.4217	26.286	20.711	2.7884	21.984	122.878	1.0825	1.0334	0.8737
<b>Euro reference exchange rates published by the European Central Bank (EUR 1 = ... currency units) <sup>2</sup></b>										
1999 Jan.	1.1608	131.35	7.4412	9.0826	0.70312	8.6512	1.6055	1.7646	1.8387	2.1588
Feb.	1.1208	130.78	7.4352	8.9077	0.68851	8.6497	1.5979	1.6786	1.7515	2.0623
Mar.	1.0883	130.20	7.4325	8.9403	0.67127	8.5065	1.5954	1.6510	1.7260	2.0451

\* Calculated from daily quotations. — <sup>1</sup> Exchange rates from Australia and  
New Zealand; those for New Zealand calculated from rates as at the middle  
and end of the month. — <sup>2</sup> The ECB publishes daily reference exchange

rates, which are calculated on the basis of the concertation between the  
central banks at 2.15 p.m.

X. Foreign trade and payments

12. External values of the Deutsche Mark and selected foreign currencies

1995 = 100

	External value of the Deutsche Mark						Nominal external values of selected foreign currencies against the currencies of 18 industrial countries 1							
	Nominal against the currencies of ...			Real against the currencies of ...			US dollar	Pound sterling	Canadian dollar	Swiss franc	Japanese yen	French franc	Italian lira	Spanish peseta
	38 countries	18 industrial countries	the EU countries	38 countries		on the basis of the deflators of total sales								
				18 industrial countries	on the basis of consumer prices									
1990	.	91.8	85.2	.	91.9	91.9	110.0	120.1	122.2	89.6	64.5	93.7	146.9	126.8
1991	.	90.4	85.3	.	89.6	90.4	108.3	120.5	124.1	88.0	70.2	91.6	143.9	126.6
1992	.	93.1	87.5	.	92.8	93.9	105.9	115.8	116.5	86.3	73.2	94.6	139.6	123.6
1993	.	94.9	94.6	.	95.4	95.5	108.8	105.0	109.6	88.1	89.0	96.2	115.8	108.3
1994	.	94.9	95.6	.	95.5	95.3	106.7	105.0	102.5	93.7	96.0	96.8	110.4	100.8
1995	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1996	98.8	98.1	96.5	95.8	97.3	97.4	105.5	102.3	102.3	98.8	87.0	100.4	109.9	101.2
1997	94.8	93.1	92.8	90.4	92.5	92.3	114.7	118.8	103.2	92.9	82.9	96.8	110.1	96.7
1998	98.7	93.6	92.7	P 91.8	92.5	P 92.6	120.1	123.0	97.3	94.8	77.6	97.5	109.9	96.4
1998 Jan.	96.8	92.2	92.2	91.2	91.6	.	120.3	123.7	100.3	95.1	79.1	96.4	108.9	95.6
Feb.	96.3	91.9	92.3	90.7	91.2	2 91.2	119.1	123.6	100.4	95.5	81.4	96.1	108.3	95.5
Mar.	95.8	91.8	91.9	89.7	90.9	.	119.9	126.1	102.0	94.5	79.5	96.0	108.5	95.3
Apr.	96.2	92.4	92.0	89.9	91.1	.	120.7	126.7	101.2	93.1	77.4	96.4	108.7	95.5
May	97.8	93.7	92.6	91.5	92.5	2 92.4	121.0	122.6	100.1	93.7	75.2	97.5	110.1	96.4
June	98.1	93.7	92.3	91.7	92.8	.	123.3	125.2	99.2	93.7	72.7	97.5	110.3	96.5
July	98.1	93.8	92.4	91.8	93.1	.	124.0	124.9	98.0	92.8	72.6	97.5	110.2	96.5
Aug.	99.0	94.4	92.7	92.2	93.5	2 93.5	125.9	124.3	95.1	94.0	70.6	98.1	110.7	97.0
Sep.	101.6	95.1	93.1	93.8	93.7	.	120.4	122.7	94.6	96.0	74.0	98.8	111.3	97.5
Oct.	102.1	95.2	93.7	P 93.9	93.5	.	114.9	119.1	92.0	97.1	81.5	99.1	111.3	97.5
Nov.	101.1	94.4	93.5	P 92.6	92.9	2 P 93.2	116.2	118.8	92.4	95.6	82.5	98.4	110.5	97.0
Dec.	101.6	94.4	93.6	P 93.1	93.0	.	114.9	118.6	92.0	96.7	84.3	98.4	110.4	96.9

1 Including Germany. — 2 Quarterly average.

13. Effective exchange rates \* of the euro and selected foreign currencies

	Effective exchange rate of the euro against the currencies of 16 countries 1		Memo item: Indicators of the German economy's price competitiveness 3 against...				Effective nominal exchange rates of selected foreign currencies against 18 industrial countries 4				
	Nominal 2	Real on the basis of consumer prices	38 countries		18 industrial countries		US dollar	Pound sterling	Canadian dollar	Swiss franc	Japanese yen
			on the basis of consumer prices		on the basis of the deflators of total sales						
	1990 = 100		1995 = 100		1990 = 100						
1999 Jan.	92.7	92.1	P 92.4	P 100.3	.	103.4	97.7	76.1	106.3	136.1	
Feb.	90.9	90.3	...	P 99.3	5 P 99.3	105.5	98.9	77.8	106.0	134.1	
Mar.	89.5	...	...	...	.	107.8	100.8	77.3	105.6	132.7	

\* The effective exchange rate corresponds to the external value of the currency concerned. — 1 Source: ECB. According to BIS calculations based on the weighted averages of the effective exchange rates of the euro. The original figures have been rescaled to 1990 = 100 on the basis of the weighted averages of euro area countries' effective exchange rates. The weights used in that calculation are based on manufactured goods traded in 1990 with the following countries: USA, Japan, Switzerland, United

Kingdom, Sweden, Denmark, Greece, Norway, Canada, Australia, New Zealand, Hong Kong, South Korea, Singapore, Taiwan and Mexico. Where consumer prices are not yet available, estimates have been used. — 2 Excluding Mexico. — 3 Data up to the end of 1998: real external value of the Deutsche Mark in table X.12. — 4 Including EMU countries. — 5 Quarterly average.

# Overview of publications by the Deutsche Bundesbank

This overview is designed to inform readers about selected recent economic and statistical publications by the Deutsche Bundesbank. Except where stated, these publications are published both in German and English, and on the Internet.

The publications are available to interested parties free of charge from the Press and Public Relations Division. Against reimbursement of the costs, a monthly updated file with approximately 40,000 time series published by the Bundesbank can also be obtained on magnetic tape or on ZIP diskette from the Statistical Data Processing Division. Please submit orders in writing, using the addresses specified on the back of the title page.

## Annual Report

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## Monthly Report

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For information on the articles published between 1980 and 1998 see the index attached to the January 1999 Monthly Report.

### April 1998

- Opinion of the Central Bank Council concerning convergence in the European Union in view of Stage Three of economic and monetary union
- Economic conditions in eastern Germany
- Structural changes in the German capital market in the run-up to European monetary union

#### May 1998

- European policy decisions of May 1 to 3, 1998 pave the way for the launching of the euro on January 1, 1999
- Overall financial flows in 1997
- Problems of inflation measurement
- The new Principle I

#### June 1998

- The economic scene in Germany in spring 1998

#### July 1998

- Recent trends in Germany's external relations with the south-east Asian emerging economies
- East German enterprises' profitability and financing in 1996
- Financial market prices as monetary policy indicators

#### August 1998

- Review of monetary targeting in 1997-8 and of the 1998 monetary target
- The performance of German credit institutions in 1997
- Present and future financial burdens facing the central, regional and local authorities from expenditure on personnel
- The Bundesbank's credit register for loans of 3 million Deutsche Mark or more

#### September 1998

- The economic scene in Germany in summer 1998

#### October 1998

- Operational features of the new European exchange-rate mechanism
- West German enterprises' profitability and financing in 1997

- The methodological basis of the Deutsche Bundesbank's corporate balance sheet statistics
- Banks' internal risk management models and their prudential suitability

#### November 1998

- The implementation of the ESCB's monetary policy by the Bundesbank and its formulation in the General Terms and Conditions
- Trends in and structure of the overall capital stock
- The indicator quality of different definitions of the real external value of the Deutsche Mark
- Updating the calculation of the external value of the Deutsche Mark and adjusting it to the conditions of European monetary union

#### December 1998

- The economic scene in Germany in autumn 1998

#### January 1999

- Launching the economic and monetary union on January 1, 1999
- Changes in households' asset situation since the beginning of the nineties
- The Bundesbank's method of assessing the creditworthiness of business enterprises

#### February 1999

- The economic scene in Germany around the turn of 1998-9

#### March 1999

- Monetary analysis for the euro area
- Hedge funds and their role in the financial markets
- German balance of payments in 1998

April 1999

- The role of economic fundamentals in the emergence of currency crises in emerging markets
- Development of public sector capital formation, and its financing
- Taylor interest rate and Monetary Conditions Index

### Statistical Supplements to the Monthly Report<sup>1</sup>

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- 1 Banking statistics (monthly)
- 2 Capital market statistics (monthly)
- 3 Balance of payments statistics (monthly)
- 4 Seasonally adjusted business statistics (monthly)
- 5 Exchange rate statistics (quarterly)

### Special Publications

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The monetary policy of the Bundesbank, October 1995<sup>2</sup>

Makro-ökonomisches Mehr-Länder-Modell, November 1996<sup>3</sup>

Macroeconometric model of the German economy, April 1994<sup>4</sup>

Weltweite Organisationen und Gremien im Bereich von Währung und Wirtschaft, April 1997<sup>3</sup>

Europäische Organisationen und Gremien im Bereich von Währung und Wirtschaft, Mai 1997<sup>3</sup>

The market for German Federal securities, July 1998

### Special Statistical Publications

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- 1 Banking statistics guidelines, January 1999<sup>5</sup>
- 2 Bankenstatistik Kundensystematik, January 1999<sup>6</sup>  
(The lists of enterprises can also be obtained on diskette for a fee of currently DM 50).
- 3 Aufbau der bankstatistischen Tabellen, Januar 1996<sup>o,3</sup>
- 4 Ergebnisse der gesamtwirtschaftlichen Finanzierungsrechnung für Westdeutschland 1960 bis 1992, November 1994<sup>o,3</sup>
- 4 Financial accounts for Germany 1990 to 1997, June 1998
- 5 Annual accounts of west German enterprises 1971 to 1996, March 1999<sup>1</sup>
- 6 Ratios from the annual accounts of west German enterprises for 1990, March 1994<sup>o,1</sup>
- 7 Erläuterungen zum Leistungsverzeichnis der Außenwirtschaftsverordnung, März 1994<sup>o,3</sup>

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<sup>o</sup> Not on the Internet.

<sup>1</sup> Only the headings and explanatory notes to the data contained in the German originals are available in English.

<sup>2</sup> Also available (in different editions) in French, Spanish, Russian and Chinese.

<sup>3</sup> Available in German only.

<sup>4</sup> Available in English only.

<sup>5</sup> Only the sections "Monthly Balance Sheet Statistics" and "External position" will shortly be available in English translation.

<sup>6</sup> Only the sections "Overall survey on sectoral classification", "Survey on breakdown by industry or activity" and "Explanatory notes on the system of customer classification by industry or activity" are available in English translation.

8 Balance of payments statistics of the Federal Republic of Germany, 2nd edition, February 1991<sup>o</sup>

9 Securities deposits, August 1998

10 International capital links, May 1998<sup>1</sup>

11 Balance of payments by region, August 1998

12 Technological services in the balance of payments, May 1998<sup>1</sup>

13 Off-balance-sheet operations of German banks, December 1998

#### Banking regulations

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1 Bundesbank Act and Statute of the European System of Central Banks and of the European Central Bank, June 1998

2 Gesetz über das Kreditwesen, April 1998<sup>3</sup>

2a Grundsatz I über die Eigenmittel der Institute, October 1998<sup>3</sup>

7 Merkblatt für die Abgabe der Groß- und Millionenkreditanzeigen nach §§ 13 bis 14 KWG, September 1998<sup>3</sup>

#### Publications on EMU

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Informationsbrief zur Europäischen Wirtschafts- und Währungsunion<sup>3</sup>

Nr. 1, September 1996

Nr. 2, Oktober 1996

Nr. 3, Januar 1997

Nr. 4, Februar 1997

Nr. 5, April 1997

Nr. 6, Mai 1997

Nr. 7, Juni 1997

Nr. 8, Juli 1997

Nr. 9, September 1997

Nr. 10, Februar 1998

Nr. 11, April 1998

Nr. 12, April 1998

Nr. 13, Mai 1998

Nr. 14, Juli 1998

Nr. 15, Oktober 1998

Nr. 16, November 1998

Nr. 17, Dezember 1998

Der Euro ist da. Wir sagen Ihnen, worauf es ankommt. (Faltblatt)<sup>3</sup>

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For footnotes, see p. 75\*.