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## Commentaries

### Economic conditions

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#### Manufacturing

The orders situation in industry continued to improve in November 2002. In particular, the volume of foreign orders (adjusted for seasonal fluctuations) was up again substantially on the month, with brisk export business having already been reported in October. The orders intake, which included a whole series of larger-than-average contracts, benefited all the main sectors of industry. October and November together witnessed a seasonally adjusted increase in foreign business of just over 2½% on the third quarter. This meant that it was possible largely to overcome the slowdown in orders which had occurred in summer and almost match the strong flow recorded in spring. The year-on-year figure, which had turned positive again in summer following a long negative period, went up to somewhat more than 5%. Retarding effects due to the appreciation of the euro, especially against the US dollar, were not discernible in October and November.

*Orders*

In November, seasonally adjusted domestic demand did not maintain its October level, although it remained satisfactory. Thus, orders in October and November together were just over 1% up on the average level for the summer quarter. There was also a slight year-on-year increase of 1½% whereas the figure for the third quarter had been -2½%.

Industrial output rose significantly in November having previously dropped to quite a low level not least owing to the prevailing pattern

*Output*

## Economic conditions in Germany \*

Seasonally adjusted

		New orders (volume); 1995 = 100			
		Industry 1			Con- struction
		of which			
Period	Total	Domestic	Foreign		
2002	Q1	121.0	102.7	154.0	73.9
	Q2	123.6	102.6	161.3	70.0
	Q3	122.1	102.8	156.9	67.8
	Sep	121.9	102.9	156.1	69.1
	Oct	123.2	104.1	157.6	66.6
	Nov	125.3	103.7	164.3	...
		Output; 1995 = 100			
		Industry 2			Con- struction
		of which			
	Total	Inter- mediate goods	Capital goods 3		
2002	Q1	117.7	115.3	130.0	78.4
	Q2	118.1	116.0	130.4	72.9
	Q3	119.0	116.9	132.2	72.7
	Sep	118.9	117.6	131.0	72.4
	Oct	116.9	115.7	129.7	73.5
	Nov	119.9	117.8	135.0	76.3
		Labour market			
		Em- ployed 4	Vacancies	Un- employed	Un- employ- ment rate in % 5
		Number in thousands			
2002	Q2	38,765	471	4,027	9.7
	Q3	38,600	445	4,097	9.8
	Q4	...	409	4,150	10.0
	Oct	38,521	413	4,130	9.9
	Nov	...	403	4,169	10.0
	Dec	...	394	4,197	10.1
		Prices; 1995 = 100			
		Import prices	Producer prices of industrial prod- ucts 6	Overall construc- tion price level 7	Con- sumer price index
2002	Q2	109.6	104.4	99.5	111.0
	Q3	108.8	104.1	99.5	111.0
	Q4	...	...	99.4	111.3
	Oct	109.4	104.6	.	111.4
	Nov	108.3	104.5	.	111.2
	Dec	...	...	.	111.2

\* Data in many cases provisional. — 1 Manufacturing sectors excluding, in particular, food products, beverages and tobacco, and refined petroleum products. — 2 Manufacturing industries not classified under energy plus mining and quarrying. — 3 Including manufacture of motor vehicles, trailers and semi-trailers. — 4 Workplace concept. — 5 Measured on the basis of all civilian members of the labour force. — 6 Domestic sales. — 7 Calculated by the Bundesbank. Mid-quarter level.

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of working days and public holidays. This was one major reason for the average level of output in the October-November period being a seasonally adjusted ½% down on the third quarter. Nevertheless, this still signified a year-on-year increase of somewhat more than 1%. Output thus showed a rise on the year again for the first time in quite a long while.

## Construction

November 2002 still failed to bring a turn for the better in construction. Construction output did pick up somewhat, however – partly as a result of the comparatively mild weather. Seasonally adjusted output in November was considerably higher than in the previous month. The average figure for the third quarter is scarcely likely to have been matched in October and November, however. The figures currently available show too low a level of output for the summer months, as they do not yet include the usual upward revision resulting from this year's overall survey. A year-on-year comparison, which is not affected by the impending revisions, shows a fall of 5½% for the October-November period.

In October (the last month for which figures are currently available), construction orders continued to fall in seasonally adjusted terms and were around 1¾% down on the third-quarter level. This signifies a year-on-year decline of 8%. The decline in residential construction was even sharper, with the minus figure still in the double-digit range. The public sector also reduced its orders substantially compared with the previous year. The reduc-

Output

Orders received

tion in industrial construction orders was, however, relatively moderate.

### Labour market

#### *Employment*

The labour market continued to be affected by the cyclical weakness of the German economy. There were further job cuts and unemployment increased significantly. According to the initial estimates of the Federal Statistical Office, the seasonally adjusted number of persons in work fell to 38.52 million in October, ie around 80,000 fewer than on an average of the third quarter and roughly 360,000 fewer than one year before. As hardly any new jobs were created in the services sector either, it was not possible to offset the persistent losses in industry and construction.

#### *Unemployment*

The number of persons officially registered as unemployed rose to a seasonally adjusted 4.2 million in December. This was almost 30,000 more than the comparable figure for November and represented a year-on-year increase of more than 260,000. The seasonally adjusted unemployment rate, as calculated by the Federal Labour Office, reached 10.1%. According to the EU's standardised method, the relevant figure was 8.5%. At the end of 2001, the figures had been 9.5% and 7.9% respectively.

### Prices

#### *Consumer prices*

The price climate in Germany at the end of 2002 remained favourable. The rate of consumer price increase remained within narrow bounds in December 2002. The seasonally

adjusted general price level was no higher than in November. The year-on-year increase remained unchanged at 1.1%. The heightened upward pressure on energy prices – including, in particular, for refined petroleum products – was offset by weakening pressure on industrial products and food.

The prices of heating oil and petrol followed internationally quoted oil prices, which stopped falling in November and began to accelerate upwards. At times, the price of North Sea Oil reached US\$30 per barrel on the spot markets. This was due, in particular, to shortfalls in Venezuelan oil production and a risk premium owing to the possibility of war in Iraq.

#### *Oil prices*

German import prices for oil were still declining in November. Moreover, the appreciation of the euro had a price-dampening impact. On the whole, import prices fell somewhat in seasonally adjusted terms. The price level over 12 months which, in October, had shown an increase for the first time in quite a long while, was back down in the negative range (-0.6%).

#### *Import prices*

Domestic producer prices were broadly constant in recent months. In November, industrial producer prices were only 0.4% higher than a year earlier and agricultural products were 5.7% cheaper. Construction prices were barely higher than during the same period of 2001.

#### *Producer prices*

## Public finance

### Indebtedness of central, state and local government

November

Indebtedness of central, state and local government rose very steeply again in November (+€10.8 billion). The Federal Government accounted for €5.9 billion, almost all of which was raised on the capital market. Federal bonds (Bunds) were the most preferred financing vehicle – the outstanding amount of Bunds went up by €8.9 billion owing to a new issue of €5.3 billion and market management operations. Despite new issues, the outstanding amount – after deducting redemptions – of five-year Federal notes (Bobls) increased by only €0.5 billion, while that of Treasury discount paper (Bubills) declined by €0.5 billion. Liabilities from loans against borrowers' notes, which in November recorded the highest monthly redemptions of 2002 (€4 billion in total), declined by €3.5 billion on balance.

In November state government expanded its indebtedness by €4.8 billion. The borrowed resources it required were made up mainly of Treasury notes (€2.5 billion), along with short-term cash advances from banks (€2.0 billion) and loans against borrowers' notes (€0.3 billion). Of the off-budget special funds, the "German Unity" Fund – which participated in the above-mentioned Bund issue to the amount of €0.6 billion – moderately lowered its indebtedness by €0.2 billion. Local government is likely to have drawn marginally on the credit markets in November.

### Net borrowing in the market

€ billion				
Borrower	2001		2002	
	Total	of which Jan-Nov	Jan-Nov pe	Nov pe
Central government <sup>1</sup>	3 – 14.8	3 – 7.0	+ 33.7	+ 5.9
State government	+ 26.4	+ 26.4	+ 27.3	+ 4.8
Local government <sup>2, pe</sup>	+ 2.6	+ 1.8	+ 2.5	+ 0.3
ERP Special Fund	+ 0.8	+ 0.8	+ 0.2	– 0.0
"German Unity" Fund	– 0.8	– 0.5	– 0.1	– 0.2
Central, state and local government, total	+ 14.2	+ 21.4	+ 63.6	+ 10.8

<sup>1</sup> Including the off-budget special funds not shown separately here. — <sup>2</sup> Including special-purpose associations. — <sup>3</sup> Including exceptional redemptions of equalisation claims out of UMTS sales proceeds in the amount of €33 billion.

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### Federal Government borrowing

In December the Federal Government reduced its indebtedness by €9.7 billion. Hence its gross monthly repayment obligation of €27.0 billion, which was far higher than in any other month in 2002, was only partly financed by recourse to the capital market (€13.8 billion) and an increase in money market liabilities (€3.5 billion). With the exception of Bobls (which rose by €0.9 billion), the outstanding amount of almost all other securities declined. This was particularly noticeable for ten-year bonds (–€12.3 billion), since both a Bund and a Treuhand agency bond were redeemed. These were only marginally offset by proceeds from market management operations amounting to €0.6 billion. After deducting redemptions, the outstanding volume of Federal Treasury notes (Schätze) de-

In December...



clined by €0.3 billion, despite the quarterly new issue – which raised €7.3 billion gross. The monthly issue of Bubills was sold at an average yield of 2.77% and once again, therefore, was distinctly cheaper for the Federal Government than in the previous month. The Federal Government repaid loans against borrowers' notes to the net value of €1.1 billion.

... and in 2002

The Federal Government's cumulative indebtedness (excluding the ERP Special Fund and the "German Unity" Fund) at the end of 2002 amounted to €725 billion and was consequently almost €24 billion higher than at the end of 2001.<sup>1</sup> Of this net increase in borrowing, just over €2 billion resulted from higher money market indebtedness and almost €22 billion from capital market operations. Gross borrowing by the Federal Government in the capital market amounted to €176 billion. Regarding the debt structure, the share of Bunds (with a maturity of 10 and 30 years) declined slightly in 2002 by 1 percentage point to just over 58% of the Federal Government's overall debt. By contrast, the share of five-year Bobls increased marginally to 17½%, while the share of two-year Schätze went up markedly to just under 11%. At the short end of the maturity range, the outstanding amount of six-month Bubills increased by half. Consequently their share in overall debt increased to 4%. In terms of both the absolute and the relative amount, the significance of Federal savings notes and of bank loans declined considerably again; their shares in the Federal Government's indebtedness at the end of 2002 amounted to just 2½% and 5½% respectively.

### Federal Government borrowing in the market

€ billion; 2002

Item	December		January-December	
	Gross	Net	Gross	Net
Change in money market debt	3.5	3.5	2.2	2.2
Change in capital market debt, total <sup>1</sup>	13.8	- 13.2	176.0	21.7
Treasury discount paper (Bubills)	4.5	- 0.2	47.8	9.1
Federal Treasury financing paper	0.0	- 0.0	1.3	- 0.1
Treasury notes (Schätze)	7.6	- 0.3	2 43.0	18.9
Five-year Federal notes (Bobls)	0.9	0.9	3 36.0	7.4
Federal savings notes	0.0	0.0	1.7	- 8.5
Federal bonds (Bunds)	0.6	- 12.3	4 41.4	6.1
Bank loans	0.1	- 1.1	4.7	- 9.9
Loans from non-banks	-	-	-	- 0.3
Other debt	-	-	-	- 1.2
Total borrowing	17.3	- 9.7	178.2	23.9

<sup>1</sup> Memo item: borrowing for 2002 as a whole according to the draft supplementary budget: €188 billion gross, €35 billion net. — <sup>2</sup> Including borrowing for the "German Unity" Fund: €43.1 billion. — <sup>3</sup> Including borrowing for the ERP Special Fund: €36.1 billion. — <sup>4</sup> Including borrowing for the "German Unity" Fund and the ERP Special Fund: €55.0 billion.

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The Federal Government has redemption obligations amounting to €185 billion in 2003. The Federal draft budget for 2003 envisages net borrowing of €19 billion. This will thus result in total gross borrowing of €204 billion according to the budget figures. This excludes new bond issues agreed as part of the supplementary budget for 2002. The rise in gross borrowing vis-à-vis 2002 is primarily due to the increase in the redemption requirement, which is around €30 billion higher this year. This particularly reflects the sizeable increase in the issue volumes of Bubills and Schätze during the past few years. Furthermore, the

Outlook for  
2003

<sup>1</sup> The budgeted borrowing requirement, which amounted to €31.8 billion for 2002 according to the Federal Government's preliminary budget outturn, customarily differs from the net borrowing figure actually raised in the market which is shown here, partly owing to time lags in recording the transactions in the accounts.

bulk of the ten-year bonds raised by the former Treuhand agency will be redeemed in 2003. Lower repayments are scheduled for loans against borrowers' notes and Federal savings notes; this mirrors the continuing decline in the importance of these forms of financing.

## Securities markets

### Bond market

*Bond sales*

Sales activity in the German bond market made a clear recovery in November 2002. Domestic borrowers issued debt securities to a market value of €97.0 billion, compared with €82.7 billion in October. After deducting redemptions and adjusting for changes in issuers' holdings of their own bonds, net sales came to €25.8 billion, compared with only €2.9 billion in October. Sales of foreign bonds in the German market raised €9.3 billion net; most of those bonds were denominated in euro (€7.2 billion). Overall, net sales of domestic and foreign bonds yielded €35 billion in November, compared with €4.5 billion one month previously.

*Public sector  
bonds*

The public sector increased its indebtedness in the bond market by €15.3 billion in November, as opposed to €4.2 billion in the previous month. The Federal Government raised €12.5 billion net (October: €7.3 billion) from sales of its own bonds, with ten-year bonds accounting for most of this amount (€8.5 billion). However, the amount of Federal savings notes outstanding fell by €0.2 billion.<sup>2</sup> In November the *Land* governments issued €2.4

billion net of bonds and notes, somewhat less than in the previous month (€3.1 billion).

The credit institutions raised €9.9 billion net from the sale of their own bonds. Sales were mainly of other bank bonds (€8.0 billion), followed by debt securities issued by specialised credit institutions (€5.3 billion). However, mortgage Pfandbriefe were repurchased for €1.5 billion and public Pfandbriefe for €1.9 billion.

*Bank bonds*

Sales of corporate bonds amounted to €0.6 billion net in November and were thus well down on the previous month (€3.0 billion).

*Corporate  
bonds*

Credit institutions and non-banks were more or less equally active on the buyers' side of the bond market in November. The credit institutions added €17.4 billion to their bond portfolios, most of their purchases consisting of paper issued by domestic borrowers (€11.9 billion), while €5.5 billion comprised foreign bonds and notes. Domestic non-banks increased their investment in the bond market by €15.9 billion, purchasing €12.2 billion net of domestic debt securities, €7.5 billion of which were issued by private borrowers. They invested €3.7 billion net in foreign debt instruments. Foreign investors purchased €1.7 billion of debt securities in November.

*Bond purchases*

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<sup>2</sup> The individual items for the Federal Government are shown at nominal values rather than at market values, and no account is taken of the changes in its holdings of Federal bonds. The sum total of these individual items therefore normally fails to tally with the aforementioned total net sales of Federal Government bonds.

## Equity market

### Share sales

Issuing activity in the German equity market remained subdued in November. Domestic enterprises placed new shares to a market value of €0.3 billion (October: €0.6 billion). The volume of foreign equities outstanding in Germany decreased by €0.3 billion, after €2.5 billion had been raised from share sales in the previous month.

### Share purchases

Credit institutions reduced their equity holdings by €1.8 billion. Domestic shares were purchased by non-residents and domestic non-banks; these acquired equities worth €1.2 billion net and €0.5 billion net respectively.

## Mutual fund shares

### Sales of mutual fund shares

The resources raised by domestic mutual funds in November were, at €4.8 billion, down on the previous month (€6.1 billion). Half of this amount accrued to mutual funds open to the general public and half to specialised funds. After a period of six months, of the funds open to the general public, share-based funds, which raised €1.5 billion of new capital, were again predominant. Sales of shares in open-end real estate funds raised €0.6 billion. Sales of bond-based fund shares raised €0.5 billion. Money market funds and mixed funds, however, experienced return flows (€0.1 billion each). Sales of foreign fund shares yielded €0.7 billion in Germany in November. The total amount raised from sales of domestic and foreign mutual fund shares thus came to €5.5 billion.

## Sales and purchases of bonds and notes

€ billion

Item	2002		2001
	Oct	Nov	Nov
Sales of domestic bonds and notes <sup>1</sup>	2.9	25.8	7.2
of which			
Bank bonds	- 4.3	9.9	11.0
Public sector bonds	4.2	15.3	- 1.6
Foreign bonds and notes <sup>2</sup>	1.6	9.3	4.3
Purchases			
Residents	6.3	33.3	- 6.4
Credit institutions <sup>3</sup>	- 9.7	17.4	- 6.8
Non-banks <sup>4</sup>	16.0	15.9	0.4
of which			
Domestic bonds and notes	13.2	12.2	- 6.2
Non-residents <sup>2</sup>	- 1.9	1.7	17.9
Total sales/purchases	4.5	35.0	11.5

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

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Mutual fund shares were purchased mainly by credit institutions (€3.5 billion), which focused on buying domestic fund shares (€3.2 billion). Domestic non-banks raised €2.0 billion from the sale of fund shares. By contrast, foreign investors made no changes to their holdings of domestic mutual fund shares.

### Purchases of mutual fund shares

## Balance of payments

Germany's current account ran a surplus of €8.5 billion in November 2002, which was €3.5 billion more than in the previous month. The increase was due primarily to a smaller deficit on invisible current transactions with non-residents, which is that part of the current account comprising services, factor in-

### Current account

## Major items of the balance of payments

€ billion				
Item	2001		2002	
	Nov	Oct r	Nov	
I Current account				
1 Foreign trade <sup>1</sup>				
Exports (fob)	54.9	58.6	58.7	
Imports (cif)	47.5	47.5	46.7	
Balance	+ 7.4	+ 11.1	+ 12.0	
Memo item				
Seasonally adjusted figures				
Exports (fob)	50.9	54.3	56.0	
Imports (cif)	44.7	44.4	45.0	
2 Supplementary trade items <sup>2</sup>	- 0.3	- 0.6	- 0.5	
3 Services				
Receipts	7.7	9.6	8.1	
Expenditure	10.5	13.1	10.2	
Balance	- 2.8	- 3.5	- 2.1	
4 Factor income (net)	+ 0.1	+ 1.2	+ 0.9	
5 Current transfers				
from non-residents	0.6	0.8	1.3	
to non-residents	3.3	4.0	3.3	
Balance	- 2.8	- 3.3	- 2.0	
Balance on current account	+ 1.6	+ 4.9	+ 8.5	
II Capital transfers (net) <sup>3</sup>	- 0.2	- 0.1	- 0.1	
III Financial account (net capital exports: -)				
Direct investment	+ 2.6	- 0.8	+ 3.4	
German investment abroad	+ 0.0	- 3.3	+ 1.1	
Foreign investment in Germany	+ 2.5	+ 2.4	+ 2.3	
Portfolio investment	+ 11.6	- 6.6	- 4.9	
German investment abroad	- 7.0	- 5.5	- 7.8	
of which				
Shares	- 0.5	- 2.8	+ 2.2	
Bonds and notes	- 6.1	- 1.1	- 8.2	
Foreign investment in Germany	+ 18.6	- 1.1	+ 2.9	
of which				
Shares	- 0.1	+ 0.9	+ 1.2	
Bonds and notes	+ 18.1	- 0.9	+ 0.1	
Financial derivatives	- 1.1	- 1.3	+ 0.9	
Credit transactions	- 29.4	- 13.5	- 9.2	
Credit institutions	- 37.7	- 10.0	- 18.8	
of which				
Short-term	- 19.6	- 10.5	- 14.2	
Enterprises and individuals	+ 0.6	+ 1.8	+ 4.5	
General government	+ 1.0	+ 0.6	- 0.1	
Bundesbank	+ 6.7	- 5.8	+ 5.1	
Other investment	- 0.1	- 0.1	- 0.1	
Overall balance on financial account	- 16.4	- 22.3	- 9.8	
IV Change in the foreign reserves at transaction values (increase: -) <sup>4</sup>	+ 0.2	+ 0.6	- 0.8	
V Balance of unclassifiable transactions	+ 14.8	+ 16.8	+ 2.4	

<sup>1</sup> Special trade according to the official foreign trade statistics (source: Federal Statistical Office). — <sup>2</sup> Mainly warehouse transactions for account of residents and deduction of goods returned. — <sup>3</sup> Including the acquisition/disposal of non-produced non-financial assets. — <sup>4</sup> Excluding allocation of SDRs and excluding changes due to value adjustments.

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come and current transfers. The trade surplus was also larger than in October 2002.

According to figures from the Federal Statistical Office, the surplus on foreign trade amounted to €12.0 billion in November and was therefore €1.0 billion greater than in October. After the elimination of seasonal influences, too, the surplus, at €11 billion, was €1 billion more in November than in the previous month. This was due mainly to the fact that exports of goods rose in November by 3% above the low figure in October. If September, October and November are taken together, exports rose by approximately 2% compared with the period from June to August. The seasonally adjusted imports of goods also showed an increase in November, but, at 1%, the result was lower than on the export side. In the three-month period from September to November imports were 2½% up on the previous period.

The remaining current account transactions with non-residents ran a deficit of €3.1 billion in November, which was €2.4 billion less than in October. This was due both to a smaller deficit on services (€2.1 billion compared with €3.5 billion in October) and to lower net current transfers to non-residents (€2.0 billion compared with €3.3 billion in the previous month). By contrast, net factor income from abroad (€0.9 billion) was €0.3 billion less than in October.

With respect to financial transactions, there were again net capital exports as a result of portfolio investment and non-securitised credit transactions in November while net

*Foreign trade*

*Invisibles*

*Portfolio investment*

capital imports were recorded in the case of direct investment. The outflow of funds through portfolio investment amounted to €4.9 billion net compared with €6.6 billion in October. German residents invested more heavily in foreign securities (November: €7.8 billion compared with €5.5 billion a month earlier). Interest-bearing paper issued by foreign borrowers was most in demand. For example, German residents acquired foreign bonds and notes (especially those denominated in euro) worth €8.2 billion and foreign money market paper worth €1.1 billion. However, they sold foreign shares worth €2.2 billion net. Non-resident investors, who had sold German securities in October, returned to the German securities markets in November. They invested a total of €2.9 billion in German paper, €1.2 billion in shares and €1.6 billion in money market paper. In the case of bonds and notes the value of their purchases of public-sector paper almost entirely offset the value of their sales of private issues (+€0.1 billion).

*Direct  
investment*

In contrast to events in portfolio investment, net capital imports (of €3.4 billion) arose as a result of direct investment. Foreign proprietors provided their subsidiaries and branches domiciled in Germany with financing funds amounting to €2.3 billion; these were mainly in the form of credits. German enterprises, by

contrast, repatriated funds (€1.1 billion); within the framework of intra-group credit operations the amounts paid by foreign subsidiaries to their parent companies were greater than those spent by parent companies on establishing and expanding participating interests abroad.

In the field of non-securitised credit transactions the financial transactions of enterprises and individuals with non-residents resulted in net inflows of €4.5 billion. In the case of enterprises they made slight reductions in the balances held with foreign banks. In the case of general government cross-border payments were almost completely in balance (-€0.1 billion net). The non-securitised external operations of the banking system were of greater significance. As in earlier months, German credit institutions exported large amounts of capital in November (€18.8 billion net) although this was partly offset by credits of €5.1 billion to the accounts of the Bundesbank (excluding foreign reserves); as usual, the latter development was due largely to balances in connection with the payment system TARGET.

*Credit  
transactions*

The foreign reserves of the Bundesbank rose – at transaction values – by €0.8 billion in November.

*Foreign  
reserves of the  
Bundesbank*



## Reserve assets: their development and importance in monetary union

Global reserve assets have continued to grow strongly right up to the present. Despite the currency crises in Latin America and in Asia, they have more than doubled over the past ten years. In the brief period since the start of 1999, when European monetary union was established, there has been a worldwide increase of around 35%. However, the Eurosystem, one of the principal holders of reserve assets, has not contributed to this increase. In fact, it has slightly reduced its reserve assets overall (expressed in US dollars). There has actually been a distinct decrease in Germany's reserve assets in the past four years. Nonetheless, the importance and appropriate level of reserve assets under the special conditions of monetary union continues to be a subject of debate in Germany, too. This article takes up that issue and comes to the conclusion that, although Germany's reserve assets are quite substantial in absolute terms, they are on the low side by international comparison when measured in terms of Germany's economic size and high degree of openness. The article also examines the terms and conditions under which Germany's reserve policy operates within European monetary union.

## Development and structure of the global reserve assets

*Sharp increase  
in global  
reserves*

After the Second World War the international holdings of reserve assets expanded fairly slowly at first. A rapid increase only began in the early 1970s and has continued ever since. The global reserves increased almost fivefold between 1970 and 1980 and doubled in each of the following two decades. At the end of September 2002<sup>1</sup> they amounted to US\$2,454 billion.<sup>2,3</sup> The start of the expansion process coincided with the collapse of the Bretton Woods system of fixed exchange rates, which, in its final stages, entailed extensive interventions in the foreign exchange markets. An important factor was also the first "oil price explosion" and the concomitant marked expansion of reserve assets in the OPEC countries. Subsequently, large US current account deficits and shifts in exchange rate patterns contributed to a further swelling of the international reserves. Moreover, many countries continued to observe exchange rate agreements even after the end of the Bretton Woods system. It is that background which ultimately makes it possible to find an explanation for the surprising occurrence of a sharp increase in the global reserves after the system of fixed exchange rates had been officially abandoned.<sup>4</sup>

*Share of  
emerging  
economies and  
developing  
countries  
increases*

In recent years the increase in the reserve assets has been attributable primarily to the emerging economies and developing countries, which more than trebled their reserve holdings between the end of 1992 and the end of September 2002. Even if, in currency crises, some of these countries have tempor-

arily used large amounts of foreign exchange to protect their national currency, this has hardly had any effect on the longer-term trend. Since 1996 the emerging economies and developing countries, taken together, have held more reserve assets than the group of industrial countries. They currently hold some 60% of the global reserve assets although most of their holdings are concentrated on a few more developed countries, such as China, Taiwan or South Korea. Nevertheless, seven of the ten principal holders of reserve assets are emerging economies or developing countries (see table on page 18).

Of the industrial countries, Japan, in particular, has increased its reserve assets significantly since the end of the 1980s by means of interventions; in the short period of time

*Japan and  
Eurosystem  
hold largest  
reserves*

<sup>1</sup> The data used in this article in order to make international comparisons are mainly those as at the end of September 2002 or, in the case of annual data, the end of 2001. In the case of Germany, data on the reserve assets are available up to the end of 2002 and are indicated separately in the appropriate places.

<sup>2</sup> In the underlying data of the International Monetary Fund (IMF), gold reserves are consistently valued at the fixed gold price of SDR 35 per ounce of fine gold. At the end of September 2002 the gold reserves were therefore worth around SDR 33 billion or (converted) US\$43 billion. At that cut-off date the market price for gold in London was US\$323.70 per ounce of fine gold. Valued at market prices, the gold reserves therefore amounted to around US\$301 billion (SDR 228 billion) and the total reserve assets to US\$2,712 billion. In earlier publications US\$38 per ounce was taken as the gold price in 1971 and 1972 and US\$42.22 per ounce from 1973 onwards in order to eliminate the impact of exchange rate fluctuations on the value of the gold reserves.

<sup>3</sup> Owing to the high percentage of US dollar holdings in the global foreign exchange reserves – at the end of 2001 68% of the foreign exchange reserves were in US dollars – it seems appropriate to show the reserve assets in US dollars. Otherwise, exchange rate fluctuations would distort the development patterns in which we are interested. As clarified below, this also applies to the euro area, in particular.

<sup>4</sup> For the reasons for the increase in global reserves in the 1970s and 1980s, see also Deutsche Bundesbank, Longer-term trends in global reserve assets, *Monthly Report*, January 1990, pp 33-55.

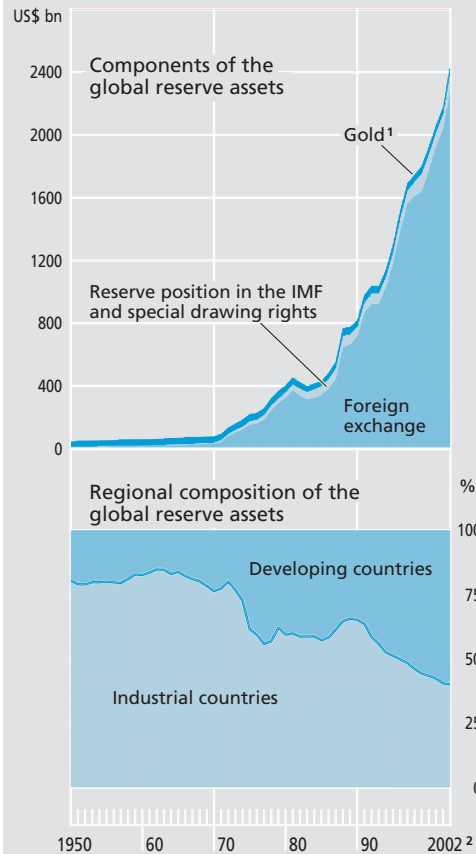


since the start of 1999 its holdings have approximately doubled as a result. At the end of September 2002 it had more reserve assets – US\$454 billion – than any other country. The second place among the holders of reserves is occupied by the Eurosystem, whose balance sheet shows the combined reserve assets of the 12 participating national central banks and the European Central Bank (ECB). At the end of September 2002 the Eurosystem had reserve assets amounting to €381 billion.<sup>5</sup> In contrast to what has happened in Japan, however, the Eurosystem's reserve assets have actually decreased since the start of 1999 when monetary union came into being. This can be seen from the balance of payments statistics, which include only transaction-related changes (ie not valuation changes). The decrease up to the end of September 2002 is shown to have been around €45 billion (or 12%). By contrast, in the Eurosystem's financial statement, which is presented in euro and based on market prices, the large valuation gains have such an impact on the foreign exchange position and the gold reserves, in particular, that an increase from €338 billion to €381 billion was recorded.<sup>6</sup>

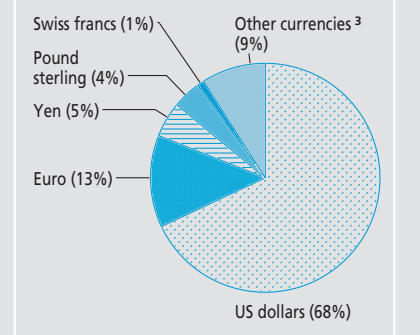
<sup>5</sup> The Eurosystem's reserve assets are valued at market prices in this article, as in ECB publications. However, if a uniform gold price of SDR 35 per ounce is taken as a basis and converted into US dollars (as in the table on page 18), they amount to US\$264 billion. For the Eurosystem, which holds around 40% of the official gold reserves, the valuation of the gold stock is of greater importance than for most other countries.

<sup>6</sup> In each case, including Greece. From the start of 1999 to the end of September 2002 the price of gold went up from €246.37 per ounce to €326.98 per ounce and the dollar rate rose from €0.86 to €1.01 per US dollar. The dollar rate has since fallen considerably.

### Global reserve assets: volume and composition \*



### Regional composition of the global reserve assets



Sources: IMF, Bundesbank calculations. —  
\* Excluding gold holdings of the BIS and IMF and excluding special drawing rights of the IMF and "other holders". — <sup>1</sup> Gold valued at SDR 35 per ounce. — <sup>2</sup> September 2002. — <sup>3</sup> Difference between total foreign exchange reserves and foreign exchange reserves in the currencies indicated.

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### The ten principal holders of reserve assets \*

End of September 2002

Country	US\$ billion
Japan	453.9
China	263.7
Taiwan	157.7
South Korea	116.6
Hong Kong	111.2
Singapore	80.5
USA	76.9
India	60.9
Germany	57.1
Mexico	46.6
<i>Memo item</i>	
Euro area	263.9

Sources: IMF, Bundesbank calculations. — \* Gold holdings valued at SDR 35 per ounce.

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Components  
of reserve  
assets ...

Although gold continues to play an important role within the reserve assets as a relatively crisis-proof, non-government asset, at least since the Second Amendment of the IMF Articles of Agreement it no longer has a key function in the international monetary system.<sup>7</sup> Its quantitative importance as part of the reserve assets has also declined significantly. Even when valued at market prices, the gold reserves at the end of September 2002 accounted for only 11% of the total reserve assets. At the same time, the reserve position in the IMF and special drawing rights accounted for 4%. In terms of volume, however, the foreign exchange reserves are predominant, with a share of 85%.<sup>8</sup>

The available data on the currency composition of the foreign exchange reserves indi-

cate that assets denominated in US dollars play the most important role. More than two-thirds of the total holdings of foreign exchange reserves are in US dollars. After an interim low in the early 1990s, the US dollar has increased its share by more than 10 percentage points. At the end of 2001 the euro accounted for 13% of the monetary authorities' foreign exchange holdings worldwide, thus somewhat strengthening its position as the second most important reserve currency. Around 5% of the foreign exchange reserves were denominated in Japanese yen and 4% in pounds sterling. At the end of 2001 the share of Swiss francs was less than 1%.<sup>9</sup>

... and currency  
composition of  
foreign  
exchange  
reserves

### Development and structure of Germany's reserve assets

The volume and composition of Germany's reserve assets are not so much the result of an optimisation strategy as, primarily, a response to the Bundesbank's intervention obligations during the time of the Bretton Woods system and foreign exchange purchases at times when the dollar was weak. By contrast, the Bundesbank's participation in the European Monetary System (EMS) was not a significant factor in the longer-term in-

Reserve assets  
expanded after  
Second World  
War

<sup>7</sup> Under the Second Amendment of the IMF Articles of Agreement, the gold definition of the special drawing rights and the function of gold as a reference variable for monetary parities and as a unit of account in the IMF, *inter alia*, ceased to be used. Moreover, no official gold payments have since been made between the IMF and its members. See also Deutsche Bundesbank, *Weltweite Organisationen und Gremien im Bereich von Wahrung und Wirtschaft*, Special Publication, April 1997, pp 52-53.

<sup>8</sup> Valued at a gold price of SDR 35 per ounce, the percentages shift distinctly in favour of foreign exchange reserves (94%) and away from gold (2%).

<sup>9</sup> See *IMF Annual Report 2002*, p 97, Table 1.2.

crease in the reserve assets. Although, in the context of the EMS, there were repeatedly very large foreign exchange inflows in the short term, with the result that the reserve assets peaked during the EMS crises at DM179 billion in 1992 and DM163 billion in 1993, the volume of foreign exchange purchased was generally quickly reduced again and therefore had no lasting impact on the level of the reserves. At the end of 1998, the Bundesbank had reserve assets which amounted to DM134 billion (€68½ billion) – calculated at the then balance sheet rates, which were largely geared to the historical acquisition rates.

*Sharp rise in euro equivalent of reserve assets on accession to monetary union...*

At the start of monetary union, the reserve assets of all participants in the Eurosystem – ie including Germany's reserve assets – were redefined in accordance with standard criteria.<sup>10</sup> Furthermore, they have since been regularly revalued at market prices.<sup>11</sup> Accordingly, at the start of January 1999 the Bundesbank had reserve assets which, when expressed in euro, amounted to €94 billion. They have decreased slightly since then, albeit with fluctuations; at the end of September 2002 their market value was still €89 billion.<sup>12</sup> Much the same as in the case of the

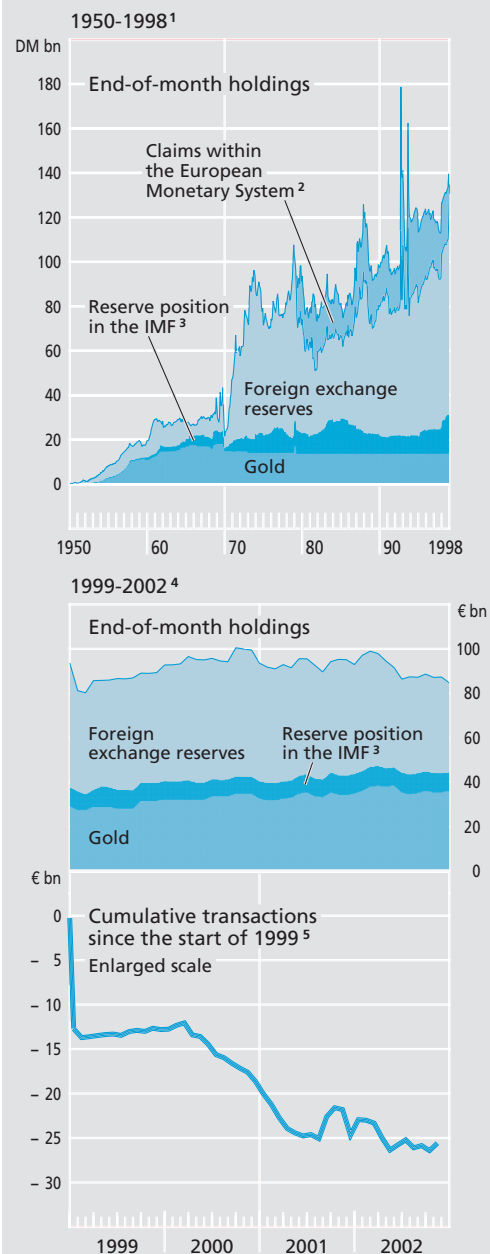
*... followed by deliberate reduction of reserves*

<sup>10</sup> Since then, in addition to gold, the reserve position in the IMF and the special drawing rights, only liquid foreign-currency-denominated claims of the Eurosystem on non-residents are taken to be reserve assets. This therefore excludes, for example, claims on euro-area residents that are denominated in euro (or the legacy currencies) and in foreign currency.

<sup>11</sup> Initially, revaluation at current market prices was carried out at the end of each quarter. Since January 2001 the Bundesbank has recorded all end-of-month positions at market prices.

<sup>12</sup> Data on Germany's reserve assets are available up to the end of December 2002. At that cut-off date the reserves amounted, at market prices, to a total of €85 billion.

## Germany's reserve assets 1950-2002



<sup>1</sup> Valued at balance sheet rates. — <sup>2</sup> Up to 1993 the claims were made on the European Monetary Cooperation Fund, from 1994 until May 1998 on the European Monetary Institute and from June to December 1998 on the European Central Bank. — <sup>3</sup> Including special drawing rights. — <sup>4</sup> Up to December 2000, at the end of each quarter; since January 2001, generally valued at market prices. — <sup>5</sup> Transactions with reserve assets as per the balance of payments statistics.

Eurosystem's reserve assets as a whole, this decrease reflects two opposing movements: the deliberate reduction of the reserves, on the one hand, and holding gains, particularly in the case of foreign exchange and gold positions, on the other. Data from the balance of payments, in which only transactions involving reserve assets are reflected, show that, from the start of EMU up to the end of September 2002, Germany's reserves decreased by €25½ billion (or 27%) as a result of transactions. Roughly half of the decrease can be traced back to the transfer of gold and foreign exchange holdings to the ECB at the beginning of January 1999; in return, the Bundesbank received a claim for the equivalent amount in euro. The Bundesbank also reduced its holdings by injecting foreign exchange into the market in addition to the amounts that had arisen from the interest income accruing to it from its investment of the reserve assets. In this way it responded to the change in the need for reserves in monetary union.

*Structural  
changes in  
reserve assets*

The reduction of the foreign exchange holdings and the movements in market prices and foreign exchange rates have also led to major structural shifts within the reserve assets. Although, at the start of monetary union, foreign exchange reserves still accounted for 60% of Germany's reserve assets, their share has since fallen to 49½% (end of September 2002). Owing to the increase in the price of gold, by contrast, the share of the gold reserves expanded, in terms of value, by 10 percentage points to 41% in this same period even though the volume of gold holdings decreased. A slight increase (from 9% to 10%)

was also recorded in the reserve position in the IMF and the special drawing rights.

### International comparison of Germany's reserve assets

Despite the decrease, the Bundesbank still has the most reserve assets, in terms of value, within the Eurosystem. If the different sizes of the individual economies are taken into account, however, Germany's reserve assets are not unusually large when compared with those of other participating countries. With reserve assets of €89 billion, the Bundesbank held about 26½% of the total reserve assets of the national central banks in the Eurosystem at the end of September 2002. This is, for instance, far less than the German capital share in the ECB, which – when calculated for the current 12 euro-area member states – is slightly more than 30%. Of the individual components of the reserve assets, Germany's gold reserves were slightly above average (29½%) but, relatively speaking, they were still less than its capital share; at 24½%, Germany's share of the foreign exchange reserves of the national central banks in the Eurosystem was even smaller.

This discrepancy between the absolute and relative volume of Germany's reserve assets is also apparent if an international comparison is made. Although Germany is one of the principal holders of reserve assets, those assets account for only 3% of the international reserves if calculated at market prices. This is far less than, for example, Ger-

*Germany's  
reserve assets  
within the  
Eurosystem...*

*... and by  
international  
comparison*

many's share of global GDP (6%) or its share of world trade (8½%).

*Reserve assets  
in relation to  
GDP*

In international comparisons of reserve assets, rather than reference being made to the share of global GDP or of world trade, the national reserves are often calculated, for example, in relation to GDP in the country in question or to (monthly) imports, and these figures are then compared. If the reserve assets of an economy or a currency area are compared with its economic strength, the 2001 figure for Germany is approximately 4½%. Germany therefore ranks low on the list of leading industrial countries (along with France and Italy). Countries with even fewer reserve assets in relation to GDP are, for example, the United States with a ratio of just under 1½% and the United Kingdom (2½%) while, relatively speaking, the euro area as a whole has slightly more reserves (6%). The figures for Switzerland (21%), Japan (9½%) and some emerging economies and countries in transition are far higher (see the table on page 22).

*Import cover of  
reserve assets...*

Relating a country's reserve assets to its (average monthly) imports gives the import cover of the reserve assets (in months); for Germany it was 1.6 (months). Hypothetically, Germany's reserve assets would therefore be enough to finance the (total) imports of goods and services for about 1½ months. That figure is fairly low by international comparison. A similarly low import cover by reserve assets is recorded, for instance, by the United States and the United Kingdom, with slightly more than one month, or France and Italy, with around two months. In terms of

### Germany's reserve assets within the Eurosystem

End of September 2002

Item	Total	Gold	Reserve position in the IMF and special drawing rights	Foreign exchange reserves
€ billion				
Eurosystem	380.9	131.3	31.2	218.3
of which				
ECB	46.5	8.1	0.2	38.2
Germany	88.9	36.2	8.8	44.0
in %				
Germany's share of the Euro-system's reserve assets <sup>1</sup>	26.6	29.4	28.2	24.4

Sources: ECB, Bundesbank. — <sup>1</sup> Excluding the ECB's reserve assets.

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this indicator, the reserve assets of the Eurosystem as a whole (3½ months) and Switzerland (6½ months) are far higher. Of the major industrial countries, Japan has the largest import cover, almost one year. Some emerging economies and countries in transition – such as South Korea with 7½ months and Russia with six months – also have quite a large import cover.

The calculation of the months of import cover provided by reserve assets is ultimately based on the view that, except for performance-related reasons, reserve assets are held mainly for intervention and transaction purposes. It is assumed that an economy's external vulnerability increases with its degree of openness. In order to cushion external shocks, the monetary authorities will hold a growing amount

*... an  
appropriate  
indicator only  
in certain  
circumstances*

### International comparison of reserve assets \*

2001

Country	Reserve assets in relation to GDP	Imports covered by reserve assets (in months)	Reserve assets in relation to ex- ternal liabilities <sup>2</sup>	Reserve assets in relation to money stock <sup>3</sup>
<b>Selected industrial countries</b>				
Canada	4.7%	1.5	4.8%	7.4%
France	4.5%	2.0	2.6%	–
Germany	4.5%	1.6	3.2%	6.4%
Italy	4.2%	1.9	4.4%	–
Japan	9.7%	11.8	26.3%	8.2%
Switzerland	20.9%	6.6	5.3%	15.7%
United Kingdom	2.6%	1.1	0.8%	2.7%
United States	1.3%	1.1	1.4%	1.6%
<b>Selected emerging economies and countries in transition</b>				
Czech Republic	25.5%	4.1	29.4%	32.6%
Hungary	20.7%	4.0	19.8%	43.0%
Mexico	7.2%	2.9	–	31.7%
Poland	15.0%	5.4	25.0%	31.2%
Russia	11.8%	5.9	22.2%	52.0%
South Korea	24.3%	7.2	–	28.9%
<i>Memo item</i>				
Euro area	5.8%	3.7	5.2%	7.2%

Sources: IMF, ECB, Bundesbank, Bundesbank calculations. — \* Reserve assets as per the international investment position (where data available); as at end-2001. — 1 Imports of goods and services as per the national accounts; for the euro area, imports of goods and services as per the balance of payments; in both cases for the whole of 2001. — 2 External liabilities as per the inter-

national investment position; as at end-2001. — 3 The money stock is made up of the IFS aggregates "money" and "quasi-money"; it comprises cash, sight deposits, time deposits, savings deposits and foreign exchange deposits; for the United Kingdom, M4; for the United States and the euro area, M3; for Germany, the German contribution to M3; as at end-2001.

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of reserves the more the economy is exposed internationally. In this connection, however, the underlying institutional conditions of each monetary system are a decisive factor. Under the conditions of the Bretton Woods system, with fixed exchange rates, comparatively less developed capital markets and widespread restrictions on the movement of capital, external disruptions were transferred mainly via trade in goods and services. During the period in which the Bretton Woods system was in operation, there was therefore clearly a certain justification for using reference variables based on imports when evaluating the relative amounts of reserve assets.<sup>13</sup>

national capital markets generally no longer need – for reasons related to the balance of payments – to hold extensive reserve assets. Market participants are normally able to raise the funds required for cross-border payments on the free foreign exchange market. Nonetheless, reserve assets are still likely to be a major factor underpinning international investors' confidence in a country's ability to meet its financial commitments, thus contributing to stabilising capital flows and, at times,

<sup>13</sup> One criticism of this standard method for assessing the level of the reserve assets is that reserves do not generally serve to finance imports but (balance of payments) deficits; another criticism is that the approach is said to imply that the reserves have an import elasticity of 1 although there is no empirical evidence to support this. See J Frenkel, B Jovanovic, *Optimal International Reserves: A Stochastic Framework*, *Economic Journal* (91) 1981, pp 507-514 and H Badinger, *The Demand for International Reserves in the Eurosystem*, Research Institute for European Affairs, IEF Working Paper No 37, 2000, p 25.

Other indicators

Since the changeover to flexible exchange rates and the liberalisation of capital movements, countries with access to the inter-

the national currency. It is therefore appropriate to use financial variables in the analysis and to set a country's reserve assets against its external liabilities or money stock. While the former indicator shows the confidence factor more clearly in terms of the external balance of payments, the latter takes account of the sustainability of financial developments in the domestic market.<sup>14</sup>

External  
liabilities

When comparing the relation between reserve assets and external liabilities for the major industrial countries and some countries in transition – for many emerging economies the corresponding data from the international investment position are not available – there is also evidence of a broad spread of values, even if the countries are not always ranked in the same order as in the other previously analysed indicators. In 2001 the lowest ratios of reserve assets to external liabilities were those of the United Kingdom at just under 1% – which owes much to London's status as an international financial centre – and the United States at 1½%. Germany was also in the bottom bracket at 3% (the euro area as a whole: 5%). This contrasts with other countries such as Japan (26½%), Poland (25%) and the Czech Republic (29½%) which, measured in terms of external assets, had comparatively large holdings of reserve assets. The problem with these figures is, however, the focus on the external liabilities – regardless of whether these were offset by external assets (and if so, to what extent). For instance, the USA's external position (net external liabilities of US\$2,309 billion or 23% of GDP at the end of 2001) differs fundamentally from the German external

position (net external assets of €116 billion or 5½% of GDP).

If the reserve assets are measured against the money stock – normally using a broad aggregate such as M3 – the same familiar pattern generally tends to emerge: here, too, the United States (1½%) and the United Kingdom (2½%) show the smallest figures among the industrial countries. At 6½% Germany's reserve assets are somewhat larger than its contribution to M3 (euro area 7%), whereas the figures for virtually all the countries in transition and emerging economies included in the analysis were several times higher. The reason for this probably has to do, *inter alia*, with the comparatively underdeveloped financial sector in these countries. However, this may also be attributable in part to distortions due to discrepancies in the statistical definitions or in the customary payment media; these distortions frequently play a major role in the monetary aggregates.

Money stock

Econometric analyses of the central bank demand for reserve assets frequently draw on "buffer stock models". The approaches are based on the view that the greater the likelihood is of the reserves being fully depleted within a given period, the more monetary authorities seek to increase their reserve holdings. It is frequently assumed that this probability depends on the past volatility of the reserve assets. In addition, higher adjustment

Monetary  
reserve volatility

<sup>14</sup> The ratio of the reserve assets to the money stock has frequently proved to be an important determinant when modelling currency crises. See, for example, B Schnatz, *Macroeconomic determinants of currency turbulences in emerging markets*, Economic Research Centre of the Deutsche Bundesbank, Discussion paper 3/98.

costs in the real economy, which are incurred if the reserves are fully depleted, have a positive influence on the (optimal) stock of reserves, while higher opportunity costs have a negative influence. These correlations were again corroborated in recent panel studies, although the explanatory content of the models is still rather moderate.<sup>15</sup> However, these studies are only of minor importance for the current analysis of Germany's reserve assets as, within the context of monetary union, Germany is not faced with undesirable outflows of reserves.

*Interim  
statement*

The results of the simple comparison of ratios and the econometric studies show that the reserve holdings of monetary authorities vary considerably from one country to another. If the actual reserve assets were interpreted as being the result of an optimisation strategy (which they generally are not), the demand for reserves would clearly be so different from one country to the next that they could not be captured using a single model. Some authors therefore take a different approach with regard to the euro-area countries. They assume that before accession to monetary union the size of reserve holdings was "optimal" in terms of the ability to absorb external economic shocks. The changeover to the euro is said, however, to have reduced the degree of openness of the participating countries, now defined as openness vis-à-vis countries outside the euro area. Correspondingly, the volume of reserve assets would also tend to decrease – if the national central banks maintained their assumed behaviour in the period before monetary union. If this line of argument is followed, Germany – possibly

*A different  
approach*

following a transition period – would maintain the level of its reserve assets in relation to its imports from (or vis-à-vis its external liabilities to) non-euro-area countries at the same level as the ratio that prevailed before monetary union in relation to total imports (or total external liabilities).<sup>16</sup>

When Germany acceded to monetary union, its reserve assets amounted to 17½% (or 2.1 months' worth of imports) in relation to (total) imports in 1998 and 5% in relation to (total) external liabilities. For 2001, the last year for which complete data are available, values of 23% (2.7 months' worth of imports) and somewhat over 5% can be calculated – measured against the imports from or liabilities to non-euro-area countries. As the reserve assets declined by around 9% in the course of 2002, the ratios (adjusted for the effect of the reduced degree of openness) are likely to have since moved closer to the levels recorded at the start of monetary union (imports) or to have fallen below them (external liabilities).

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<sup>15</sup> See, for example, R Flood, N Marion, *Holding international reserves in an era of high capital mobility*, IMF Working Paper 02/62, April 2002 and H Badinger, *Adäquanz und Optimalität internationaler Reserven – theoretische Aspekte und Schätzung der Reservenachfrage Österreichs (1970-1998)*, Vienna University of Economics and Business Administration, 2000, which summarises more than 40 empirical studies of the demand for reserves.

<sup>16</sup> The argument implicitly assumes that only the confidence of investors from third countries has to be protected. This is not necessarily the case, however; rather, with regard to Germany's ability to meet its international financial commitments, it would be possible to continue to measure its reserve assets against its total external liabilities. Another possibility would be to emphasise the currency aspect and to use external debt denominated in foreign currency as the measure.



## Germany's reserve assets in the changed monetary policy setting

*Profound changes due to monetary union*

The belief described above that the new monetary policy environment in which the Bundesbank finds itself could be accounted for simply by disregarding cross-border transactions or financial relations within the euro area fails, however, to embrace in full the actual implications of monetary union. The Bundesbank is now integrated into the Eurosystem, which has assumed responsibility for both internal and external monetary policy for the euro area. This also calls for a fundamental rethink on the question of the importance of national reserve assets. The reasons normally given for holding reserve assets have at most an indirect relevance in the case of the national reserve assets.<sup>17</sup>

*Some "traditional" reasons for holding reserve assets...*

Confidence in the euro is primarily based on the Eurosystem's independent monetary policy with its goal of maintaining price stability. The availability of reserve assets, especially the reserve assets of the national central banks in the Eurosystem, which are not readily available for intervention purposes, can at most act as an indirect support. Other reasons which were important in the past or which apply to less developed economies have lost importance owing to the development of the financial markets, the liberalisation of cross-border capital flows and the strong role of the euro as an international currency. In addition to the confidence function, three reasons essentially remain for holding national reserve assets.

*... are no longer as important*

- In accordance with secondary Community legislation, the ECB can ask the national central banks to transfer more reserves if necessary.<sup>18</sup>
- Foreign exchange reserves enable the Federal Government to process payments (for example, in the context of international agreements) in foreign currency without a major impact on the market; as such, they are a means of fulfilling the fiscal agent function which the Bundesbank assumes for the Federal Government.
- Foreign exchange reserves yield appreciable interest income; this is an important part of the Bundesbank's profit, which accrues to the Federal Government in accordance with the statutory regulations since the Bundesbank is owned by the Federal Republic of Germany.

*Other reasons are still valid ...*

However, these factors provide no clear indication of what the appropriate level of the Bundesbank's reserve assets should be. It also

*... but allow no concrete quantification*

<sup>17</sup> The literature gives, *inter alia*, the following reasons for holding reserve assets: reserve assets serve to maintain confidence in the currency in question; reserve assets are a monetary policy instrument; interventions on the foreign exchange market are used, where appropriate, to support the exchange rate, in order to avoid real adjustment burdens or at least to spread them out over time; reserve assets may be used to service a country's external liabilities denominated in a foreign currency; insofar as this is within the powers of the government, reserve assets may help to deal with cross-border public expenditure; reserve assets may be drawn on during natural disasters or other emergency situations; reserve assets serve to earn income. See, for example, J Nugée, *Foreign exchange reserve management*, Handbooks in Central Banking No 19, Centre for Central Banking Studies, Bank of England, 2000.

<sup>18</sup> Pursuant to Council Regulation (EC) No 1010/2000 of 8 May 2000, the ECB may effect further calls for reserve assets from the national central banks up to an amount equivalent to €50 billion if such reserve assets are needed.

needs to be borne in mind that the present volume and composition of the reserve assets constitute the starting point for any changes. Moreover, decisions on any adjustments can be made only in the overall monetary policy context. Besides the current market situation, further constraints apply within the framework of the Eurosystem or in the light of other contractual obligations of the Bundesbank. For example, a portion (albeit relatively small) of the reserve assets – the reserve positions in the IMF and the special drawing rights – are governed by international agreements and cannot therefore be mobilised. In addition, the Bundesbank may not sell gold at present because major European central banks – including the Bundesbank – have agreed, until September 2004, to refrain from making any sales of gold other than those already scheduled by individual central banks;<sup>19</sup> the Bundesbank has announced no such sales for the duration of this period.

*Restrictions on  
the use of  
reserve assets*

In addition, the Bundesbank, like the other national central banks in the Eurosystem, is bound by certain restrictions on the use of its reserve assets.<sup>20</sup> Article 31 of the Statute of the ESCB stipulates that, apart from transactions which allow the national central banks to fulfil their obligations towards international organisations, all of their reserve assets transactions above a certain limit established by the Governing Council of the ECB are subject to the approval of the ECB.<sup>21</sup> This rule does not apply to investment transactions in foreign currency. These restrictions are necessary to ensure the consistency of the Eurosystem's monetary and exchange rate policy and to avoid disruptions to the market. However,

they do not preclude specific changes in the volume of reserve assets made over longer periods of time, as is shown by the reduction in the foreign exchange reserves made by the Bundesbank and other national central banks.

Possible "alternative uses" for Germany's reserve assets are a frequent topic of public debate – for example, in connection with last summer's flooding disaster or to finance the planned bank for SMEs. The proposals are not always in keeping with the provisions of the EC Treaty. Pursuant to Article 105 (2) of the EC Treaty, the Bundesbank holds and manages the official German foreign reserves. Any attempt by government to influence the Bundesbank in the performance of these functions would constitute a breach of the Treaty and undermine the Bundesbank's independence. Apart from these serious legal objections, however, the reserve assets cannot, for accounting reasons, simply be transferred from the Bundesbank's accounts to other agencies. The equivalent value of the reserve assets has been largely injected into the economy in the form of central bank money (see box on page 27). A sale of foreign exchange reserves would withdraw liquidity from the banking system, which would then have to be made good by means of more refinancing loans, for example. The

*Possible  
"alternative"  
uses*

<sup>19</sup> The Central Bank Gold Agreement of 1999 was signed by the ECB, the then 11 national central banks in the Eurosystem, Sveriges Riksbank, the Swiss National Bank and the Bank of England.

<sup>20</sup> See European Central Bank, Foreign exchange reserves and operations of the Eurosystem, *Monthly Bulletin*, January 2000, pp 51-57.

<sup>21</sup> This rule also applies to member states' transactions with their foreign exchange working balances.

## Germany's reserve assets as part of the balance sheet

Viewed in isolation, the building-up of reserve assets by a central bank amounts to an extension of the balance sheet. An increase in its assets is matched by a corresponding increase in its liabilities. This interaction can be seen most clearly if one considers what happens when foreign currency is purchased from a domestic credit institution. In such a situation, there is an initial increase both in the central bank's foreign currency reserves and in the credit institution's central bank deposits (as a result of the equivalent value of the foreign currency purchased being credited to the credit institution's account). Even if the banking system then responds (by increasing its lending, for example) or the central bank does so (by granting fewer refinancing loans, for example), the fundamental balance sheet connection between the building-up of reserve assets, on the one hand, and the creation of central bank money, on the other, remains intact: the equivalent value of accumulated reserve assets has been made available to the financial system as central bank money.

This interaction is disrupted – but not entirely eliminated – by valuation changes in existing reserve stocks. If market prices are rising, unrealised holding gains ensue, which, in line with the Eurosystem's accounting principles, are not distributed but transferred to a revaluation account. With the changeover to marking to market at the start of monetary union, large unrealised holding gains accrued to the Bundesbank from the previous lower valuation of stocks of gold, SDRs, US dollars and securities. These amounted to €25½ billion. Particularly as a result of the increase in the price of gold and the higher US dollar exchange rate, further (unrealised) holding gains followed, with the result that there

was around €37½ billion on the revaluation accounts at the end of September 2002. First and foremost, these liability items form a kind of buffer which shields the Bundesbank's profit and loss account against losses incurred by its holding reserve assets in times of falling market prices and exchange rates. The fluctuations in the revaluation account can be seen from the Bundesbank's financial statement. Its highest value to date – €45 billion – was recorded at the end of June 2001.

The revaluation account "bridges" the discrepancy between the market value of the reserve assets and the supply of central bank money derived from the earlier acquisition of the reserves. Apart from the other restrictions which the Bundesbank is obliged to observe in the management of its reserve assets, the discussion of alternative uses of reserve assets (in the sense of making resources available to the public sector) can only be about this partial amount. As Article 101 of the EC Treaty prohibits the central banks in the Eurosystem from providing public sector financing, reserve assets cannot be transferred to a public sector body and a corresponding asset shown on the Bundesbank's balance sheet. When reserve assets are sold at market prices which are higher than the prices originally paid for them, the ensuing holding gains can, where appropriate, be realised, corresponding revaluation reserves being liquidated with an effect on the profit and loss account and paid over to the Federal Government. However, it needs to be borne in mind that the balance on the revaluation account is primarily attributable to the currently higher price of gold and that, as far as the use of its gold reserves is concerned, the Bundesbank is currently bound by the Central Bank Gold Agreement.

### Financial statement of the Deutsche Bundesbank (simplified)

End of September 2002, in € billion

Assets		Liabilities	
Reserve assets	89	Revaluation accounts	37
Lending related to monetary policy operations	104	Banknotes in circulation	92
Other assets	29	Liabilities related to monetary policy operations	41
		Other liabilities	52
<b>Total assets</b>	<b>222</b>	<b>Total liabilities</b>	<b>222</b>

Deutsche Bundesbank

gross proceeds from any sale cannot therefore be disbursed in full but are tied up in the balance sheet. Only the unrealised holding gains recorded in an additional revaluation account on the liabilities side of the Bundesbank's balance sheet are released in part whenever assets are sold and would thus be available for alternative use. The Bundesbank has sold a limited amount of foreign exchange reserves in recent years and distributed the realised holding gains with the Bundesbank profit. Another point to remember is that the (national) reserve assets continue to serve a certain function even in the context of monetary union. A sizeable volume of reserves will therefore continue to be needed. Furthermore, the Bundesbank's revaluation reserves relate mainly to its gold holdings which – even after the expiry of the Gold

Agreement – can only be reduced very gradually to ensure that the price of gold does not collapse. The unrealised gains relating to the foreign exchange reserves totalled less than €10 billion at the end of September 2002 and have since fallen further owing to the euro's appreciation on the foreign exchange markets, with the result that the resources which arise from the sale of foreign exchange reserves and which can be drawn on for special purposes would be less than is frequently assumed. Moreover, any reduction in the foreign exchange reserves, by releasing revaluation reserves, would lead to a contraction of the balance sheet total and would thus also entail a loss of income for the Bundesbank.

## Conclusion

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The Bundesbank is one of the world's principal holders of reserve assets; but compared with the size of the German economy and its high degree of international economic integration, Germany's reserve asset holdings do not appear excessive by international standards. However, the question arises as to whether the ratios normally used to value such reserves are also an appropriate measure for countries in a monetary union. Yet even if this is not the case, the reserve assets still held at the Bundesbank are also of special sig-

nificance within European monetary union: they are a kind of "standby fund" should the ECB need additional reserve assets and they also enable the Bundesbank to carry out its fiscal agent function. In addition, the interest income on foreign exchange reserves contributes substantially to the Bundesbank's profit. Moreover, any adjustments to the reserve holdings can only be made by the Bundesbank itself within the framework of the legally stipulated or agreed limits. To sum up, the bulk of Germany's reserve assets are not available for "alternative" uses.



## Role and importance of interest rate derivatives

Since being introduced in the late 1970s, interest rate derivatives have become indispensable instruments of risk management on the financial markets. This has not been without consequences for the structure, price formation and liquidity of the relevant cash markets. Derivatives take away transactions from the cash market while also creating new trading opportunities. Thanks to lower trading costs, information is reflected in prices on the futures markets sooner than on the cash market. Liquid derivative markets thus have a tendency to raise the efficiency of the financial markets. Under certain conditions, however, the major leverage effect of derivative financial instruments may also have a destabilising impact. The following report first explains the development and structure of the markets for interest rate derivatives and then the impact of the increasing use of derivatives on the stability of the financial system and the monetary policy transmission process.

### Introduction

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“Interest rate derivatives” is the general term for instruments whose value is derived from the market price of a debt security or a reference interest rate. These include bond futures, their related options as well as interest rate swaps. In April 2001, daily turnover in interest rate contracts on the derivatives exchanges was in the order of US\$2.2 trillion,

*Sharp growth  
in the market  
for interest rate  
derivatives ...*

almost double its value in the mid-1990s. The rates of growth in over-the-counter (OTC) trading have been even greater, with its turnover of interest rate derivatives more than tripling during the same period to US\$0.8 trillion. At the end of June 2001, the nominal value of all open interest rate contracts – traded on exchanges and OTC – was, at US\$93 trillion, several times higher than the nominal value of all bonds outstanding (US\$36 trillion).<sup>1,2</sup>

*... raises questions about the implications for monetary policy*

The Bundesbank investigated the monetary policy implications of derivatives as early as November 1994.<sup>3</sup> Back then, the article came to the provisional conclusion that monetary policymakers could take a relaxed view of the increasing use of derivative financial instruments. At the same time, however, a careful analysis of these markets was urged. Now that extensive statistical central bank surveys of the banks' derivative business are conducted every three years, with their results published by the Bank for International Settlements (BIS), the available database – which also covers the OTC derivatives market – is much better than in 1994. Additionally, since 1998, there have been supplementary semi-annual derivatives statistics, which are likewise collected by the national central banks and coordinated by the BIS.

*Characteristics of derivatives*

The key characteristic of derivatives is that their use makes it easier and more cost-effective to split off the risks associated with the underlying financing instruments and to trade them separately. Some types of derivatives, such as futures contracts and swaps, may, in principle, be replicated by a combin-

ation of their underlying securities or interest rate contracts. In practice, however, this entails considerable transaction costs and is therefore uneconomic for the individual investor. For that reason, derivatives are often the only possibility of trading a given combination of risks. This is all the more true of derivatives with option characteristics, the risk profile of which cannot practically be reproduced by a combination of underlyings.

According to a 1997 survey, more than three-quarters of the surveyed German enterprises use – mainly currency and interest rate – derivatives.<sup>4</sup> The popularity of derivatives is due to the fact that they tie up much less capital than do positions in the underlying assets. This results in these instruments having a major leverage effect. They may be used to reduce risks (hedging) or to take on risks intentionally. The derivatives markets allow enterprises, for example, to separate the operational policy risks of an investment from the interest rate risk so as to make operating performance less dependent on factors outside their sphere of influence. They allow banks – whose interest rates on their assets are typically locked in for a longer period than those

*Significance of derivatives from a micro-economic ...*

<sup>1</sup> Owing to the strong leverage effect of derivatives, these figures do overstate the importance of the futures market, however.

<sup>2</sup> Source: central bank survey. See Bank for International Settlements (BIS), Triennial Bank Survey: Foreign Exchange and Derivatives Market Activity, March 2002 and various issues of BIS, *Quarterly Review*.

<sup>3</sup> Deutsche Bundesbank, The monetary policy implications of the increasing use of derivative financial instruments, *Monthly Report*, November 1994.

<sup>4</sup> The survey covered 368 large and medium-sized enterprises outside the financial sector. The response ratio was around one-third. See G M Bodnar and G Gebhardt, Derivatives Usage in Risk Management by U.S. and German Non-Financial Firms: A Comparative Survey, Centre for Financial Studies, Working Paper, 98/17, Frankfurt 1998.



on their liabilities – to hedge against interest rate risks. Portfolio managers can manage their portfolios' dependency on individual risk factors more quickly, more precisely and more cost-effectively than would be possible by means of adjusting their securities portfolios.

*... and a  
macroeconomic  
perspective*

Derivatives complete the financial markets by making risk factors tradeable. From a macroeconomic perspective, tradeability, in turn, is a precondition for the efficient allocation of risks. For that reason, derivatives are likely, in principle, to contribute to a higher rate of growth, even though the importance of that fact is difficult to quantify. This fundamentally positive impact, however, should not obscure our view of the risks that may arise from the use of derivatives. This point will be dealt with in greater depth towards the end of this article.

### The market for interest rate derivatives

*Early derivatives  
markets*

The existence of derivatives markets has been recorded since early modern times.<sup>5</sup> As early as the 17th century, shares were sold and bought at a forward date and even share options were traded.<sup>6</sup> Trading of forward contracts on rice is also recorded in Japan in the 17th and 18th centuries. The basic features of modern derivatives exchanges emerged during the second half of the 19th century on the Chicago commodities exchanges. That was where quantities and prices were standardised for the first time, margin calls were regulated and the possibility of fulfilling contracts by means of offsetting trades rather than delivering the underlying was intro-

duced. With rare exceptions, the majority of the early derivatives involved commodities contracts. Financial derivatives, which nowadays account for most of all forward transactions, did not make a breakthrough until the 1970s.

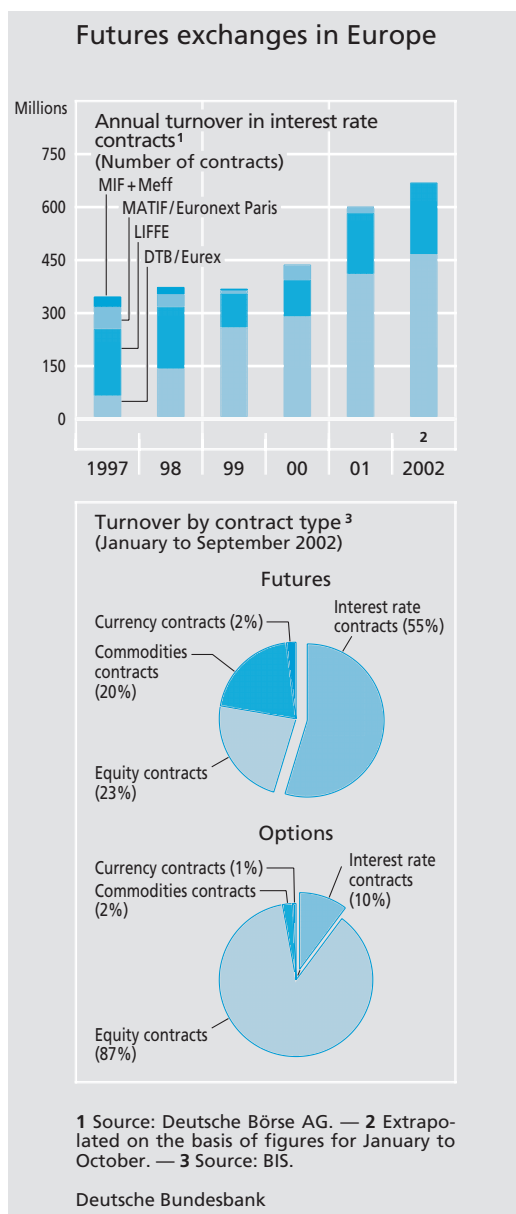
Although the first currency swaps appeared as early as the 1960s, they were used mainly to circumvent British capital controls and were thus of minor importance at first, especially as a world monetary system in which exchange rates were fixed meant that there was a limited need to hedge against exchange rate fluctuations. This situation only changed when the Bretton Woods system was replaced by free exchange rates in the early 1970s, leading to a sudden sharp increase in the demand for hedging instruments. That is the background to the success of the first exchange-traded currency future, which was introduced on the International Money Market of the Chicago Mercantile Exchange (CME) in 1972. Interest rate futures were first traded on the Chicago Board of Trade (CBoT) trading floor in October 1975 and were based on US mortgage bonds. In the end, these contracts gained no more than minor importance, mainly on account of the low level of standardisation in the potential underlyings. The futures (which were introduced shortly afterwards) on three-month CME Treasury Bills and long-term CBoT Treas-

*Following  
tentative  
beginnings  
in the 1960s ...*

*... break-  
through of  
financial  
derivatives  
in the 1970s*

<sup>5</sup> There may have been futures contracts as long ago as antiquity. On the history of derivatives, see D Duffie, *Futures Markets*, Prentice-Hall, 1989 and F Allen and D Gale, *Financial Innovation and Risk Sharing*, MIT Press, 1994.

<sup>6</sup> See Joseph de la Vega, *Confusión des Confusiones*, 1688, translated by H. Kellenbenz, No 12 (1987), The Kress Library Series of Publications, Harvard University.



ury Bonds enjoyed greater success, benefiting from the dramatically increased interest rate volatility towards the end of the decade. It was in this setting that, in the early 1980s, the basic idea of currency swaps (which had now clearly gained in significance) was also transferred to the field of interest rates. Instead of payments in different currencies, the counterparties swapped interest payments on a given principal amount – mainly fixed pay-

ments for payments linked to a short-term interest rate.

Even though options had been known for centuries, the role they played was a marginal one until the 1970s. This was due, in particular, to difficulties in terms of valuation which made trading with options a risky undertaking. A crucial boost was given to the option markets by the development of the Black-Scholes model, which – despite its restrictive assumptions – is nowadays still the basis for the valuation of options. In 1973, the year in which the groundbreaking article by Black and Scholes was published,<sup>7</sup> options on individual shares were introduced on the Chicago Board Option Exchange (CBOE). Index and interest rate options followed ten years later.

*Options*

In Europe, it was only in the 1980s that the market for derivatives gained a firm foothold. Milestones in this respect were the establishment of the British derivatives exchange LIFFE in 1982, the French futures exchange MATIF in 1986 and the German Financial Futures Exchange DTB in 1989. In Germany, the establishment of a liquid futures market had been impeded, among other things, by existing legislation – a situation that was remedied only as part of the 1989 amendment of the Stock Exchange Act.<sup>8</sup> The comparatively late start of the DTB was one reason for interest rate

*European futures exchanges*

<sup>7</sup> F Black and M Scholes, The Pricing of Options and Corporate Liabilities, *Journal of Political Economy*, Vol 81, 1973, pp 637-654.

<sup>8</sup> The amendment of the Stock Exchange Act (*Börsengesetz*) included new provisions concerning the capacity to enter into forward contracts. Before 1989, forward contracts by private investors had been classified as gambling or betting, which meant that liabilities arising from them were void. The amended version of the Stock Exchange Act removed the legal basis for related difference pleas.

derivatives denominated in Deutsche Mark being traded, initially, mainly on the LIFFE in London. It was only during the 1990s that a large part of trading shifted to Frankfurt. This mostly concerned the long-term segment of the market, especially the future on ten-year Federal bonds (Bund future). By contrast, the LIFFE has been able to maintain its market position in money market contracts.

*Exchange  
concentration  
in the euro area*

European monetary union has brought a fundamental change to the European derivatives landscape. This has affected not only the foreign exchange field but also, in particular, interest rate derivatives. Following the elimination of the foreign exchange risk, the differences in yields among the individual participating countries have been reduced to a minimum.<sup>9</sup> A position in, say, Spanish bonds can now be hedged by a matching position in the Euro-Bund future, even though the latter is actually based on German Federal bonds. Although this hedging strategy is not entirely without risk – the price of the future and the price of the Spanish bond may still drift apart – that risk is generally offset by the higher liquidity of the Bund contract. European monetary union has thus been accompanied by a concentration of trading in euro-denominated bond contracts on the Eurex (the successor to DTB), while the LIFFE has strengthened its dominant position in the money market. Among the other national futures markets, only the French MATIF was initially able to defend its market share, while interest rate business activity on the Italian and Spanish derivatives exchanges (MIF and Meff, respectively) has virtually come to a standstill.<sup>10</sup>

Between January and September 2002, 1.6 billion futures contracts and 1.7 billion options were traded worldwide on the futures exchanges. In the case of futures, 55 % of turnover was accounted for by interest rate derivatives,<sup>11</sup> followed by equity and commodities contracts at 23 % and 20 %, respectively. By contrast, foreign exchange futures were of very minor importance at 2 % of overall turnover. In the case of options, equity options were clearly to the fore at 87 % of turnover. Interest rate options were of no more than secondary importance with a market share of 10 %. At the end of September 2002, the nominal value of all open interest rate futures amounted to US\$10 trillion, while that of interest rate options was as much as US\$16 trillion.<sup>12</sup>

*Turnover and  
nominal values  
of exchange-  
traded  
derivatives*

The growing popularity of futures exchanges when compared with the cash market may also be explained by the lower capital required. Price gains and losses are first offset on an internal exchange account. It is possible to sell the contracts short without – as on the

*Organisation of  
futures  
exchanges*

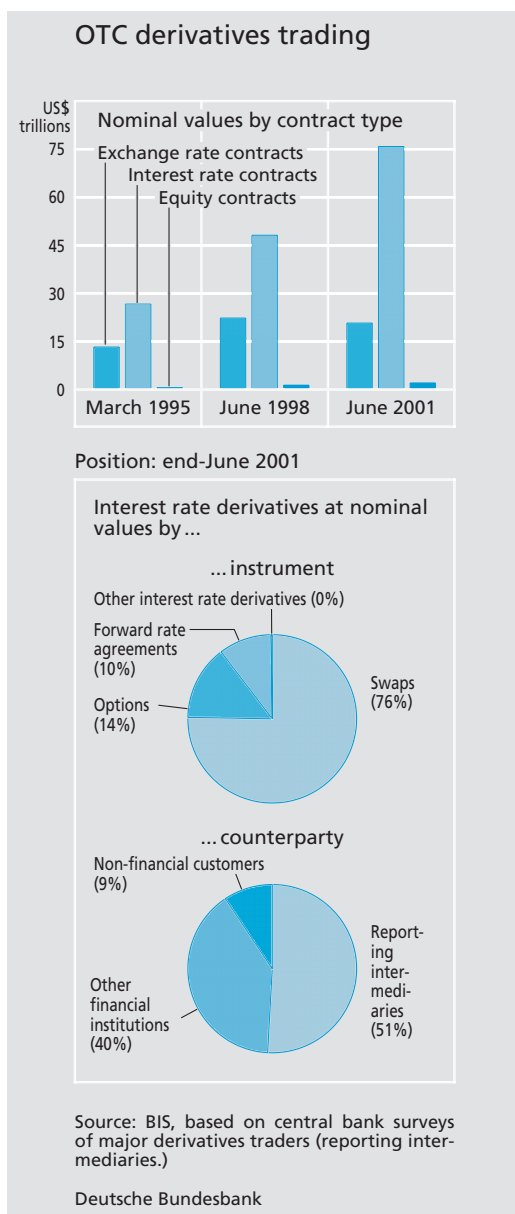
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<sup>9</sup> In the case of integrated markets, differing nominal rates of interest on government bonds denominated in the same currency can be explained mainly by differences in financial standing and liquidity from one country to another. See Deutsche Bundesbank, International integration of German securities markets, *Monthly Report*, December 2001.

<sup>10</sup> For an analysis of the impact of European monetary union on the derivatives exchanges, see W Schulze and R Violi, Interactions between Cash and Derivatives Bond Markets: Some Evidence for the Euro Area, BIS Paper No 12.

<sup>11</sup> Measured by the number of contracts traded.

<sup>12</sup> Source: *BIS Quarterly Review*, December 2002. It is not possible to make a direct comparison between the nominal values of interest rate derivatives and the nominal values of other contracts. At the end of September 2002, for example, the nominal value of all equity options and share index options was no more than US\$1.8 trillion, despite the fact that turnover was much higher.



cash market – first having to borrow the matching paper. As a rule, open positions are closed by offsetting trades shortly prior to maturity and the account is squared; fulfilment of futures contracts by delivery of the underlying is the exception. Since interest rate futures are mostly based on a notional bond,<sup>13</sup> the delivered paper is converted into the underlying in accordance with a specified key. The conversion factor depends on the

maturity and interest rate of the paper that is actually delivered and the extent to which they differ from the notional bond on which the contract is based.<sup>14</sup>

In contrast to the traditional cash exchanges, the market players on the futures exchanges conclude contracts with a central counterparty and not among themselves.<sup>15</sup> This has the advantage that transactions do not have to be unwound if one party does not fulfil its obligations. In order to hedge against that eventuality, the exchange demands a margin, which is adjusted to the market situation on a daily basis. If market players are unable to meet their resulting margin call, their positions are liquidated by offsetting trades.

The high degree of liquidity of listed derivatives is made possible by a large measure of standardisation of the contracts. Tailor-made instruments, on the other hand, are traded over the counter, as are those for which the margin system (for a variety of reasons) is impracticable. This last-named category includes swaps, for example, for which regularly recurring interest payments – but not principal amounts – are exchanged. In the past few years, the OTC market has witnessed even faster rates of growth than the futures exchanges. At the end of June 2001, the nom-

*Strong growth in OTC derivatives trading*

<sup>13</sup> Futures on money market rates, which are based on a reference interest rate, such as the three-month Euribor, are an exception. These contracts are fulfilled exclusively by cash settlement.

<sup>14</sup> The calculation of the conversion factor is described, for example, in M Steiner and C Bruns, *Wertpapiermanagement*, Schäffel Poeschel, 2000.

<sup>15</sup> The Eurex-type model with a central counterparty and regulated margin calls is to be extended to the XETRA trading system this March. This means that the structure of the cash and futures markets will move into line with each other in this respect.

inal value of all open OTC interest rate contracts, at US\$76 trillion, was more than four times higher than that of listed interest rate derivatives (US\$17 trillion).<sup>16</sup> Interest rate swaps accounted for three-quarters of that amount, with 14 % being options and 10 % forward rate agreements.

*Key role of  
investment  
banks as  
intermediaries*

The vast majority of OTC derivatives transactions take place between internationally operating banks or other financial institutions. The market is very concentrated: just over half of all transactions in OTC interest rate derivatives takes place among some 60 institutions, of which seven are in Germany. In some areas, there are only a handful of players that account for the majority of turnover. Less than 10 % of OTC transactions in derivatives is conducted with end customers outside the financial sector. This stands in sharp contrast to conditions in the early 1980s, when swap transactions were conducted mainly between non-financial enterprises. At that time, the banks largely confined themselves to acting as brokers and did not themselves contract open positions. Under such circumstances, the users of derivatives often found it difficult to make a correct assessment of their counterparties' financial soundness. The market for OTC derivatives was therefore able to develop properly only when the banks increasingly began to act as intermediaries conducting transactions for their own account with the end customers.

*Germany in  
third place*

With 14 % of the overall transaction volume, Germany occupies third place in interest rate derivatives trading behind the United King-

dom (35 %) and the United States (17 %). Taking into account solely derivatives denominated in euro (just under half of the turnover in all interest rate contracts), German institutions have a market share of 22 %.

### Impact on price formation and liquidity

Owing to the low capital input and the possibility of selling short without major expenditure, derivatives are suitable not only as instruments for hedging against interest rate risks but also as a way of deliberately contracting speculative positions. A recently published Bundesbank research paper<sup>17</sup> on the price relationship between German Federal bonds and the Bund future shows that the vast majority of information is "priced in" on the futures market. In turbulent times, the processing of information takes place entirely on the futures market, in fact, and the prices for ten-year Federal bonds follow the future without contributing to price discovery. The highly liquid futures contracts, in particular, thus have a kind of price leadership over the underlying, the prices of which adjust to the prices on the futures market.

*Information  
leadership of  
the futures  
market*

The impact of derivatives on the liquidity of the cash market is ambiguous. As a rule, market players can hedge more cost-effectively or contract speculative positions more easily by using derivatives than by investing in debt

*Derivatives and  
market liquidity*

<sup>16</sup> See Bank for International Settlements, Triennial Central Bank Survey, Foreign Exchange and Derivatives Market Activity in 2001, March 2002, Table E.39.

<sup>17</sup> C. Upper and T. Werner, Tail Wags Dog? Time-Varying Information Shares in the Bund Market, Discussion paper 24/02, Economic Research Centre of the Deutsche Bundesbank, October 2002.

securities. The futures market thus withdraws transactions from the cash market. The same applies to investors using futures for the purpose of acquiring bonds. Neither case necessarily results in the underlyings having a reduced market liquidity, however. This is because a futures market not only attracts transactions – it also creates new trading opportunities in the underlying securities. For example, traders in derivatives use the cash market to hedge against the risks arising from derivative transactions. Moreover, a category of securities may become more attractive overall if a liquid derivatives market is available for hedging. Thus, Federal securities owe their benchmark status on the euro-area bond market not least to the matching futures contracts having the function of major hedging instruments for long-term interest rate risks in the euro zone. According to one study, the market rewards the status of a bond as “cheapest to deliver”,<sup>18</sup> ie as the actual underlying, in the case of the Bund future with a yield discount of just under three basis points.<sup>19</sup>

*Liquid derivatives market is a precondition for benchmark function*

*Futures markets and price volatility*

Operations that might otherwise be unprofitable may be conducted on the futures market since the transaction costs are lower. The effect of such transactions on price formation depends on the level of information of the players involved. Poorly informed investors who use capital investments like a lottery increase uncertainty and thus have a destabilising impact. However, investors of this type tend to make a loss in the long run and can therefore be displaced from the market.<sup>20</sup> Arbitrageurs can systematically generate a profit only if they buy at low prices and sell at

high prices. Rational speculation therefore has a stabilising effect on the markets and thus tends to reduce volatility.

In addition to these basic considerations, derivatives have certain properties which may have a destabilising impact. It has been repeatedly observed, for example, that, shortly before a future matures, market players systematically buy up the underlying bond in order then to throw the hoarded paper on to the market at a profit. Unfortunately, it is not known whether this strategy met with success. What is certain, however, is that the resulting shortage of the underlying was only temporary and that there were no delivery problems upon the maturity of the futures contracts.<sup>21</sup>

In contrast to futures, the payout structure of options is asymmetrical. Options thus provide investors with more extensive hedging opportunities than do pure forward contracts. For example, the holder of a call option on a bond cannot only hedge against price losses – ie an interest rate rise – but also benefit

*Delta hedging and the impact of options*

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<sup>18</sup> Although several bonds are deliverable in the case of the Bund future, the fulfilment of the contractual obligations by means of a specific bond is generally cheaper than using the other paper. This bond is frequently described as “cheapest to deliver” or “ctd”.

<sup>19</sup> R Blanco, Euro Area Government Securities Markets: Recent Developments and Implications for Market Functioning, Bank for International Settlements, BIS Paper No 12, 2002.

<sup>20</sup> However, there are some counter-examples in which uninformed players survive rational investors. See J B De Long, A Schleifer, L A Summes and R J Waldmann, Noise Trader Risk in Financial Markets, *Journal of Political Economy*, 98 (4), pp 703-738, 1990 and The Survival of Noise Traders in Financial Markets, *Journal of Business*, 64 (1), pp 1-19, 1991.

<sup>21</sup> See W Schulte and R Violi, Interactions between Cash and Derivatives Bond Markets: Some Evidence for the Euro Area, BIS Paper No 12, 2002.

## Derivative prices and delta hedging

In order to gain a better understanding of the price relationship between cash and futures markets and of delta hedging, it is useful first to recall some basic features of price formation in interest rate contracts and the valuation of interest rate options. Market players' arbitrage operations ensure a close parallel movement of prices in the cash and futures markets. Ignoring transaction costs, the price of a bond future  $F$  corresponds to the price of the underlying  $B$  plus the financing costs up to the maturity of the future: <sup>1</sup>

$$F = B(1 + r). \quad (1)$$

If this condition is not met, arbitrage opportunities open up, the use of which drives prices towards their equilibrium values. If futures prices are too high, ie  $F > B(1 + r)$ , an investor might sell a future for, say, € $F$  and buy a bond for € $B$ . The investor first lends this as part of a repo at an interest rate  $r$  and then delivers it when the future matures. Futures prices which are too high (or bond prices which are too low) thus lead to selling on the futures market and to buying on the cash market. The opposite case of futures prices which are too low, ie  $F < B(1 + r)$ , also provides arbitrage opportunities, the use of which ultimately drives prices towards their equilibrium values. In this instance, the arbitrageur has to borrow bonds on the repo market and sell them immediately. At the same time, the arbitrageur buys futures and fulfils his obligations arising from the repo with the debt securities delivered when the futures contract matures. <sup>2</sup>

The valuation of interest rate options and the associated delta hedging are much more complicated than the replication of futures. We shall therefore describe them briefly using a simplified example. Let us assume that the price of a bond is currently €100 and may, in the next period, either rise to  $P_H = €110$  or fall to  $P_L = €90$ . Let us now look at the case of a purchase option on the bond with a price of  $S = 100$ . The buyer of this derivative acquires the right to purchase the bond in the next period at a price of €100 – irrespective of how prices develop

on the cash market. If the price of the bond rises to  $P_H = €110$ , the purchaser of the option makes a profit of €10. If bond prices fall, the option is worthless, however, and is not exercised.

For the option writer, a price rise on the cash market represents a risk which he can hedge against by purchasing bonds. The number of bonds needed for this is usually denoted by the Greek letter  $\Delta$ , which is where the term "delta hedging" comes from. In the above example, the option writer therefore first buys bonds to the value of  $\Delta x €100$ . If there is a rise in price on the bond market, the value of the bond portfolio increases to  $\Delta x €110$ . This is matched by a payment obligation, arising from the sale of the option, amounting to  $OP_H = €10$ . Although, if the price falls, the option writer receives only  $\Delta x €90$  from the sale of the bonds, he does not have to pay anything to the buyer of the option, ie  $OP_L = 0$ . The option writer can thus select  $\Delta$  so that the value of the hedge portfolio, less the payments from the option, is independent of the future price of the bond. In the example, this would be the case if  $\Delta x P_H - OP_H = \Delta x P_L - OP_L$ . This implies a delta

$$\Delta = (OP_H - OP_L) / (P_H - P_L) = 10 / 20 = 1/2.$$

The commonly used option price models are based on delta hedging. <sup>3</sup>

In practice, the hedge portfolio has to be adjusted continuously to current price developments. This can be explained by extending the above example. Let us assume that the price of the bond rises in the second period to €110 and, in the third period, can then either go up by another €10 to €120 or go back down to €100. The option payout would then amount to €20 or €0, which would correspond to  $\Delta = 1$ . The adjustment of the hedging portfolio over time is also called "dynamic hedging". The example shows that this involves a positive feedback between the price change of the underlying (bond) and the hedging operations. <sup>4</sup>

<sup>1</sup> In practice,  $r$  is a rate for repo transactions. — <sup>2</sup> The arbitrage relationship between futures and bonds described here is a simplification. In practice, transaction costs are incurred and different bonds can be delivered which are converted using a conversion factor. For details, see H Diwald, *Zinsfutures und Zinsoptionen*, Munich, 1999. — <sup>3</sup> The hedge portfolio, consisting of a long position in a bond and a short position in the option, guarantees a secure

payment in the next period. Its current price should therefore correspond to the price of a risk-free bond with an identical payoff. This means that the price of the option can then be determined. — <sup>4</sup> For a more detailed description of delta hedging in continuous time and the corresponding Black-Scholes model, see John C Hull: *Options, Futures, and other Derivatives*, Prentice-Hall, 1997.

## Derivatives and interest rate uncertainty on the bond market

The potential impact of derivatives on interest rate uncertainty on the bond market is studied below using the example of the Bund future. To do this, the yields of underlying Federal bonds are modelled using a GARCH(1.1) approach. A dummy variable in the regression for volatility provides information on the extent to which the introduction of the future contract on Federal bonds has affected interest rate uncertainty.

In the model regression, the yield outstanding on Federal bonds deliverable on the Eurex  $i_t$  is modelled as a first-order autoregressive process AR(1):

$$i_t = \beta_0 + \beta_1 i_{t-1} + \varepsilon_t$$

The conditional variance of the disturbance item  $\varepsilon_t$  corresponds to the interest rate uncertainty. This is denoted as  $h_t$  and is modelled by the following variance equation:

$$h_t = \alpha_0 + \alpha_1 \varepsilon_{t-1}^2 + \alpha_2 h_{t-1} + \gamma_1 t + \gamma_2 d_t$$

The introduction of the Bund future on the German Futures Exchange on 23 November 1990<sup>1</sup> is characterised by a dummy variable  $d_t$ , which assumes the value of zero before that date and the value of one thereafter. A positive and statistically significant coefficient  $\gamma_2$  then indicates an increase in volatility brought about by the future and a negative coefficient shows a reduction in interest rate uncertainty by the future. A time trend  $t$  was included in order to separate the impact of the derivatives market from other long-term effects on interest rate uncertainty. The GARCH model was estimated using daily data over the period from the start of 1978 to the end of 2001. The results are shown in the table below:

Parameter	Estimate	Significance level
Level equation		
$\beta_0$	$-8.2 * 10^{-4}$	0.74
$\beta_1$	1.0	0.00
Variance equation		
$\alpha_0$	$3.18 * 10^{-5}$	0.00
$\alpha_1$	0.06	0.00
$\alpha_2$	0.93	0.00
$\gamma_1$	$1.61 * 10^{-6}$	0.73
$\gamma_2$	$-7.30 * 10^{-10}$	0.54

The estimation results show a high degree of persistence of the yield outstanding in both the level ( $\beta_1 = 1$ ) and the volatility ( $\alpha_1 + \alpha_2 = 0.99$ ). The parameters  $\gamma_1$  and  $\gamma_2$  are both extremely small and statistically insignificant. Thus, neither a trend movement in interest rate uncertainty nor an influence of the introduction of the Bund Future can be demonstrated.<sup>2</sup>

<sup>1</sup> The results remain largely unchanged if the estimates are based on the introduction of the Bund Future on the LIFFE on 29 September 1988. — <sup>2</sup> It has been possible to show comparable results for the US market for Treasury bonds and the related futures contracts. See S P Hedge, The Impact of Futures Trading on the Spot Market for Treasury Bonds, *The Financial Review*, 29, pp 441-471, 1994.

from price gains. On the other hand, in order not to enter into an incalculable risk, the issuer of the option has to adjust his portfolio continuously. This is referred to as "dynamic" or "delta" hedging (see explanatory notes on page 39). Such hedging operations can amplify price movements since underlyings are sold if prices are falling and purchased when prices are rising. They have a particularly destabilising impact if the exercise prices of options are concentrated on certain threshold values. The overshooting of such a threshold may then lead to a chain reaction, resulting in extreme price fluctuations. For the United States, it has been possible to show that such hedging operations may also distort the term structure of interest rates.<sup>22</sup>

The question as to whether futures markets increase or reduce volatility is therefore an empirical one. An econometric study of the yield development of ten-year Federal bonds based on daily data for the period from 1978 to 2001 shows that the introduction of the Bund future had no demonstrable effect whatsoever on the volatility of German bond yields (see the adjacent explanatory notes). Independently of this, however, each investor has the possibility of using interest rate derivatives to change his individual interest rate risk.

*Bund future and interest rate uncertainty*

<sup>22</sup> See J Kambhu and P Mosser, The Effect of Interest Rate Options Hedging on Term-Structure Dynamics, *Economic Policy Review*, Federal Reserve Bank of New York, 2001.



## Effects of the increasing use of derivatives

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### Monetary policy implications

*1994 assessment largely confirmed*

The above-mentioned *Monthly Report* article on the monetary policy implications of interest rate derivatives, which was published in 1994, came to the conclusion that the existence of derivatives does not affect the central bank's ability to influence interest rates on the money market. Changes in the scale and speed with which monetary policy measures impact on the real economy were conceivable, however. On the whole, however, monetary policymakers could, if anything, take a relaxed view of the increasing use of derivative instruments. From the current perspective, this assessment has been confirmed. It is only on isolated points that the conclusions drawn in 1994 have to be modified somewhat.

*Changes in the monetary policy transmission process*

Although the existence of interest rate derivatives does not reduce the central bank's ability to control short-term interest rates, the use of such instruments can lead to changes in the monetary transmission process. In this context, it is not possible, however, to separate the impact of derivatives from that of other changes in the structure of the financial system. For instance, the securitisation of large parts of the banks' balance sheets means that credit institutions are more dependent on interest rates – something which banks can, in turn, contain by the use of derivatives. In the final analysis, however, derivatives can only spread risks – not eliminate them. In every transaction, there is a counterparty

which accepts the traded risk. This does not necessarily have to be a domestic bank. Risks may also be transferred to other institutions, say, to insurance companies, or to another country, which means that the transmission of monetary policy stimuli through the domestic banking sector will tend to become weaker.

Of the various monetary policy transmission channels, the credit channel – which is based on frictions in lending to enterprises – is likely to be especially affected by the use of derivatives. That is because derivatives enable firms to hedge against rising interest rates (and thus also against price losses in their loan collateral). For the transmission process, this means that the credit channel is becoming less effective.<sup>23</sup> However, in Germany and the euro area as a whole, the credit channel plays a secondary role to the interest rate channel in any case. A further weakening is therefore likely to be of very little relevance to monetary policy.

*Credit channel less important*

With the exception of currency swap arrangements, no major central bank at present uses derivatives as an instrument of monetary policy. Nevertheless, the central bank could, in theory, use derivative contracts (such as forward rate agreements or options) to influence longer-term interest rates. However tempting it might seem to use derivatives for that purpose, such operations would be fraught with enormous risks. It would mean the central bank tying its own hands and committing it-

*Derivatives as monetary policy instruments ...*

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<sup>23</sup> See I Fender, *Corporate Hedging: The Impact of Financial Derivatives on the Broad Credit Channel of Monetary Policy*, BIS Working Paper No 94, November 2000.

self over an extended period to a given interest rate path, which would be very costly to leave. In particular, adopting such a strategy would make it all but impossible to respond appropriately to future shocks. For that reason, interest rate derivatives have no place in the set of monetary policy instruments. It is only in extreme situations – such as in a persistent deflation – that a central bank might find it useful to be able to commit itself to a specific interest rate path by using derivatives.<sup>24</sup>

... and  
indicators

Even though derivatives are hardly suited to be monetary policy instruments, the heightened information efficiency of the market associated with them can be used for monetary policy purposes. Derivatives prices provide many different kinds of data about market players' expectations. This information enables the central bank to form a more nuanced judgement of the impact of monetary policy measures.<sup>25</sup> As information is "priced in" mainly on the futures market, futures are fundamentally better indicators than are bonds. The close arbitrage relationship between the cash and futures markets ensures that identical information can be observed in both market segments after only a few minutes.<sup>26</sup> In monetary policy practice, it is therefore irrelevant which market is being analysed.

### Stability of the financial system

Concentration  
of OTC deriva-  
tives trading

Potential risks to the stability of the financial system are primarily associated with OTC derivatives trading since it is concentrated on a comparatively small number of intermediaries

with a diverse presence in the various market segments. As things stand at present, there are no empirically corroborated findings on the impact that the sudden collapse of a major market maker can have on financial system stability. There are indications, however, that the derivatives markets are sufficiently liquid to allow the unwinding of sizeable positions without causing major dislocations. More problematical than the collapse of individual institutions, however, is a critical situation that affects several institutions at once. The events of September and October 1998 show that, under such circumstances, the limits of the markets' resilience may soon be reached.<sup>27</sup>

In addition to its high degree of concentration, the lack of transparency on the OTC derivatives market gives cause for concern. The accounting of many market players has not kept pace with innovation on the financial markets. In Germany, derivatives, as a rule, are shown on the balance sheet only upon their maturity. Before that they are deemed to be uncompleted transactions, which do not appear on the balance sheet and are mentioned, if at all, only in the notes on the annual accounts. In other countries, banks

Lack of  
transparency in  
OTC activity...

<sup>24</sup> See P A Tinsley, Short Rate Expectations, Term Premiums, and the Central Bank Use of Derivatives to Reduce Policy Uncertainty, Finance and Economics Discussion Paper 1999-14, Federal Reserve Board, Washington DC, 1999.

<sup>25</sup> See Deutsche Bundesbank, The information content of derivatives for monetary policy, *Monthly Report*, November 1995.

<sup>26</sup> See C Upper and T Werner, How Resilient Are Financial Markets to Stress? Bund Futures and Bonds During the 1998 Turbulence, Bank for International Settlements, BIS Papers No 12, 2002.

<sup>27</sup> See Deutsche Bundesbank, The impact of financial market crises on the German securities markets, *Monthly Report*, April 2000.

... and  
complicated  
valuation ...

... make it  
difficult to  
assess counter-  
party risks

Considerable  
demands on  
market players

Consequences  
for banking  
supervision

can show their derivatives activities on the balance sheet, but the associated information value is limited by the considerable scope for discretion that is available and by rights to opt for an alternative procedure.<sup>28</sup> A further difficulty in the accounting of OTC derivatives is the lack of an observable market price at which open positions can be valued. While there are recognised pricing models for "plain vanilla" products, such as simple swaps or options, the valuation of complex derivatives is often hard to follow. For the reasons cited, it is difficult for outsiders to assess the financial situation of the major players in the derivatives markets.

The sometimes very high degree of complexity of OTC derivatives makes considerable demands on the market players. With newly introduced instruments, in particular, there is no guarantee that their risk profiles are really always properly understood. For example, owing to errors, a number of major multinational companies have suffered significant losses when using derivatives.<sup>29</sup>

The German banking supervisors reacted at an early stage to the increasing use of derivatives. Credit institutions have had to include derivatives in their reports to the Bundesbank since as long ago as 1986. Since October 1990, open positions in derivatives have had to be backed by capital.<sup>30</sup> Derivatives are not treated fundamentally differently from other financial assets. In the case of interest rate derivatives, this is of particular relevance to the capital requirements for market risks, which, since 1996, have applied to the bank's portfolio as a whole. This means

that the market price risks of derivatives positions and the price risks of securities can be offset against each other if they run in different directions. The use of derivatives for hedging purposes thus lowers the prudential capital requirements, while the incurrence of additional risks through derivatives increases them.

### Closing remarks

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The financial system has become far more complex over the past few decades. The growing number of financial instruments means that it is possible to split up risks into ever finer individual factors and trade them. The increased use of derivatives is a key feature of this development. This may produce changes in the monetary policy transmission process, although such changes have thus far stayed within narrow and manageable bounds. Overall, from the perspective of the monetary policymakers, this is likely to be outweighed by the information advantages. Less easy to predict, by contrast, are the risks to the stability of the financial system resulting from transactions being concentrated on a small number of banks, insurance companies and securities firms active in OTC de-

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<sup>28</sup> See L Schirmer, *Die Rechnungslegung von Finanzderivaten bei Banken in Deutschland, Japan und USA*, Deutscher Universitätsverlag, 2000; regulations on the accounting and valuation of financial derivatives may be found in, for example, IAS 39 of the International Accounting Standards Board and in the US Financial Accounting Standard (FAS) 133.

<sup>29</sup> A short list of these may be found in G J Schinasi, R S Craig, B Drees and C Kramer, *Modern Banking and OTC Derivatives Markets*, International Monetary Fund, Occasional Paper 203, 2000, p 28.

<sup>30</sup> See Deutsche Bundesbank, *Off-balance-sheet activities of German banks, Monthly Report*, October 1993.

derivatives trading. Much the same applies to the lack of transparency in such trading. Clear, internationally harmonised accounting standards are needed so that the players can make a better assessment of their counterparty risks. The accounting of derivatives at their "fair value" in accordance with IAS 39 is

a step in that direction. In the interests of greater transparency and valuation certainty, the available scope for discretion and rights to opt for an alternative procedure in the accounting of derivatives should be reduced to an absolute minimum.

## The new “Minimum requirements for the credit business of credit institutions” and Basel II

In September 2000 the Basel Committee on Banking Supervision published its “Principles for the Management of Credit Risk”, which identified concentrations of risk and weaknesses in lending and loan monitoring processes in credit institutions as the most frequent causes of problems in credit business. This is confirmed by the recent difficulties being faced by individual credit institutions.

On 20 December 2002 the Federal Financial Supervisory Authority, or FFSA (Bundesanstalt für Finanzdienstleistungsaufsicht, BaFin), published a set of “Minimum requirements for the credit business of credit institutions”,<sup>1</sup> which define qualitative standards for organising credit business.

The new international capital adequacy requirements (Basel II), which will probably enter into effect at the end of 2006, likewise contain qualitative rules for the credit business of those institutions which use internal rating methods for measuring credit risk. The “Minimum requirements” and the lending rules under Basel II are largely congruent with one another.

Both sets of rules are ultimately designed to contribute to the soundness of credit institutions and thus also to promoting the functional ability and the stability of the German banking system.

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<sup>1</sup> In German: *Mindestanforderungen an das Kreditgeschäft der Kreditinstitute*, or *MaK*; hereinafter referred to as “Minimum requirements”.

## Scope of application and main features of the “Minimum requirements”

### Regulatory motives

The “Minimum requirements” represent a step towards qualitative banking supervision since supervisors are now paying greater attention to credit risk management besides other factors such as the institutions’ capital base and their compliance with the rules governing the disclosure of the borrower’s financial situation, rules governing loans to managers and the like, and large exposure limits. In this regard the “Minimum requirements” complement the “Minimum requirements for the trading activities of credit institutions”<sup>2</sup> which were published back in October 1995 and the “Minimum requirements for the internal audit function of credit institutions”<sup>3</sup> published in January 2000.

The “Minimum requirements” mirror the best practices of well-managed credit institutions regarding the organisation of credit business. A key aim was to create a set of practical minimum requirements that are also compatible with the limited resources available to smaller banks.

### Entry into force and transitional arrangements

The new “Minimum requirements” entered into force with the publication of circular 34/2002 (BA). At the same time, credit institutions have been given until 30 June 2004 to implement these requirements (first stage of implementation). Necessary adjustments in the IT area have to be implemented in a second step by 31 December 2005.

With its circular on the “Minimum requirements”, the FFSA has given concrete shape in

respect of credit business to the provisions of section 25a (1) of the Banking Act, according to which credit institutions are subject to special requirements regarding a proper business organisation, risk controlling and the monitoring of their banking business.

The “Minimum requirements” apply to all credit institutions in Germany, including branches located abroad. They do not apply to branches of enterprises domiciled in another country of the European Economic Area pursuant to section 53b of the Banking Act. In principle, all exposures within the meaning of section 19 (1) of the Banking Act (asset items and off-balance-sheet transactions entailing a counterparty risk) and all transactions with country risk fall within the scope of application of this circular. The requirements of this circular apply by analogy to trading activities, in accordance with the “Minimum requirements for the trading activities of credit institutions”, as well as to participating interests. By selecting the extended credit definition of section 19 (1), the “Minimum requirements” are consistent with the definition of credit risk usually applied internationally for regulatory purposes.

Banking supervisors place special emphasis on creating a proper credit risk environment within which credit business activities can develop. Credit institutions are therefore required to impose their own framework conditions for ensuring a proper and suitable or-

*Legal basis and  
scope of appli-  
cation of the  
“Minimum  
requirements”*

*Framework  
conditions for  
credit business*

<sup>2</sup> In German: *Mindestanforderungen an das Betreiben von Handelsgeschäften der Kreditinstitute*, or *MaH*.

<sup>3</sup> In German: *Mindestanforderungen an die Ausgestaltung der Internen Revision der Kreditinstitute*, or *MaIR*.

ganisation of credit business and for creating procedures to identify, manage and monitor credit risk as well as to implement them internally. The framework conditions are to be defined for each specific institution and should take account of each institution's individual situation such as size, complexity, the focus of its operations and its ability to sustain risk.

One example of such framework conditions is the formulation of a credit risk strategy which defines lending activities over an adequate planning period. This strategy should be formulated taking into account the institution's ability to bear risk, an analysis of the business policy status quo and an estimate of the risks associated with the credit business. Internal organisational guidelines are another part of this framework. The "Minimum requirements" list areas which expressly need to be regulated by the institution, such as

- the allocation of tasks, the assignment of competencies and monitoring;
- the procedure for the timely risk assessment of the exposures, also in respect of any risk provisioning measures that might be necessary;
- risk classification procedures for assessing counterparty risk and, as appropriate, object/project risk;
- procedures for the early identification, management and monitoring of risks arising from credit business; and

### Scope of application of the Minimum requirements for the credit business of credit institutions

#### Credit institutions

- within the meaning of section 1 (1) of the Banking Act (including branches of German credit institutions domiciled abroad)
- within the meaning of section 53 (1) of the Banking Act

#### Exposures

- within the meaning of section 19 (1) of the Banking Act (asset items and off-balance-sheet transactions entailing a counterparty risk)
- all transactions with country risk

#### Credit decisions:

##### All decisions on

- new loans
- overdrafts
- loan increases
- extensions
- changes in risk-relevant circumstances on which the lending decision was based
- definition of borrower-specific limits (including counterparty and issuer-related limits)
- participating interests

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- a procedure for the introduction of new types of products and the commencement of business activities on new markets.

The framework conditions have to be reviewed annually and amended as appropriate; they have to be documented logically and communicated within the credit institution.

By emphasising the overall responsibility of management, the "Minimum requirements" make it clear that, despite the division of managerial responsibilities prevalent in today's business world, all managers, regardless of the internal assignment of competencies, are collectively responsible for ensuring the orderly organisation of credit business and the proper management and monitoring

*Overall  
responsibility of  
management*

of risks. Here the "Minimum requirements" pick up where the "Minimum requirements for the trading activities of credit institutions" and the "Minimum requirements for the internal audit function of credit institutions" left off.

*Staff  
qualifications*

The requirements concerning sufficient qualification of the staff who perform credit business relate not only to the staff active in lending decisions but to all staff involved in the various processes of the credit business chain. Adequate professional qualifications of the persons incurring, managing and monitoring the risks are of key importance. These requirements should be met by the careful selection of staff and by means of employee training measures.

*Separation of  
functions*

The rules governing the separation of functions in credit business are a core element of the "Minimum requirements". The key principle for organising the processes in credit business is the clear separation of the "front office" and "back office" functions, with the former defined as the area which initiates transactions. The separation of the two functions is to be observed all the way up to and including management level and also at deputy level (for exceptions see the section "Simplified rules" below).

The credit risk controlling function, which is responsible for independently monitoring portfolio risks and filing reports, is to be exercised by a unit not affiliated with the front office. The same applies to the units responsible for the development and quality of credit business processes and for the development,

quality and monitoring of the implementation of risk classification procedures.

The involvement in the credit decision of a unit independent of the initiators of the transaction is a key element of the rules governing the separation of functions. The establishment of a credit risk controlling unit not affiliated with the front office is designed to increase the transparency of credit decisions and their effects and thereby to eliminate weaknesses in the identification of credit risk and in credit risk management which in some cases still exist.

Another key requirement, in keeping with the separation of the front office and back office functions, is that each credit decision necessitates a vote by a unit independent of the front office as well as by the front office. The vote of the back office is the deciding factor. This should also be reflected in the assignment of competencies and, in the case of a split vote, the subsequent escalation procedure (referral of the decision to the next higher level). The thinking behind the introduction of a two-vote rule was again to enhance the transparency of the credit transaction processes.

*Votes in a  
lending  
decision*

A different situation applies where one manager of an institution takes a credit decision within the defined scope of his individual decision-making authority. In that case the votes of the front office and back office may deviate from the manager's credit decision. These decisions, however, should be made transparent in the risk report.



*Simplified rules  
for low-risk  
business*

For lending decisions relating to certain types of business or for lending transactions below certain thresholds which are to be defined under risk aspects (low-risk transactions), management may decide that only one vote is necessary. To that extent the organisational separation between front office and back office is only relevant to credit transactions in which the risk involved makes two votes necessary.

*Risk classifica-  
tion procedures  
and early  
warning  
procedures*

Banks need to develop internal procedures for classifying their credit positions by riskiness. It is up to the banks to determine the precise design of their risk classification procedures. Meaningful and logical risk classification procedures for the initial, regular or ad hoc assessment of counterparty risk and, as appropriate, object/project risk must be established.

In addition, credit institutions have to set up early warning procedures which detect any deterioration in a borrower's creditworthiness at an early stage and enable the credit institution to take timely suitable measures to deal with the exposures in question. Such early warning procedures might include, for instance, the ongoing monitoring of current accounts. If, for example, a borrower's incoming payments deviate sharply from the usual chronological pattern, this would be an early warning indicator. Early warning procedures and risk classification procedures may be integrated in an overall risk system.

*Identifying,  
managing and  
monitoring  
credit risk*

On the basis of the risk classification procedure, banks need to implement procedures to identify, manage and monitor credit risk. As

part of the requested procedures, the "Minimum requirements" additionally prescribe a regular (at least quarterly) risk report. Management must then forward the report to the supervisory board. Regulators attach great importance to this report because, without a meaningful internal reporting procedure, management cannot assume its overall responsibility for the institution, especially for assessing the risk situation. The risk report should *inter alia* comment on the development of the loan portfolio, the volume and trend of new business, the development of risk provisioning or important credit decisions which deviate from the credit risk strategy.

#### **Minimum requirements for internal rating systems under Basel II**

The new Basel Capital Accord introduces qualitative and quantitative minimum requirements for banks' internal rating systems where these are required for measuring regulatory capital. Two internal ratings-based approaches (IRB approaches) exist, each of which requires approval. In addition, there is a regulatory Basel standardised approach for measuring the necessary regulatory capital for those credit institutions which do not use internal rating systems or whose internal rating systems have not been approved by regulators.

If the IRB approaches are used, the probability of default (PD), loss given default (LGD) and exposure at default (EAD), as well as the maturity, are estimated for every loan on the basis of the ratings. The regulatory capital re-

*Internal rating  
methods  
recognised by  
regulators*

### Credit risk measurement approaches under Basel II

Method	Revised standardised approach	Foundation IRB approach	Advanced IRB approach
Rating	external	internal	internal
PD estimate <sup>1</sup>	none	own estimate	own estimate
EAD estimate <sup>2</sup>	none	defined by the supervisor	own estimate
LGD estimate <sup>3</sup>	none	defined by the supervisor	own estimate
Maturity	not recognised	not explicitly recognised	defined by the supervisor
Application of risk-mitigating techniques for collateral and product characteristics	defined by the supervisor	defined by the supervisor (via LGD and EAD)	own estimate (via LGD and EAD)

<sup>1</sup> PD: Probability of Default. — <sup>2</sup> EAD: Exposure at Default. — <sup>3</sup> LGD: Loss Given Default.

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quirement is calculated from these risk parameters and on the basis of a regulatory risk weighting function. The above table illustrates the evolutionary character of the new Basel approaches to measuring credit risk.

To be approved by regulators, internal rating systems need to meet the following basic criteria. These criteria, like the "Minimum requirements", are geared closely to current best practices for rating systems in the banking industry.

The goal of internal rating systems is to achieve a meaningful differentiation of risks within the institution's loan portfolio. Internal rating systems should also provide clues regarding major risk drivers. Internal rating systems must therefore analyse, in two separate

dimensions, borrowers' creditworthiness and any collateral (two-dimensional rating system). In addition, internal rating systems should contain at least seven rating classes for non-defaulted loans and at least one rating class for defaulted borrowers. Rating systems should assess all important credit risks, but specific risk factors are not prescribed in detail. This therefore gives credit institutions extensive methodological leeway.

The rating process should ensure the objectivity and independence of the processes of assigning credit ratings and monitoring the rating system. In practice, this can be achieved either by assigning the rating process to a unit independent of the initiators of transactions, or by fully automated and objective rating systems which leave the customer ac-

*Rating process*

*Structure of rating systems*

count staff no discretion to influence the rating result. The rating classification prescribed by the system can be changed at any time; however, changes must always be documented.

For methodological reasons it is additionally necessary for every borrower in an IRB portfolio to have a rating, and thus a PD, which is needed to calculate the required amount of regulatory capital. A further key requirement is that all borrowers be re-rated at least once a year to capture the current risk situation.

*Corporate  
governance*

The corporate governance rules encompass *inter alia* management's overall responsibility for the adequacy of rating systems and their correct use in internal borrower evaluation and risk management. Banks are also required to allow internal and external auditors to regularly audit the quality of rating systems and the adequacy of their use.

*Banks' internal  
use of rating  
systems*

If a bank has its own ratings, they must form an integral part of its internal management. Examples range from ratings-based lending decisions, assignments of competencies, limit systems and risk provisioning measures to credit risk-dependent remuneration systems. Rating systems conceived merely for regulatory purposes which are not simultaneously being used for internal risk management will not be approved.

The internal use of ratings is of key importance from a regulatory perspective. For one thing, it helps to improve internal risk management, thus promoting the stability of the banking industry. For another, credit institu-

tions, by using these ratings in their lending decisions, have a vested interest in the rating assessments being adequate and in the attendant intensive internal monitoring. The internal use of ratings for credit risk management thus also contributes to ensuring the adequacy of PD, LGD and EAD as risk parameters.

To obtain a comprehensive picture of the risk situation in credit business, internal stress tests based on ratings must be performed. The idea is to use these stress tests to help banks better understand the impact of negative conjunctural influences on their loan portfolios and to take the relevant precautionary measures on that basis.

*Stress tests*

Banks are required to use the uniform regulatory definition of default shown in the box on page 52 for quantifying the risk parameters PD, LGD and EAD. The uniformity of the definition of default is intended to ensure the comparability of the internally measured risk parameters. This uniformity is significant both for regulatory and for competitive reasons.

*Risk  
quantification*

The forecast PD, LGD and EAD should, in addition, be calculated based on each bank's own internal loss history to ensure the adequacy of the risk parameters for that credit institution's specific portfolio and the rating system being used. If the bank's own loss history is not sufficient to estimate statistically

## Basel definition of default

A default is considered to have occurred with regard to a particular obligor when either or both of the two following events has taken place.

- The bank considers that the obligor is unlikely to pay its credit obligations to the banking group in full, without recourse by the bank to actions such as realising security (if held).
- The obligor is past due more than 90 days on any material credit obligation to the banking group. Overdrafts will be considered as being past due once the customer has breached an advised limit or been advised of a limit smaller than current outstandings.

The elements to be taken as indications of unlikelihood to pay include:

- The bank puts the credit obligation on non-accrued status.
- The bank makes a charge-off or account-specific provision resulting from a significant perceived decline in credit quality subsequent to the bank taking on the exposure.
- The bank sells the credit obligation at a material credit-related economic loss.
- The bank consents to a distressed restructuring of the credit obligation where this is likely to result in a diminished financial obligation caused by the material forgiveness, or postponement, of principal, interest or (where relevant) fees.
- The bank has filed for the obligor's bankruptcy or a similar order in respect of the obligor's credit obligation to the banking group.
- The obligor has sought or been placed in bankruptcy or similar protection where this would avoid or delay repayment of the credit obligation to the banking group.

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valid risk parameters,<sup>4</sup> external or pooled data may also be used.<sup>5</sup>

In order to allow the risk-mitigating effect of the financial and physical collateral recognised in the IRB foundation approach to be included in the calculation of the capital charge via regulatory LGD, banks must demonstrate that the collateral they have collected is of lasting value (eg by producing expert opinions to that effect). In addition, the bank's internal collateral management system must ensure the legal enforceability and a regular realistic valuation of the collateral.

*Recognition of eligible collateral by regulators*

Credit institutions which wish to use one of the IRB approaches must review the adequacy of their rating systems and risk parameters at least once a year. The banks will test the ability of rating systems to discriminate between high-quality and low-quality borrowers – if only out of self-interest. From a regulatory perspective, however, the absolute level of PD, LGD and EAD is even more important since they determine the amount of regulatory capital.

*Validation of rating systems*

Only one empirical default rate can be calculated per rating class per year – as the quo-

<sup>4</sup> This may be the case, for instance, if no defaults exist in the very good rating classes or even in entire portfolios, or if smaller banks generally do not have enough defaults per year and rating class for statistical analyses.

<sup>5</sup> In this connection, pooled data refer to the estimation of PD by pooling the loss histories of several credit institutions which use comparable internal rating systems. The internal data form at least part of the data pool used for the estimates. By contrast, external data denote a default data pool containing no data from the credit institution whatsoever. A textbook example of the latter is the mapping of internal ratings to the rating scales of external rating agencies such as Standard & Poor's or Moody's and the use of their default rates.

tient of the number of borrowers defaulting in the year in question divided by all borrowers in the rating class. Statistical tests which compare the forecast PDs to the actually observed annual default rates will probably have only limited informative value owing to the short empirical time series. Notwithstanding this, the Basel Committee is still working on the development of further prudential validation methods. However, even under the already proposed rules banks should still review their forecast PDs using annual default rates and adjust their forecasts for the future as appropriate.

*Disclosure  
of rating  
information*

Under Basel II, credit institutions seeking to qualify for one of the IRB approaches must disclose aggregated risk information (eg forecast and actual PD, LGD and EAD per rating class) in their annual accounts. These data can be used by market participants to obtain a clearer picture of the institutions' risk structure. However, information which would make it possible to infer information about individual borrowers and would therefore be problematic in terms of data protection may not be published.

#### **The prudential character of the "Minimum requirements" and the IRB approaches under Basel II**

The implementation of both the "Minimum requirements" and Basel II will improve credit institutions' credit risk management. Nevertheless, the "Minimum requirements" and the IRB approaches are fundamentally different in terms of their prudential character.

Whereas the "Minimum requirements" prescribe qualitative minimum requirements for the credit business of all credit institutions, the qualitative and quantitative minimum requirements of the IRB approaches are mandatory only for those institutions which have chosen to apply IRB approaches. The IRB approaches represent a further-reaching complement to a selected aspect of the "Minimum requirements" – the risk classification procedure.

For a bank to be able to use one of the two IRB approaches to calculate its regulatory capital, it has to submit an application for supervisory review followed by an explicit approval by supervisors. In contrast, the "Minimum requirements", as best practices, are regularly monitored at all credit institutions in the course of ongoing banking supervision. The relationship between the "Minimum requirements" and the IRB approaches is in many respects similar to the relationship between the "Minimum requirements for the trading activities of credit institutions" and banks' internal models for calculating the capital charge for market risk in line with the Basel Market Risk Paper of 1997. Both the "Minimum requirements for the trading activities of credit institutions" and the "Minimum requirements for the credit business of credit institutions" provide the necessary organisational basis for the correct use of internal models and procedures.

The monitoring of the "Minimum requirements for the trading activities of credit institutions" and the "Minimum requirements for the credit business of credit institutions", as

*Parallels to  
trading book  
regulations*

*Supervisory  
Review Process  
(SRP)*

### Regulatory character of general minimum requirements and of minimum requirements for internal models

Regulatory requirements	Market risk	Credit risk	Scope of application
General qualitative process and organisational requirements	Minimum requirements for the trading activities of credit institutions	Minimum requirements for the credit business of credit institutions	To be observed by all credit institutions  Audited as part of the Supervisory Review Process (SRP)
Specific requirements for internal risk quantification models	Internal Value-at-Risk models for calculating market risk pursuant to Principle I	Internal rating systems for calculating credit risk pursuant to Basel II	Only upon application by the credit institution  Only after supervisory examination and approval as part of the SRP  Only for the calculation of regulatory capital

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well as the audits of internal market risk models and rating systems, will all merge into the Supervisory Review Process (SRP) from the end of 2006. However, the initial review of a market risk model or an internal rating system within the SRP will continue to be tantamount to an eligibility test, a test that is conducted only at the request of the credit institution.

*Granting or refusal of supervisory approval*

The standardised approach is to be applied until approval to use internal rating systems for determining regulatory capital is granted or if approval is refused. This means that parallels between the respective standardised approaches for market and credit risk, on the one hand, and alternative internal methods, on the other, can also be seen in respect of the supervisory procedure.

### Common features shared by the "Minimum requirements" and IRB approaches

The "Minimum requirements" concentrate on principles of the functional and organisational structure and the shaping of credit business processes. The IRB approaches of Basel II, by contrast, exclusively address the issue of risk quantification and the attendant calculation of regulatory capital. They thus focus primarily on a specific sub-sector of the "Minimum requirements" – the risk classification procedure.

However, some aspects of the "Minimum requirements" play a role in ensuring that ratings obtained using IRB approaches are correct. Certain general minimum requirements

*The "Minimum requirements" as a "side condition" of the IRB approaches*

## Standardised approaches versus internal models

Method	Market risk	Credit risk	Scope of application
Standardised method of risk measurement prescribed by the supervisor	Standardised method for calculating the capital requirements for market risk (interest rate risk, foreign exchange risk, stock market risk and commodity risk) pursuant to Principle I	Standardised method for calculating the capital requirements for credit risk pursuant to Basel II	To be observed by all credit institutions, in principle  Exemption where an internal method has been recognised
Individual methods of risk measurement developed internally	Internal Value-at-Risk models for calculating market risk	Internal rating systems for calculating credit risk	Use for calculating regulatory capital only after supervisory examination and approval

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may be interpreted as a "side condition" of the IRB approaches.

The separation of functions required by the "Minimum requirements" is rather similar to the independence of the rating assignment in the IRB approaches. Parallels similarly exist between the independent monitoring of rating systems under Basel II and the fact that responsibility for the development, quality and monitoring of the application of risk classification procedures is to be independent of the front office according to the "Minimum requirements".

There is a notable link between the Basel requirement that ratings be used for internal credit risk management and the provisions of the "Minimum requirements" with respect to

the identification and management of risk, the assignment of competencies, credit risk strategy, risk provisioning and the structure of the terms and conditions. All these provisions of the "Minimum requirements" should be based on the risk information provided by internal rating systems in the case of banks using IRB approaches.

The exemptions for low-risk credit business expressed in the "Minimum requirements" are contained in a different form in the IRB approaches. For retail banking, a typical example of low-risk business, banks are permitted to use rating methods which are simpler, standardised, more automated and thus more cost-effective. They are often called "scorings" or "score cards" in practice. It is nevertheless necessary to assess the risk

*Exemptions for low-risk credit business*

for the individual borrowers in a standardised manner since less risky business, too, needs to be backed by capital. For this, within the IRB approaches it is necessary to differentiate by risk and to estimate PD, LGD and EAD.

*Congruence  
between the  
"Minimum  
requirements"  
and Basel II*

General process, organisation and monitoring requirements, such as the overall responsibility of management, regular reviews by the internal audit function and external auditors, and requirements for staff qualifications are nearly identical in both sets of rules. In each case the rules require the responsible units to be familiar with the internally defined framework conditions and risk measurement methods, to be able to adequately implement and monitor them, and to have the necessary qualifications.

#### **Specific requirements for internal rating systems**

In the area of risk classification, the minimum requirements for IRB systems are far more extensive than those contained in the "Minimum requirements". Unlike the IRB approaches, the "Minimum requirements" do not require the quantification of risk by estimating PD and, as appropriate, LGD and EAD. There is neither a prudential definition of default nor a minimum number of rating classes. The risk classification procedure, which complies with the "Minimum requirements", does not have to be quantitatively validated, either.

*Basel II as a  
special case  
of risk  
classification*

An internal rating conforming to Basel II is to be considered a special case in respect of the risk classification procedures stipulated in the

"Minimum requirements"; all Basel II ratings will comply with the "Minimum requirements" in respect of risk classification procedures. The reverse does not apply, though; the "Minimum requirements" can be met using much simpler procedures than for ratings conforming to Basel II. The bar must be set higher for internal rating systems than for the "Minimum requirements" because the former apply only to selected banks which voluntarily choose to pursue one of the IRB approaches whereas the "Minimum requirements" apply to all banks.

However, for those banks which choose to use one of the IRB approaches, practical considerations make it appear wise to implement the risk classification procedures of the "Minimum requirements" in such a manner as to already meet the key Basel II requirements.

#### **"Minimum requirements" not directly related to Basel II**

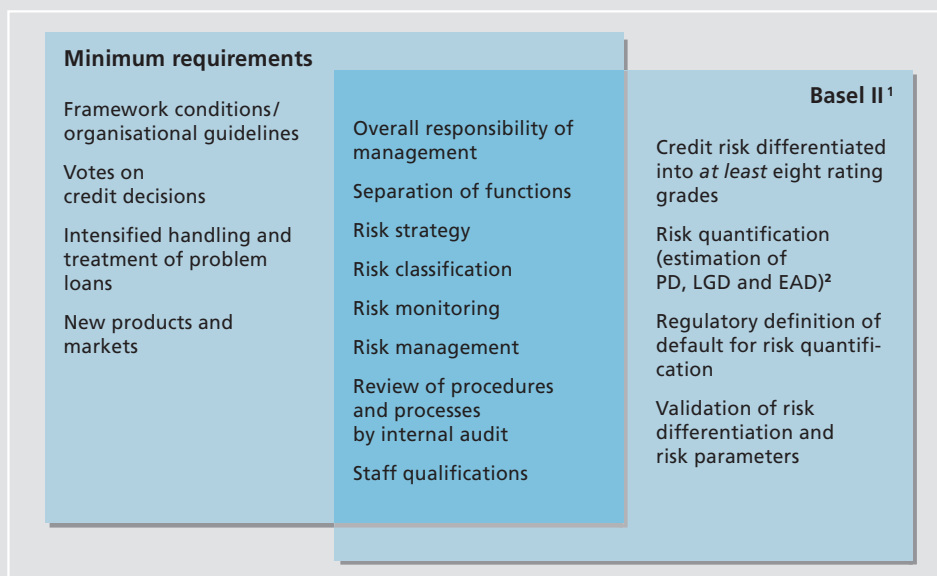
Unlike the "Minimum requirements", the new Basel Capital Accord does not primarily contain specific requirements for certain internal processes such as the following.

- Internal definition of the credit risk strategy and organisational guidelines for the conduct of credit business. Parts of the organisational guidelines refer to the allocation of tasks and the assignment of competencies, the structure of the processes and risk classification procedures and to the reporting procedure.

*Rules peculiar  
to the  
"Minimum  
requirements"*



A comparison between the “minimum requirements for the credit business of credit institutions” and Basel II



<sup>1</sup> Requirements for internal ratings under Basel II. — <sup>2</sup> PD: Probability of Default. EAD: Exposure at Default. LGD: Loss Given Default.

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- Voting, in the sense that credit decisions require separate votes of consent from the front office and back office.
- Rules governing the intensified handling of loans and problem loans, particularly those governing which loans are transferred to intensified handling and which are transferred to winding up or restructuring.
- The initiation of credit business in new types of products or on new markets, which must be based on the development of a strategy and, as appropriate, the subsequent conducting of a test phase.

These specific rules in the “Minimum requirements” are not essential for risk quantifica-

tion and the calculation of regulatory capital. In these areas the “Minimum requirements” exceed the minimum requirements for internal ratings (for an illustration of all interdependencies between the “Minimum requirements” and the IRB approaches see the chart on this page).

In addition, the “Minimum requirements” are more differentiated than the Basel standardised approach in the area of risk classification. The standardised approach does not require any classification of loans using a risk classification method; only externally rated loans need to be backed by capital in a differentiated manner commensurate with the external rating. Credit institutions using the standardised approach cannot, within the context of the “Minimum requirements”, rely solely

*“Minimum requirements” more differentiated than the Basel II standardised approach*

on determining a differentiated level of regulatory capital by means of external ratings. An internal risk classification method which

incorporates loans that are not rated externally is still necessary.

## Reports from the Economic Research Centre

On 5 and 6 December 2002 the Monetary Stability Foundation (*Stiftung "Geld und Wahrung"*) staged its first conference in collaboration with the Bundesbank and the Federal Ministry of Finance. The Foundation's aim is to promote basic research in the fields of economics and law with a view to securing monetary stability and stable financial systems. To this end research facilities affiliated to a university are to be set up. A total of €51 million is available for this purpose in the form of the Foundation's endowment capital, which was raised by the issue of a commemorative DM 1 gold coin from the Bundesbank's monetary reserves. The subject of the conference was "An institutional framework for monetary stability" (see also the conference programme on page 61). The choice of this subject was intended to underscore the importance of defining the right institutional framework. This has been demonstrated very clearly in recent years by economic theory, particularly in the field of monetary policy. Prominent representatives of international organisations, central banks, commercial banks, regulatory bodies and the academic world took part in the discussion.

## An institutional framework for monetary stability

*Monetary  
stability and  
stable financial  
systems as  
goals of  
economic  
policy*

The first session of the conference established the framework for the subsequent discussion. The defined objective was to answer the following questions. What do we mean by price stability and a stable financial system? Why are these goals important in an economy? How do these goals relate to one another? There is now a general consensus that monetary stability is a key basis for the welfare of a country or currency area. There was also broad agreement that an inflation rate of under 2% is compatible with monetary stability. Monetary stability relates to the overall price level, not to individual prices. Relative prices must be able to change if they are to fulfil their steering function. By contrast, economic theorists still find it hard to come up with a simple and concise definition for the stability of the financial system. It is clear, however, that stability should not be confused with rigidity. On the contrary, the ability to adjust to new circumstances is a key feature of any system that promises lasting stability. In this context the conference participants also considered the interrelationship between efficiency, competition and stability.

In recent years financial systems worldwide have been confronted with crises more than in the first few decades after the Second World War – despite the marked progress that has been made in combating inflation. Nevertheless, the dominant view at the conference was that safeguarding monetary stability is the best contribution that central banks can make to avoiding financial crises.

This is the most direct way in which monetary policy can help ensure transparency and efficiency in the financial system. This does not rule out short-term disruptions and exaggerations in the financial markets, however. In this context the participants also discussed to what extent central banks can integrate early warning systems into their strategies to detect such dangers. In particular, it was pointed out that the growth of monetary aggregates and bank lending may serve as an indicator of unhealthy developments. Financial market bubbles are often accompanied by a steep rise in bank liabilities and bank claims. This opens up an additional perspective which may also be of interest in the discussion on the first pillar of the ECB's monetary policy strategy.

After initially defining the goals in detail, the conference then addressed the question of what institutional framework is best suited to realising these aims. The debate focused at first on monetary stability. In this respect the precise formulation of central banking legislation is of key importance. Germany's positive experience of an independent central bank, which had a particularly successful track record in the field of stability policy, and the academic debate going back more than a decade jointly paved the way to today's situation in which central banks the world over enjoy greater autonomy than used to be the case. This went hand in hand with two other developments: the commitment of central banks to enhanced transparency and their greater public accountability.

*Central bank  
laws important  
for lastingly  
safeguarding  
price stability*

First conference of the Monetary Stability Foundation:  
An institutional framework for monetary stability \*

Programme of the conference held on 5 and 6 December 2002

Welcoming address by Ernst Welteke  
(Deutsche Bundesbank) and Hermann Remsperger  
(Deutsche Bundesbank and Chairman of the  
Foundation's Supervisory Board)

**Session I**

Chair: Hermann Remsperger  
(Deutsche Bundesbank and Chairman of  
the Foundation's Supervisory Board)

**Why stable prices and stable markets are important  
and how they fit together**

Stanley Fischer (Citigroup Inc)  
Otmar Issing (European Central Bank)  
Allan Meltzer (Carnegie Mellon University)

**Institutions for stable prices: How to design an  
optimal central bank law**

Jean-Victor Louis (University Paris I)  
William Poole (Federal Reserve Bank of St Louis)  
Nout Wellink (De Nederlandsche Bank)

**Session II**

Chair: Reiner König (Deutsche Bundesbank  
and Chairman of the Foundation's  
Executive Board)

**How relevant are institutional arrangements in  
labour markets and fiscal policy for a stability-  
oriented monetary policy?**

Alberto Alesina (Harvard University)  
Wolfgang Franz (Centre for European Economic  
Research, Mannheim)  
Pedro Solbes (European Commission)

**Which institutions and regulations for a stable  
financial system?**

Arnoud Boot (University of Amsterdam)  
Charles Goodhart (London School of Economics)  
Jochen Sanio (Federal Financial Supervisory  
Authority)

**Session III**

Chair: Wolfgang Bühler (University of Mannheim)

**Law, finance and stability**

Gerd Häusler (International Monetary Fund)  
Friedrich Kübler (Johann Wolfgang Goethe Univer-  
sity, Frankfurt and Clifford Chance Pünder)  
Colin Mayer (University of Oxford)

**Panel discussion**

**Institutions for stability:  
Current and past experience**

Facilitator: Axel Weber (University of Cologne)  
Alan Blinder (Princeton University)  
Andrew Crockett (Bank for International  
Settlements)  
Barry Eichengreen (University of California, Berkeley)

\* The conference proceedings can be viewed on the Founda-  
tion's website (<http://www.stiftung-geld-und-waehrung.de>)

or that of the Bundesbank (<http://www.bundesbank.de>).

Although it appears uncontested that the amendments to central bank statutes played an important role in the stability policy success of the recent past, speakers at the conference underscored that this was not an automatic process. Not least the history of the Federal Reserve System and the Deutsche Bundesbank clearly shows that public support, as well as skill and resilience on the part of the policy makers at the central banks, have been major factors in their success.

*The importance of the institutional setting on the labour markets ...*

Central bank laws define the available scope of monetary policy action in the narrower sense. But other institutional conditions, too, need to be examined. Two further areas were discussed during the conference, namely labour markets and fiscal policy. The relationship between monetary policy and the institutional setting on the labour markets appears complex. In the run-up to European monetary union, for example, some people speculated that the single monetary policy in Europe might change the way labour markets in the euro area are organised and function. On balance, however, such influences seem to have been very limited so far. On the other hand, labour market rigidities that often stem from institutional factors may increase the costs of a stability policy. In some cases this may lead to greater political pressure on central banks.

*... and in fiscal policy*

The discussion on the interrelationship between monetary and fiscal policy focused on the pros and cons of the European Stability and Growth Pact. EC Commissioner Pedro Solbes and Federal Finance Minister Hans Eichel stressed the Pact's importance for the smooth functioning of EMU. This does not

preclude improvements in the Pact's implementation. Mr Solbes specifically called for greater attention to be paid in future to ensuring that the principles of a responsible medium-term fiscal policy are also taken to heart during economic upswings. This demands greater fiscal policy restraint whenever the level of business activity is above average. Critics of the Pact, by contrast, cited two principal dangers. They argued, firstly, that the Pact prevents due account from being taken of the different requirements in the individual euro-area economies and, secondly, that it diverts attention from the real challenges that Europe's countries will face in the future. In particular, the Pact's critics claim, it is more urgent to lower the general government spending ratios than just to reduce the general government deficits.

Whereas price stability was at the centre of discussion during the first part of the conference, the focus later turned to the question of what precautionary measures are most conducive to minimising the danger of financial market crises. The intellectual challenges in this field now appear just as great as in the discussion on safeguarding price stability. Besides the difficulty of defining financial market stability, there is at the moment no generally agreed and closed model for determining what instruments and approaches are best suited to predicting or preventing crises. The ongoing development of the financial systems and the intensified competition which, though important for efficiency, can also pose risks to stability, are additional challenges which call for new approaches to prudential

*Unresolved issues concerning financial market stability*

supervision. Nonetheless, there is evidently agreement about some basic principles.

*Key importance  
of transparency*

For example, various speakers emphasised that transparency plays a key role in modern systems of financial market supervision by promoting responsibility and facilitating, for instance, functioning early warning systems. The concrete design of accounting standards could force firms inter alia to adopt a more open disclosure practice, which in turn would help to safeguard the stability of a given financial system. Most participants took the view that attempts to regulate the market directly are only of limited usefulness in a constantly changing world. This is often associated with a tendency towards harmonisation which fails to address the differing individual needs and hence may impair efficiency. These misgivings about overregulation were highlighted by examples from the financial system.

*Organisation of  
financial  
market  
supervision*

Another issue examined during the conference was how the supervision of financial systems can best be organised. The discussion focused on conditions in Europe. There was a broad consensus that even in a monetary union supervision should remain a national responsibility, although a close exchange of information is necessary between these national authorities. There was likewise a large measure of agreement that central banks should be integrated into the supervision of

financial systems; for a number of reasons central banks are especially suited to contributing to the stability of the overall system. In this context the German solution, under which the Federal Financial Supervisory Authority collaborates with the Bundesbank in the field of prudential supervision in an efficient and economical partnership, was also discussed extensively.

Finally, the conference also considered the best way of tackling international financial crises. Resolving this issue has acquired major significance given the huge growth in international capital flows of private-sector creditors. For example, the IMF has proposed a "Sovereign Debt Restructuring Mechanism". It was also pointed out, however, that all such approaches require broad support if they are to be successfully implemented.

*Approaches to  
solving  
international  
financial crises*

The conference showed that a number of questions remain unresolved, particularly in respect of creating an efficient and stable financial system. In other areas, such as gaining acceptance for the goal of monetary stability, a greater degree of unity and certainty prevails today. But in this field, too, it is already apparent that the future will bring new challenges. Against this background the new Foundation's objective of studying and promoting the conditions for stable prices and a sound financial system seems well chosen.





# Statistical Section

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## Abbreviations and symbols

---

- e estimated
- p provisional
- pe partly estimated
- r revised
- ... Data available at a later date
- . Data unknown, 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

### 1. Monetary developments and interest rates

Period	Money stock in various definitions 1 2				Determinants of the money stock 1			Interest rates			
	M1	M2	M 3 3		MFI lending, total	MFI lending to enterprises and individuals	Monetary capital formation 4	EONIA 5, 7	3-month EURIBOR 6, 7	Yield on European government bonds outstanding 8	
				3-month moving average (centred)							
	Change from previous year, in %							% p. a. as a monthly average			
2001 May	2.9	3.6	4.3	4.6	5.3	8.5	3.5	4.65	4.64	5.3	
June	4.0	4.3	5.5	5.1	5.7	8.4	3.4	4.54	4.45	5.2	
July	3.4	4.4	5.6	5.7	5.8	8.2	2.7	4.51	4.47	5.2	
Aug.	3.6	4.4	5.9	6.1	5.5	7.7	2.3	4.49	4.35	5.0	
Sep.	5.0	5.1	6.8	6.7	5.2	7.1	2.5	3.99	3.98	5.0	
Oct.	5.2	5.5	7.3	7.3	5.1	6.9	2.6	3.97	3.60	4.8	
Nov.	5.9	6.0	7.8	7.7	5.4	7.0	3.6	3.51	3.39	4.6	
Dec.	5.5	6.4	8.0	7.8	5.2	6.7	4.7	3.34	3.34	4.9	
2002 Jan.	6.6	6.7	7.8	7.7	5.2	6.2	4.8	3.29	3.34	5.0	
Feb.	6.2	6.3	7.4	7.5	5.1	6.0	4.8	3.28	3.36	5.1	
Mar.	6.0	6.3	7.2	7.3	4.8	5.4	4.7	3.26	3.39	5.3	
Apr.	6.6	6.3	7.3	7.4	4.4	5.1	4.6	3.32	3.41	5.3	
May	6.7	6.7	7.6	7.3	4.5	5.3	5.2	3.31	3.47	5.3	
June	6.8	6.4	7.1	7.3	4.4	5.3	4.3	3.35	3.46	5.2	
July	7.6	6.5	7.1	7.1	4.0	4.8	4.9	3.30	3.41	5.0	
Aug.	7.6	6.4	7.0	7.1	4.2	5.1	5.2	3.29	3.35	4.7	
Sep.	8.2	6.6	7.3	7.1	4.3	5.0	5.1	3.32	3.31	4.5	
Oct.	8.2	6.8	7.0	7.1	4.3	4.9	4.9	3.30	3.26	4.6	
Nov.	9.1	6.9	7.1	...	4.0	4.6	5.0	3.30	3.12	4.6	
Dec.	...	...	...	...	...	...	...	3.09	2.94	4.4	

1 Source: ECB. — 2 Seasonally adjusted. — 3 Excluding holdings of money market fund shares/units by non-residents of the euro area. — 4 Longer-term liabilities to euro area non-MFIs. — 5 Euro OverNight Index

Average. — 6 Euro InterBank Offered Rate. — 7 See also footnotes to table VI.5., p. 44\*. — 8 GDP-weighted yield on ten-year government bonds; from 2001 Euro12.

### 2. Foreign trade and payments \*

Period	Selected items of the EMU balance of payments							Euro exchange rates 1		
	Current account		Capital account			Monetary reserves	Dollar rate	Effective exchange rate 3		
	Balance	of which: Trade balance	Balance	Direct investment	Securities transactions 2			Credit transactions	nominal	real 4
	€ million							Euro/US-\$	1st q 1999=100	
2001 May	- 4,581	+ 4,160	- 3,060	- 46,522	+ 31,473	+ 15,569	- 3,581	0.8742	85.9	87.6
June	- 3,008	+ 7,994	- 6,072	- 6,037	+ 26,021	- 25,208	- 849	0.8532	84.7	86.3
July	- 790	+ 10,548	- 25,607	- 2,803	- 4,527	- 18,313	+ 36	0.8607	85.4	87.1
Aug.	+ 5,257	+ 7,428	- 6,123	- 5,910	+ 204	- 4,485	+ 4,068	0.9005	87.7	89.3
Sep.	+ 743	+ 6,019	- 21,326	- 15,612	+ 46,607	- 50,706	- 1,615	0.9111	88.0	89.7
Oct.	+ 4,122	+ 11,397	- 22,033	+ 4,005	- 1,535	- 21,843	- 2,661	0.9059	88.0	90.0
Nov.	+ 2,668	+ 8,846	- 6,834	+ 11,690	+ 17,096	- 35,681	+ 60	0.8883	86.8	88.8
Dec.	+ 2,295	+ 10,439	- 3,197	+ 831	- 17,117	+ 7,232	+ 5,856	0.8924	87.7	89.9
2002 Jan.	- 94	+ 3,109	- 49,540	+ 9	- 38,477	- 5,759	- 5,313	0.8833	87.6	90.3
Feb.	+ 4,399	+ 9,999	+ 6,741	- 8,915	- 11,195	+ 24,396	+ 2,455	0.8700	86.8	89.4
Mar.	+ 7,444	+ 13,222	+ 16,327	- 6,091	- 569	+ 23,192	- 205	0.8758	86.8	89.6
Apr.	- 4,550	+ 8,355	+ 16,794	+ 8,027	+ 19,279	- 18,882	+ 8,369	0.8858	87.2	90.1
May	+ 2,368	+ 10,708	+ 2,126	+ 3,748	+ 29,888	- 33,329	+ 1,818	0.9170	88.6	91.5
June	+ 7,335	+ 13,647	- 41,261	- 16,147	+ 15,168	- 36,836	- 3,446	0.9554	90.6	93.6
July	+ 2,587	+ 14,178	- 11,188	- 3,617	+ 7,230	- 12,273	- 2,528	0.9922	91.7	94.7
Aug.	+ 9,720	+ 11,691	- 11,763	+ 1,694	+ 2,546	- 17,784	+ 1,780	0.9778	91.1	94.0
Sep.	+ 8,019	+ 11,290	- 20,287	- 3,417	+ 16,709	- 29,814	- 3,765	0.9808	91.2	94.2
Oct.	+ 3,718	+ 11,698	- 21,469	- 5,019	+ 19,391	- 37,977	+ 2,136	0.9811	91.7	94.8
Nov.	...	...	...	...	...	...	...	1.0014	92.5	95.5
Dec.	...	...	...	...	...	...	...	1.0183	93.6	96.6

\* Source: ECB. — 1 See also tables X.12 and 13, p. 74–75. — 2 Including financial derivatives. — 3 Vis-a-vis a narrow group of countries. — 4 Based on consumer prices.

I. Key economic data for European monetary union

3. General economic indicators

Period	Belgium	Germany	Finland	France	Greece	Ireland	Italy	Luxembourg	Netherlands	Austria	Portugal	Spain	EMU 6
<b>Real gross domestic product <sup>1</sup></b>													
1999	3.2	2.0	4.1	3.2	3.6	11.1	1.6	6.0	4.0	2.7	3.8	4.2	2.8
2000	3.7	2.9	6.1	3.8	4.2	10.0	2.9	8.9	3.3	3.5	3.7	4.2	3.5
2001	0.8	0.6	0.7	1.8	4.1	5.7	1.8	1.0	1.3	0.7	1.6	2.7	1.4
2001 2nd qtr	1.3	0.6	0.4	2.0	4.0	6.7	2.3		1.7	0.5	3.0	2.0	1.6
3rd qtr	0.8	0.4	0.1	1.9	3.5	4.3	1.9		1.1	0.3	1.0	2.5	1.3
4th qtr	- 0.5	- 0.1	- 1.1	0.7	3.7	1.1	0.4		0.6	- 0.4	0.7	2.6	0.5
2002 1st qtr	- 0.5	- 1.2	- 1.5	0.3	4.3	4.4	- 0.2		- 0.1	0.4	1.2	1.9	- 0.2
2nd qtr	0.5	0.4	3.1	1.0	4.0	6.5	0.1		0.0	1.0	0.9	2.1	0.7
3rd qtr	...	0.9	2.3	1.4	3.6	...	0.3		0.3	0.9	...	1.7	1.0
<b>Industrial production <sup>1, 2</sup></b>													
1999	0.9	1.5	5.5	2.0	3.9	14.8	- 0.1	11.5	1.3	6.0	3.0	2.6	1.9
2000	5.3	6.2	11.2	3.5	0.5	15.4	4.8	4.3	4.0	8.9	- 1.9	4.0	5.5
2001	- 1.0	0.5	- 1.0	0.9	1.4	10.2	- 1.2	1.8	1.4	0.8	3.1	- 1.1	0.4
2001 2nd qtr	- 1.0	1.4	- 2.2	1.7	0.5	12.4	- 0.8	0.2	2.5	0.0	5.1	- 1.3	1.1
3rd qtr	- 0.9	- 1.1	- 3.3	2.4	2.5	3.6	- 1.3	2.5	1.2	0.2	0.8	- 0.4	- 0.2
4th qtr	- 5.2	- 3.7	- 4.7	- 2.1	0.1	- 2.6	- 5.6	1.3	- 1.5	- 2.4	1.8	- 2.0	- 3.6
2002 1st qtr	- 0.8	- 4.0	...	- 2.2	- 1.1	3.0	- 3.4	- 2.7	- 2.9	- 2.1	- 1.6	- 3.9	- 2.7
2nd qtr	2.9	- 1.8	...	- 0.1	2.4	11.3	- 2.3	5.9	- 2.9	2.4	1.7	1.0	- 0.6
3rd qtr	2.9	- 0.4	...	- 1.3	- 1.2	10.6	- 2.9	- 0.5	- 1.4	0.3	0.2	1.4	- 0.6
<b>Capacity utilisation <sup>3</sup></b>													
2000	84.0	85.9	86.8	87.5	78.1	78.6	78.8	87.8	84.7	84.5	81.2	80.6	84.2
2001	82.3	85.1	85.7	87.4	77.6	78.4	78.9	88.7	84.6	83.1	81.7	79.6	83.6
2002	79.6	82.0	82.7	85.3	77.0	75.9	77.3	85.1	82.9	80.6	79.4	77.2	81.2
2001 3rd qtr	81.4	84.3	85.1	87.7	76.1	78.0	78.7	88.9	84.6	82.7	82.4	80.1	83.4
4th qtr	80.2	83.3	84.5	86.3	76.8	75.2	77.9	87.8	83.8	81.4	79.7	78.3	82.2
2002 1st qtr	79.2	82.4	82.0	85.5	75.4	77.5	76.9	86.9	83.5	80.9	77.9	76.3	81.1
2nd qtr	79.6	81.5	82.7	85.8	76.7	76.3	77.3	84.3	82.9	80.6	79.4	77.0	81.2
3rd qtr	80.1	82.0	83.0	85.3	79.0	72.8	76.9	83.8	82.5	80.5	79.1	76.3	81.0
4th qtr	79.6	82.1	83.1	84.7	76.8	76.9	78.0	85.3	82.8	80.4	81.2	79.3	81.5
<b>Unemployment rate <sup>4</sup></b>													
2000	6.9	7.8	9.8	9.3	11.1	4.3	10.4	2.3	2.9	3.7	4.1	11.3	8.5
2001	6.7	7.7	9.1	8.5	10.5	3.9	9.4	2.0	2.5	3.6	4.1	10.6	8.0
2002	7.3	8.2	...	...	...	4.4	...	...	...	4.1	...	11.4	...
2002 June	7.3	8.3	9.3	8.7	...	4.4	9.0	2.3	2.8	4.1	4.5	11.3	8.3
July	7.4	8.3	9.2	8.8	...	4.4	9.0	2.4	2.8	4.1	4.6	11.4	8.3
Aug.	7.3	8.3	9.2	8.8	...	4.4	9.0	2.5	2.8	4.1	4.7	11.5	8.3
Sep.	7.3	8.3	9.1	8.8	...	4.4	9.0	2.5	2.8	4.2	4.8	11.6	8.3
Oct.	7.4	8.4	9.0	8.8	...	4.4	8.9	2.5	2.9	4.1	5.0	11.8	8.4
Nov.	7.5	8.4	8.9	8.8	...	4.4	...	2.6	...	4.1	5.1	11.9	8.4
Dec.	7.6	8.5	...	...	...	4.4	...	...	...	4.2	...	12.0	...
<b>Harmonised index of consumer prices <sup>1</sup></b>													
2000	2.7	2.1	3.0	1.8	2.9	5.3	2.6	3.8	2.3	2.0	2.8	3.5	2.3
2001	2.4	2.4	2.7	1.8	3.7	4.0	2.3	2.4	5.1	2.3	4.4	2.8	2.5
2002	1.6	1.3	2.0	1.9	3.9	...	2.6	2.1	3.9	...	3.7	3.6	...
2002 June	0.8	0.7	1.5	1.5	3.6	4.5	2.2	1.3	3.9	1.5	3.5	3.4	1.8
July	1.1	1.0	2.0	1.6	3.6	4.2	2.4	1.9	3.8	1.5	3.6	3.5	1.9
Aug.	1.3	1.0	1.8	1.8	3.8	4.5	2.6	2.0	3.8	2.1	3.9	3.7	2.1
Sep.	1.2	1.0	1.4	1.8	3.8	4.5	2.8	2.2	3.7	1.6	3.8	3.5	2.1
Oct.	1.3	1.3	1.7	1.9	3.9	4.4	2.8	2.5	3.6	1.7	4.1	4.0	2.3
Nov.	1.1	1.0	1.7	2.1	3.9	4.7	2.9	2.7	3.4	1.7	4.1	3.9	2.2
Dec.	1.3	1.1	1.7	2.2	3.5	...	3.0	2.8	3.5	...	4.0	4.0	...
<b>General government financial balance <sup>5</sup></b>													
1999	- 0.5	- 1.5	1.9	- 1.6	- 1.9	2.2	- 1.8	3.6	0.7	- 2.3	- 2.4	- 1.1	- 1.3
2000	0.1	1.1	7.0	- 1.3	- 1.8	4.4	- 0.5	5.6	2.2	- 1.5	- 2.9	- 0.6	0.2
2001	0.4	- 2.8	4.9	- 1.4	- 1.2	1.5	- 2.2	6.1	0.1	0.2	- 4.1	- 0.1	- 1.5
<b>General government debt <sup>5</sup></b>													
1999	114.9	61.2	46.8	58.5	105.1	49.7	114.5	6.0	63.1	64.9	54.4	63.1	71.9
2000	109.2	60.2	44.0	57.3	106.2	39.1	110.5	5.6	55.8	63.6	53.3	60.5	69.4
2001	107.6	59.5	43.4	57.3	107.0	36.4	109.8	5.6	52.8	63.2	55.5	57.1	69.2

Sources: National data, European Commission, Eurostat, European Central Bank. Latest data are partly based on press reports and are provisional. — 1 Annual percentage changes; GDP of Greece and Portugal is 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; 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, ESA95; including proceeds from sales of UMTS licenses in 2000 and 2001. — 6 Including Greece (Harmonised index of consumer prices, General government financial balance and General government debt only from 2001).

## II. Overall monetary survey in the European monetary union

### 1. The money stock and its counterparts\*)

Period	I. Lending to non-banks (non-MFIs) in the euro area					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	Deposits with an agreed maturity of over 2 years	Deposits at agreed notice of over 3 months	Debt securities with maturities of over 2 years (net) <sup>3</sup>	Capital and reserves <sup>4</sup>
	Total	Securities	Total	Securities	Securities								
<b>European monetary union (€ billion) <sup>1</sup></b>													
2001 Aug.	- 20.0	- 11.9	3.2	- 8.0	- 4.3	27.0	57.2	30.1	2.7	- 2.1	- 1.2	- 1.2	7.3
Sep.	42.2	45.5	- 2.0	- 3.3	- 4.3	31.2	49.1	18.0	26.4	0.8	- 0.9	17.5	9.0
Oct.	24.5	36.8	8.4	- 12.3	- 9.6	25.2	43.7	18.4	18.6	- 0.3	- 1.7	12.7	7.9
Nov.	72.5	48.6	- 1.1	23.8	7.9	27.5	66.0	38.5	18.9	- 1.6	- 1.1	18.7	2.9
Dec.	39.4	46.1	24.2	- 6.7	- 10.3	- 8.6	- 26.4	- 17.8	28.6	7.3	0.1	7.6	13.6
2002 Jan.	36.2	17.5	4.9	18.7	21.8	- 14.0	- 0.2	13.8	25.2	3.6	- 3.6	11.0	14.3
Feb.	28.8	24.9	8.7	3.9	1.2	- 10.5	0.3	10.7	9.1	1.6	- 1.0	9.3	- 0.8
Mar.	70.7	48.6	- 10.4	22.2	16.9	- 5.7	19.9	25.6	23.7	3.7	- 1.3	18.7	2.6
Apr.	26.2	44.7	3.0	- 18.5	1.5	- 2.6	18.0	20.6	- 6.2	- 0.2	- 1.9	1.0	- 5.1
May	39.1	32.2	3.9	6.9	9.7	38.9	73.9	35.0	25.8	3.5	- 1.2	19.7	3.8
June	32.5	32.4	- 6.9	0.1	- 1.3	40.7	- 26.8	- 67.4	- 5.5	3.3	- 0.2	8.6	- 17.1
July	- 18.8	- 15.0	- 12.2	- 3.8	- 2.0	- 1.6	- 2.4	- 0.7	19.8	1.3	- 0.0	8.8	9.8
Aug.	- 7.0	7.0	6.7	- 14.0	- 3.1	14.3	- 10.6	- 24.9	13.9	2.2	0.2	2.7	8.7
Sep.	57.3	43.1	5.6	14.2	11.0	23.7	68.4	44.8	24.4	1.0	0.4	12.8	10.1
Oct.	27.0	30.1	12.0	- 3.1	- 2.7	28.4	53.7	25.3	9.7	1.3	- 1.0	9.5	- 0.0
Nov.	40.2	24.7	6.7	15.4	6.4	35.9	84.9	49.0	22.7	4.0	- 0.5	15.8	3.5
<b>German contribution (€ billion) <sup>2</sup></b>													
2001 Aug.	- 5.2	- 1.3	- 3.1	- 3.9	- 3.4	7.7	33.1	- 25.4	5.8	- 0.2	- 1.3	2.7	4.6
Sep.	- 6.2	7.9	- 4.6	- 14.0	- 10.9	25.4	23.8	- 1.6	- 0.0	0.6	- 0.8	2.5	- 2.3
Oct.	- 0.2	4.6	3.3	- 4.8	- 6.0	9.6	7.6	- 2.0	2.4	- 0.8	- 1.8	1.6	3.4
Nov.	15.7	6.2	- 0.4	9.5	- 0.9	30.5	15.3	- 15.2	7.6	- 1.6	- 1.0	8.9	1.3
Dec.	18.9	22.1	10.8	- 3.1	4.2	19.1	- 18.0	- 37.1	- 0.8	1.4	0.1	- 4.7	2.5
2002 Jan.	- 7.3	- 8.7	1.5	1.3	1.0	- 21.5	- 5.2	16.3	2.8	1.9	- 3.6	2.7	1.9
Feb.	1.8	0.1	- 3.2	1.7	4.2	1.8	- 0.3	- 2.1	5.0	1.2	- 1.0	3.2	1.6
Mar.	- 1.0	- 2.4	- 9.5	1.4	3.0	7.6	10.6	3.0	13.3	3.5	- 1.1	10.1	0.9
Apr.	11.0	9.9	5.8	1.1	5.2	- 20.2	- 3.0	17.2	- 7.7	- 1.3	- 1.9	- 2.1	- 2.4
May	6.6	3.7	- 0.2	2.9	8.4	10.7	24.6	13.9	0.4	- 0.4	- 1.1	2.2	- 0.4
June	- 19.8	- 12.6	- 11.1	- 7.2	- 2.2	25.7	0.1	- 25.6	- 0.5	- 0.7	- 0.2	2.3	- 1.9
July	7.2	- 7.4	- 2.8	14.6	6.1	- 16.5	- 5.7	10.8	11.2	0.5	0.1	8.2	2.4
Aug.	- 1.7	5.8	6.4	- 7.5	2.2	11.0	6.4	- 4.5	8.9	- 0.2	0.1	5.2	3.7
Sep.	12.0	10.8	- 0.7	1.2	4.1	15.4	31.0	15.6	1.5	- 0.5	- 0.5	2.0	0.5
Oct.	4.6	5.8	7.4	- 1.2	- 4.6	17.8	11.6	- 6.1	0.1	1.9	- 0.8	- 0.3	- 0.7
Nov.	9.4	4.5	4.3	4.8	3.5	19.1	32.0	12.8	5.8	4.1	- 0.6	0.4	1.9
<b>German contribution (DM billion) <sup>2</sup></b>													
2001 Aug.	- 10.2	- 2.5	- 6.0	- 7.7	- 6.7	15.0	64.7	- 49.7	11.3	- 0.4	- 2.5	5.2	8.9
Sep.	- 12.0	15.4	- 8.9	- 27.4	- 21.4	49.6	46.5	- 3.1	- 0.1	1.1	- 1.5	4.8	- 4.5
Oct.	- 0.4	9.0	6.4	- 9.4	- 11.7	18.8	14.9	- 3.8	4.7	- 1.5	- 3.6	3.1	6.7
Nov.	30.7	12.2	- 0.7	18.6	- 1.7	59.7	29.9	- 29.8	14.9	- 3.1	- 1.9	17.3	2.6
Dec.	37.0	43.2	21.2	- 6.1	8.2	37.3	- 35.2	- 72.5	- 1.5	2.7	0.1	- 9.2	4.8
2002 Jan.	- 14.4	- 16.9	2.9	2.6	2.0	- 42.0	- 10.1	31.9	5.6	3.7	- 7.1	5.3	3.7
Feb.	3.5	0.2	- 6.3	3.3	8.3	3.5	- 0.6	- 4.1	9.8	2.4	- 2.0	6.3	3.1
Mar.	- 2.0	- 4.7	- 18.6	2.7	5.9	14.9	20.8	5.9	26.1	6.8	- 2.2	19.8	1.7
Apr.	21.4	19.3	11.4	2.2	10.3	- 39.5	- 5.8	33.7	- 15.0	- 2.5	- 3.8	- 4.1	- 4.6
May	13.0	7.2	- 0.4	5.8	16.3	21.0	48.1	27.1	0.7	- 0.7	- 2.2	4.3	- 0.7
June	- 38.7	- 24.7	- 21.6	- 14.0	- 4.3	50.2	0.1	- 50.1	- 1.0	- 1.4	- 0.4	4.5	- 3.7
July	14.0	- 14.5	- 5.5	28.5	11.9	- 32.3	- 11.2	21.1	21.9	1.1	0.1	16.0	4.7
Aug.	- 3.4	11.3	12.5	- 14.7	4.3	21.5	12.6	- 8.9	17.4	- 0.3	0.3	10.2	7.3
Sep.	23.5	21.1	- 1.4	2.4	8.0	30.1	60.6	30.5	3.0	- 1.0	- 0.9	3.9	1.0
Oct.	9.1	11.4	14.6	- 2.3	- 9.0	34.7	22.8	- 12.0	0.2	3.8	- 1.6	- 0.7	- 1.3
Nov.	18.3	8.9	8.5	9.5	6.9	37.4	62.5	25.1	11.4	8.1	- 1.2	0.8	3.7

\* 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 Excluding MFIs portfolios; for the German contribution: excluding German MFIs portfolios of securities issued by MFIs in the euro area. — 4 After deduction of inter-MFI participations. — 5 For the European monetary union: including the counterparts of monetary

liabilities of central governments. — 6 The German contributions to the Eurosystem's monetary aggregates should on no account be interpreted as national monetary aggregates, and are therefore not comparable to the erstwhile German money stocks M1, M2 or M3. — 7 In Germany, bank debt securities with maturities of up to one year are classed as money market paper; up to the January 2002 Monthly Report they were published in this table together with money market fund certificates. — 8 From 2002 euro currency in circulation plus outstanding national banknotes and coins. Excluding euro-area MFIs' cash in hand denominated in euro or in



II. Overall monetary survey in the European monetary union

IV. De- posits of central gov- ernments	V. Other factors		VI. Money stock M3 (balance I plus II less III less IV less V) 6,7,11											Period		
	Total 5	Intra- Eurosystem liability/ claim related to banknote issue 12	Total	Money Stock M2						Deposits with an agreed maturity of up to 2 years 9	Deposits at agreed notice of up to 3 months 9,10	Repo- trans- actions	Money market fund certificates (net) 3,11		Money market paper and debt securities with maturities of up to 2 years (net) 3,7,11	
				Total	Money Stock M1			Total	Currency in circu- lation 8							Overnight deposits 9
					Total	Total	Total									
<b>European Monetary union (€ billion) 1</b>																
- 3.3	2.2	-	5.4	- 15.4	- 39.7	- 8.8	- 30.9	18.4	5.9	7.5	10.5	- 2.8	2001 Aug.			
- 5.4	8.4	-	44.0	- 46.3	57.7	- 9.6	67.4	- 18.2	6.8	- 5.1	3.7	- 0.9	Sep.			
5.2	1.7	-	24.2	2.6	- 12.6	- 14.2	1.6	3.3	11.8	9.5	11.6	0.5	Oct.			
- 2.9	29.6	-	54.4	48.7	32.0	- 15.7	47.8	1.9	14.8	- 9.2	9.8	5.0	Nov.			
- 11.5	- 86.2	-	99.9	116.4	63.8	- 40.0	103.8	11.1	41.5	- 7.4	- 1.1	- 8.0	Dec.			
10.3	- 4.1	-	9.1	- 26.2	- 40.6	6.8	- 47.3	- 6.7	21.1	- 2.3	19.8	- 0.4	2002 Jan.			
6.3	1.8	-	1.2	- 10.7	- 10.8	- 6.2	- 4.6	- 4.0	4.1	4.9	10.8	- 3.9	Feb.			
1.1	1.1	-	39.1	27.2	11.5	14.0	- 2.6	12.3	3.4	8.4	3.2	0.3	Mar.			
0.5	- 13.8	-	43.1	39.8	40.2	7.4	32.8	5.4	- 5.8	- 1.5	8.0	- 3.3	Apr.			
- 8.6	12.5	-	48.2	27.5	14.3	12.2	2.1	10.9	2.3	6.7	4.0	10.0	May			
5.9	47.0	-	25.8	46.3	60.6	12.0	48.6	- 20.6	6.3	- 6.1	- 7.4	- 7.0	June			
- 2.9	- 24.5	-	- 12.8	- 15.9	- 22.9	11.0	- 33.8	4.2	2.8	- 0.7	12.7	- 8.9	July			
- 10.8	- 9.1	-	13.2	- 8.0	- 27.5	4.4	- 31.8	13.5	6.0	7.7	12.4	1.2	Aug.			
3.9	4.4	-	48.2	41.8	62.4	5.6	56.9	- 22.8	2.1	3.5	- 1.6	4.5	Sep.			
5.2	20.4	-	20.1	18.3	- 8.8	7.2	- 16.0	20.5	6.7	- 2.8	2.1	2.5	Oct.			
- 3.4	- 13.9	-	70.6	64.7	60.4	7.5	52.9	- 6.8	11.1	- 6.5	14.9	- 2.4	Nov.			
<b>German contribution (€ billion) 2</b>																
- 0.1	- 11.2	-	7.8	2.8	- 1.0	- 3.3	2.3	3.7	0.1	2.9	1.5	0.6	2001 Aug.			
- 2.9	6.9	-	15.3	14.4	14.5	- 4.6	19.1	- 1.2	1.0	- 1.7	1.5	1.1	Sep.			
- 1.6	4.1	-	4.5	0.4	- 3.3	- 6.0	2.6	0.9	2.8	6.5	1.6	- 4.1	Oct.			
1.1	18.8	-	18.7	19.3	20.3	- 7.5	27.8	- 3.8	2.8	- 5.3	1.1	3.7	Nov.			
- 7.4	27.1	-	19.2	13.2	- 9.5	- 24.4	14.9	6.3	16.5	0.9	1.9	3.2	Dec.			
1.0	- 6.3	11.6	- 26.4	- 25.7	- 18.0	13	- 4.1	- 13.8	- 10.2	2.4	- 2.4	2.0	2002 Jan.			
- 0.7	- 4.9	3.4	4.2	- 0.1	3.9	4.5	- 0.6	- 3.5	- 0.5	1.0	0.8	2.4	Feb.			
- 0.0	- 8.6	3.4	1.9	1.5	- 0.0	2.6	- 2.6	1.6	- 0.1	0.2	- 0.1	0.4	Mar.			
- 1.9	- 1.4	1.3	1.8	0.2	12.4	3.1	9.3	- 4.8	- 7.3	- 0.3	0.2	1.7	Apr.			
0.7	- 0.6	2.9	16.9	12.6	8.7	2.5	6.2	4.5	- 0.6	1.3	- 0.0	3.0	May			
0.5	- 5.1	1.0	11.0	15.7	16.4	3.3	13.1	0.3	- 1.0	- 0.6	- 0.3	3.7	June			
- 1.1	- 13.7	2.0	- 5.8	- 3.2	- 1.5	3.7	- 5.1	- 0.2	- 1.5	- 1.0	0.6	- 2.2	July			
1.3	- 4.3	3.2	3.3	- 0.4	- 4.3	0.9	- 5.2	3.7	0.1	1.2	1.2	1.4	Aug.			
1.0	10.7	2.2	14.2	8.4	16.5	1.6	14.9	- 9.0	1.0	6.4	0.1	- 0.8	Sep.			
- 1.6	8.5	2.0	15.5	11.7	2.7	1.5	1.2	6.8	2.2	- 1.0	0.7	4.1	Oct.			
- 0.6	- 6.1	1.5	29.5	32.1	34.3	2.5	31.8	- 5.6	3.3	- 3.2	- 0.2	0.8	Nov.			
<b>German contribution (DM billion) 2</b>																
- 0.2	- 21.9	-	15.3	5.4	- 1.9	- 6.4	4.5	7.2	0.1	5.7	2.9	1.3	2001 Aug.			
- 5.7	13.5	-	29.9	28.1	28.4	- 9.0	37.4	- 2.3	2.0	- 3.4	3.0	2.2	Sep.			
- 3.1	8.1	-	8.7	0.8	- 6.5	- 11.6	5.2	1.7	5.5	12.7	3.1	- 7.9	Oct.			
2.2	36.8	-	36.6	37.7	39.8	- 14.6	54.4	- 7.5	5.5	- 10.4	2.2	7.2	Nov.			
- 14.5	52.9	-	37.5	25.9	- 18.6	- 47.8	29.2	12.3	32.2	1.8	3.7	6.2	Dec.			
1.9	- 12.3	22.7	- 51.6	- 50.3	- 35.1	13	- 8.1	- 27.0	- 19.9	4.7	- 4.7	3.9	2002 Jan.			
- 1.3	- 9.7	6.6	8.1	- 0.2	7.5	8.8	- 1.2	- 6.8	- 0.9	1.9	1.6	4.8	Feb.			
- 0.1	- 16.8	6.6	3.8	2.9	- 0.1	5.0	- 5.1	3.1	- 0.1	0.3	- 0.3	0.9	Mar.			
- 3.7	- 2.8	2.5	3.5	0.4	24.2	6.1	18.1	- 9.4	- 14.4	- 0.6	0.3	3.3	Apr.			
1.4	- 1.2	5.6	33.1	24.6	16.9	4.8	12.1	8.8	- 1.2	2.6	- 0.0	5.9	May			
0.9	- 10.0	2.0	21.6	30.6	32.0	6.5	25.6	0.6	- 2.0	- 1.2	- 0.7	7.2	June			
- 2.1	- 26.8	4.0	- 11.3	- 6.3	- 2.9	7.2	- 10.1	- 0.4	- 2.9	- 2.0	1.2	- 4.3	July			
2.6	- 8.4	6.2	6.5	- 0.8	- 8.4	1.8	- 10.1	7.3	0.2	2.3	2.4	2.6	Aug.			
2.0	21.0	4.2	27.7	16.5	32.2	3.1	29.1	- 17.5	1.9	12.5	0.2	- 1.5	Sep.			
- 3.2	16.6	4.0	30.2	22.8	5.3	2.9	2.4	13.2	4.3	- 2.0	1.3	8.1	Oct.			
- 1.3	- 12.0	2.8	57.6	62.7	67.1	4.9	62.2	- 10.9	6.4	- 6.4	- 0.4	1.6	Nov.			

currencies of the euro area. From 2002 the German contribution contains the euro banknote volume put into circulation by the Bundesbank according to the accounting regime chosen by the Eurosystem (see footnote 4 on banknote circulation in Table III.2). The volume of currency actually put into circulation by the Bundesbank can be calculated by adding to this total the item "Intra-Eurosystem liability/claim related to banknote issue". — 9 For the European monetary union: including the monetary liabilities of central governments (Post Office, Treasury). — 10 In Germany, only savings

deposits. — 11 Paper held by residents outside the euro area has been eliminated. — 12 For the German contribution: the difference between the volume of euro banknotes actually issued by the Bundesbank and the amount disclosed according to the accounting regime chosen by the Eurosystem (see also footnote 4 on banknote circulation in Table III.2). — 13 Includes statistically non-eliminated decrease of €11.6 billion (DM22.7 billion) owing to the changed method of recording banknote circulation (see also footnotes 8 and 12).

## II. Overall monetary survey in the European monetary union

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

Period	Assets										
	Lending to non-banks (non-MFIs) in the euro area									Claims on non-euro-area residents	Other assets
	Total	Enterprises and individuals				Public authorities					
Advances		Debt securities <sup>3</sup>	Shares and other equities	Total	Advances	Debt securities <sup>4</sup>	Total				
Total assets or liabilities	Total	Advances	Debt securities <sup>3</sup>	Shares and other equities	Total	Advances	Debt securities <sup>4</sup>	Total	Claims on non-euro-area residents	Other assets	
<b>European monetary union (€ billion)<sup>1</sup></b>											
2001 Aug.	13,144.3	9,260.1	7,238.5	6,369.6	323.7	545.1	2,021.6	828.8	1,192.9	2,624.7	1,259.5
Sep.	13,318.6	9,309.1	7,284.1	6,421.9	327.4	534.7	2,025.0	829.8	1,195.2	2,697.8	1,311.7
Oct.	13,424.2	9,339.1	7,325.2	6,451.6	329.9	543.7	2,014.0	827.2	1,186.8	2,742.5	1,342.5
Nov.	13,574.5	9,413.9	7,379.6	6,501.9	333.1	544.6	2,034.3	843.3	1,191.0	2,827.6	1,333.0
Dec.	13,576.6	9,451.5	7,424.5	6,519.3	336.9	568.3	2,026.9	847.7	1,179.2	2,807.6	1,317.6
2002 Jan.	13,667.3	9,495.6	7,444.5	6,534.4	341.9	568.2	2,051.1	844.8	1,206.3	2,829.4	1,342.3
Feb.	13,657.3	9,520.7	7,465.5	6,548.7	349.9	566.8	2,055.2	847.5	1,207.7	2,833.0	1,303.5
Mar.	13,694.3	9,595.0	7,513.3	6,606.1	346.6	560.6	2,081.7	852.6	1,229.1	2,845.1	1,254.2
Apr.	13,680.1	9,612.6	7,551.0	6,641.2	342.9	566.9	2,061.7	832.4	1,229.2	2,826.3	1,241.2
May	13,711.5	9,645.1	7,573.7	6,659.7	345.0	569.0	2,071.4	829.2	1,242.3	2,845.7	1,220.7
June	13,642.2	9,667.2	7,598.1	6,691.1	343.0	563.9	2,069.1	830.1	1,239.0	2,731.1	1,243.9
July	13,679.7	9,653.0	7,587.1	6,692.6	345.3	549.2	2,065.9	828.5	1,237.4	2,756.5	1,270.3
Aug.	13,649.1	9,645.6	7,592.6	6,692.3	341.0	559.2	2,053.0	818.0	1,235.0	2,745.1	1,258.4
Sep.	13,817.8	9,702.6	7,628.9	6,728.4	349.2	551.3	2,073.7	821.1	1,252.6	2,816.1	1,299.0
Oct.	13,858.5	9,727.7	7,659.1	6,743.9	351.7	563.4	2,068.6	820.7	1,247.9	2,866.4	1,264.5
Nov.	14,009.1	9,765.1	7,681.6	6,755.8	355.2	570.5	2,083.5	829.5	1,254.0	2,940.0	1,304.0
<b>German contribution (€ billion)<sup>2</sup></b>											
2001 Aug.	4,298.5	3,293.6	2,566.3	2,256.4	62.8	247.0	727.3	498.1	229.3	780.0	224.9
Sep.	4,323.3	3,288.4	2,575.0	2,269.7	63.7	241.6	713.3	495.0	218.3	808.1	226.8
Oct.	4,334.4	3,288.4	2,579.9	2,271.3	64.4	244.2	708.6	496.2	212.4	818.3	227.6
Nov.	4,336.2	3,303.9	2,587.2	2,279.0	64.8	243.4	716.6	506.6	210.0	837.9	194.5
Dec.	4,328.2	3,321.6	2,608.3	2,289.4	66.0	252.9	713.3	499.3	213.9	821.2	185.4
2002 Jan.	4,321.4	3,315.2	2,600.6	2,280.2	66.9	253.4	714.6	499.7	215.0	820.0	186.2
Feb.	4,322.9	3,316.3	2,600.1	2,283.4	65.1	251.6	716.2	497.1	219.1	822.1	184.4
Mar.	4,334.0	3,315.0	2,597.6	2,290.4	67.2	240.1	717.4	495.4	221.9	829.6	189.3
Apr.	4,330.7	3,324.0	2,605.7	2,293.1	69.0	243.7	718.3	491.2	227.1	816.6	190.1
May	4,341.9	3,327.7	2,606.9	2,294.6	69.2	243.2	720.8	485.6	235.2	827.5	186.7
June	4,291.6	3,309.3	2,596.0	2,294.8	69.7	231.6	713.3	480.4	232.8	800.0	182.3
July	4,303.6	3,317.5	2,589.5	2,291.3	69.8	228.4	728.0	489.0	239.0	801.2	184.9
Aug.	4,307.0	3,315.3	2,594.9	2,289.8	67.1	238.0	720.4	479.8	240.6	810.2	181.5
Sep.	4,355.6	3,327.5	2,605.3	2,301.6	66.5	237.3	722.2	477.0	245.2	841.9	186.1
Oct.	4,370.5	3,332.3	2,611.3	2,299.8	69.8	241.7	721.0	480.4	240.6	850.3	188.0
Nov.	4,413.9	3,341.0	2,615.3	2,299.5	69.6	246.2	725.8	481.7	244.1	879.3	193.5
<b>German contribution (DM billion)<sup>2</sup></b>											
2001 Aug.	8,407.1	6,441.7	5,019.2	4,413.2	122.9	483.1	1,422.5	974.1	448.4	1,525.5	439.9
Sep.	8,455.7	6,431.5	5,036.3	4,439.2	124.5	472.6	1,395.2	968.1	427.0	1,580.6	443.6
Oct.	8,477.3	6,431.6	5,045.8	4,442.3	126.0	477.5	1,385.8	970.5	415.3	1,600.5	445.1
Nov.	8,481.0	6,461.8	5,060.2	4,457.3	126.7	476.1	1,401.6	990.9	410.7	1,638.7	380.5
Dec.	8,465.3	6,496.5	5,101.4	4,477.7	129.1	494.7	1,395.0	976.6	418.4	1,606.2	362.6
2002 Jan.	8,451.9	6,484.0	5,086.3	4,459.7	130.9	495.7	1,397.7	977.3	420.4	1,603.7	364.2
Feb.	8,454.8	6,486.2	5,085.4	4,465.9	127.4	492.1	1,400.8	972.2	428.6	1,607.8	360.7
Mar.	8,476.5	6,483.6	5,080.5	4,479.6	131.4	469.5	1,403.1	969.0	434.1	1,622.6	370.3
Apr.	8,470.2	6,501.2	5,096.3	4,484.9	134.9	476.6	1,404.8	960.6	444.2	1,597.2	371.8
May	8,422.0	6,508.4	5,098.7	4,487.8	135.3	475.6	1,409.8	949.7	460.0	1,618.4	365.2
June	8,393.6	6,472.4	5,077.4	4,488.2	136.2	452.9	1,395.0	939.6	455.4	1,564.7	356.6
July	8,417.2	6,488.5	5,064.7	4,481.5	136.6	446.6	1,423.8	956.4	467.4	1,567.0	361.7
Aug.	8,423.8	6,484.3	5,075.2	4,478.5	131.2	465.5	1,409.0	938.4	470.6	1,584.5	355.0
Sep.	8,518.8	6,508.1	5,095.6	4,501.5	130.0	464.1	1,412.5	932.9	479.7	1,646.6	364.0
Oct.	8,548.0	6,517.3	5,107.2	4,497.9	136.5	472.7	1,410.1	939.5	470.6	1,663.0	367.6
Nov.	8,632.8	6,534.5	5,115.0	4,497.3	136.2	481.5	1,419.5	942.1	477.4	1,719.7	378.5

\* 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 Including money market paper of enterprises. — 4 Including Treasury bills and other money market paper of public authorities. — 5 From 2002 euro currency in circulation plus outstanding national banknotes and coins. Excluding MFIs' cash in hand (in euro). From 2002 the German contribution contains the euro banknote

II. Overall monetary survey in the European monetary union

Liabilities											Period
Currency in circulation <sup>5</sup>	Deposits of non-banks (non-MFIs) in the euro area										
	Total	in euro <sup>6</sup>	Enterprises and individuals								
			Total	Overnight	With agreed maturities of			At agreed notice of 7			
					up to 1 year	over 1 year up to 2 years	over 2 years	up to 3 months	over 3 months		
<b>European monetary union (€ billion) <sup>1</sup></b>											
319.2	5,424.1	5,070.7	5,117.3	1,617.5	949.6	81.4	1,134.7	1,215.3	118.9	2001 Aug.	
309.6	5,475.9	5,132.4	5,170.9	1,680.4	933.4	81.5	1,136.0	1,221.6	118.0	Sep.	
295.5	5,494.4	5,144.7	5,183.4	1,678.9	938.6	81.1	1,136.1	1,232.4	116.4	Oct.	
279.7	5,554.1	5,200.8	5,249.5	1,728.6	944.2	79.9	1,134.9	1,246.6	115.3	Nov.	
239.7	5,699.4	5,360.0	5,403.1	1,826.5	952.3	80.0	1,142.4	1,286.5	115.3	Dec.	
246.5	5,670.7	5,318.9	5,363.4	1,773.6	948.3	79.5	1,146.2	1,304.0	111.8	2002 Jan.	
240.3	5,671.9	5,311.3	5,359.8	1,768.1	946.9	78.7	1,148.1	1,307.2	110.8	Feb.	
254.3	5,686.3	5,327.3	5,376.5	1,769.8	954.6	80.4	1,151.5	1,310.6	109.5	Mar.	
261.7	5,711.7	5,355.4	5,401.0	1,797.8	959.7	81.0	1,150.8	1,304.2	107.5	Apr.	
273.9	5,714.0	5,366.7	5,409.7	1,801.1	961.3	81.5	1,153.0	1,306.4	106.4	May	
285.8	5,749.6	5,407.9	5,438.3	1,844.4	938.5	81.5	1,155.0	1,312.7	106.2	June	
296.8	5,726.2	5,384.9	5,422.5	1,816.1	948.3	82.6	1,154.1	1,315.4	106.2	July	
301.2	5,688.8	5,358.6	5,396.2	1,783.7	959.7	83.3	1,142.5	1,320.6	106.4	Aug.	
306.7	5,733.3	5,398.5	5,434.8	1,837.4	941.2	82.6	1,143.6	1,323.1	106.8	Sep.	
313.9	5,747.8	5,409.9	5,445.8	1,818.9	964.4	82.6	1,144.8	1,329.3	105.8	Oct.	
321.4	5,803.5	5,466.4	5,504.8	1,870.8	957.6	82.1	1,148.6	1,340.4	105.3	Nov.	
<b>German contribution (€ billion) <sup>2</sup></b>											
110.5	2,059.2	1,960.9	1,922.0	455.6	240.7	18.1	649.7	440.9	117.0	2001 Aug.	
105.8	2,075.2	1,979.0	1,939.6	472.7	240.0	18.3	650.5	441.9	116.2	Sep.	
99.9	2,077.6	1,982.9	1,945.0	475.5	241.8	18.6	650.0	444.8	114.4	Oct.	
92.4	2,103.2	2,006.3	1,973.0	504.0	240.7	18.7	648.7	447.5	113.5	Nov.	
68.0	2,135.1	2,048.0	2,010.0	519.0	244.7	18.6	650.2	463.9	113.6	Dec.	
8	63.8	2,113.2	2,024.0	1,989.9	506.4	236.6	18.5	652.0	466.4	2002 Jan.	
	68.3	2,108.1	2,019.4	1,986.2	505.6	235.1	17.1	653.5	465.9	Feb.	
	70.9	2,109.1	2,021.9	1,989.1	504.1	237.3	17.1	656.8	465.9	Mar.	
	74.0	2,100.4	2,015.8	1,984.7	513.9	234.0	17.1	655.2	458.6	Apr.	
	76.5	2,107.7	2,023.6	1,987.3	519.1	234.2	17.1	654.1	457.9	May	
	79.8	2,119.3	2,035.6	1,997.1	530.9	234.4	17.3	653.0	457.0	June	
	83.4	2,112.5	2,030.5	1,993.2	525.8	235.8	17.6	653.9	455.5	July	
	84.3	2,098.8	2,018.1	1,979.2	521.5	239.6	17.6	640.1	455.6	Aug.	
	85.9	2,105.7	2,023.7	1,987.6	536.6	233.0	17.5	639.6	456.5	Sep.	
	87.4	2,115.1	2,035.2	2,003.0	538.0	243.7	17.5	641.5	458.8	Oct.	
	89.9	2,147.3	2,066.9	2,035.6	569.5	237.6	17.9	645.7	462.0	Nov.	
<b>German contribution (DM billion) <sup>2</sup></b>											
216.0	4,027.4	3,835.2	3,759.1	891.1	470.8	35.4	1,270.7	862.3	228.8	2001 Aug.	
207.0	4,058.8	3,870.7	3,793.6	924.5	469.4	35.9	1,272.2	864.3	227.3	Sep.	
195.4	4,063.4	3,878.2	3,804.2	929.9	472.9	36.3	1,271.3	869.9	223.8	Oct.	
180.7	4,113.6	3,924.1	3,858.9	985.8	470.7	36.5	1,268.7	875.2	222.0	Nov.	
132.9	4,175.9	4,005.5	3,931.2	1,015.2	478.6	36.4	1,271.6	907.4	222.1	Dec.	
8	124.8	4,133.1	3,958.6	3,891.8	990.5	462.7	36.2	1,275.2	912.2	2002 Jan.	
	133.6	4,123.1	3,949.5	3,884.6	988.8	459.9	33.5	1,278.1	911.3	Feb.	
	138.7	4,125.0	3,954.6	3,890.3	986.0	464.2	33.5	1,284.6	911.3	Mar.	
	144.7	4,108.0	3,942.5	3,881.8	1,005.1	457.6	33.5	1,281.5	897.0	Apr.	
	149.6	4,122.4	3,957.8	3,886.7	1,015.2	458.1	33.5	1,279.4	895.7	May	
	156.0	4,145.0	3,981.3	3,906.0	1,038.3	458.5	33.8	1,277.2	893.8	June	
	163.2	4,131.7	3,971.2	3,898.4	1,028.4	461.2	34.4	1,279.0	890.9	July	
	165.0	4,105.0	3,947.0	3,871.0	1,020.0	468.6	34.5	1,252.0	891.0	Aug.	
	168.1	4,118.3	3,958.0	3,887.3	1,049.4	455.7	34.3	1,251.0	892.9	Sep.	
	170.9	4,136.7	3,980.5	3,917.6	1,052.2	476.7	34.3	1,254.7	897.2	Oct.	
	175.8	4,199.8	4,042.5	3,981.3	1,113.8	464.7	35.1	1,262.9	903.6	Nov.	

volume put into circulation by the Bundesbank according to the accounting regime chosen by the Eurosystem (see footnote 4 on banknote circulation in Table III.2). The volume of currency actually put into circulation by the Bundesbank can be calculated by adding to this total the item "Intra-Eurosystem liability/claim related to banknote issue" (see "Other

liability items"). — <sup>6</sup> Excluding central governments deposits. — <sup>7</sup> In Germany, only saving deposits. — <sup>8</sup> Includes decrease of €11.6 billion (DM22.7 billion) owing to the changed method of recording banknote circulation (see also footnote 5).

## II. Overall monetary survey in the European monetary union

### 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)													
Public authorities								Repo transactions with counterparties in the euro area			Debt securities		
Period	Other public authorities							Total	Enterprises and individuals	Money market fund certificates (net) 4,6	Debt securities		
	Central governments	Total	Overnight	With agreed maturities of			At agreed notice of 3				Total	denominated in euro	
				up to 1 year	over 1 year up to 2 years	over 2 years	up to 3 months						over 3 months
<b>European monetary union (€ billion) 1</b>													
2001 Aug.	154.8	152.0	63.8	56.1	1.8	27.3	2.5	0.6	230.8	225.3	380.7	1,728.7	1,383.1
Sep.	149.4	155.5	69.5	54.4	1.6	27.0	2.5	0.6	225.7	220.2	384.7	1,752.3	1,396.0
Oct.	154.7	156.3	71.4	53.4	1.6	26.8	2.5	0.5	235.1	227.2	395.9	1,766.5	1,399.2
Nov.	151.8	152.8	69.5	51.9	1.6	26.7	2.6	0.5	225.9	218.3	404.5	1,758.8	1,372.7
Dec.	140.3	156.0	69.7	54.9	1.7	26.7	2.6	0.5	218.5	214.6	402.0	1,760.1	1,376.4
2002 Jan.	150.0	157.3	74.1	51.4	1.7	27.0	2.5	0.5	216.2	211.4	420.8	1,775.4	1,375.2
Feb.	156.3	155.7	75.1	49.4	1.7	26.6	2.5	0.5	221.1	215.8	431.6	1,778.3	1,380.2
Mar.	157.5	152.3	69.3	51.8	1.6	26.7	2.5	0.5	229.6	224.9	435.9	1,793.8	1,389.4
Apr.	158.0	152.7	71.9	50.0	1.4	26.6	2.5	0.4	228.1	223.8	442.2	1,785.7	1,382.9
May	149.4	154.8	68.8	55.2	1.4	26.6	2.4	0.4	234.8	230.7	447.3	1,805.2	1,392.3
June	155.3	156.0	71.6	53.3	1.5	26.7	2.4	0.4	229.6	225.9	443.7	1,788.7	1,392.4
July	152.4	151.3	69.3	51.4	1.5	26.3	2.4	0.4	228.8	224.9	455.5	1,796.2	1,398.4
Aug.	141.7	150.8	67.8	52.4	1.5	26.3	2.4	0.4	236.5	231.9	468.7	1,814.2	1,415.6
Sep.	149.3	149.2	70.7	48.5	1.3	25.9	2.4	0.4	240.0	236.0	461.7	1,814.3	1,418.0
Oct.	154.6	147.4	72.2	45.3	1.3	25.6	2.5	0.4	237.2	233.7	464.0	1,824.3	1,416.2
Nov.	151.1	147.6	72.0	45.7	1.3	25.6	2.5	0.4	230.7	226.8	478.6	1,832.2	1,423.2
<b>German contribution (€ billion) 2</b>													
2001 Aug.	60.0	77.2	13.3	37.6	1.0	23.1	1.7	0.6	4.6	4.6	26.5	811.4	705.5
Sep.	57.0	78.5	15.4	36.9	1.0	23.0	1.7	0.6	2.8	2.8	28.0	815.5	709.0
Oct.	55.4	77.1	15.3	35.8	1.0	22.8	1.7	0.5	9.4	9.4	29.6	813.4	707.5
Nov.	56.6	73.6	14.7	33.0	1.0	22.7	1.7	0.5	4.0	4.0	30.7	792.9	678.1
Dec.	49.1	75.9	14.6	35.2	1.2	22.7	1.7	0.5	4.9	4.9	32.6	791.9	676.0
2002 Jan.	50.1	73.3	13.6	33.3	1.2	23.0	1.7	0.5	2.5	2.5	34.5	795.7	672.2
Feb.	49.4	72.5	13.8	32.6	1.2	22.7	1.7	0.5	3.5	3.5	35.4	801.2	678.8
Mar.	49.4	70.6	12.6	32.0	1.2	22.8	1.6	0.5	3.7	3.7	35.8	811.6	687.2
Apr.	47.5	68.2	11.8	30.6	1.0	22.7	1.6	0.4	3.4	3.4	35.9	808.5	685.1
May	48.2	72.3	12.4	34.2	1.0	22.7	1.6	0.4	4.7	4.7	35.4	810.5	683.8
June	48.7	73.5	13.8	34.1	1.1	22.6	1.6	0.4	4.1	4.1	35.0	805.1	684.0
July	47.6	71.7	13.9	32.3	1.0	22.5	1.5	0.4	3.1	3.1	35.6	813.3	687.2
Aug.	48.9	70.7	13.0	32.2	1.0	22.6	1.6	0.4	4.3	4.3	37.1	836.1	702.8
Sep.	49.9	68.2	13.1	30.0	0.9	22.2	1.6	0.4	10.7	10.7	37.0	837.1	702.4
Oct.	48.3	63.7	12.8	26.0	0.9	22.0	1.6	0.4	9.6	9.6	37.6	840.5	695.4
Nov.	47.7	64.1	13.1	26.2	0.9	21.9	1.6	0.4	6.4	6.4	37.5	841.3	691.9
<b>German contribution (DM billion) 2</b>													
2001 Aug.	117.3	151.0	26.0	73.5	2.0	45.1	3.3	1.1	8.9	8.9	51.8	1,586.9	1,379.9
Sep.	111.5	153.6	30.1	72.1	2.0	45.0	3.3	1.1	5.6	5.6	54.7	1,595.1	1,386.7
Oct.	108.4	150.8	30.0	70.0	2.0	44.5	3.3	1.0	18.3	18.3	57.8	1,590.9	1,383.8
Nov.	110.6	144.0	28.7	64.5	2.0	44.4	3.4	1.0	7.9	7.9	60.0	1,550.7	1,326.2
Dec.	96.1	148.5	28.6	68.9	2.3	44.4	3.4	1.0	9.7	9.6	63.7	1,548.9	1,322.2
2002 Jan.	98.0	143.3	26.6	65.1	2.4	45.0	3.3	0.9	5.0	5.0	67.6	1,556.3	1,314.8
Feb.	96.7	141.8	27.0	63.8	2.4	44.4	3.3	0.9	6.9	6.9	69.2	1,567.0	1,327.7
Mar.	96.6	138.1	24.6	62.6	2.4	44.5	3.2	0.9	7.2	7.2	70.0	1,587.3	1,344.1
Apr.	92.9	133.3	23.1	59.9	2.0	44.4	3.1	0.9	6.6	6.6	70.2	1,581.3	1,339.9
May	94.3	141.4	24.2	66.8	2.0	44.4	3.1	0.9	9.2	9.2	69.3	1,585.2	1,337.4
June	95.2	143.8	26.9	66.7	2.1	44.2	3.0	0.9	8.1	8.1	68.5	1,574.7	1,337.8
July	93.1	140.3	27.2	63.2	2.0	44.1	3.0	0.8	6.1	6.1	69.7	1,590.6	1,344.1
Aug.	95.7	138.3	25.3	62.9	2.0	44.1	3.1	0.8	8.3	8.3	72.5	1,635.3	1,374.5
Sep.	97.7	133.3	25.5	58.7	1.8	43.4	3.1	0.8	20.8	20.8	72.3	1,637.3	1,373.7
Oct.	94.5	124.6	25.1	50.9	1.7	43.0	3.0	0.8	18.9	18.9	73.6	1,643.9	1,360.2
Nov.	93.2	125.3	25.7	51.2	1.7	42.8	3.1	0.8	12.5	12.5	73.3	1,645.5	1,353.3

\* 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 In Germany: only savings deposits. — 4 Excluding holdings of MFIs; for the German contribution: excluding German MFIs portfolios of securities issued by MFIs in the euro area. — 5 In Germany, bank debt securities with maturities of up to one year are classed as money market paper; up to the January 2002 Monthly Report they were

published in this table together with money market fund certificates. — 6 Paper held by residents outside the euro area has been eliminated. — 7 Excluding liabilities arising from securities issued. — 8 After deduction of Inter-MFI participations. — 9 The German contributions to the Eurosystem's monetary aggregates should on no account be interpreted as national monetary aggregates, and are therefore not comparable to the erstwhile German money stocks M1, M2 or M3. — 10 Currency in circulation (from 2002 euro currency in circulation plus outstanding national banknotes and coins), overnight deposits (excluding central governments' deposits), and (for EMU) central governments' overnight monetary liabilities,

II. Overall monetary survey in the European monetary union

issued (net) <sup>4</sup>										Memo item				Monetary liabilities of central governments (Post, Office, Treasury) <sup>14</sup>	Period
With maturities of			Liabilities to non-euro-area residents <sup>7</sup>	Capital and reserves <sup>8</sup>	Excess of inter-MFI liabilities	Other liability items		Monetary aggregates <sup>9</sup>							
up to 1 year <sup>5,6</sup>	over 1 year up to 2 years <sup>6</sup>	over 2 years				Total	Intra-Eurosystem-liability/claim related to banknote issue <sup>15</sup>	M1 <sup>10</sup>	M2 <sup>11</sup>	M3 <sup>6,12</sup>	Monetary capital formation <sup>13</sup>				
<b>European monetary union (€ billion) <sup>1</sup></b>															
91.2	51.3	1,586.2	2,620.1	959.9	- 8.6	1,489.4	-	2,066.7	4,448.4	5,202.4	3,827.5	141.3	2001 Aug.		
94.9	52.7	1,604.7	2,639.9	970.4	- 18.7	1,541.4	-	2,124.7	4,495.3	5,253.4	3,856.5	140.8	Sep.		
98.3	51.1	1,617.0	2,661.6	981.1	- 5.5	1,588.7	-	2,111.6	4,497.9	5,278.4	3,877.9	142.5	Oct.		
97.4	54.9	1,606.6	2,726.2	982.6	- 10.4	1,632.4	-	2,144.3	4,548.2	5,330.8	3,866.6	143.7	Nov.		
89.0	57.6	1,613.6	2,719.1	995.2	- 8.5	1,551.8	-	2,207.9	4,664.6	5,430.9	3,893.7	150.7	Dec.		
96.6	45.9	1,632.9	2,755.2	1,007.6	- 2.0	1,573.6	-	2,168.3	4,639.7	5,418.6	3,925.9	158.0	2002 Jan.		
90.2	49.3	1,638.8	2,763.3	1,011.5	- 1.1	1,538.9	-	2,157.4	4,628.6	5,420.1	3,936.2	158.7	Feb.		
89.4	48.6	1,655.8	2,786.6	1,010.6	- 1.3	1,496.6	-	2,168.5	4,654.8	5,457.6	3,954.6	159.8	Mar.		
84.5	51.0	1,650.2	2,769.2	1,004.5	- 8.9	1,486.6	-	2,207.2	4,691.2	5,496.2	3,940.0	161.0	Apr.		
93.8	50.8	1,660.5	2,750.3	1,008.7	- 7.3	1,485.2	-	2,219.3	4,712.8	5,539.0	3,955.6	160.8	May		
84.8	48.8	1,655.2	2,615.4	985.7	- 10.7	1,533.6	-	2,277.9	4,752.8	5,558.9	3,929.2	161.0	June		
77.5	48.6	1,670.1	2,642.9	993.3	- 2.9	1,543.5	-	2,256.1	4,742.8	5,552.7	3,950.4	159.2	July		
80.1	47.0	1,687.0	2,610.9	1,004.2	- 0.2	1,525.4	-	2,228.4	4,734.2	5,566.0	3,966.9	161.6	Aug.		
84.8	48.0	1,681.6	2,672.4	1,016.0	- 5.1	1,579.0	-	2,290.9	4,775.6	5,609.4	3,974.2	161.5	Sep.		
86.4	48.3	1,689.6	2,695.4	1,014.1	- 3.4	1,559.0	-	2,281.9	4,793.3	5,628.6	3,980.3	162.7	Oct.		
84.1	48.3	1,699.9	2,734.7	1,017.4	- 3.4	1,594.5	-	2,341.9	4,857.4	5,698.4	3,997.2	163.5	Nov.		
<b>German contribution (€ billion) <sup>2</sup></b>															
19.3	41.6	750.5	745.8	260.9	- 39.5	319.2	-	579.4	1,319.4	1,411.2	1,801.7	-	2001 Aug.		
19.4	42.6	753.5	746.5	259.6	- 39.5	329.2	-	593.9	1,333.8	1,426.6	1,803.4	-	Sep.		
19.1	39.6	754.6	747.4	263.0	- 37.5	331.6	-	590.7	1,334.3	1,432.0	1,805.4	-	Oct.		
16.9	42.4	733.6	736.7	264.4	- 21.8	333.7	-	611.1	1,353.7	1,447.7	1,783.4	-	Nov.		
17.9	44.5	729.5	702.1	265.3	- 10.6	317.7	-	601.6	1,367.0	1,466.9	1,781.7	-	Dec.		
22.4	35.1	738.2	724.3	267.2	- 0.1	320.2	11.6	583.8	1,341.5	1,436.1	1,790.8	-	2002 Jan.		
22.3	37.6	741.2	721.4	272.1	- 0.6	313.4	8.2	587.7	1,341.4	1,440.2	1,798.9	-	Feb.		
22.7	37.7	751.2	721.6	272.4	- 2.7	311.6	11.6	587.6	1,342.8	1,442.6	1,811.4	-	Mar.		
22.9	38.7	746.9	728.3	270.0	- 1.1	311.4	12.9	599.7	1,342.7	1,441.9	1,801.1	-	Apr.		
25.2	39.4	745.9	730.3	269.8	- 8.2	315.1	15.7	607.9	1,354.0	1,458.7	1,797.8	-	May		
23.1	38.1	743.9	687.4	265.5	- 24.8	320.1	16.7	624.4	1,369.8	1,470.1	1,790.1	-	June		
21.9	38.7	752.7	705.4	267.7	- 39.0	321.5	18.8	623.1	1,366.9	1,466.2	1,801.9	-	July		
24.5	37.5	774.2	698.5	272.4	- 50.5	326.0	22.0	618.8	1,366.4	1,469.6	1,814.5	-	Aug.		
24.4	36.8	775.9	713.6	274.4	- 48.6	339.8	24.1	635.6	1,375.1	1,483.9	1,816.9	-	Sep.		
28.2	37.1	775.2	706.9	272.8	- 42.1	342.7	26.2	638.2	1,386.7	1,499.3	1,815.4	-	Oct.		
29.7	36.9	774.7	716.9	274.2	- 47.5	347.9	27.6	672.5	1,418.7	1,529.2	1,819.8	-	Nov.		
<b>German contribution (DM billion) <sup>2</sup></b>															
37.7	81.3	1,467.9	1,458.6	510.3	- 77.2	624.4	-	1,133.2	2,580.5	2,760.2	3,523.9	-	2001 Aug.		
37.9	83.4	1,473.8	1,460.1	507.8	- 77.2	643.9	-	1,161.6	2,608.7	2,790.2	3,527.2	-	Sep.		
37.4	77.5	1,475.9	1,461.8	514.5	- 73.4	648.6	-	1,155.3	2,609.6	2,800.7	3,531.1	-	Oct.		
33.0	82.9	1,434.8	1,440.8	517.2	- 42.6	652.7	-	1,195.3	2,647.6	2,831.4	3,488.0	-	Nov.		
35.1	87.0	1,426.8	1,373.1	518.9	- 20.8	621.4	-	1,176.7	2,673.6	2,869.1	3,484.7	-	Dec.		
43.9	68.6	1,443.8	1,416.6	522.6	- 0.3	626.3	22.7	1,141.9	2,623.7	2,808.8	3,502.5	-	2002 Jan.		
43.7	73.6	1,449.7	1,411.0	532.1	- 1.1	613.0	16.1	1,149.4	2,623.5	2,816.9	3,518.3	-	Feb.		
44.5	73.6	1,469.2	1,411.4	532.8	- 5.3	609.5	22.7	1,149.2	2,626.3	2,821.6	3,542.8	-	Mar.		
44.8	75.7	1,460.8	1,424.5	528.0	- 2.1	609.0	25.2	1,172.9	2,626.0	2,820.1	3,522.7	-	Apr.		
49.3	77.0	1,458.9	1,428.3	527.7	- 16.1	616.4	30.7	1,189.0	2,648.2	2,853.0	3,516.1	-	May		
45.1	74.6	1,455.0	1,344.4	519.3	- 48.5	626.1	32.8	1,221.2	2,679.1	2,875.4	3,501.1	-	June		
42.9	75.6	1,472.1	1,379.6	523.6	- 76.2	628.9	36.7	1,218.7	2,673.3	2,867.6	3,524.2	-	July		
47.8	73.3	1,514.2	1,366.1	532.8	- 98.8	637.6	43.0	1,210.3	2,672.4	2,874.3	3,548.9	-	Aug.		
47.7	71.9	1,517.6	1,395.7	536.6	- 95.0	664.6	47.2	1,243.0	2,689.4	2,902.2	3,553.5	-	Sep.		
55.2	72.6	1,516.2	1,382.6	533.5	- 82.4	670.2	51.2	1,248.2	2,712.1	2,932.4	3,550.7	-	Oct.		
58.1	72.2	1,515.2	1,402.0	536.3	- 92.9	680.4	54.0	1,315.3	2,774.6	2,990.8	3,559.2	-	Nov.		

which are not included in the consolidated balance sheet. From 2002 the German contribution contains the euro banknote volume put into circulation by the Bundesbank according to the accounting regime chosen by the Eurosystem (see footnote 4 on banknote circulation in Table III.2). The volume of currency actually put into circulation by the Bundesbank can be calculated by adding to this total the item "Intra-Eurosystem liability/claim related to banknote issue". — <sup>11</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) and (for EMU) central

governments' monetary liabilities with such maturities. — <sup>12</sup> M2 plus repo transactions, money market fund certificates, money market paper and debt securities up to 2 years. — <sup>13</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>14</sup> Non-existent in Germany. — <sup>15</sup> For the German contribution: the difference between the volume of euro banknotes actually issued by the Bundesbank and the amount disclosed according to the accounting regime chosen by the Eurosystem (see also footnote 4 on banknote circulation in Table III.2).

## II. Overall monetary survey in the European monetary union

### 3. Banking system's liquidity position \* Stocks

€ billion; period averages of daily positions

Maintenance period ending in 1	Liquidity-providing factors					Liquidity-absorbing factors					Credit institutions' current accounts (including minimum reserves) 5	Base money 6
	Net assets in gold and foreign currency	Monetary policy operations of the Eurosystem				Deposit facility	Other liquidity-absorbing operations	Banknotes in circulation 3	Central government deposits	Other factors (net) 4		
		Main refinancing operations	Longer-term refinancing operations	Marginal lending facility	Other liquidity-providing operations							
<b>Eurosystem 2</b>												
2000 July	380.8	157.9	59.9	0.4	—	0.5	—	357.0	50.4	76.8	114.2	471.7
Aug.	382.0	163.1	55.4	0.1	—	0.3	—	359.2	48.8	80.0	112.4	471.9
Sep.	381.6	173.1	51.1	0.3	—	0.2	—	354.8	56.6	81.2	113.3	468.3
Oct.	396.3	176.5	45.7	0.5	—	0.2	—	354.5	47.4	102.5	114.4	469.1
Nov.	398.6	183.7	45.0	0.2	—	0.2	—	352.7	49.8	109.2	115.7	468.6
Dec.	394.4	210.4	45.0	0.4	—	0.2	—	360.4	61.1	111.1	117.4	478.0
2001 Jan. 7	383.7	205.3	45.0	0.5	—	0.6	—	368.3	52.2	94.2	119.1	488.0
Feb.	377.9	188.9	49.8	2.6	—	0.4	—	354.8	57.0	86.3	120.7	476.0
Mar.	375.6	185.2	54.1	0.4	—	0.5	—	353.0	53.0	87.7	121.0	474.5
Apr.	382.1	172.4	58.4	2.2	—	0.5	—	354.6	49.5	89.1	121.4	476.4
May	384.4	144.0	59.1	0.4	17.0	0.6	—	352.7	39.4	87.5	124.8	478.1
June	385.0	161.7	59.1	0.2	—	0.4	—	351.1	41.3	87.5	125.7	477.3
July	397.6	161.9	59.9	0.2	—	0.4	—	350.8	42.5	98.8	127.1	478.3
Aug.	402.1	164.0	60.0	0.1	—	0.2	—	347.6	48.8	101.8	127.8	475.6
Sep.	401.3	147.1	60.0	0.5	3.5	0.4	—	335.4	45.2	105.4	126.1	461.9
Oct.	389.9	136.7	60.0	1.1	—	0.1	—	325.2	43.6	93.6	125.1	450.4
Nov.	385.0	132.3	60.0	0.2	—	0.3	—	311.3	46.1	93.1	126.7	438.3
Dec.	383.7	122.5	60.0	0.5	12.4	0.8	—	298.0	43.5	109.3	127.4	426.2
2002 Jan.	385.2	118.5	60.0	0.4	3.7	0.6	—	344.3	38.3	54.2	130.4	475.2
Feb.	386.0	127.3	60.0	0.2	—	0.1	—	306.2	49.6	85.2	132.6	438.8
Mar.	386.7	114.6	60.0	0.2	—	0.1	—	283.3	54.2	91.8	132.1	415.6
Apr.	395.4	112.7	60.0	0.4	—	0.2	—	285.9	55.9	95.3	131.2	417.3
May	397.7	110.6	60.0	0.1	—	0.3	—	293.7	49.2	93.5	131.7	425.6
June	396.2	112.6	60.0	0.5	—	0.4	—	300.8	45.1	91.2	131.8	433.0
July	369.1	130.4	60.0	0.2	—	0.2	—	313.4	54.4	60.3	131.4	445.0
Aug.	360.0	139.2	55.2	0.1	—	0.1	—	322.7	50.9	50.8	129.9	452.8
Sep.	362.3	140.9	50.8	0.1	—	0.2	—	323.6	49.1	51.7	129.6	453.4
Oct.	370.0	146.1	45.3	0.1	—	0.1	—	329.2	45.6	58.2	128.3	457.6
Nov.	372.1	147.5	45.0	0.1	—	0.1	—	334.0	42.8	58.6	129.3	463.4
Dec.	371.5	168.1	45.0	1.1	2.0	0.2	—	350.7	51.7	55.5	129.5	480.5
<b>Deutsche Bundesbank</b>												
2000 July	93.4	67.9	33.3	0.2	—	0.4	—	131.8	0.1	27.6	35.1	167.2
Aug.	93.0	71.6	34.9	0.1	—	0.1	—	131.9	0.1	33.1	34.5	166.5
Sep.	92.6	81.9	33.8	0.3	—	0.1	—	131.4	0.1	42.6	34.4	165.9
Oct.	97.0	87.2	30.7	0.3	—	0.1	—	131.1	0.1	49.5	34.5	165.7
Nov.	98.2	99.1	30.7	0.2	—	0.1	—	130.1	0.1	63.0	34.9	165.1
Dec.	97.6	103.5	31.1	0.2	—	0.1	—	132.0	0.1	65.0	35.2	167.4
2001 Jan.	93.0	103.1	28.4	0.3	—	0.3	—	131.2	0.1	57.7	35.6	167.1
Feb.	90.3	93.2	28.3	1.3	—	0.2	—	126.7	0.1	50.0	36.2	163.1
Mar.	89.1	87.6	33.2	0.2	—	0.4	—	126.2	0.1	47.6	35.9	162.4
Apr.	90.1	84.5	37.4	1.5	—	0.2	—	126.2	0.1	50.7	36.4	162.8
May	90.0	67.4	37.8	0.2	7.5	0.5	—	124.8	0.1	47.6	37.4	162.7
June	89.7	79.9	37.5	0.1	—	0.3	—	123.6	0.1	45.7	37.5	161.4
July	92.8	85.4	37.0	0.1	—	0.3	—	121.8	0.1	55.5	37.7	159.7
Aug.	94.2	77.0	38.2	0.1	—	0.2	—	119.3	0.1	52.0	37.8	157.3
Sep.	93.7	73.3	38.9	0.1	1.3	0.1	—	115.4	0.1	54.6	37.1	152.7
Oct.	91.3	66.3	40.2	0.5	—	0.1	—	110.8	0.1	50.1	37.3	148.2
Nov.	89.8	68.2	38.5	0.2	—	0.2	—	104.6	0.1	53.8	38.0	142.9
Dec.	89.4	62.4	40.1	0.2	5.0	0.5	—	96.6	0.1	67.1	37.8	134.9
2002 Jan.	89.9	63.3	41.1	0.3	1.4	0.3	—	91.7	0.1	64.9	39.0	131.0
Feb.	89.9	63.3	42.4	0.1	—	0.0	—	78.5	0.1	78.6	38.6	117.2
Mar.	90.0	58.5	40.7	0.2	—	0.1	—	79.7	0.1	71.2	38.3	118.1
Apr.	92.3	57.6	40.4	0.3	—	0.2	—	80.8	0.1	71.8	37.9	118.8
May	92.3	53.1	39.7	0.1	—	0.3	—	83.8	0.1	63.1	38.0	122.0
June	91.6	60.6	38.8	0.1	—	0.3	—	85.4	0.1	67.3	38.1	123.8
July	84.7	67.6	37.1	0.2	—	0.2	—	89.2	0.1	62.0	38.1	127.5
Aug.	82.5	63.1	36.4	0.0	—	0.1	—	92.2	0.1	51.8	37.9	130.2
Sep.	82.4	64.4	32.7	0.1	—	0.1	—	92.4	0.0	49.1	37.9	130.4
Oct.	84.0	69.0	31.7	0.1	—	0.1	—	94.0	0.1	53.0	37.6	131.6
Nov.	84.3	73.2	31.6	0.1	—	0.1	—	94.6	0.1	56.5	37.9	132.6
Dec.	84.4	91.1	33.8	0.9	0.7	0.2	—	99.3	0.1	73.5	37.8	137.3

Discrepancies may arise from rounding. — \* The banking system's liquidity position is defined as the current account holdings in euro of credit institutions in the euro area with the Eurosystem. Amounts are derived from the consolidated financial statement of the Eurosystem and the statement of the Bundesbank. — 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. — 2 Source: ECB. — 3 From 2002, euro banknotes and

other banknotes which have been issued by the national central banks of the Eurosystem and which are still in circulation. In accordance with the accounting procedure chosen by the Eurosystem for the issue of euro banknotes, 8% of the total value of the euro banknotes in circulation are allocated on a monthly basis to the ECB. The counterpart of this adjustment is shown under "Other factors". The remaining 92% of the value of the euro banknotes in circulation are allocated, likewise on a monthly basis, to the

II. Overall monetary survey in the European monetary union

Flows

Liquidity-providing factors					Liquidity-absorbing factors					Credit institutions' current accounts (including minimum reserves) <sup>5</sup>	Base money <sup>6</sup>	Maintenance period ending in <sup>1</sup>
Net assets in gold and foreign currency	Monetary policy operations of the Eurosystem				Deposit facility	Other liquidity-absorbing operations	Banknotes in circulation <sup>3</sup>	Central government deposits	Other factors (net) <sup>4</sup>			
	Main refinancing operations	Longer-term refinancing operations	Marginal lending facility	Other liquidity-providing operations								
<b>Eurosystem <sup>2</sup></b>												
+ 2.7	+ 17.0	- 0.0	+ 0.1	- 0.2	- 0.3	-	+ 2.9	+ 12.1	+ 4.7	- 0.0	+ 2.6	2000 July
+ 1.2	+ 5.2	- 4.5	- 0.3	-	- 0.2	-	+ 2.2	- 1.6	+ 3.2	- 1.8	+ 0.2	Aug.
- 0.4	+ 10.0	- 4.3	+ 0.2	-	- 0.1	-	- 4.4	+ 7.8	+ 1.2	+ 0.9	- 3.6	Sep.
+ 14.7	+ 3.4	- 5.4	+ 0.2	-	+ 0.0	-	- 0.3	- 9.2	+ 21.3	+ 1.1	+ 0.8	Oct.
+ 2.3	+ 7.2	- 0.7	- 0.3	-	+ 0.0	-	- 1.8	+ 2.4	+ 6.7	+ 1.3	+ 0.5	Nov.
- 4.2	+ 26.7	- 0.0	+ 0.2	-	+ 0.0	-	+ 7.7	+ 11.3	+ 1.9	+ 1.7	+ 9.4	Dec.
- 10.7	- 5.1	+ 0.0	+ 0.1	-	+ 0.4	-	+ 7.9	- 8.9	- 16.9	+ 1.7	+ 10.0	2001 Jan. 7
- 5.8	- 16.4	+ 4.8	+ 2.1	-	- 0.2	-	- 13.5	+ 4.8	- 7.9	+ 1.6	- 12.0	Feb.
- 2.3	- 3.7	+ 4.3	- 2.2	-	+ 0.1	-	- 1.8	- 4.0	+ 1.4	+ 0.3	- 1.5	Mar.
+ 6.5	- 12.8	+ 4.3	+ 1.8	-	- 0.0	-	+ 1.6	- 3.5	+ 1.4	+ 0.4	+ 1.9	Apr.
+ 2.3	- 28.4	+ 0.7	- 1.8	+ 17.0	+ 0.1	-	- 1.9	- 10.1	- 1.6	+ 3.4	+ 1.7	May
+ 0.6	+ 17.7	+ 0.0	- 0.2	- 17.0	- 0.2	-	- 1.6	+ 1.9	+ 0.0	+ 0.9	- 0.8	June
+ 12.6	+ 0.2	+ 0.8	+ 0.0	-	+ 0.0	-	- 0.3	+ 1.2	+ 11.3	+ 1.4	+ 1.0	July
+ 4.5	+ 2.1	+ 0.1	- 0.1	-	- 0.2	-	- 3.2	+ 6.3	+ 3.0	+ 0.7	- 2.7	Aug.
- 0.8	- 16.9	+ 0.0	+ 0.4	+ 3.5	+ 0.2	-	- 12.2	+ 3.6	+ 3.6	- 1.7	- 13.7	Sep.
- 11.4	- 10.4	+ 0.0	+ 0.6	- 3.5	- 0.3	-	- 10.2	- 1.6	- 11.8	- 1.0	- 11.5	Oct.
- 4.9	- 4.4	- 0.0	- 0.9	-	+ 0.2	-	- 13.9	+ 2.5	- 0.5	+ 1.6	- 12.1	Nov.
- 1.3	- 9.8	+ 0.0	+ 0.3	+ 12.4	+ 0.5	-	- 13.3	- 2.6	+ 16.2	+ 0.7	- 12.1	Dec.
+ 1.5	- 4.0	- 0.0	- 0.1	- 8.7	- 0.2	-	+ 46.3	- 5.2	- 55.1	+ 3.0	+ 49.0	2002 Jan.
+ 0.8	+ 8.8	+ 0.0	- 0.2	- 3.7	- 0.5	-	- 38.1	+ 11.3	+ 31.0	+ 2.2	- 36.4	Feb.
+ 0.7	- 12.7	+ 0.0	+ 0.0	-	+ 0.0	-	- 22.9	+ 4.6	+ 6.6	- 0.5	- 23.2	Mar.
+ 8.7	- 1.9	- 0.0	+ 0.2	-	+ 0.1	-	+ 2.6	+ 1.7	+ 3.5	- 0.9	+ 1.7	Apr.
+ 2.3	- 2.1	- 0.0	- 0.3	-	+ 0.1	-	+ 7.8	- 6.7	- 1.8	+ 0.5	+ 8.3	May
- 1.5	+ 2.0	+ 0.0	+ 0.4	-	+ 0.1	-	+ 7.1	- 4.1	- 2.3	+ 0.1	+ 7.4	June
- 27.1	+ 17.8	- 0.0	- 0.3	-	- 0.2	-	+ 12.6	+ 9.3	- 30.9	- 0.4	+ 12.0	July
- 9.1	+ 8.8	- 4.8	- 0.1	-	- 0.1	-	+ 9.3	- 3.5	- 9.5	- 1.5	+ 7.8	Aug.
+ 2.3	+ 1.7	- 4.4	+ 0.0	-	+ 0.1	-	+ 0.9	- 1.8	+ 0.9	- 0.3	+ 0.6	Sep.
+ 7.7	+ 5.2	- 5.5	- 0.0	-	- 0.1	-	+ 5.6	- 3.5	+ 6.5	- 1.3	+ 4.2	Oct.
+ 2.1	+ 1.4	- 0.3	+ 0.0	-	- 0.0	-	+ 4.8	- 2.8	+ 0.4	+ 1.0	+ 5.8	Nov.
- 0.6	+ 20.6	+ 0.0	+ 1.0	+ 2.0	+ 0.1	-	+ 16.7	+ 8.9	- 3.1	+ 0.2	+ 17.1	Dec.
<b>Deutsche Bundesbank</b>												
+ 0.2	+ 8.3	- 2.0	+ 0.0	- 0.1	+ 0.1	-	- 0.1	- 0.0	+ 6.4	- 0.0	- 0.1	2000 July
- 0.4	+ 3.7	+ 1.6	- 0.2	-	- 0.3	-	+ 0.1	- 0.0	+ 5.6	- 0.6	- 0.8	Aug.
- 0.5	+ 10.3	- 1.1	+ 0.2	-	- 0.0	-	- 0.5	+ 0.0	+ 9.5	- 0.1	- 0.6	Sep.
+ 4.5	+ 5.3	- 3.1	+ 0.0	-	+ 0.0	-	- 0.3	+ 0.0	+ 6.9	+ 0.1	- 0.2	Oct.
+ 1.2	+ 11.8	- 0.0	- 0.2	-	+ 0.0	-	- 1.0	+ 0.0	+ 13.4	+ 0.4	- 0.6	Nov.
- 0.6	+ 4.5	+ 0.5	+ 0.1	-	+ 0.0	-	+ 1.9	+ 0.0	+ 2.1	+ 0.4	+ 2.3	Dec.
- 4.6	- 0.5	- 2.7	+ 0.1	-	+ 0.2	-	- 0.8	- 0.0	- 7.4	+ 0.3	- 0.2	2001 Jan.
- 2.7	- 9.8	- 0.1	+ 1.0	-	- 0.1	-	- 4.6	- 0.0	- 7.7	+ 0.6	- 4.0	Feb.
- 1.2	- 5.6	+ 4.8	- 1.2	-	+ 0.1	-	- 0.5	- 0.0	- 2.4	- 0.4	- 0.7	Mar.
+ 1.0	- 3.1	+ 4.3	+ 1.3	-	- 0.2	-	- 0.0	+ 0.0	+ 3.1	+ 0.5	+ 0.4	Apr.
- 0.1	- 17.2	+ 0.3	- 1.2	+ 7.5	+ 0.3	-	- 1.4	+ 0.0	- 3.1	+ 1.1	- 0.1	May
- 0.3	+ 12.5	- 0.3	- 0.1	- 7.5	- 0.2	-	- 1.2	+ 0.0	- 1.9	+ 0.1	- 1.3	June
+ 3.2	+ 5.5	- 0.5	+ 0.0	-	+ 0.0	-	- 1.9	- 0.0	+ 9.9	+ 0.2	- 1.7	July
+ 1.3	- 8.4	+ 1.2	- 0.1	-	- 0.2	-	- 2.4	- 0.0	- 3.5	+ 0.2	- 2.4	Aug.
- 0.4	- 3.7	+ 0.7	+ 0.1	+ 1.3	- 0.0	-	- 3.9	+ 0.0	+ 2.6	- 0.7	- 4.7	Sep.
- 2.4	- 7.0	+ 1.3	+ 0.4	- 1.3	- 0.0	-	- 4.7	- 0.0	- 4.5	+ 0.2	- 4.5	Oct.
- 1.5	+ 2.0	- 1.7	- 0.3	-	+ 0.2	-	- 6.1	+ 0.0	+ 3.7	+ 0.7	- 5.3	Nov.
- 0.4	- 5.8	+ 1.7	+ 0.0	+ 5.0	+ 0.3	-	- 8.1	+ 0.0	+ 13.3	- 0.1	- 7.9	Dec.
+ 0.4	+ 0.9	+ 1.0	+ 0.1	- 3.6	- 0.2	-	- 4.8	- 0.0	- 2.2	+ 1.1	- 3.9	2002 Jan.
+ 0.0	+ 0.1	+ 1.3	- 0.2	- 1.4	- 0.3	-	- 13.2	- 0.0	+ 13.6	- 0.4	- 13.8	Feb.
+ 0.1	- 4.9	- 1.7	+ 0.1	-	+ 0.0	-	+ 1.2	- 0.0	- 7.4	- 0.3	+ 0.9	Mar.
+ 2.4	- 0.9	- 0.3	+ 0.1	-	+ 0.1	-	+ 1.0	+ 0.0	+ 0.6	- 0.4	+ 0.7	Apr.
- 0.0	- 4.5	- 0.7	- 0.2	-	+ 0.1	-	+ 3.0	+ 0.0	- 8.7	+ 0.1	+ 3.3	May
- 0.7	+ 7.5	- 0.9	+ 0.1	-	- 0.0	-	+ 1.6	- 0.0	+ 4.2	+ 0.2	+ 1.8	June
- 6.9	+ 7.0	- 1.7	+ 0.0	-	- 0.1	-	+ 3.8	+ 0.0	- 5.3	- 0.1	+ 3.7	July
- 2.2	- 4.5	- 0.7	- 0.1	-	- 0.1	-	+ 3.0	- 0.0	- 10.2	- 0.2	+ 2.7	Aug.
- 0.1	+ 1.3	- 3.7	+ 0.0	-	+ 0.1	-	+ 0.2	- 0.0	- 2.8	- 0.0	+ 0.2	Sep.
+ 1.6	+ 4.6	- 1.0	+ 0.0	-	- 0.0	-	+ 1.5	+ 0.0	+ 3.9	- 0.3	+ 1.2	Oct.
+ 0.4	+ 4.3	- 0.1	- 0.0	-	- 0.0	-	+ 0.7	+ 0.0	+ 3.5	+ 0.3	+ 1.0	Nov.
+ 0.1	+ 17.8	+ 2.2	+ 0.9	+ 0.7	+ 0.1	-	+ 4.7	+ 0.0	+ 17.1	- 0.2	+ 4.6	Dec.

NCBs, with each NCB showing in its balance sheet the percentage of the euro banknotes in circulation that corresponds to its paid-up share in the ECB's capital. The difference between the value of the euro banknotes allocated to an NCB and the value of the euro banknotes which that NCB has put into circulation is likewise shown under "Other factors". — 4 Remaining items in the consolidated financial statement of the Euro-

system and the statement of the Bundesbank. — 5 Equal to the difference between the sum of liquidity-providing factors and the sum of liquidity-absorbing factors. — 6 Calculated as the sum of the "deposit facility", "banknotes in circulation" and "credit institutions' current account holdings". — 7 Entry of Greece into the euro area on January 1, 2001.

### III. Consolidated financial statement of the Eurosystem

#### 1. Assets \*

€ billion

On reporting date/ End of month 1	Total assets	Gold and gold receivables	Claims on non-euro area residents denominated in foreign currency			Claims on euro area residents denominated in foreign currency	Claims on non-euro area residents denominated 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	Claims arising from the credit facility under ERM II
<b>Eurosystem <sup>2</sup></b>									
2002 Apr. 19	778.8	139.8	268.0	33.1	234.9	21.5	5.1	5.1	—
26	788.8	139.5	264.4	33.0	231.4	23.3	4.9	4.9	—
May 3	783.8	139.5	260.6	31.1	229.5	24.0	5.2	5.2	—
10	791.6	139.5	261.6	30.7	230.9	23.9	5.0	5.0	—
17	785.5	139.5	262.2	30.9	231.2	22.9	5.0	5.0	—
24	788.8	139.5	261.1	30.9	230.2	23.1	5.0	5.0	—
31	793.3	139.4	259.4	30.9	228.5	24.1	5.1	5.1	—
June 7	788.4	139.4	260.1	30.9	229.3	23.6	5.1	5.1	—
14	783.6	139.4	261.8	30.8	231.1	22.9	5.1	5.1	—
21	793.7	139.4	263.2	34.5	228.7	22.0	5.0	5.0	—
28	3 780.8	3 128.3	3 238.0	3 32.6	3 205.3	3 19.7	4.5	4.5	—
July 5	764.7	128.3	237.9	32.5	205.4	19.3	4.6	4.6	—
12	765.6	128.3	239.4	32.5	206.9	19.5	4.8	4.8	—
19	776.0	128.3	240.1	32.4	207.7	20.2	4.9	4.9	—
26	783.5	128.3	240.9	32.3	208.6	20.4	4.9	4.9	—
Aug. 2	771.6	128.3	240.1	32.3	207.8	20.0	4.9	4.9	—
9	768.6	128.3	239.4	32.1	207.3	19.3	4.8	4.8	—
16	763.5	128.3	237.4	32.4	205.0	19.4	4.9	4.9	—
23	764.1	128.3	240.0	32.4	207.6	17.9	4.8	4.8	—
30	770.8	128.3	238.5	32.4	206.0	17.0	5.3	5.3	—
Sep. 6	765.6	128.3	239.7	32.5	207.2	18.5	4.8	4.8	—
13	762.1	128.3	241.4	32.4	209.0	18.2	4.6	4.6	—
20	772.6	128.3	243.0	32.4	210.6	18.5	4.8	4.8	—
27	772.8	128.3	242.5	32.4	210.1	18.3	5.0	5.0	—
Oct. 4	3 778.3	3 131.2	3 248.3	3 32.6	3 215.7	3 18.5	4.5	4.5	—
11	778.7	131.2	247.2	32.6	214.6	19.4	4.2	4.2	—
18	774.3	131.2	246.4	32.5	213.9	19.6	4.2	4.2	—
25	798.0	131.2	246.6	32.4	214.2	21.0	4.6	4.6	—
Nov. 1	779.7	131.2	244.9	32.3	212.6	21.0	4.3	4.3	—
8	777.5	131.2	246.4	32.1	214.3	19.8	3.8	3.8	—
15	773.3	131.1	246.9	32.0	214.9	20.4	3.9	3.9	—
22	788.7	131.1	246.9	32.0	214.9	21.0	3.8	3.8	—
29	796.5	131.1	245.6	32.0	213.6	20.0	3.5	3.5	—
Dec. 6	812.7	131.1	248.4	32.0	216.4	20.1	3.7	3.7	—
13	818.7	131.0	250.7	31.9	218.8	20.2	3.7	3.7	—
20	820.4	131.0	248.6	31.9	216.6	20.2	3.7	3.7	—
27	832.6	130.9	248.6	32.5	216.1	19.9	4.0	4.0	—
2003 Jan. 3	3 795.0	3 130.7	3 236.8	3 31.3	3 205.5	3 19.9	4.0	4.0	—
<b>Deutsche Bundesbank</b>									
2001 Feb.	255.2	32.7	58.7	7.6	51.1	—	0.3	0.3	—
Mar.	3 245.3	3 32.7	3 60.5	3 7.8	3 52.7	—	0.3	0.3	—
Apr.	239.1	32.7	59.4	7.7	51.7	—	0.3	0.3	—
May	229.8	32.7	58.8	7.7	51.1	—	0.3	0.3	—
June	3 247.3	3 35.5	3 60.3	3 8.2	3 52.2	—	0.3	0.3	—
July	241.0	35.4	60.4	8.2	52.3	—	0.3	0.3	—
Aug.	238.4	35.4	60.0	8.1	51.9	—	0.3	0.3	—
Sep.	3 233.4	3 35.4	3 59.1	3 9.0	3 50.2	—	0.3	0.3	—
Oct.	226.6	35.4	59.5	8.8	50.7	—	0.3	0.3	—
Nov.	225.6	35.4	59.9	8.7	51.3	—	0.3	0.3	—
Dec.	3 239.9	3 35.0	3 58.2	3 8.7	3 49.5	—	0.3	0.3	—
2002 Jan.	230.6	35.0	60.0	8.8	51.2	—	0.3	0.3	—
Feb.	221.4	35.0	59.9	8.8	51.1	—	0.3	0.3	—
Mar.	3 227.4	3 38.5	3 59.6	3 8.8	3 50.8	—	0.3	0.3	—
Apr.	205.3	38.5	58.0	8.3	49.6	—	0.3	0.3	—
May	218.3	38.5	56.6	8.4	48.2	—	0.3	0.3	—
June	3 217.9	3 35.4	3 51.2	3 8.8	3 42.4	—	0.3	0.3	—
July	211.3	35.4	51.8	8.8	43.0	—	0.3	0.3	—
Aug.	218.3	35.4	50.9	8.7	42.2	—	0.3	0.3	—
Sep.	3 221.9	3 36.2	3 52.7	3 8.8	3 44.0	—	0.3	0.3	—
Oct.	226.4	36.2	52.1	8.6	43.5	—	0.3	0.3	—
Nov.	229.9	36.2	53.0	8.6	44.4	—	0.3	0.3	—
Dec.	3 240.0	3 36.2	3 48.8	3 8.3	3 40.5	—	0.3	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.—  
1 For the Eurosystem: financial statement for specific weekly dates;



III. Consolidated financial statement of the Eurosystem

Lending to euro area credit institutions related to monetary policy operations denominated in euro							Other claims on euro area credit institutions denomi- nated in euro	Securities of euro area residents denominated in euro	General government debt denominated in euro	Other assets	On reporting date/ End of month 1
Total	Main refinancing operations	Longer-term refinancing operations	Fine-tuning reverse operations	Structural reverse operations	Marginal lending facility	Credits related to margin calls					
<b>Eurosystem <sup>2</sup></b>											
157.0	97.0	60.0	-	-	0.0	0.0	0.2	30.3	67.7	89.2	2002 Apr. 19
169.0	109.0	60.0	-	-	0.0	0.0	0.2	30.5	67.7	89.3	26
169.0	109.0	60.0	-	-	0.0	0.0	0.3	30.1	67.7	87.4	May 3
174.9	114.9	60.0	-	-	0.0	0.0	0.3	30.3	67.7	88.4	10
169.0	109.0	60.0	-	-	0.0	0.0	0.3	29.9	67.7	88.9	17
173.0	113.0	60.0	-	-	0.0	0.0	0.2	30.2	67.7	89.0	24
178.4	118.0	60.0	-	-	0.4	0.0	0.2	29.9	67.7	89.1	31
173.3	113.0	60.0	-	-	0.3	0.0	0.2	29.9	67.7	89.1	June 7
167.0	107.0	60.0	-	-	0.0	0.0	0.2	30.1	67.7	89.2	14
175.9	112.0	60.0	-	-	3.9	0.0	0.2	30.2	67.7	90.1	21
201.0	140.0	60.0	-	-	0.9	0.0	0.5	30.5	67.7	90.7	28
187.0	127.0	60.0	-	-	0.0	0.0	0.4	30.6	67.7	88.8	July 5
186.0	126.0	60.0	-	-	0.0	0.0	0.4	30.5	67.7	89.1	12
194.4	134.0	60.0	-	-	0.4	0.0	0.2	30.7	67.7	89.5	19
204.7	149.0	55.0	-	-	0.7	0.0	0.4	30.7	67.7	85.5	26
194.0	139.0	55.0	-	-	0.0	0.0	0.4	30.5	67.7	85.6	Aug. 2
192.1	137.0	55.0	-	-	0.0	0.0	0.4	30.6	67.6	86.0	9
189.1	134.0	55.0	-	-	0.1	0.0	0.2	30.7	67.2	86.3	16
189.0	134.0	55.0	-	-	0.0	0.0	0.1	30.9	67.2	85.7	23
197.0	147.0	50.0	-	-	0.0	0.0	0.4	31.4	67.2	85.8	30
191.0	141.0	50.0	-	-	0.0	0.0	0.2	31.5	67.2	84.2	Sep. 6
186.1	136.0	50.0	-	-	0.0	0.0	0.2	31.5	67.2	84.7	13
194.0	144.0	50.0	-	-	0.0	0.0	0.2	31.5	67.2	85.1	20
194.1	149.0	45.0	-	-	0.1	0.0	0.3	31.5	67.2	85.6	27
190.4	145.0	45.0	-	-	0.4	0.0	0.6	32.1	67.2	85.5	Oct. 4
191.0	146.0	45.0	-	-	0.0	0.0	0.6	32.3	67.2	85.5	11
187.1	142.0	45.0	-	-	0.0	0.1	0.4	32.3	67.2	85.8	18
209.1	164.0	45.0	-	-	0.0	0.1	0.2	32.1	67.2	86.0	25
190.1	145.0	45.0	-	-	0.1	0.0	0.4	32.3	67.2	88.4	Nov. 1
189.0	144.0	45.0	-	-	0.0	0.0	0.4	32.6	67.2	87.1	8
183.1	138.0	45.0	-	-	0.1	0.0	0.4	32.7	67.2	87.6	15
196.3	150.0	45.0	-	-	1.2	0.0	0.2	33.1	67.2	89.1	22
206.1	161.0	45.0	-	-	0.1	0.0	0.3	33.2	67.2	89.4	29
219.7	173.8	45.0	-	-	0.9	0.0	0.2	33.2	67.2	89.1	Dec. 6
221.8	176.8	45.0	-	-	0.0	0.0	0.2	33.2	67.1	90.7	13
223.8	168.5	45.0	10.0	-	0.3	0.0	0.2	33.3	67.1	92.7	20
236.6	191.5	45.0	-	-	0.0	0.0	0.1	33.1	66.3	93.1	27
225.1	180.0	45.0	-	-	0.0	0.1	0.1	27.8	44.5	106.0	2003 Jan. 3
<b>Deutsche Bundesbank</b>											
140.0	109.9	28.3	-	-	1.8	-	0.0	-	4.4	19.1	2001 Feb.
119.3	81.2	38.0	-	-	0.1	-	0.0	-	4.4	28.0	Mar.
124.0	86.3	37.7	-	-	0.0	-	0.0	-	4.4	18.2	Apr.
115.1	77.3	37.7	-	-	0.1	-	0.0	-	4.4	18.4	May
128.2	91.2	36.9	-	-	0.1	-	0.0	-	4.4	18.6	June
121.8	83.5	38.3	-	-	0.0	-	0.0	-	4.4	18.7	July
114.0	74.5	39.1	-	-	0.4	-	0.0	-	4.4	24.2	Aug.
111.7	70.2	40.3	-	-	1.2	-	0.0	-	4.4	22.4	Sep.
108.2	69.8	38.4	-	-	0.1	-	0.0	-	4.4	18.7	Oct.
106.8	45.0	40.4	-	21.3	0.2	-	0.0	-	4.4	18.7	Nov.
123.0	80.5	41.1	-	-	1.4	-	0.0	-	4.4	18.9	Dec.
112.3	69.5	42.8	-	-	0.0	-	0.0	-	4.4	18.6	2002 Jan.
103.7	61.7	40.4	-	-	1.6	-	0.0	-	4.4	18.1	Feb.
106.8	65.7	40.4	-	-	0.7	-	0.0	-	4.4	17.7	Mar.
86.6	46.7	39.6	-	-	0.3	-	0.0	-	4.4	17.5	Apr.
101.0	62.3	38.6	-	-	0.1	-	0.0	-	4.4	17.4	May
109.1	71.2	36.9	-	-	0.9	-	0.0	-	4.4	17.5	June
98.2	61.8	36.4	-	-	0.0	-	0.0	-	4.4	21.2	July
100.3	68.3	32.0	-	-	0.0	-	0.0	-	4.4	26.9	Aug.
104.2	72.4	31.7	-	-	0.1	-	0.0	-	4.4	24.0	Sep.
103.9	72.4	31.6	-	-	0.0	-	0.0	-	4.4	29.4	Oct.
111.1	77.0	34.0	-	-	0.1	-	0.0	-	4.4	24.8	Nov.
125.5	87.1	36.1	-	-	2.2	-	0.0	-	4.4	24.8	Dec.

for the Bundesbank: up to the end of 2001 financial statement for the last Friday of each month, from 2002 end-of-month financial statement. —

<sup>2</sup> Source: ECB. — <sup>3</sup> Changes are due mainly to revaluations at the end of the quarter.

### III. Consolidated financial statement of the Eurosystem

#### 2. Liabilities \*

€ billion

On reporting date/ End of month 1	Total liabilities	Banknotes in circulation 2 3	Liabilities to euro area credit institutions related to monetary policy operations denominated in euro						Other liabilities to euro area credit institutions denominated in euro	Debt certificates issued	Liabilities to other euro area residents denominated 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 4</b>													
2002 Apr. 19	778.8	284.9	134.3	134.3	0.0	-	-	0.0	2.2	2.9	51.0	45.1	5.9
26	788.8	286.5	132.2	132.1	0.1	-	-	-	2.3	2.9	63.6	57.7	5.9
May 3	783.8	294.5	129.9	128.8	1.1	-	-	0.0	2.2	2.9	53.3	47.3	5.9
10	791.6	297.3	134.3	134.1	0.2	-	-	0.0	2.3	2.9	53.6	47.8	5.8
17	785.5	297.2	133.3	133.2	0.0	-	-	0.0	2.2	2.9	47.3	41.2	6.0
24	788.8	295.2	128.6	128.5	0.0	-	-	-	2.2	2.9	60.7	54.8	5.9
31	793.3	299.0	130.2	130.1	0.1	-	-	0.0	2.4	2.9	59.9	54.0	5.9
June 7	788.4	302.9	132.9	132.9	0.1	-	-	0.0	2.5	2.9	48.0	42.1	5.8
14	783.6	303.6	128.2	128.2	0.0	-	-	0.0	2.4	2.9	46.0	40.3	5.7
21	793.7	304.5	135.0	132.3	2.7	-	-	0.0	2.2	2.9	48.3	42.5	5.9
28	5 780.8	308.8	134.9	134.8	0.1	-	-	0.0	2.0	2.9	70.9	65.2	5.7
July 5	764.7	315.1	129.1	128.7	0.0	-	-	0.4	0.2	2.9	57.5	52.7	4.8
12	765.6	316.7	129.4	129.4	0.0	-	-	0.0	0.1	2.9	54.5	49.9	4.6
19	776.0	317.2	128.6	128.0	0.6	-	-	0.0	0.0	2.9	62.7	58.0	4.7
26	783.5	317.6	132.4	132.3	0.0	-	-	0.0	0.1	2.9	69.6	65.0	4.5
Aug. 2	771.6	324.0	129.3	129.2	0.0	-	-	0.0	0.0	2.9	55.3	50.6	4.7
9	768.6	326.0	127.6	127.6	0.0	-	-	0.0	0.3	2.9	52.3	47.6	4.7
16	763.5	325.8	129.4	129.4	0.0	-	-	0.0	0.2	2.9	47.5	42.7	4.8
23	764.1	321.2	131.3	128.7	2.6	-	-	0.0	0.1	2.9	49.8	45.1	4.7
30	770.8	321.8	126.1	125.9	0.1	-	-	0.0	0.1	2.9	63.8	59.0	4.8
Sep. 6	765.6	325.8	129.9	129.8	0.0	-	-	0.0	0.3	2.9	51.7	47.0	4.7
13	762.1	325.7	126.8	126.8	0.0	-	-	0.0	0.1	2.9	50.1	45.4	4.7
20	772.6	324.5	130.0	129.9	0.1	-	-	0.0	0.1	2.9	55.8	51.0	4.8
27	772.8	325.4	126.9	126.9	0.0	-	-	-	0.2	2.9	58.8	53.7	5.0
Oct. 4	5 778.3	331.7	127.3	127.3	0.1	-	-	0.0	0.2	2.9	47.8	42.9	4.9
11	778.7	331.6	132.3	132.3	0.0	-	-	-	0.4	2.9	43.9	39.1	4.8
18	774.3	330.8	128.9	128.8	0.0	-	-	0.0	0.2	2.9	43.8	39.1	4.7
25	798.0	329.6	136.8	136.8	0.0	-	-	0.0	0.1	2.9	59.1	54.4	4.6
Nov. 1	779.7	334.8	122.7	122.6	0.0	-	-	0.0	0.1	2.9	50.6	45.8	4.8
8	777.5	336.7	130.7	130.6	0.1	-	-	-	0.3	2.0	41.2	35.9	5.3
15	773.3	335.7	129.7	129.6	0.1	-	-	-	0.2	2.0	36.8	32.0	4.8
22	788.7	334.6	126.8	126.3	0.5	-	-	-	0.2	2.0	55.1	50.2	4.9
29	796.5	340.0	121.9	121.9	0.0	-	-	-	0.2	2.0	64.8	59.6	5.3
Dec. 6	812.7	351.3	127.1	127.0	0.1	-	-	-	0.3	2.0	62.2	56.6	5.6
13	818.7	355.7	130.0	129.9	0.1	-	-	-	0.0	2.0	58.5	53.6	4.9
20	820.4	367.9	127.9	126.7	1.2	-	-	-	0.0	2.0	50.0	44.9	5.0
27	832.6	374.6	129.3	129.1	0.2	-	-	-	0.0	2.0	55.1	49.8	5.2
2003 Jan. 3	5 795.0	354.5	130.0	129.9	0.1	-	-	-	0.0	2.0	47.4	42.4	5.0
<b>Deutsche Bundesbank</b>													
2001 Feb.	255.2	126.2	46.1	45.8	0.3	-	-	-	-	-	0.5	0.1	0.4
Mar.	5 245.3	125.3	45.1	45.0	0.1	-	-	-	-	-	0.6	0.1	0.5
Apr.	239.1	125.0	40.8	40.8	0.0	-	-	-	-	-	0.5	0.1	0.4
May	229.8	124.1	32.6	32.5	0.1	-	-	-	-	-	0.5	0.1	0.4
June	5 247.3	121.9	42.7	42.5	0.2	-	-	-	-	-	0.6	0.1	0.5
July	241.0	119.9	33.6	33.6	0.0	-	-	-	-	-	0.6	0.1	0.5
Aug.	238.4	116.5	48.0	48.0	0.0	-	-	-	-	-	0.5	0.1	0.4
Sep.	5 233.4	112.0	48.3	48.2	0.0	-	-	-	-	-	0.6	0.1	0.5
Oct.	226.6	106.7	34.0	34.0	0.0	-	-	-	-	-	0.5	0.1	0.4
Nov.	225.6	99.0	49.9	49.8	0.1	-	-	-	-	-	0.6	0.1	0.5
Dec.	5 239.9	76.5	57.5	57.4	0.1	-	-	-	-	-	1.0	0.1	1.0
2002 Jan.	230.6	82.5	46.1	46.1	0.0	-	-	-	-	-	1.0	0.1	0.9
Feb.	221.4	79.8	41.6	41.5	0.0	-	-	-	-	-	0.6	0.1	0.6
Mar.	5 227.4	80.5	42.0	42.0	0.1	-	-	-	-	-	0.6	0.1	0.5
Apr.	205.3	81.7	40.1	38.9	1.2	-	-	-	-	-	0.5	0.1	0.5
May	218.3	84.1	44.9	44.9	0.0	-	-	-	-	-	0.6	0.0	0.6
June	5 217.9	86.9	41.4	41.3	0.1	-	-	-	-	-	0.6	0.1	0.5
July	211.3	90.0	40.7	40.6	0.0	-	-	-	-	-	0.6	0.1	0.5
Aug.	218.3	90.7	44.3	44.2	0.1	-	-	-	-	-	0.5	0.0	0.5
Sep.	5 221.9	92.0	41.0	41.0	0.0	-	-	-	-	-	0.6	0.0	0.5
Oct.	226.4	94.2	41.3	41.3	0.0	-	-	-	-	-	0.6	0.1	0.5
Nov.	229.9	95.7	41.0	40.9	0.0	-	-	-	-	-	0.8	0.1	0.7
Dec.	5 240.0	104.5	44.8	44.8	0.0	-	-	-	-	-	0.6	0.0	0.6

\* 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. — 1 For the Eurosystem: financial statement for specific weekly dates;

for the Bundesbank: up to the end of 2001 financial statement for the last Friday of each month, from 2002 end-of-month financial statement. — 2 From 2002 euro banknotes and up to end of 2002 banknotes still in circulation issued by the national central banks of the Eurosystem. — 3 According to the accounting regime chosen by the Eurosystem on the issue of euro banknotes, a share of 8% of the total value of the euro

III. Consolidated financial statement of the Eurosystem

Liabilities to non-euro area residents denominated in euro	Liabilities to euro area residents denominated in foreign currency	Liabilities to non-euro area residents denominated in foreign currency			Counterpart of special drawing rights allocated by the IMF	Other liabilities	Intra-Eurosystem liability related to banknote issue <sup>3</sup>	Revaluation accounts	Capital and reserves	On reporting date/ End of month <sup>1</sup>
		Total	Deposits, balances and other liabilities	Liabilities arising from the credit facility under ERM II						
<b>Eurosystem<sup>4</sup></b>										
8.3	1.4	21.0	21.0	—	7.0	65.2	—	136.9	63.7	2002 Apr. 19
8.4	1.4	19.1	19.1	—	7.0	64.8	—	136.9	63.7	26
9.6	1.4	17.8	17.8	—	7.0	64.6	—	136.9	63.8	May 3
8.5	1.4	18.9	18.9	—	7.0	64.6	—	136.9	63.8	10
8.6	1.5	19.4	19.4	—	7.0	65.4	—	136.9	63.8	17
8.4	1.4	18.8	18.8	—	7.0	62.6	—	136.9	64.1	24
8.5	1.4	18.2	18.2	—	7.0	62.9	—	136.9	64.1	31
8.6	1.4	18.6	18.6	—	7.0	62.5	—	136.9	64.3	June 7
8.3	1.4	20.0	20.0	—	7.0	62.4	—	136.9	64.3	14
8.9	1.4	19.1	19.1	—	7.0	62.9	—	136.9	64.3	21
8.4	1.6	5 16.9	5 16.9	—	6.5	5 64.4	—	5 99.1	64.3	28
8.5	1.2	16.9	16.9	—	6.5	63.3	—	99.1	64.3	July 5
8.6	1.2	18.8	18.8	—	6.5	63.3	—	99.1	64.3	12
8.6	1.5	20.0	20.0	—	6.5	64.5	—	99.1	64.3	19
9.0	1.3	21.5	21.5	—	6.5	59.3	—	99.1	64.3	26
9.4	1.4	20.4	20.4	—	6.5	59.1	—	99.1	64.3	Aug. 2
8.6	1.3	19.7	19.7	—	6.5	59.9	—	99.1	64.3	9
8.6	1.3	17.3	17.3	—	6.5	60.5	—	99.1	64.3	16
9.1	1.3	18.4	18.4	—	6.5	60.0	—	99.1	64.3	23
9.0	1.3	16.1	16.1	—	6.5	59.8	—	99.1	64.3	30
8.7	1.3	15.1	15.1	—	6.5	60.0	—	99.1	64.3	Sep. 6
8.6	1.3	16.6	16.6	—	6.5	60.0	—	99.1	64.3	13
9.0	1.5	18.1	18.1	—	6.5	60.7	—	99.1	64.3	20
8.9	1.4	17.9	17.9	—	6.5	60.5	—	99.1	64.3	27
9.2	1.3	18.1	18.1	—	6.6	5 62.5	—	5 106.3	64.3	Oct. 4
8.5	1.3	18.0	18.0	—	6.6	62.6	—	106.3	64.3	11
8.3	1.4	17.3	17.3	—	6.6	63.5	—	106.3	64.3	18
8.4	1.6	18.8	18.8	—	6.6	63.6	—	106.3	64.3	25
8.4	1.4	17.3	17.3	—	6.6	64.3	—	106.3	64.2	Nov. 1
8.5	1.4	17.0	17.0	—	6.6	62.7	—	106.3	64.2	8
8.4	1.6	17.1	17.1	—	6.6	64.7	—	106.3	64.2	15
8.3	1.7	19.3	19.3	—	6.6	63.4	—	106.3	64.4	22
8.6	1.3	17.3	17.3	—	6.6	62.9	—	106.3	64.4	29
8.5	1.3	20.0	20.0	—	6.6	62.6	—	106.3	64.4	Dec. 6
8.4	1.3	22.4	22.4	—	6.6	63.0	—	106.3	64.5	13
9.5	1.4	20.7	20.7	—	6.6	63.7	—	106.3	64.4	20
8.8	1.2	20.1	20.1	—	6.6	64.1	—	106.3	64.4	27
11.6	1.1	5 21.0	5 21.0	—	6.3	5 73.8	—	5 82.8	64.3	2003 Jan. 3
<b>Deutsche Bundesbank</b>										
6.9	0.0	0.0	0.0	—	1.7	29.5	.	39.2	5.1	2001 Feb.
6.7	0.0	0.0	0.0	—	1.7	19.2	.	5 41.4	5.1	Mar.
6.8	0.0	—	—	—	1.7	17.8	.	41.4	5.1	Apr.
7.2	0.0	—	—	—	1.7	17.1	.	41.4	5.1	May
6.8	0.0	—	—	—	1.8	23.2	.	5 45.2	5.1	June
6.8	0.0	—	—	—	1.8	28.0	.	45.2	5.1	July
6.8	0.0	—	—	—	1.8	14.4	.	45.2	5.1	Aug.
6.8	0.0	1.8	1.8	—	1.7	15.3	.	5 41.8	5.1	Sep.
6.9	0.0	3.0	3.0	—	1.7	26.8	.	41.8	5.1	Oct.
6.9	0.0	4.1	4.1	—	1.7	16.4	.	41.8	5.1	Nov.
7.3	0.0	1.4	1.4	—	1.7	47.8	.	5 41.6	5.1	Dec.
7.1	0.0	3.3	3.3	—	1.7	30.6	11.6	41.6	5.1	2002 Jan.
7.0	0.0	3.2	3.2	—	1.7	32.6	8.2	41.6	5.1	Feb.
7.0	0.0	5 3.0	5 3.0	—	1.7	30.9	11.6	5 44.8	5.1	Mar.
7.0	0.0	2.4	2.4	—	1.7	9.1	12.9	44.8	5.1	Apr.
7.0	0.0	1.6	1.6	—	1.7	12.7	15.7	44.8	5.1	May
6.9	0.0	2.3	2.3	—	1.6	20.9	16.7	5 35.5	5.1	June
7.1	0.0	3.0	3.0	—	1.6	8.9	18.8	35.5	5.1	July
7.1	0.0	2.3	2.3	—	1.6	9.2	22.0	35.5	5.1	Aug.
7.2	0.0	2.8	2.8	—	1.6	10.2	24.1	5 37.3	5.1	Sep.
7.1	0.0	2.4	2.4	—	1.6	10.6	26.2	37.3	5.1	Oct.
7.1	0.0	3.1	3.1	—	1.6	10.5	27.6	37.3	5.1	Nov.
7.1	0.0	1.8	1.8	—	1.6	11.1	29.1	5 34.2	5.0	Dec.

banknotes in circulation is allocated to the ECB on a monthly basis. The counterpart of this adjustment is disclosed as an "Intra-Eurosystem liability related to banknote issue." The remaining 92% of the value of the euro banknotes in circulation are allocated to the NCBs on a monthly basis too, whereby each NCB shows in its balance sheet a share of the euro banknotes issued corresponding to its paid-up share in the ECB's capital. The difference

between the value of the euro banknotes allocated to the NCB according to the aforementioned accounting regime, and the value of euro banknotes put into circulation, is also disclosed as an "Intra-Eurosystem claim/ liability related to banknote issue." — 4 Source: ECB. — 5 Changes are due mainly to revaluations at the end of the quarter.

#### IV. Banks

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

#### Assets

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

Period	Balance-sheet total <sup>2</sup>	Cash in hand	Lending to banks (MFIs) in the euro area <sup>3</sup>						Lending to non-banks (non-MFIs) in the				
			to banks in the home country			to banks in other member countries			to non-banks in the home country		Enterprises and individuals		
			Total	Ad- vances <sup>3</sup>	Secur- ities issued by banks	Total	Ad- vances <sup>3</sup>	Secur- ities issued by banks	Total	Total	Total	Ad- vances <sup>3</sup>	
<b>End of year or month</b>													
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
1999	5,678.5	17.2	1,836.9	1,635.0	1,081.4	553.6	201.9	161.8	40.1	3,127.4	2,958.6	2,326.4	2,093.4
2000	6,083.9	16.1	1,977.4	1,724.2	1,108.9	615.3	253.2	184.5	68.6	3,249.9	3,062.6	2,445.7	2,186.6
2001	6,303.1	14.6	2,069.7	1,775.5	1,140.6	634.9	294.2	219.8	74.4	3,317.1	3,084.9	2,497.1	2,235.7
2001 Feb.	6,141.3	13.6	1,985.8	1,728.3	1,097.6	630.8	257.4	187.1	70.3	3,281.4	3,072.2	2,468.1	2,198.0
Mar.	6,259.3	13.1	2,037.0	1,749.6	1,111.2	638.4	287.4	215.0	72.3	3,309.4	3,095.3	2,487.6	2,204.2
Apr.	6,283.6	13.7	2,036.3	1,750.8	1,101.7	649.1	285.5	211.3	74.2	3,311.9	3,092.6	2,492.9	2,202.3
May	6,312.3	13.9	2,038.9	1,756.7	1,106.2	650.5	282.2	206.5	75.7	3,323.1	3,095.6	2,497.6	2,210.5
June	6,283.8	13.8	2,050.4	1,753.5	1,112.4	641.1	296.9	221.0	75.9	3,295.9	3,070.6	2,473.6	2,212.8
July	6,225.8	13.8	2,036.5	1,748.3	1,100.6	647.7	288.2	213.2	75.0	3,298.4	3,073.9	2,466.3	2,206.8
Aug.	6,236.5	13.5	2,037.6	1,751.9	1,113.0	638.9	285.7	210.6	75.1	3,289.2	3,061.6	2,464.3	2,207.2
Sep.	6,295.9	13.7	2,070.9	1,778.2	1,142.2	635.9	292.7	216.8	75.9	3,283.9	3,056.0	2,471.5	2,218.7
Oct.	6,300.0	14.2	2,064.4	1,769.4	1,130.7	638.7	295.0	218.2	76.8	3,284.0	3,058.5	2,474.7	2,219.6
Nov.	6,320.2	13.7	2,082.6	1,779.3	1,144.1	635.3	303.2	227.1	76.1	3,299.4	3,073.7	2,479.4	2,226.6
Dec.	6,303.1	14.6	2,069.7	1,775.5	1,140.6	634.9	294.2	219.8	74.4	3,317.1	3,084.9	2,497.1	2,235.7
2002 Jan.	6,255.1	27.7	2,019.8	1,728.4	1,094.0	634.4	291.4	216.2	75.2	3,310.8	3,075.1	2,487.1	2,225.5
Feb.	6,230.4	19.5	2,004.6	1,725.2	1,084.2	641.0	279.4	202.9	76.5	3,311.9	3,074.7	2,485.5	2,227.3
Mar.	6,269.8	16.9	2,033.3	1,744.1	1,096.1	647.9	289.3	213.2	76.1	3,310.6	3,065.5	2,478.9	2,230.3
Apr.	6,267.7	14.9	2,032.8	1,736.5	1,085.8	650.7	296.3	220.2	76.1	3,319.5	3,072.8	2,485.6	2,231.6
May	6,304.5	14.7	2,055.5	1,749.0	1,096.7	652.2	306.6	230.7	75.8	3,323.3	3,074.2	2,485.6	2,232.0
June	6,277.4	14.3	2,073.9	1,758.9	1,111.2	647.6	315.1	238.1	77.0	3,304.8	3,059.5	2,477.9	2,233.2
July	6,265.6	13.8	2,051.7	1,731.9	1,094.9	637.1	319.7	242.3	77.4	3,313.1	3,063.8	2,471.5	2,231.6
Aug.	6,290.6	13.6	2,073.4	1,746.9	1,113.0	634.0	326.5	249.2	77.3	3,310.9	3,064.3	2,480.6	2,231.5
Sep.	6,341.1	13.3	2,077.4	1,745.3	1,113.3	632.1	332.0	253.8	78.3	3,323.1	3,074.8	2,490.6	2,242.3
Oct.	6,359.1	14.2	2,078.3	1,741.3	1,117.9	623.5	336.9	257.2	79.7	3,327.8	3,080.9	2,494.9	2,240.6
Nov.	6,453.5	13.2	2,130.3	1,780.8	1,150.6	630.2	349.5	267.3	82.2	3,336.6	3,088.4	2,497.7	2,238.4
<b>Changes <sup>1</sup></b>													
1994	406.2	- 1.6	89.7	96.6	72.4	24.2	- 6.9	- 6.9	- 0.1	326.5	327.4	257.5	185.9
1995	587.7	1.1	184.6	169.3	114.7	54.6	15.2	13.0	2.3	322.1	312.1	201.2	188.1
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	825.6	0.5	313.1	279.6	172.9	106.7	33.5	27.6	5.9	324.0	287.5	228.4	197.6
1998	1,001.0	- 0.8	422.2	355.7	215.1	140.6	66.4	56.2	10.2	440.4	363.3	337.5	245.2
1999	452.6	1.8	179.8	140.1	81.4	58.6	39.8	26.3	13.5	206.6	158.1	156.8	126.4
2000	401.5	- 1.2	143.0	91.7	28.1	63.6	51.4	22.8	28.6	123.2	105.4	116.8	89.5
2001	244.9	- 1.4	91.0	50.7	30.3	20.5	40.3	34.5	5.8	55.1	23.9	50.4	48.1
2001 Mar.	105.7	- 0.5	51.3	21.3	13.6	7.7	30.0	28.0	2.0	26.0	21.8	18.2	4.9
Apr.	24.1	0.6	- 2.0	- 0.1	- 10.9	10.7	- 1.9	- 3.7	1.8	2.7	- 2.5	5.5	- 1.7
May	12.3	0.1	2.4	5.9	4.6	1.3	- 3.5	- 4.8	1.3	7.5	0.6	2.3	5.9
June	- 26.6	- 0.1	11.6	- 3.2	6.2	- 9.4	14.8	14.5	0.3	- 26.5	- 24.4	- 23.6	2.7
July	- 47.6	- 0.0	- 13.8	- 5.2	- 11.8	6.7	- 8.7	- 7.8	- 0.8	4.5	4.5	- 6.1	- 4.8
Aug.	25.5	- 0.3	1.3	3.6	12.4	- 8.8	- 2.3	- 2.6	0.2	- 5.2	- 8.9	- 0.5	1.9
Sep.	56.7	0.3	33.2	26.3	29.2	- 3.0	6.9	6.2	0.8	- 6.2	- 6.5	6.4	10.6
Oct.	1.6	0.4	- 6.6	- 8.9	- 11.7	2.8	2.3	1.4	0.9	- 0.2	2.3	3.0	0.8
Nov.	51.1	- 0.5	18.2	10.0	13.4	- 3.3	8.2	8.9	- 0.7	15.7	14.4	3.7	6.0
Dec.	- 16.8	1.0	- 12.3	- 3.4	- 3.5	0.1	- 8.9	- 7.3	- 1.7	18.9	12.4	18.7	10.1
2002 Jan.	- 51.6	13.0	- 49.6	- 46.7	- 46.6	- 0.1	- 2.9	- 3.7	0.8	- 7.3	- 10.4	- 10.7	- 11.0
Feb.	- 23.2	- 8.2	- 15.1	- 3.1	- 9.8	6.7	- 12.0	- 13.3	1.2	- 1.8	0.1	- 1.0	2.0
Mar.	42.2	- 2.5	28.9	19.0	11.9	7.1	9.9	10.3	- 0.4	- 1.0	- 8.9	- 6.5	3.0
Apr.	7.7	- 2.0	- 0.9	- 8.0	- 10.3	2.3	7.1	7.0	0.1	11.0	8.7	8.1	2.3
May	52.5	- 0.2	23.2	12.8	11.1	1.8	10.4	10.5	- 0.2	6.6	3.6	2.1	2.4
June	- 5.7	- 0.4	18.4	9.7	14.3	- 4.5	8.6	7.4	1.3	- 19.8	- 17.1	- 10.1	- 1.1
July	- 19.6	- 0.5	- 22.6	- 27.2	- 16.3	- 10.9	4.6	4.2	0.3	7.2	3.6	- 7.1	- 2.6
Aug.	23.8	- 0.2	21.8	15.0	18.1	- 3.1	6.8	6.8	- 0.0	- 1.7	0.9	8.8	0.3
Sep.	51.3	- 0.2	4.0	- 1.6	0.3	- 1.9	5.6	4.6	0.9	12.0	10.2	10.3	10.4
Oct.	20.4	0.9	0.9	- 4.0	4.6	- 8.6	4.9	3.5	1.4	4.6	6.2	4.4	- 1.5
Nov.	97.2	- 1.0	52.0	39.4	32.7	6.7	12.6	10.1	2.5	9.4	7.9	2.2	- 1.8

\* 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 Statistical breaks have been eliminated from the flow figures. — 2 Up to December

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>		
Public authorities			Enterprises and individuals				Public authorities							
Secur-ities	Total	Ad-ances <sup>3</sup>	Secur-ities <sup>4</sup>	Total	Total	of which: Ad-ances <sup>3</sup>	Total	Ad-ances <sup>3</sup>	Secur-ities	Total				
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	
233.0	632.1	488.4	143.7	168.8	65.3	35.9	103.6	20.7	82.8	511.2	404.2	185.8	1999	
259.1	616.9	478.5	138.4	187.3	83.8	44.2	103.5	20.0	83.5	622.4	481.7	218.1	2000	
261.3	587.8	468.7	119.1	232.3	111.3	53.7	121.0	26.2	94.8	727.3	572.0	174.3	2001	
270.1	604.1	482.3	121.7	209.2	89.6	46.5	119.6	23.7	95.8	642.0	500.1	218.6	2001 Feb.	
283.4	607.7	482.5	125.2	214.1	95.1	49.0	119.0	24.1	94.9	670.6	522.6	229.3	Mar.	
290.7	599.6	477.1	122.5	219.3	99.5	48.3	119.9	24.0	95.9	689.7	536.9	231.9	Apr.	
287.1	598.0	475.5	122.5	227.5	103.5	48.4	123.9	24.3	99.7	698.1	541.1	238.4	May	
260.7	597.1	469.2	127.8	225.2	104.4	50.8	120.8	24.5	96.3	693.2	535.9	230.4	June	
259.5	607.6	470.3	137.3	224.5	103.2	49.7	121.4	24.0	97.3	663.1	510.4	214.1	July	
257.0	597.3	469.5	127.8	227.5	102.0	49.2	125.6	24.1	101.5	683.8	531.3	212.6	Aug.	
252.9	584.5	466.8	117.7	228.0	103.5	51.1	124.5	23.8	100.7	712.8	558.0	214.6	Sep.	
255.1	583.8	467.7	116.1	225.5	105.2	51.7	120.3	24.1	96.2	722.0	563.7	215.5	Oct.	
252.8	594.3	477.4	116.9	225.7	107.8	52.4	117.9	24.8	93.1	741.7	584.8	182.8	Nov.	
261.3	587.8	468.7	119.1	232.3	111.3	53.7	121.0	26.2	94.8	727.3	572.0	174.3	Dec.	
261.6	588.1	469.5	118.5	235.6	113.5	54.7	122.1	25.7	96.4	723.8	569.9	173.1	2002 Jan.	
258.2	589.2	466.9	122.3	237.2	114.6	56.1	122.6	25.8	96.8	721.8	566.7	172.6	Feb.	
248.6	586.6	464.3	122.3	245.0	118.7	60.1	126.3	26.7	99.6	730.8	574.6	178.3	Mar.	
254.0	587.2	460.4	126.9	246.7	120.1	61.5	126.6	26.4	100.2	721.2	568.3	179.3	Apr.	
253.6	588.6	455.2	133.4	249.0	121.3	62.6	127.7	26.0	101.8	734.8	580.6	176.1	May	
244.6	581.6	450.0	131.6	245.4	118.1	61.5	127.2	26.0	101.2	712.6	559.4	171.7	June	
239.9	592.3	458.1	134.2	249.3	118.1	59.8	131.2	26.5	104.7	712.9	557.9	174.2	July	
249.1	583.7	448.5	135.2	246.6	114.3	58.3	132.3	26.9	105.4	722.0	566.9	170.7	Aug.	
248.3	584.2	445.3	138.9	248.3	114.7	59.3	133.6	27.2	106.3	752.3	597.5	174.9	Sep.	
254.2	586.0	448.3	137.7	246.9	116.4	59.1	130.5	27.6	102.9	762.2	608.7	176.7	Oct.	
258.2	591.7	449.2	142.5	248.2	118.6	61.0	129.6	28.0	101.6	791.0	634.2	182.4	Nov.	
<b>Changes <sup>1</sup></b>														
71.6	69.9	27.5	42.4	- 0.9	- 4.9	- 4.9	4.0	- 0.0	4.0	- 16.4	- 25.1	8.1	1994	
13.1	110.9	113.1	- 2.1	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	6.0	11.2	69.5	49.3	15.1	1996	
30.8	59.1	53.3	5.8	36.5	5.1	4.4	31.4	6.1	25.3	159.4	132.9	28.6	1997	
92.3	25.8	28.1	- 2.3	77.1	18.9	13.0	58.3	12.5	45.7	83.9	52.0	55.3	1998	
30.4	1.3	7.7	- 6.4	48.4	12.2	6.4	36.2	2.0	34.2	33.1	13.8	31.3	1999	
27.3	- 11.4	- 6.7	- 4.6	17.8	16.8	7.2	1.0	- 0.3	1.2	103.9	71.9	32.5	2000	
2.4	- 26.5	- 9.8	- 16.7	31.3	24.3	7.7	7.0	2.2	4.8	110.1	86.6	- 9.9	2001	
13.3	3.6	0.1	3.5	4.2	5.0	2.0	- 0.8	0.2	- 1.0	18.2	13.3	10.7	2001 Mar.	
7.2	- 8.1	- 5.4	- 2.7	5.3	4.4	- 0.6	0.9	- 0.1	1.0	20.1	15.2	2.6	Apr.	
- 3.6	- 1.7	- 1.6	- 0.1	6.9	3.5	- 0.4	3.5	0.1	3.4	- 4.1	- 6.5	6.4	May	
- 26.3	- 0.9	- 6.2	5.4	- 2.0	1.0	2.4	- 3.0	0.2	- 3.2	- 3.7	- 4.2	- 8.0	June	
- 1.3	10.6	1.0	9.6	- 0.0	- 0.9	- 0.8	0.9	- 0.3	1.2	- 21.9	- 18.4	- 16.4	July	
- 2.4	- 8.4	- 0.7	- 7.7	3.7	- 0.8	- 0.1	4.5	0.2	4.3	31.3	30.2	- 1.6	Aug.	
- 4.2	- 12.9	- 2.8	- 10.1	0.3	1.5	1.9	- 1.1	- 0.3	- 0.8	27.3	25.1	2.1	Sep.	
2.2	- 0.7	0.9	- 1.5	- 2.5	1.6	0.5	- 4.1	0.3	- 4.4	7.1	3.9	0.8	Oct.	
- 2.3	10.7	9.8	0.9	1.3	2.5	0.6	- 1.2	0.6	- 1.8	16.3	18.0	1.3	Nov.	
8.6	- 6.3	- 8.8	2.4	6.6	3.4	1.2	3.2	1.4	1.8	- 15.9	- 14.6	- 8.5	Dec.	
0.3	0.3	0.8	- 0.5	3.0	2.1	0.9	1.0	- 0.6	1.5	- 6.4	- 6.4	- 1.2	2002 Jan.	
- 3.0	1.2	- 2.6	3.8	1.6	1.1	1.3	0.5	0.1	0.4	- 1.2	- 2.7	- 0.4	Feb.	
- 9.6	- 2.4	- 2.6	0.2	7.9	4.1	4.1	3.8	1.0	2.8	11.3	11.5	5.6	Mar.	
5.7	0.6	- 3.9	4.5	2.2	1.8	1.7	0.5	- 0.2	0.7	- 1.2	1.1	0.8	Apr.	
- 0.3	1.6	- 5.1	6.7	3.0	1.6	1.5	1.4	- 0.3	1.6	25.8	23.0	- 3.0	May	
- 9.0	- 7.0	- 5.1	- 1.9	- 2.7	- 2.6	- 0.5	- 0.2	0.2	- 0.4	0.6	- 0.3	- 4.5	June	
- 4.5	10.7	8.1	2.6	3.5	- 0.3	- 2.0	3.8	0.4	3.4	- 6.1	- 7.1	2.5	July	
8.5	- 7.9	- 9.6	1.7	- 2.6	- 3.0	- 0.9	0.4	- 0.1	0.5	7.4	7.1	- 3.5	Aug.	
- 0.1	- 0.1	- 3.2	3.1	1.8	0.5	1.1	1.3	0.4	0.9	31.2	31.4	4.3	Sep.	
5.9	1.8	3.1	- 1.2	- 1.6	1.4	- 0.2	- 3.0	0.4	- 3.4	12.2	11.8	1.7	Oct.	
4.0	5.7	0.9	4.8	1.4	2.3	2.0	- 0.9	0.4	- 1.3	31.1	27.5	5.7	Nov.	

1998, 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.

#### IV. Banks

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

Until the end of 1998 DM billion, from 1999 € 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 <sup>5</sup>		At agreed notice <sup>6</sup>		Total	Over- night
								Total <sup>4</sup>	of which: up to 2 years <sup>7</sup>	Total	of which: up to 3 months		
	End of year or month												
1993	6,799.5	1,556.3	1,438.2	118.1	2,982.1	2,810.6	489.6	1,312.6	628.5	1,008.4	587.7	70.6	3.5
1994	7,205.7	1,650.9	1,483.5	167.4	3,082.7	2,894.4	510.4	1,288.3	549.2	1,095.8	654.6	80.1	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	3,552.2	751.6	1,411.1	461.6	1,389.6	971.9	187.4	9.4
1999	5,678.5	1,288.1	1,121.8	166.3	2,012.4	1,854.7	419.5	820.6	247.0	614.7	504.4	111.1	6.5
2000	6,083.9	1,379.4	1,188.9	190.5	2,051.4	1,873.6	441.4	858.8	274.3	573.5	450.5	107.9	6.9
2001	6,303.1	1,418.0	1,202.1	215.9	2,134.0	1,979.7	525.0	880.2	290.6	574.5	461.9	105.2	7.6
2001 Feb.	6,141.3	1,377.4	1,159.8	217.5	2,036.3	1,872.7	442.1	863.3	278.2	567.2	444.2	105.6	6.2
Mar.	6,259.3	1,396.1	1,179.9	216.2	2,040.4	1,874.4	440.7	868.1	281.8	565.6	443.0	108.4	7.6
Apr.	6,283.6	1,399.2	1,170.1	229.1	2,044.2	1,878.0	450.8	864.5	279.0	562.7	442.1	108.0	7.5
May	6,312.3	1,397.2	1,169.6	227.7	2,053.8	1,883.9	453.9	870.1	282.1	559.9	440.4	110.9	8.8
June	6,283.8	1,390.9	1,183.6	207.3	2,061.5	1,893.3	462.1	872.4	283.7	558.7	440.1	109.2	8.2
July	6,225.8	1,374.9	1,168.1	206.8	2,055.1	1,888.4	458.8	873.2	285.8	556.4	439.0	106.9	7.6
Aug.	6,236.5	1,367.7	1,168.2	199.4	2,058.6	1,893.2	461.9	876.2	289.0	555.1	439.0	105.5	6.6
Sep.	6,295.9	1,398.9	1,196.0	203.0	2,074.6	1,912.0	479.2	877.4	289.0	555.4	440.0	105.6	8.3
Oct.	6,300.0	1,386.9	1,176.9	210.0	2,077.0	1,914.5	482.5	875.6	287.3	556.4	442.8	107.1	7.7
Nov.	6,320.2	1,418.2	1,198.8	219.4	2,102.7	1,938.6	509.6	870.9	284.1	558.2	445.6	107.5	8.6
Dec.	6,303.1	1,418.0	1,202.1	215.9	2,134.0	1,979.7	525.0	880.2	290.6	574.5	461.9	105.2	7.6
2002 Jan.	6,255.1	1,375.4	1,153.3	222.2	2,112.2	1,957.1	511.0	872.8	281.4	573.4	464.3	105.0	8.1
Feb.	6,230.4	1,346.3	1,141.7	204.6	2,107.5	1,955.2	510.5	872.7	278.8	572.0	463.9	102.9	8.2
Mar.	6,269.8	1,371.2	1,157.9	213.3	2,108.5	1,954.0	508.0	875.2	278.4	570.8	463.8	105.1	8.1
Apr.	6,267.7	1,362.1	1,129.9	232.1	2,099.9	1,948.3	515.1	871.3	274.5	561.8	456.7	104.1	10.1
May	6,304.5	1,382.7	1,150.7	232.0	2,107.1	1,957.8	523.5	874.3	277.0	560.1	456.1	101.1	7.4
June	6,277.4	1,392.3	1,174.8	217.4	2,118.7	1,970.2	535.6	875.7	278.3	558.9	455.1	99.9	8.5
July	6,265.6	1,371.7	1,149.6	222.1	2,111.9	1,964.9	531.2	876.2	278.0	557.5	453.6	99.5	8.0
Aug.	6,290.6	1,389.2	1,165.7	223.5	2,098.3	1,962.0	526.7	877.6	280.7	557.8	453.8	87.4	7.3
Sep.	6,341.1	1,400.2	1,172.1	228.1	2,105.1	1,967.6	540.3	869.1	272.6	558.3	454.7	87.5	8.8
Oct.	6,359.1	1,419.4	1,177.2	242.2	2,114.5	1,979.6	542.0	877.8	279.0	559.7	456.9	86.6	8.2
Nov.	6,453.5	1,460.0	1,214.3	245.7	2,146.5	2,008.8	571.8	874.6	273.2	562.4	460.2	90.1	10.0
	Changes <sup>1</sup>												
1994	406.2	94.6	45.3	49.3	100.6	83.8	20.8	- 24.3	- 79.3	87.4	66.9	9.4	0.6
1995	587.7	110.7	98.5	12.2	189.3	156.5	47.2	4.9	- 76.5	104.3	99.1	30.0	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	825.6	223.7	185.5	38.3	330.8	303.8	112.1	16.3	- 3.8	49.4	60.3	25.0	- 0.3
1998	1,001.0	277.0	182.8	94.2	405.9	376.8	176.8	97.8	34.8	32.7	42.0	26.2	2.0
1999	452.6	70.2	66.4	3.7	75.0	65.6	34.2	36.7	13.5	- 5.3	7.4	7.5	1.7
2000	401.5	87.5	66.0	21.5	38.7	19.8	22.5	37.8	27.0	- 40.5	- 53.6	- 4.2	0.3
2001	244.9	32.4	8.4	24.0	80.6	105.2	83.0	21.2	16.2	1.1	11.4	- 4.0	0.4
2001 Mar.	105.7	15.3	16.6	- 1.3	2.9	1.2	- 1.8	4.6	3.5	- 1.6	- 1.2	2.1	1.4
Apr.	24.1	2.1	- 10.7	12.8	3.6	3.6	10.0	- 3.5	- 2.8	- 2.9	- 0.9	- 0.4	- 0.3
May	12.3	- 2.2	- 0.5	- 1.7	8.4	5.2	2.7	5.3	3.0	- 2.8	- 1.7	2.2	1.3
June	- 26.6	- 6.3	- 14.0	- 20.3	7.8	9.4	8.3	2.4	1.6	- 1.2	- 0.3	- 1.5	- 0.6
July	- 47.6	- 16.0	- 15.5	- 0.6	- 5.4	- 4.4	- 3.1	1.0	2.2	- 2.4	- 1.1	- 1.9	- 0.5
Aug.	25.5	- 7.2	0.1	- 7.4	4.7	5.3	3.4	3.2	3.3	- 1.2	0.0	- 0.7	- 1.1
Sep.	56.7	31.3	27.8	3.5	15.7	18.7	17.3	1.2	- 0.0	0.2	1.0	- 0.1	1.7
Oct.	1.6	- 12.0	- 19.1	7.1	2.1	2.4	3.2	- 1.8	- 1.7	1.0	2.8	1.4	- 0.6
Nov.	51.1	30.8	21.4	9.4	25.4	24.0	26.9	- 4.7	- 3.3	1.8	2.8	0.2	1.0
Dec.	- 16.8	- 0.3	3.3	- 3.6	31.2	41.0	15.4	9.2	6.5	16.4	16.3	- 2.3	- 1.0
2002 Jan.	- 51.6	- 42.6	- 48.9	6.3	- 22.3	- 22.8	- 14.2	- 7.5	- 9.2	- 1.2	2.4	- 0.4	0.4
Feb.	- 23.2	- 29.1	- 11.5	- 17.6	- 4.7	- 1.9	- 0.4	- 0.0	- 2.6	- 1.4	- 0.4	- 2.2	0.1
Mar.	42.2	24.9	16.2	8.7	1.2	- 1.1	- 2.5	2.5	- 0.5	- 1.2	- 0.1	2.4	- 0.1
Apr.	7.7	- 9.2	- 28.0	18.8	- 7.9	- 5.4	7.4	- 3.8	- 3.8	- 9.0	- 7.1	- 0.6	1.9
May	52.5	20.9	21.1	- 0.1	9.2	11.0	8.8	3.9	3.2	- 1.7	- 0.6	- 2.5	- 2.6
June	- 5.7	6.9	22.2	- 15.3	11.9	12.1	12.0	1.3	1.3	- 1.2	- 1.0	- 0.6	1.2
July	- 19.6	- 20.5	- 25.2	4.6	- 7.4	- 5.6	- 4.6	0.4	- 0.4	- 1.4	- 1.5	- 0.7	- 0.6
Aug.	23.8	17.5	16.1	1.5	0.0	- 2.8	- 4.5	1.4	2.7	0.3	0.1	1.5	- 0.7
Sep.	51.3	10.9	6.4	4.6	6.9	5.2	13.3	- 8.6	- 8.5	0.5	1.0	0.6	1.5
Oct.	20.4	19.2	5.1	14.1	9.6	12.2	1.8	- 9.0	- 6.4	1.4	2.2	- 0.9	- 0.6
Nov.	97.2	40.6	37.1	3.5	32.3	29.4	29.8	- 3.2	- 5.8	2.7	3.3	3.5	1.8

\* 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 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. — 3 Up to December 1998, including liabilities arising from loans on a trust basis and liabilities arising from rediscounted bills (endorsement liabilities). — 4 Up to December 1998, including liabilities arising from

IV. Banks

in other member countries <sup>8</sup>				Deposits of central governments <sup>4</sup>			Money market fund certificates issued <sup>10</sup>	Debt securities issued <sup>10</sup>		Liabilities to non-euro-area residents	Capital and reserves	Other Liabilities	Period
With agreed maturities		At agreed notice		Total	of which: domestic central governments	Liabilities arising from repos <sup>9</sup>		Total	of which: with maturities of up to 2 years <sup>10</sup>				
Total <sup>4</sup>	of which: up to 2 years <sup>7</sup>	Total	of which: up to 3 months										
60.3	6.8	6.8	6.8	100.8	100.8	-	-	1,327.6	85.5	302.2	278.3	353.0	1993
68.7	11.8	7.3	7.3	108.2	108.2	-	31.3	1,441.2	81.9	336.8	305.2	357.8	1994
97.3	11.4	8.3	8.3	111.0	111.0	-	39.1	1,608.1	70.3	393.9	325.0	391.0	1995
120.6	9.0	9.2	9.2	114.6	114.6	-	34.0	1,804.3	54.4	422.1	350.0	438.8	1996
145.8	9.2	9.4	9.4	108.3	108.3	-	28.6	1,998.3	62.5	599.2	388.1	511.3	1997
168.3	13.8	9.7	9.7	111.2	111.2	-	34.8	2,248.1	80.2	739.8	426.8	574.8	1998
99.7	8.9	4.8	3.7	46.6	45.9	2.0	20.8	1,323.6	97.4	487.9	262.6	281.1	1999
96.3	6.7	4.7	3.3	69.9	67.6	0.4	19.3	1,417.1	113.3	599.8	298.1	318.4	2000
92.4	9.0	5.2	3.8	49.1	46.9	4.9	33.2	1,445.4	129.3	647.6	319.2	300.8	2001
94.4	7.0	5.0	3.5	58.0	55.5	1.6	21.5	1,450.2	112.4	640.7	299.6	314.1	2001 Feb.
95.8	7.7	5.0	3.5	57.6	56.1	0.9	22.7	1,457.8	113.8	720.4	302.5	318.5	Mar.
95.6	7.7	5.0	3.5	58.1	55.5	1.4	23.3	1,460.3	116.3	725.9	301.8	327.6	Apr.
97.1	8.4	5.0	3.5	59.0	55.1	1.8	23.4	1,466.2	117.4	744.6	304.7	320.5	May
96.1	8.7	5.0	3.5	58.9	55.2	1.1	24.2	1,468.0	118.0	717.9	307.2	313.0	June
94.2	8.0	5.0	3.5	59.8	55.3	1.7	25.0	1,473.1	123.7	682.5	310.3	303.3	July
94.0	8.4	5.0	3.6	59.9	54.5	4.6	26.5	1,468.1	123.5	693.7	312.6	304.9	Aug.
92.3	7.3	5.0	3.6	57.0	54.0	2.8	28.0	1,471.1	125.6	692.2	314.2	314.0	Sep.
94.4	9.8	5.0	3.6	55.4	53.4	9.4	29.6	1,473.1	126.7	690.0	318.2	315.8	Oct.
93.8	9.3	5.1	3.7	56.5	53.6	4.0	30.7	1,448.5	123.8	677.1	321.3	317.6	Nov.
92.4	9.0	5.2	3.8	49.1	46.9	4.9	33.2	1,445.4	129.3	647.6	319.2	300.8	Dec.
91.8	8.1	5.1	3.8	50.1	47.4	2.5	35.0	1,450.5	122.2	668.3	320.1	291.1	2002 Jan.
89.6	7.3	5.1	3.8	49.4	47.3	3.5	35.9	1,462.8	125.4	664.8	322.2	287.3	Feb.
92.0	9.3	5.0	3.7	49.4	46.9	3.7	35.8	1,479.4	129.0	666.4	323.3	281.6	Mar.
89.4	8.3	4.7	3.5	47.5	45.8	3.4	35.9	1,478.2	133.1	673.4	325.3	289.7	Apr.
89.1	9.5	4.7	3.4	48.2	45.6	4.7	35.4	1,480.6	134.6	673.3	329.0	291.6	May
86.7	8.5	4.6	3.4	48.7	45.9	4.1	35.0	1,472.6	133.1	628.9	331.1	294.7	June
87.0	8.7	4.6	3.4	47.6	45.8	3.1	35.6	1,471.6	133.7	640.9	336.8	293.9	July
75.5	9.7	4.6	3.4	48.9	45.8	4.3	37.1	1,489.4	135.9	636.3	341.2	294.8	Aug.
74.2	8.8	4.5	3.4	49.9	46.7	10.7	37.0	1,490.2	137.0	647.7	344.8	305.5	Sep.
73.9	9.1	4.5	3.4	48.3	46.8	9.6	37.6	1,485.9	137.5	642.5	343.7	306.0	Oct.
75.6	9.4	4.5	3.4	47.6	46.3	6.4	37.5	1,497.3	148.7	653.5	342.5	309.8	Nov.

Changes <sup>1</sup>													Period
8.3	5.0	0.4	0.4	7.4	7.4	-	31.3	113.5	- 3.6	34.5	26.9	4.8	1994
28.6	- 0.4	1.0	1.0	2.8	2.8	-	7.8	166.9	- 11.5	57.2	19.8	36.0	1995
23.3	- 2.4	0.9	0.9	3.6	3.6	-	5.1	196.3	- 15.9	28.1	25.0	47.8	1996
25.1	0.2	0.2	0.2	6.2	6.2	-	4.5	194.8	8.1	172.3	37.1	71.2	1997
24.0	4.6	0.3	0.3	2.9	2.9	-	6.2	263.3	28.1	151.4	28.8	68.3	1998
5.9	1.5	- 0.2	- 1.3	1.9	1.2	0.6	3.5	168.0	65.1	89.7	38.0	7.7	1999
- 4.5	- 0.5	- 0.1	- 0.3	23.1	21.6	- 1.6	- 1.5	90.6	15.9	97.8	35.3	54.6	2000
- 4.6	1.6	0.2	0.4	- 20.5	- 20.4	4.6	13.3	59.5	18.6	34.8	20.9	- 1.1	2001
0.7	0.7	0.0	0.0	- 0.4	0.6	- 0.6	1.1	5.1	2.1	66.2	2.3	13.4	2001 Mar.
- 0.2	0.0	0.0	0.0	0.5	- 0.7	0.5	0.7	2.6	2.5	6.7	- 0.7	8.6	Apr.
1.0	0.1	- 0.0	0.0	0.9	- 0.4	0.4	0.0	1.3	1.0	2.2	2.1	0.2	May
- 0.9	0.3	0.0	0.0	- 0.1	0.1	- 0.7	0.9	2.8	0.5	- 25.2	2.6	- 8.3	June
- 1.4	- 0.6	0.0	0.0	0.9	0.1	0.6	0.8	7.7	5.8	- 25.0	3.6	- 13.8	July
0.3	0.4	0.0	0.0	0.1	- 0.8	2.9	1.5	- 2.9	- 0.5	- 24.7	2.9	- 1.1	Aug.
- 1.8	- 1.1	0.0	0.0	- 2.9	- 0.5	- 1.7	1.5	2.5	2.0	- 3.7	1.5	9.6	Sep.
1.9	2.5	0.0	0.0	- 1.6	- 0.6	6.5	1.6	1.6	0.2	- 4.9	4.0	2.7	Oct.
- 0.8	- 0.6	0.0	0.0	1.1	0.1	- 5.3	1.1	8.5	0.3	- 17.1	2.8	4.9	Nov.
- 1.5	- 0.2	0.1	0.2	- 7.4	- 6.6	0.9	1.9	- 3.2	5.5	- 32.0	- 1.6	- 13.8	Dec.
- 0.8	- 0.9	- 0.1	- 0.0	1.0	0.5	- 2.4	2.0	4.0	- 2.4	15.1	0.7	- 6.0	2002 Jan.
- 2.2	- 0.9	- 0.1	- 0.0	- 0.7	- 0.2	1.0	0.8	12.7	3.2	- 2.8	2.3	- 3.3	Feb.
2.5	2.0	- 0.0	- 0.0	- 0.0	- 0.3	0.2	- 0.1	16.9	3.6	3.7	1.2	- 5.8	Mar.
- 2.3	- 1.0	- 0.3	- 0.3	- 1.9	- 1.2	- 0.3	0.2	0.9	4.1	15.9	2.3	5.8	Apr.
0.2	1.3	- 0.1	- 0.0	0.7	- 0.1	1.3	- 0.0	6.2	1.7	12.6	4.1	- 1.8	May
- 1.8	- 1.0	- 0.0	0.0	0.5	0.3	- 0.6	- 0.3	- 3.8	- 1.8	- 28.2	2.5	5.9	June
- 0.1	0.2	- 0.1	- 0.0	- 1.1	- 0.1	- 1.0	0.6	- 3.4	- 1.2	5.4	5.2	1.6	July
2.2	1.0	- 0.0	- 0.0	1.4	0.0	1.2	1.2	1.5	2.3	- 2.6	4.7	0.2	Aug.
- 0.9	- 0.4	- 0.0	- 0.0	1.0	0.8	6.4	0.1	1.0	1.0	11.9	3.5	10.6	Sep.
- 0.3	0.4	- 0.0	- 0.0	- 1.7	- 0.1	- 1.0	- 0.7	- 3.9	0.6	- 4.6	- 1.1	1.5	Oct.
1.8	0.3	- 0.0	- 0.0	- 0.6	- 0.5	- 3.2	- 0.2	11.9	10.7	- 0.5	3.2	3.2	Nov.

loans on a trust basis. — <sup>5</sup> For the German contribution: from 1999 including deposits under savings and loan contracts (see table IV.12). — <sup>6</sup> For the German contribution: up to the end of 1998 including deposits under savings and loan contracts (see also footnote 5). — <sup>7</sup> Up to December 1998, with maturities of less than 4 years. — <sup>8</sup> Excluding central

governments' deposits. — <sup>9</sup> Data collected separately only from 1999; up to December 1998, included in the deposits with agreed maturities of up to 2 years. — <sup>10</sup> In Germany, debt securities with maturities of up to one year are classed as money market paper; up to January 2002 monthly report they were published together with money market fund certificates.

## IV. Banks

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

€ billion

End of month	Number of reporting institutions	Balance sheet total	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			Securities issued by non-banks		
					Balances and advances	Securities issued by banks		Loans and advances not evidenced by certificates for	Bills				
							up to and including 1 year	more than 1 year					
<b>All categories of banks</b>													
2002 June	2,466	6,319.7	58.5	2,278.0	1,595.8	674.7	3,565.9	465.7	2,560.6	4.9	520.4	142.5	274.7
July	2,437	6,308.1	55.1	2,258.0	1,585.9	662.9	3,574.8	462.7	2,568.1	4.9	526.1	142.2	278.0
Aug.	2,424	6,331.8	59.6	2,281.4	1,614.9	657.2	3,563.4	446.1	2,573.3	4.9	523.3	152.9	274.6
Sep.	2,394	6,381.8	55.6	2,312.2	1,646.9	654.8	3,580.4	468.0	2,568.3	4.8	522.9	154.8	278.7
Oct.	2,373	6,399.9	57.1	2,321.2	1,663.3	648.0	3,583.0	464.4	2,575.3	4.8	522.0	157.2	281.4
Nov.	2,365	6,495.3	55.0	2,400.9	1,732.2	649.8	3,592.4	468.5	2,572.5	4.8	530.2	159.1	288.0
<b>Commercial banks <sup>5</sup></b>													
2002 Oct.	274	1,793.5	22.8	605.4	477.8	123.8	952.6	242.8	542.0	2.2	154.8	93.9	118.8
Nov.	273	1,862.5	22.4	662.4	523.9	125.3	959.5	245.0	540.3	2.2	161.1	94.9	123.3
<b>Big banks <sup>6</sup></b>													
2002 Oct.	4	1,042.6	13.4	339.9	283.8	54.8	532.7	143.1	288.1	1.4	92.5	83.6	72.9
Nov.	4	1,089.7	14.1	378.8	320.4	55.6	536.3	142.5	286.2	1.3	99.1	84.5	76.0
<b>Regional banks and other commercial banks</b>													
2002 Oct.	187	642.9	8.9	213.5	149.7	61.7	377.6	80.4	237.3	0.8	56.2	9.4	33.4
Nov.	186	660.8	7.8	228.5	155.7	62.6	380.9	83.3	237.4	0.8	56.1	9.6	34.1
<b>Branches of foreign banks</b>													
2002 Oct.	83	108.0	0.4	52.0	44.3	7.2	42.3	19.3	16.6	0.1	6.1	0.8	12.5
Nov.	83	112.0	0.6	55.1	47.8	7.1	42.3	19.2	16.7	0.1	5.9	0.8	13.3
<b>Land banks</b>													
2002 Oct.	14	1,322.1	2.8	667.6	537.5	127.6	569.6	67.4	408.4	0.4	89.1	34.1	48.0
Nov.	14	1,336.2	3.1	675.2	546.4	126.2	574.9	70.4	409.5	0.4	90.7	34.3	48.7
<b>Savings banks</b>													
2002 Oct.	522	976.2	18.3	229.2	74.7	153.8	691.6	78.0	521.7	1.4	90.0	12.6	24.5
Nov.	520	983.6	17.1	236.6	80.8	155.0	692.3	76.7	522.9	1.4	90.7	13.1	24.6
<b>Regional institutions of credit cooperatives</b>													
2002 Oct.	2	195.2	0.7	125.5	87.5	37.7	54.1	11.1	24.8	0.1	17.9	9.2	5.7
Nov.	2	200.8	0.5	130.4	93.2	36.9	54.6	11.7	24.5	0.1	18.1	9.3	6.2
<b>Credit cooperatives</b>													
2002 Oct.	1,494	551.3	11.5	140.5	63.2	75.7	377.6	50.0	288.9	0.7	37.6	4.1	17.5
Nov.	1,489	556.7	11.1	147.2	69.5	76.7	376.6	48.6	289.4	0.7	37.6	4.2	17.6
<b>Mortgage banks</b>													
2002 Oct.	25	886.4	0.9	227.5	150.1	76.3	636.1	7.9	529.2	–	99.0	1.1	20.8
Nov.	25	876.8	0.5	222.0	144.6	76.3	632.1	7.9	525.4	–	98.8	1.1	21.0
<b>Building and loan associations</b>													
2002 Oct.	28	160.5	0.0	35.6	24.1	11.5	116.3	1.6	104.9	–	9.8	0.4	8.1
Nov.	28	161.4	0.0	36.2	24.7	11.6	116.5	1.5	105.1	–	9.9	0.4	8.2
<b>Banks with special functions</b>													
2002 Oct.	14	514.8	0.0	289.9	248.4	41.5	185.1	5.6	155.3	–	23.8	1.8	38.0
Nov.	14	517.3	0.3	290.9	249.1	41.8	186.0	6.7	155.4	–	23.3	1.8	38.4
<b>Memo item: Foreign banks <sup>7</sup></b>													
2002 Oct.	132	384.2	2.9	151.1	109.2	41.4	201.6	39.0	119.7	0.1	42.3	1.7	26.9
Nov.	131	387.5	2.9	156.8	114.9	41.6	197.8	39.5	118.0	0.2	39.5	1.7	28.4
<b>of which: Banks majority-owned by foreign banks <sup>8</sup></b>													
2002 Oct.	49	276.2	2.5	99.2	64.9	34.1	159.3	19.7	103.1	0.1	36.2	0.8	14.4
Nov.	48	275.5	2.4	101.7	67.1	34.4	155.5	20.3	101.3	0.1	33.5	0.9	15.1

\* 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 For building and loan associations: Including deposits under savings and loan contracts (see table IV. 12). — 2 Included in time deposits. — 3 Excluding deposits under savings and loan contracts (see also footnote 2). — 4 Including subordinated



IV. Banks

Deposits of banks (MFIs)			Deposits of non-banks (non-MFIs)								Bearer debt securities outstanding <sup>4</sup>	Capital (including published reserves, participation rights capital, funds for general banking risks)	Other liabilities	End of month
Total	of which		Total	of which				Savings deposits <sup>3</sup>	Bank savings bonds					
	Sight deposits	Time deposits		Sight deposits	Time deposits for 1 year	Time deposits for 1 year	more than 1 year <sup>1</sup>			Memo item: Liabilities arising from repos <sup>2</sup>				
<b>All categories of banks</b>														
1,790.7	266.0	1,524.4	2,365.6	574.5	341.5	767.3	30.2	569.8	463.1	112.5	1,506.6	283.4	373.5	2002 June
1,775.9	239.5	1,536.2	2,364.1	570.2	344.1	768.5	30.9	568.3	461.5	113.0	1,510.7	284.1	373.3	July
1,788.7	207.1	1,581.3	2,351.1	561.9	352.3	755.5	35.9	568.6	461.6	112.9	1,527.7	290.0	374.4	Aug.
1,805.6	265.8	1,539.6	2,369.7	582.0	353.1	753.2	45.0	569.1	462.6	112.3	1,530.9	290.5	385.2	Sep.
1,817.5	246.1	1,571.1	2,380.0	581.3	355.6	760.7	43.9	570.4	464.8	111.9	1,525.7	290.3	386.4	Oct.
1,869.8	282.6	1,586.9	2,408.9	615.0	347.1	762.0	46.5	573.1	468.1	111.7	1,534.5	291.0	391.1	Nov.
<b>Commercial banks <sup>5</sup></b>														
662.8	129.7	532.9	650.4	253.0	174.5	127.6	37.1	86.1	70.6	9.2	230.8	105.1	144.4	2002 Oct.
713.9	159.6	554.1	667.0	270.7	170.9	127.6	42.0	88.8	73.5	9.1	230.0	105.1	146.5	Nov.
<b>Big banks <sup>6</sup></b>														
404.5	91.6	312.9	330.1	115.3	119.4	74.5	34.6	20.1	18.0	0.8	163.7	67.0	77.3	2002 Oct.
441.7	104.2	337.5	339.1	125.4	117.7	74.4	38.8	20.9	18.7	0.8	164.2	67.0	77.7	Nov.
<b>Regional banks and other commercial banks</b>														
180.2	27.2	152.7	308.1	132.3	51.1	50.4	0.9	66.0	52.6	8.4	67.0	35.2	52.4	2002 Oct.
191.9	45.5	146.1	314.8	139.7	48.3	50.5	1.0	67.9	54.8	8.3	65.8	35.3	53.1	Nov.
<b>Branches of foreign banks</b>														
78.1	10.9	67.3	12.2	5.4	4.0	2.7	1.6	0.0	0.0	0.0	0.1	2.9	14.7	2002 Oct.
80.3	9.8	70.5	13.1	5.6	4.8	2.7	2.3	0.0	0.0	0.0	0.1	2.9	15.7	Nov.
<b>Land banks</b>														
478.2	63.6	414.5	306.9	40.1	43.9	208.0	5.0	14.3	13.0	0.6	412.7	62.3	62.0	2002 Oct.
480.5	66.9	413.6	304.6	41.9	39.5	208.4	3.0	14.3	13.1	0.5	426.9	62.3	61.9	Nov.
<b>Savings banks</b>														
216.6	5.9	210.7	618.3	173.1	64.7	10.2	-	297.4	236.3	72.9	46.5	44.5	50.4	2002 Oct.
215.1	6.6	208.5	627.1	182.1	64.5	10.2	-	297.3	236.2	73.0	46.3	44.5	50.6	Nov.
<b>Regional institutions of credit cooperatives</b>														
113.1	32.7	80.4	30.8	7.6	4.4	18.8	1.4	0.0	0.0	0.0	33.7	9.3	8.2	2002 Oct.
118.6	35.6	82.9	29.7	6.6	4.7	18.4	1.2	0.0	0.0	0.0	33.9	9.8	8.9	Nov.
<b>Credit cooperatives</b>														
77.0	2.4	74.6	389.9	105.1	59.3	24.4	-	172.2	144.4	28.9	33.0	28.5	22.9	2002 Oct.
75.7	2.1	73.5	396.5	111.5	59.4	24.5	-	172.3	144.9	28.8	33.2	28.5	22.8	Nov.
<b>Mortgage banks</b>														
118.1	7.5	110.6	141.3	0.9	3.1	137.0	0.1	0.0	0.0	0.2	583.0	18.5	25.6	2002 Oct.
118.3	6.7	111.5	140.8	1.1	2.5	136.9	0.1	0.1	0.0	0.2	573.3	18.6	25.8	Nov.
<b>Building and loan associations</b>														
29.2	1.6	27.6	100.7	0.2	0.7	99.4	-	0.3	0.3	0.1	7.2	7.1	16.3	2002 Oct.
29.5	2.2	27.3	101.1	0.2	0.7	99.7	-	0.3	0.3	0.1	7.2	7.1	16.5	Nov.
<b>Banks with special functions</b>														
122.5	2.7	119.9	141.6	1.3	5.1	135.3	0.2	-	-	-	178.8	15.1	56.8	2002 Oct.
118.3	2.8	115.5	142.1	0.9	4.9	136.3	0.1	-	-	-	183.8	15.1	58.0	Nov.
<b>Memo item: Foreign banks <sup>7</sup></b>														
136.4	21.6	114.7	100.9	48.5	16.0	27.7	1.7	6.4	6.1	2.3	98.2	12.9	35.8	2002 Oct.
138.4	23.1	115.2	103.0	51.3	15.0	27.6	2.4	6.7	6.4	2.4	97.1	12.9	36.2	Nov.
<b>of which: Banks majority-owned by foreign banks <sup>8</sup></b>														
58.3	10.7	47.4	88.7	43.1	11.9	25.0	0.1	6.4	6.1	2.3	98.2	10.0	21.1	2002 Oct.
58.1	13.3	44.7	89.9	45.7	10.2	24.9	0.1	6.7	6.4	2.4	97.1	10.0	20.5	Nov.

negotiable bearer debt securities; excluding non-negotiable negotiable bearer debt securities. — <sup>5</sup> Commercial banks comprise the sub-groups "Big banks", "Regional banks and other commercial banks" and "Branches of foreign banks". — <sup>6</sup> Deutsche Bank AG, Dresdner Bank AG, Commerzbank AG and Bayerische Hypo- und Vereinsbank AG. — <sup>7</sup> 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" — <sup>8</sup> Separate presentation of the banks majority-owned by foreign banks included in the categories "Regional banks and other commercial banks" and "Mortgage banks".

#### IV. Banks

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

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

Period	Cash in hand (euro-area notes and coins) 1	Balances with the Bundesbank	Lending to domestic banks (MFIs) 2, 3						Lending to domestic non-banks (non-MFIs) 3, 8				
			Total	Balances and loans and advances not evidenced by certificates	Bills 4	Negotiable money market paper issued by banks 5	Securities issued by banks 6	Memo item Trust loans 7	Total	Loans and advances not evidenced by certificates	Bills 4	Treasury bills and negotiable money market paper issued by non-banks	Securities issued by non-banks 9
<b>End of year or month *</b>													
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
1999	16.8	45.6	1,556.9	1,033.4	0.0	19.2	504.2	3.9	2,904.5	2,569.6	7.0	3.0	287.5
2000	15.6	50.8	1,639.6	1,056.1	0.0	26.8	556.6	3.6	3,003.7	2,657.3	6.5	2.3	304.7
2001	14.2	56.3	1,676.0	1,078.9	0.0	5.6	591.5	2.8	3,014.1	2,699.4	4.8	4.4	301.5
2001 June	13.2	46.1	1,671.6	1,063.4	0.0	16.8	591.5	3.4	3,007.7	2,676.1	5.8	2.3	318.7
July	13.2	50.5	1,661.4	1,046.9	0.0	14.4	600.0	3.4	3,008.2	2,671.1	5.7	4.4	323.0
Aug.	13.0	49.3	1,665.7	1,060.7	0.0	12.9	592.1	2.8	2,995.3	2,671.0	5.6	3.7	311.1
Sep.	13.2	51.2	1,689.6	1,087.9	0.0	11.2	590.6	2.8	2,989.9	2,679.6	5.6	4.9	295.7
Oct.	13.6	54.4	1,676.9	1,072.8	0.0	11.1	593.0	2.9	2,992.5	2,681.6	5.5	4.4	297.1
Nov.	13.2	55.9	1,684.1	1,084.2	0.0	7.5	592.3	2.8	3,009.4	2,698.5	5.3	3.7	297.9
Dec.	14.2	56.3	1,676.0	1,078.9	0.0	5.6	591.5	2.8	3,014.1	2,699.4	4.8	4.4	301.5
2002 Jan.	26.7	49.3	1,633.8	1,038.5	0.0	5.7	589.7	2.8	3,011.2	2,690.2	4.6	3.0	309.5
Feb.	18.8	42.0	1,636.3	1,035.4	0.0	5.2	595.7	2.8	3,006.1	2,689.6	4.4	2.8	305.4
Mar.	16.5	44.4	1,653.0	1,045.6	0.0	5.8	601.5	2.7	2,996.9	2,689.9	4.5	2.7	295.9
Apr.	14.5	40.9	1,648.3	1,038.4	0.0	6.3	603.6	2.7	3,004.3	2,687.4	4.4	3.7	304.9
May	14.3	45.4	1,655.7	1,044.4	0.0	6.1	605.2	2.7	3,005.7	2,682.8	4.2	4.6	310.2
June	13.9	43.8	1,668.4	1,061.5	0.0	6.3	600.6	2.7	2,990.8	2,678.8	4.3	5.2	298.7
July	13.4	41.2	1,643.8	1,047.7	0.0	7.6	588.4	2.6	2,995.7	2,685.3	4.3	4.2	299.1
Aug.	13.2	46.0	1,650.2	1,060.1	0.0	7.7	582.4	2.7	2,987.3	2,675.6	4.2	3.9	300.6
Sep.	13.0	42.3	1,652.7	1,064.4	0.0	8.5	579.8	2.7	2,995.5	2,683.2	4.2	3.9	301.2
Oct.	13.9	42.8	1,648.3	1,068.2	0.0	8.0	572.2	2.7	2,997.6	2,684.6	4.2	3.9	301.9
Nov.	12.9	41.7	1,689.1	1,102.1	0.0	13.3	573.8	2.6	3,003.5	2,683.3	4.1	3.6	309.5
<b>Changes *</b>													
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
1999	+ 2.2	+ 13.2	+ 122.1	+ 66.3	+ 0.0	+ 12.9	+ 42.8	– 0.7	+ 156.1	+ 136.9	+ 2.6	+ 0.4	+ 16.7
2000	– 1.1	+ 5.1	+ 83.6	+ 21.7	– 0.0	+ 7.6	+ 54.3	– 0.3	+ 100.7	+ 83.7	– 0.5	– 0.8	+ 19.0
2001	– 1.4	+ 5.5	+ 34.6	+ 20.1	– 0.0	– 21.3	+ 35.8	– 0.9	+ 11.9	+ 40.8	– 1.6	+ 1.6	+ 0.3
2001 June	– 0.1	+ 2.2	– 6.0	+ 3.5	– 0.0	– 1.7	– 7.8	– 0.0	– 24.5	– 3.3	– 0.1	– 0.6	– 20.6
July	+ 0.0	+ 4.4	– 9.2	– 15.4	– 0.0	– 2.4	+ 8.6	+ 0.0	+ 1.7	– 3.7	– 0.0	+ 2.1	+ 4.3
Aug.	– 0.3	– 1.2	+ 5.7	+ 15.2	–	– 1.5	– 8.0	– 0.6	– 9.6	+ 1.3	– 0.1	– 0.7	+ 10.1
Sep.	+ 0.3	+ 1.9	+ 23.5	+ 26.7	– 0.0	– 1.7	– 1.5	– 0.0	– 6.3	+ 7.8	+ 0.0	+ 0.6	– 14.7
Oct.	+ 0.4	+ 3.2	– 13.0	– 15.3	+ 0.0	– 0.1	+ 2.4	– 0.0	+ 2.4	+ 1.7	– 0.1	– 0.5	+ 1.3
Nov.	– 0.5	+ 1.6	+ 6.9	+ 11.1	–	– 3.6	– 0.6	– 0.1	+ 16.1	+ 15.9	– 0.1	– 0.7	+ 1.0
Dec.	+ 1.0	+ 0.3	– 7.7	– 5.4	– 0.0	– 1.9	– 0.3	– 0.0	+ 5.8	+ 1.7	– 0.5	+ 0.7	+ 3.8
2002 Jan.	+ 12.5	– 6.9	– 42.5	– 41.0	– 0.0	+ 0.1	– 1.6	– 0.0	– 3.4	– 9.9	– 0.3	– 1.5	+ 8.3
Feb.	– 8.0	– 7.3	+ 2.7	– 2.9	+ 0.0	– 0.5	+ 6.1	– 0.0	– 4.9	– 0.5	– 0.2	– 0.2	– 4.1
Mar.	– 2.3	+ 2.4	+ 16.9	+ 10.3	– 0.0	+ 0.6	+ 6.0	– 0.0	– 8.6	+ 0.7	+ 0.1	– 0.1	– 9.3
Apr.	– 2.0	– 3.5	– 5.0	– 7.2	–	+ 0.5	+ 1.6	– 0.0	+ 8.1	– 2.3	– 0.1	+ 1.0	+ 9.4
May	– 0.2	+ 4.5	+ 7.7	+ 6.2	– 0.0	– 0.2	+ 1.7	– 0.1	+ 2.2	– 3.9	– 0.2	+ 0.9	+ 5.4
June	– 0.4	– 1.6	+ 12.5	+ 16.9	– 0.0	+ 0.1	– 4.6	+ 0.0	– 19.0	– 8.0	+ 0.1	+ 0.5	– 11.5
July	– 0.5	– 2.5	– 24.9	– 13.8	–	+ 1.4	– 12.4	– 0.0	+ 5.1	+ 6.5	– 0.0	– 1.0	+ 0.6
Aug.	– 0.2	+ 4.8	+ 6.4	+ 12.4	+ 0.0	+ 0.0	– 6.0	+ 0.0	– 8.4	– 9.6	– 0.0	– 0.2	+ 1.5
Sep.	– 0.2	– 3.8	+ 2.6	+ 4.4	–	+ 0.8	– 2.6	– 0.0	+ 7.9	+ 7.3	– 0.1	– 0.0	+ 0.7
Oct.	+ 0.9	+ 0.6	– 4.4	+ 3.8	–	– 0.5	– 7.7	– 0.0	+ 2.0	+ 1.4	+ 0.0	+ 0.0	+ 0.6
Nov.	– 1.0	– 1.1	+ 40.8	+ 33.9	+ 0.0	+ 5.3	+ 1.6	– 0.0	+ 6.0	– 1.3	– 0.0	– 0.3	+ 7.6

\* 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 7. — 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 6). — 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 3). — 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 14, 15	Bills redis-counted 16	Memo item Trust loans 7	Total	Sight deposits 13	Time deposits 15, 18	Savings deposits 19	Bank savings bonds 20		Memo item Trust loans 7
<b>End of year or month *</b>														
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
37.5	58.0	75.6	1,122.0	114.4	1,007.3	0.3	29.8	1,905.3	420.4	759.6	614.7	110.7	42.1	1999
33.1	58.5	82.7	1,189.2	113.4	1,075.3	0.4	30.1	1,945.8	443.4	819.9	573.5	109.0	42.1	2000
4.0	57.0	95.9	1,204.9	123.1	1,081.6	0.3	27.2	2,034.0	526.4	827.0	574.5	106.0	43.3	2001
4.9	56.8	86.5	1,183.9	127.1	1,056.5	0.2	28.3	1,953.3	465.0	819.8	558.8	109.8	42.7	2001 June
4.0	56.7	89.4	1,168.2	116.2	1,051.8	0.2	28.1	1,948.4	461.4	821.0	556.4	109.7	42.7	July
4.0	57.6	89.6	1,167.9	119.2	1,048.4	0.2	28.1	1,953.2	463.5	825.0	555.1	109.6	42.8	Aug.
4.0	57.4	89.0	1,196.4	137.1	1,059.1	0.2	28.1	1,971.0	480.2	826.1	555.4	109.3	42.7	Sep.
4.0	57.2	88.7	1,177.5	124.2	1,053.1	0.2	28.1	1,977.5	483.7	829.0	556.4	108.4	42.4	Oct.
4.0	57.0	87.2	1,198.9	146.7	1,052.0	0.2	27.9	1,999.2	511.0	822.5	558.2	107.6	42.5	Nov.
4.0	57.0	95.9	1,204.9	123.1	1,081.6	0.3	27.2	2,034.0	526.4	827.0	574.5	106.0	43.3	Dec.
3.9	56.7	89.6	1,159.4	115.6	1,043.6	0.2	27.3	2,009.8	511.5	819.9	573.4	105.1	42.4	2002 Jan.
3.9	56.4	95.1	1,148.5	119.8	1,028.5	0.2	27.3	2,007.8	511.3	819.7	572.0	104.8	42.2	Feb.
3.9	56.2	95.4	1,164.8	126.0	1,038.6	0.2	27.1	2,006.6	509.2	821.7	570.8	104.9	42.1	Mar.
3.9	56.1	95.7	1,138.3	123.2	1,014.9	0.2	27.0	1,999.3	515.7	816.8	561.8	104.9	42.0	Apr.
3.9	56.0	95.8	1,158.7	113.4	1,045.1	0.1	26.8	2,009.4	523.8	820.6	560.1	105.0	41.9	May
3.9	55.4	95.5	1,182.3	132.1	1,050.1	0.1	26.0	2,021.4	536.2	820.6	558.9	105.7	41.5	June
3.0	55.2	95.0	1,157.4	118.2	1,039.1	0.1	25.9	2,016.2	531.6	821.1	557.5	106.0	41.6	July
3.0	55.2	105.9	1,173.0	115.3	1,057.6	0.1	25.9	2,013.9	527.2	823.0	557.8	105.9	41.6	Aug.
3.0	55.0	107.9	1,179.3	133.0	1,046.1	0.1	25.7	2,025.0	540.8	820.6	558.3	105.3	41.6	Sep.
3.0	55.1	111.5	1,184.4	130.0	1,054.2	0.1	25.7	2,037.6	543.1	829.8	559.7	105.0	41.6	Oct.
3.0	55.0	113.3	1,221.4	157.4	1,063.8	0.2	25.7	2,062.1	572.4	822.6	562.4	104.7	41.5	Nov.
<b>Changes *</b>														
- 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
- 0.6	+ 0.1	+ 9.3	+ 69.0	- 1.8	+ 81.8	- 11.1	- 0.4	+ 67.3	+ 32.7	+ 48.4	- 4.5	- 9.3	+ 0.7	1999
- 0.8	+ 0.5	+ 7.1	+ 64.7	- 2.3	+ 66.9	+ 0.1	+ 0.3	+ 41.3	+ 22.3	+ 61.1	- 40.5	- 1.7	- 0.0	2000
- 29.1	- 1.5	+ 13.3	+ 9.6	+ 7.4	+ 2.3	- 0.2	- 2.9	+ 88.5	+ 82.3	+ 8.1	+ 1.1	- 2.9	+ 1.0	2001
+ 0.1	- 0.3	+ 0.0	+ 14.6	+ 7.9	+ 6.7	+ 0.0	- 0.0	+ 9.4	+ 10.2	+ 0.6	- 1.2	- 0.1	- 0.2	2001 June
- 0.9	- 0.1	+ 3.0	- 14.5	- 9.8	- 4.7	- 0.0	- 0.2	- 4.4	- 3.1	+ 1.2	- 2.4	- 0.1	+ 0.1	July
+ 0.0	+ 0.9	+ 0.1	+ 1.1	+ 4.5	- 3.4	+ 0.0	+ 0.0	+ 5.3	+ 2.7	+ 4.0	- 1.2	- 0.1	+ 0.1	Aug.
+ 0.0	- 0.1	- 0.5	+ 28.1	+ 17.4	+ 10.7	- 0.0	- 0.0	+ 17.8	+ 16.7	+ 1.2	+ 0.2	- 0.3	- 0.2	Sep.
- 0.0	- 0.1	- 0.3	- 19.1	- 13.1	- 6.0	+ 0.0	+ 0.0	+ 6.3	+ 3.4	+ 2.9	+ 1.0	- 0.9	- 0.2	Oct.
+ 0.0	- 0.2	- 1.5	+ 20.5	+ 22.0	- 1.5	- 0.0	- 0.2	+ 21.5	+ 27.1	- 6.6	+ 1.8	- 0.8	+ 0.0	Nov.
+ 0.0	+ 0.0	+ 8.7	+ 5.9	- 23.7	+ 29.6	+ 0.1	- 0.7	+ 34.7	+ 15.4	+ 4.5	+ 16.4	- 1.5	+ 0.8	Dec.
- 0.0	- 0.3	- 6.1	- 46.1	- 10.5	- 35.6	- 0.1	+ 0.1	- 24.4	- 15.2	- 7.1	- 1.2	- 0.9	- 0.9	2002 Jan.
-	- 0.3	+ 5.8	- 10.8	+ 4.3	- 15.1	- 0.0	- 0.1	- 2.0	- 0.2	- 0.1	- 1.4	- 0.3	- 0.2	Feb.
- 0.0	- 0.3	+ 0.3	+ 16.4	+ 6.3	+ 10.1	- 0.0	- 0.2	- 1.2	- 2.0	+ 2.0	- 1.2	+ 0.1	- 0.1	Mar.
+ 0.0	- 0.1	+ 0.3	- 26.6	- 2.9	- 23.7	+ 0.0	- 0.0	- 7.3	+ 6.5	- 4.9	- 9.0	+ 0.1	- 0.1	Apr.
+ 0.0	- 0.0	+ 0.1	+ 20.7	- 9.8	+ 30.5	- 0.0	- 0.1	+ 11.1	+ 8.2	+ 4.5	- 1.7	+ 0.1	- 0.1	May
- 0.0	- 0.6	- 0.3	+ 21.7	+ 18.6	+ 3.1	- 0.0	- 0.8	+ 11.1	+ 11.9	- 0.3	- 1.2	+ 0.7	- 0.3	June
- 1.0	- 0.2	- 0.5	- 24.9	- 13.9	- 11.0	- 0.0	- 0.1	- 5.3	- 4.7	+ 0.5	- 1.4	+ 0.3	+ 0.0	July
+ 0.0	- 0.0	+ 11.5	+ 16.4	- 2.9	+ 19.3	+ 0.0	+ 0.0	- 2.3	- 4.4	+ 1.9	+ 0.3	- 0.1	- 0.0	Aug.
+ 0.0	- 0.2	+ 1.9	+ 6.4	+ 17.9	- 11.5	+ 0.0	- 0.2	+ 10.9	+ 13.5	- 2.6	+ 0.5	- 0.5	- 0.0	Sep.
- 0.0	+ 0.1	+ 3.6	+ 5.1	- 3.0	+ 8.1	+ 0.0	+ 0.0	+ 12.8	+ 2.3	+ 9.5	+ 1.4	- 0.3	+ 0.0	Oct.
+ 0.0	- 0.1	+ 1.7	+ 37.0	+ 27.3	+ 9.7	+ 0.0	+ 0.0	+ 24.5	+ 29.3	- 7.2	+ 2.7	- 0.3	- 0.1	Nov.

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 Since the inclusion of building and loan associations in January 1999, including deposits under savings and loan contracts (see table IV. 12). — 19 Excluding deposits under savings and loan contracts (see also footnote 18). — 20 Including liabilities arising from non-negotiable bearer debt securities.

#### IV. Banks

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

Until the end of 1998 DM billion, from 1999 € 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					Total	Short-term	Medium and long-term		
End of year or month *														
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
1999	0.4	427.1	383.5	279.5	104.1	0.4	43.2	4.2	396.1	235.8	52.7	183.1	7.5	152.7
2000	0.4	507.7	441.4	325.4	116.0	1.3	65.0	3.6	475.8	286.8	71.1	215.7	6.5	182.5
2001	0.4	596.1	521.7	383.7	138.0	0.8	73.6	3.5	570.3	347.2	99.7	247.5	5.2	217.9
2001 June	0.6	568.1	492.6	369.3	123.3	1.5	74.0	3.6	562.2	337.5	97.6	239.9	6.0	218.7
July	0.5	540.4	465.0	341.1	123.9	1.8	73.6	3.5	549.6	330.2	92.8	237.4	6.6	212.8
Aug.	0.5	560.0	485.2	358.5	126.7	1.8	73.0	3.5	550.4	327.7	95.2	232.6	6.7	215.9
Sep.	0.5	589.0	513.6	384.2	129.4	1.8	73.6	3.5	557.1	333.4	98.4	235.1	6.5	217.2
Oct.	0.5	591.9	516.9	384.5	132.4	1.5	73.4	3.5	561.4	338.0	100.4	237.6	6.1	217.3
Nov.	0.5	608.4	534.2	399.9	134.3	1.1	73.1	3.6	573.0	352.3	110.1	242.3	5.2	215.5
Dec.	0.4	596.1	521.7	383.7	138.0	0.8	73.6	3.5	570.3	347.2	99.7	247.5	5.2	217.9
2002 Jan.	0.9	585.2	510.4	371.7	138.7	1.0	73.8	3.2	578.2	353.8	103.1	250.7	4.6	219.8
Feb.	0.7	568.5	493.0	351.0	142.0	1.4	74.1	3.1	582.3	355.9	103.6	252.3	5.8	220.6
Mar.	0.4	581.2	505.6	362.4	143.2	1.3	74.3	2.9	596.4	366.7	113.3	253.4	7.2	222.5
Apr.	0.4	590.1	515.1	370.6	144.6	1.3	73.7	2.9	586.5	359.2	108.0	251.2	7.8	219.6
May	0.4	613.3	538.2	395.3	142.9	1.2	74.0	2.8	589.1	359.6	111.2	248.5	6.6	222.9
June	0.4	609.7	534.3	399.4	135.0	1.2	74.1	2.8	575.1	348.2	105.1	243.1	5.2	221.7
July	0.4	614.2	538.2	400.0	138.3	1.5	74.5	2.8	579.1	346.2	101.4	244.9	5.8	227.0
Aug.	0.3	631.2	554.9	413.3	141.6	1.5	74.8	2.8	576.0	344.3	98.9	245.4	8.9	222.8
Sep.	0.3	659.5	582.6	439.2	143.4	1.9	75.0	2.8	584.9	353.7	109.3	244.4	9.5	221.7
Oct.	0.3	672.9	595.2	450.2	145.0	1.9	75.8	2.7	585.5	355.6	108.9	246.7	9.8	220.1
Nov.	0.3	711.7	630.2	484.4	145.7	5.6	76.0	2.8	588.8	358.2	111.0	247.2	9.9	220.7
Changes *														
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	- 1.1	+ 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	- 1.4	+ 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
1999	- 0.3	+ 17.7	+ 5.7	- 5.3	+ 11.0	+ 0.2	+ 11.7	- 0.0	+ 85.8	+ 42.8	+ 8.4	+ 34.4	+ 1.3	+ 41.8
2000	- 0.0	+ 78.9	+ 56.5	+ 44.6	+ 11.8	+ 0.9	+ 21.6	- 0.7	+ 72.0	+ 45.0	+ 17.4	+ 27.7	- 1.2	+ 28.2
2001	+ 0.0	+ 83.7	+ 75.6	+ 54.4	+ 21.2	- 0.5	+ 8.5	- 0.2	+ 88.3	+ 53.4	+ 27.0	+ 26.4	- 1.5	+ 36.3
2001 June	+ 0.1	+ 16.7	+ 16.1	+ 11.6	+ 4.5	- 0.0	+ 0.6	- 0.0	- 6.6	- 3.0	- 5.8	+ 2.8	- 1.3	- 2.3
July	- 0.0	- 23.7	- 24.0	- 25.6	+ 1.6	+ 0.3	- 0.0	- 0.0	- 6.3	- 2.4	- 3.6	+ 1.2	+ 0.7	- 4.7
Aug.	- 0.0	+ 24.0	+ 24.2	+ 20.2	+ 4.1	- 0.0	- 0.2	+ 0.0	+ 8.6	+ 4.3	+ 4.0	+ 0.3	+ 0.2	+ 4.1
Sep.	+ 0.0	+ 28.1	+ 27.5	+ 25.2	+ 2.3	+ 0.1	+ 0.5	- 0.0	+ 5.7	+ 4.9	+ 3.0	+ 1.9	- 0.2	+ 1.0
Oct.	+ 0.0	+ 2.0	+ 2.5	- 0.3	+ 2.8	- 0.3	- 0.2	+ 0.0	+ 2.7	+ 3.2	+ 1.4	+ 1.8	- 0.4	- 0.0
Nov.	- 0.0	+ 15.1	+ 16.0	+ 14.5	+ 1.5	- 0.5	- 0.5	+ 0.0	+ 10.3	+ 12.1	+ 9.1	+ 3.0	- 1.0	- 0.9
Dec.	- 0.1	- 12.8	- 13.2	- 16.6	+ 3.4	- 0.2	+ 0.6	- 0.0	- 3.7	- 6.6	- 10.6	+ 4.0	- 0.0	+ 2.9
2002 Jan.	+ 0.5	- 13.2	- 13.5	- 13.7	+ 0.2	+ 0.2	+ 0.1	- 0.4	+ 4.8	+ 3.5	+ 2.6	+ 0.9	- 0.7	+ 1.9
Feb.	- 0.2	- 16.4	- 17.1	- 20.5	+ 3.4	+ 0.4	+ 3.1	- 0.1	+ 4.6	+ 2.5	+ 0.6	+ 1.8	+ 1.2	+ 1.0
Mar.	- 0.3	+ 13.5	+ 13.3	+ 11.9	+ 1.4	- 0.1	+ 0.2	- 0.2	+ 15.9	+ 13.9	+ 9.9	+ 4.0	+ 1.4	+ 0.6
Apr.	- 0.1	+ 12.7	+ 13.0	+ 10.7	+ 2.3	- 0.1	- 0.3	- 0.0	- 3.6	- 2.4	- 3.8	+ 1.4	+ 0.7	- 1.8
May	+ 0.0	+ 28.7	+ 28.2	+ 28.2	- 0.1	- 0.1	+ 0.6	- 0.1	+ 10.7	+ 7.1	+ 4.9	+ 2.2	- 1.0	+ 4.6
June	- 0.0	+ 10.8	+ 10.3	+ 9.0	+ 1.2	+ 0.0	+ 0.5	+ 0.0	- 3.3	- 2.9	- 3.9	+ 1.0	- 1.2	+ 0.8
July	- 0.0	+ 1.2	+ 0.8	- 1.4	+ 2.3	+ 0.3	+ 0.2	+ 0.0	- 0.2	- 5.3	- 4.5	- 0.7	+ 0.5	+ 4.6
Aug.	- 0.0	+ 14.3	+ 14.0	+ 13.8	+ 0.2	+ 0.0	+ 0.3	- 0.0	- 2.0	- 0.9	- 2.3	+ 1.3	+ 3.1	- 4.2
Sep.	+ 0.0	+ 28.8	+ 28.2	+ 26.3	+ 1.9	+ 0.4	+ 2.8	+ 0.0	+ 9.6	+ 9.7	+ 10.5	- 0.8	+ 0.6	- 0.8
Oct.	- 0.0	+ 13.8	+ 13.0	+ 11.3	+ 1.7	+ 0.1	+ 0.8	- 0.2	+ 0.9	+ 2.1	- 0.3	+ 2.5	+ 0.2	- 1.5
Nov.	- 0.0	+ 40.1	+ 36.2	+ 35.0	+ 1.2	+ 3.6	+ 0.3	+ 0.1	+ 4.7	+ 3.8	+ 2.4	+ 1.4	+ 0.1	+ 0.8

\* 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 6. — 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

IV. Banks

Memo item Trust loans 6	Participating interests in foreign banks and enter- prises 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				Total 9	Short- term 9	Medium and long- term		
End of year or month *														
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
13.6	33.9	483.6	65.6	418.0	332.3	85.6	2.0	284.4	23.8	260.6	64.9	195.7	5.8	1999
13.9	47.4	586.0	113.7	472.2	382.9	89.3	1.7	314.9	35.4	279.5	62.5	217.0	5.6	2000
13.8	47.6	622.7	91.9	530.8	434.5	96.3	1.4	350.6	34.0	316.6	97.6	219.0	5.3	2001
14.8	48.6	675.1	151.3	523.8	435.2	88.6	1.6	364.1	45.8	318.3	81.5	236.8	6.1	2001 June
14.7	49.3	635.4	132.5	502.8	414.1	88.7	1.5	367.1	42.0	325.2	91.5	233.6	6.0	July
14.3	49.2	640.1	106.9	533.3	445.0	88.3	1.5	368.3	37.7	330.6	100.6	230.0	5.7	Aug.
14.2	49.1	645.2	144.7	500.5	409.0	91.6	1.5	360.8	36.7	324.2	92.2	231.9	5.7	Sep.
14.1	49.8	637.1	133.7	503.4	412.3	91.1	1.4	376.6	37.0	339.6	105.9	233.6	5.8	Oct.
14.2	50.0	643.3	120.4	522.9	429.6	93.3	1.4	365.7	38.8	327.0	107.5	219.5	5.9	Nov.
13.8	47.6	622.7	91.9	530.8	434.5	96.3	1.4	350.6	34.0	316.6	97.6	219.0	5.3	Dec.
13.7	47.2	638.6	130.5	508.1	412.3	95.8	1.3	361.3	36.0	325.2	102.2	223.0	5.3	2002 Jan.
14.0	47.4	616.5	122.8	493.7	396.3	97.4	1.3	360.4	34.6	325.8	105.0	220.8	5.1	Feb.
14.1	47.0	627.0	122.0	505.0	406.5	98.4	1.3	363.2	35.0	328.2	106.4	221.8	5.1	Mar.
14.4	46.9	647.7	123.4	524.2	426.0	98.2	1.3	366.3	36.0	330.3	109.2	221.2	4.9	Apr.
14.1	47.4	646.2	119.3	526.9	428.8	98.1	1.2	366.0	34.9	331.1	112.7	218.4	4.7	May
13.1	47.0	608.3	133.9	474.4	376.0	98.4	1.1	344.2	38.2	306.0	93.0	213.0	4.5	June
13.4	47.2	618.3	121.3	497.1	395.4	101.6	1.1	347.9	38.6	309.3	95.8	213.5	4.6	July
13.4	47.0	615.5	91.8	523.7	419.2	104.5	1.1	337.2	34.8	302.5	100.9	201.6	4.5	Aug.
13.4	47.0	626.2	132.7	493.5	389.3	104.2	1.1	344.6	41.2	303.4	103.2	200.2	4.6	Sep.
14.2	45.7	633.0	116.1	516.9	412.9	104.1	1.1	342.4	38.2	304.2	99.4	204.8	4.6	Oct.
14.7	45.8	648.3	125.2	523.1	420.1	102.9	1.1	346.8	42.6	304.2	101.1	203.0	4.7	Nov.
Changes *														
+ 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
+ 1.1	+ 10.9	+ 37.4	- 9.2	+ 46.6	+ 47.6	- 1.0	- 0.0	+ 61.0	+ 7.2	+ 53.8	+ 15.9	+ 37.9	+ 0.1	1999
- 0.2	+ 12.8	+ 90.0	+ 47.0	+ 43.0	+ 42.9	+ 0.1	- 0.4	+ 24.4	+ 11.1	+ 13.3	- 2.9	+ 16.2	- 0.8	2000
- 0.5	- 0.5	+ 23.5	- 23.6	+ 47.0	+ 42.4	+ 4.6	- 0.4	+ 30.8	- 1.8	+ 32.6	+ 33.3	- 0.7	- 0.6	2001
- 0.0	- 0.4	- 28.0	- 3.4	- 24.5	- 26.2	+ 1.7	- 0.1	- 20.0	- 8.1	- 11.9	- 14.7	+ 2.8	- 0.0	2001 June
+ 0.0	+ 1.1	- 32.2	- 17.6	- 14.6	- 15.5	+ 0.9	- 0.0	+ 7.6	- 3.3	+ 10.9	+ 10.8	+ 0.1	+ 0.1	July
- 0.0	+ 0.5	+ 14.3	- 24.3	+ 38.7	+ 38.1	+ 0.5	- 0.0	+ 6.7	- 3.9	+ 10.6	+ 10.2	+ 0.3	+ 0.1	Aug.
- 0.1	- 0.2	+ 3.4	+ 37.7	- 34.2	- 37.4	+ 3.1	- 0.0	- 8.4	- 1.1	- 7.4	- 8.7	+ 1.3	- 0.0	Sep.
- 0.2	+ 0.5	- 10.3	- 11.4	+ 1.1	+ 1.7	- 0.6	- 0.1	+ 14.7	+ 0.3	+ 14.5	+ 13.4	+ 1.1	- 0.0	Oct.
+ 0.0	+ 0.0	+ 3.1	- 13.8	+ 16.9	+ 15.1	+ 1.8	- 0.0	- 12.6	+ 1.6	- 14.2	+ 1.0	- 15.2	- 0.0	Nov.
- 0.4	- 2.6	- 22.5	- 28.8	+ 6.3	+ 3.5	+ 2.8	+ 0.0	- 16.0	- 4.8	- 11.2	- 10.1	- 1.1	- 0.6	Dec.
- 0.2	+ 0.4	+ 11.6	+ 38.3	- 26.8	- 25.7	- 1.0	- 0.1	+ 8.2	+ 1.9	+ 6.4	+ 3.9	+ 2.5	- 0.1	2002 Jan.
+ 0.3	+ 0.2	- 21.7	- 7.7	- 14.0	- 15.7	+ 1.7	- 0.0	- 0.5	- 1.4	+ 0.9	+ 2.9	- 2.0	- 0.2	Feb.
+ 0.2	- 0.3	+ 11.9	- 0.5	+ 12.4	+ 11.3	+ 1.2	+ 0.0	+ 3.6	+ 0.4	+ 3.2	+ 1.6	+ 1.7	- 0.0	Mar.
+ 0.3	+ 0.2	+ 27.1	+ 2.3	+ 24.8	+ 24.3	+ 0.5	- 0.1	+ 7.1	+ 1.3	+ 5.8	+ 3.9	+ 1.9	- 0.2	Apr.
- 0.3	+ 1.1	+ 7.3	- 2.8	+ 10.1	+ 9.1	+ 1.0	- 0.0	+ 5.4	- 0.8	+ 6.2	+ 5.2	+ 1.0	- 0.2	May
- 1.0	+ 0.3	- 27.3	+ 16.1	- 43.4	- 44.4	+ 1.0	- 0.1	- 14.5	+ 3.7	- 18.2	- 17.6	- 0.6	- 0.3	June
+ 0.2	- 0.1	+ 5.5	- 13.6	+ 19.0	+ 16.3	+ 2.7	+ 0.0	+ 0.6	+ 0.2	+ 0.5	+ 2.1	- 1.6	+ 0.1	July
- 0.0	- 0.2	- 1.5	- 29.2	+ 27.7	+ 24.8	+ 3.0	- 0.0	+ 4.7	- 3.8	+ 8.5	+ 5.3	+ 3.2	- 0.0	Aug.
+ 0.1	+ 0.0	+ 11.3	+ 40.9	- 29.6	- 29.6	- 0.1	+ 0.0	+ 8.1	+ 6.5	+ 1.6	+ 2.9	- 1.3	+ 0.1	Sep.
+ 0.7	+ 0.1	+ 7.2	- 16.6	+ 23.7	+ 23.8	- 0.1	- 0.0	- 1.9	- 3.0	+ 1.1	- 3.8	+ 4.8	- 0.0	Oct.
+ 0.5	+ 0.3	+ 16.8	+ 9.4	+ 7.4	+ 8.4	- 0.9	- 0.0	+ 5.5	+ 4.5	+ 1.0	+ 2.0	- 1.0	+ 0.1	Nov.

maturity). — 4 Up to November 1993, included in securities; see also footnote 5. — 5 Up to November 1993, including negotiable money market paper; excluding registered debt securities. — 6 From 1999, no longer included in loans and deposits (see also footnote 2). — 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.



IV. Banks

lending 2, 6												Period
prises and individuals 1, 2						to public authorities 2						
Loans and advances not evidenced by certificates			Securities 6	Memo item Trust loans 9	Total	Loans and advances not evidenced by certificates			Securities 6, 10	Equalisation claims 11	Memo item Trust loans 9	
Total	Medium-term 7	Long-term 8				Total	Medium-term 7	Long-term 8				
End of year or month *												
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
1,764.8	182.5	1,582.3	178.9	49.2	605.6	459.5	30.9	428.6	108.6	37.5	8.7	1999
1,838.9	192.8	1,646.0	199.7	50.1	593.9	455.9	30.4	425.5	104.9	33.1	8.4	2000
1,880.5	191.1	1,689.4	189.7	48.9	556.0	440.3	25.6	414.6	111.8	4.0	8.0	2001
1,850.8	189.4	1,661.4	196.6	48.5	575.3	448.3	26.8	421.5	122.1	4.9	8.3	2001 June
1,854.6	188.8	1,665.8	192.7	48.5	580.9	446.7	26.6	420.1	130.2	4.0	8.2	July
1,862.7	189.7	1,672.9	189.7	49.4	571.6	446.2	26.6	419.7	121.4	4.0	8.2	Aug.
1,866.1	190.0	1,676.1	185.1	49.2	558.8	444.1	25.7	418.4	110.7	4.0	8.2	Sep.
1,870.9	189.8	1,681.1	188.0	49.1	556.9	443.9	25.5	418.4	109.0	4.0	8.1	Oct.
1,876.6	190.0	1,686.6	188.0	48.8	556.8	442.9	25.6	417.3	110.0	4.0	8.1	Nov.
1,880.5	191.1	1,689.4	189.7	48.9	556.0	440.3	25.6	414.6	111.8	4.0	8.0	Dec.
1,880.9	189.1	1,691.8	197.3	48.7	555.7	439.6	26.7	412.9	112.2	3.9	8.0	2002 Jan.
1,882.5	189.3	1,693.3	189.1	48.5	556.8	436.6	26.1	410.5	116.2	3.9	8.0	Feb.
1,882.3	189.4	1,692.9	179.4	48.2	552.7	432.2	25.6	406.6	116.5	3.9	7.9	Mar.
1,884.5	189.8	1,694.7	184.8	48.2	556.0	431.9	26.2	405.7	120.1	3.9	7.9	Apr.
1,888.0	189.9	1,698.1	184.7	48.1	559.5	430.1	26.3	403.8	125.5	3.9	7.9	May
1,891.0	191.2	1,699.9	175.6	47.6	553.4	426.4	24.4	402.0	123.0	3.9	7.8	June
1,897.5	191.7	1,705.8	171.0	47.5	556.8	425.8	24.5	401.3	128.0	3.0	7.7	July
1,901.6	192.3	1,709.3	171.6	47.5	558.1	426.2	24.7	401.5	128.9	3.0	7.7	Aug.
1,900.6	192.1	1,708.6	168.2	47.3	559.3	423.3	24.6	398.7	133.1	3.0	7.7	Sep.
1,906.5	193.8	1,712.6	170.1	47.5	556.8	422.1	24.7	397.4	131.8	3.0	7.6	Oct.
1,907.6	192.5	1,715.1	172.4	47.3	557.8	417.7	25.5	392.2	137.1	3.0	7.7	Nov.
Changes *												
+ 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
+ 121.8	+ 25.1	+ 96.8	+ 24.6	+ 0.3	+ 0.0	+ 8.5	+ 6.2	+ 2.3	- 7.8	- 0.6	- 0.1	1999
+ 71.8	+ 6.9	+ 64.9	+ 22.1	+ 0.8	- 7.7	- 3.8	- 0.4	- 3.5	- 3.1	- 0.8	- 0.3	2000
+ 41.9	- 2.8	+ 44.7	- 9.8	- 1.2	- 35.4	- 16.5	- 5.5	- 10.9	+ 10.1	- 29.1	- 0.4	2001
+ 1.3	- 1.0	+ 2.2	- 26.4	- 0.2	+ 5.1	- 0.8	- 0.5	- 0.3	+ 5.8	+ 0.1	- 0.1	2001 June
+ 3.8	- 0.6	+ 4.4	- 4.0	- 0.0	+ 5.8	- 1.6	- 0.2	- 1.4	+ 8.3	- 0.9	- 0.1	July
+ 8.1	+ 0.9	+ 7.2	- 3.0	+ 0.9	- 7.4	- 0.4	- 0.0	- 0.4	- 7.0	+ 0.0	- 0.0	Aug.
+ 3.4	+ 0.3	+ 3.1	- 4.6	- 0.1	- 12.2	- 2.1	- 0.8	- 1.3	- 10.1	+ 0.0	- 0.0	Sep.
+ 5.1	+ 0.1	+ 5.0	+ 2.9	- 0.1	- 1.9	- 0.3	- 0.3	- 0.0	- 1.6	- 0.0	- 0.0	Oct.
+ 5.3	- 0.1	+ 5.3	- 0.1	- 0.2	+ 0.1	- 1.0	+ 0.1	- 1.1	+ 1.1	+ 0.0	+ 0.0	Nov.
+ 4.1	+ 1.2	+ 3.0	+ 1.8	+ 0.1	- 0.6	- 2.6	+ 0.1	- 2.7	+ 2.0	+ 0.0	- 0.1	Dec.
+ 0.3	- 2.1	+ 2.4	+ 7.8	- 0.3	- 0.3	- 0.7	+ 1.0	- 1.7	+ 0.5	- 0.0	- 0.0	2002 Jan.
+ 1.7	+ 0.2	+ 1.5	- 8.1	- 0.2	+ 1.1	- 3.0	- 0.6	- 2.4	+ 4.1	-	- 0.0	Feb.
+ 0.1	+ 0.4	- 0.3	- 9.8	- 0.2	- 3.9	- 4.4	- 0.5	- 3.9	+ 0.5	- 0.0	- 0.0	Mar.
+ 2.4	+ 0.4	+ 2.0	+ 5.8	- 0.1	+ 3.3	- 0.3	+ 0.6	- 0.9	+ 3.6	+ 0.0	- 0.0	Apr.
+ 3.8	+ 0.2	+ 3.6	- 0.0	- 0.0	+ 3.6	- 1.9	+ 0.0	- 1.9	+ 5.5	+ 0.0	- 0.0	May
- 0.5	- 1.9	+ 1.4	- 9.0	- 0.5	- 6.1	- 3.6	- 1.8	- 1.8	- 2.4	- 0.0	- 0.1	June
+ 6.4	+ 0.5	+ 5.9	- 4.4	- 0.1	+ 3.4	- 0.7	+ 0.0	- 0.7	+ 5.0	- 1.0	- 0.1	July
+ 4.1	+ 0.6	+ 3.5	- 0.1	+ 0.0	+ 2.1	+ 0.4	+ 0.3	+ 0.2	+ 1.6	+ 0.0	- 0.0	Aug.
- 1.0	- 0.3	- 0.7	- 2.8	- 0.2	+ 0.6	- 2.9	- 0.1	- 2.8	+ 3.5	+ 0.0	- 0.0	Sep.
+ 5.8	+ 1.8	+ 4.1	+ 1.9	+ 0.2	- 2.5	- 1.2	+ 0.1	- 1.3	- 1.3	- 0.0	- 0.0	Oct.
+ 1.3	- 2.8	+ 4.1	+ 2.3	- 0.1	+ 1.0	- 4.3	+ 0.0	- 4.4	+ 5.4	+ 0.0	+ 0.0	Nov.

other negotiable money market paper; excluding mobilisation and liquidity paper. — 6 From 1999, breakdown of lending against securities by medium 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 (see also footnote 2). — 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.

#### IV. Banks

### 6. Lending by banks (MFIs) in Germany to domestic enterprises and resident individuals, housing loans, sectors of economic activity \*

€ billion

Lending to domestic enterprises and resident individuals (excluding holdings of negotiable money market paper and excluding securities portfolios) 1														
Period	Housing loans					Lending to enterprises and self-employed persons								
	Mortgage loans, total	Total	Mortgage loans secured by residential real estate	Other housing loans	Total	Housing loans	Manufacturing	Electricity, gas and water supply, mining 2	Construction	Wholesale and retail trade 3	Agriculture, forestry and fishing	Transport, storage and communication	Financing institutions 4 (excluding MFIs) and insurance enterprises	
Lending, total														
End of year or quarter *														
1999	2,094.2	899.3	991.3	691.5	299.9	1,209.0	332.0	166.2	33.7	67.1	173.0	31.1	47.2	27.5
2000	2,187.3	955.2	1,030.8	737.6	293.2	1,267.8	344.1	174.9	35.9	68.2	173.2	31.4	49.1	34.2
2001 Sep.	2,219.3	974.2	1,047.8	754.0	293.9	1,284.7	345.6	175.9	34.8	69.4	172.3	31.9	49.3	38.2
Dec.	2,236.3	981.4	1,053.9	757.7	296.2	1,295.6	346.1	174.3	36.7	67.9	172.9	31.3	50.0	39.0
2002 Mar.	2,230.8	983.7	1,055.7	759.9	295.7	1,291.7	345.8	173.8	38.1	68.5	169.3	31.6	51.7	39.0
June	2,233.7	994.1	1,060.2	768.0	292.2	1,287.1	345.9	171.5	39.4	68.2	167.0	32.0	51.5	36.5
Sep.	2,242.7	1,000.0	1,064.3	770.7	293.6	1,286.1	344.5	168.2	38.3	66.9	165.7	32.5	50.5	42.1
Short-term lending														
1999	329.4	—	17.6	—	17.6	276.9	11.8	57.3	4.3	17.9	61.4	4.5	10.6	8.8
2000	348.4	—	15.9	—	15.9	294.6	10.7	61.5	6.2	17.9	62.2	4.2	10.1	10.5
2001 Sep.	353.2	—	15.9	—	15.9	300.9	10.6	60.9	4.2	19.0	62.4	4.7	8.8	15.2
Dec.	355.8	—	15.9	—	15.9	304.1	10.6	59.6	5.5	17.8	63.5	4.1	9.3	14.2
2002 Mar.	348.5	—	15.1	—	15.1	299.5	10.1	59.1	6.6	18.5	61.1	4.3	10.5	15.7
June	342.6	—	14.4	—	14.4	293.2	9.4	58.6	7.3	18.4	60.0	4.6	9.6	12.1
Sep.	342.1	—	14.1	—	14.1	291.2	9.1	56.6	6.1	17.5	59.3	4.8	8.8	17.0
Medium-term lending 8														
1999	182.5	—	42.6	—	42.6	109.1	13.4	16.7	1.7	6.9	13.0	3.4	6.3	4.0
2000	192.8	—	39.3	—	39.3	120.1	12.8	17.6	1.5	7.0	13.3	3.4	6.9	9.1
2001 Sep.	190.0	—	37.9	—	37.9	117.9	12.5	18.0	1.7	6.6	13.3	3.2	7.4	7.3
Dec.	191.1	—	37.1	—	37.1	120.1	12.0	18.5	1.9	6.5	13.4	3.2	7.2	7.7
2002 Mar.	189.4	—	36.4	—	36.4	120.0	11.9	18.8	1.9	6.4	13.2	3.3	7.7	6.4
June	191.2	—	35.9	—	35.9	120.9	11.7	17.8	2.2	6.6	13.2	3.3	8.1	6.5
Sep.	192.1	—	35.7	—	35.7	121.0	11.6	18.0	2.4	6.6	13.3	3.3	8.1	6.7
Long-term lending 1, 9														
1999	1,582.3	899.3	931.1	691.5	239.7	823.0	306.8	92.3	27.7	42.2	98.7	23.3	30.3	14.7
2000	1,646.0	955.2	975.5	737.6	238.0	853.1	320.6	95.9	28.2	43.4	97.7	23.9	32.1	14.6
2001 Sep.	1,676.1	974.2	994.0	754.0	240.0	865.9	322.6	96.9	28.9	43.8	96.6	24.0	33.1	15.8
Dec.	1,689.4	981.4	1,000.9	757.7	243.2	871.4	323.5	96.2	29.4	43.7	96.1	24.0	33.5	17.1
2002 Mar.	1,692.9	983.7	1,004.1	759.9	244.2	872.3	323.8	95.9	29.5	43.5	94.9	24.1	33.5	17.0
June	1,699.9	994.1	1,009.9	768.0	241.9	873.0	324.8	95.1	29.9	43.2	93.9	24.1	33.8	17.9
Sep.	1,708.6	1,000.0	1,014.5	770.7	243.8	873.9	323.8	93.6	29.9	42.8	93.0	24.4	33.5	18.4
Lending, total														
Change during quarter *														
2001 4th qtr	+ 16.6	+ 5.8	+ 7.2	+ 4.7	+ 2.5	+ 10.6	+ 0.8	- 1.5	+ 2.0	- 1.4	+ 0.5	- 0.6	+ 0.7	+ 0.6
2002 1st qtr	- 5.7	+ 1.6	+ 1.3	+ 1.4	- 0.2	- 4.1	- 0.4	- 0.2	+ 1.3	+ 0.5	- 3.7	+ 0.3	+ 1.7	+ 0.1
2nd qtr	- 0.3	+ 3.7	+ 3.8	+ 3.4	+ 0.3	- 7.0	- 0.4	- 2.4	+ 1.2	- 0.5	- 2.7	+ 0.3	- 1.3	- 2.7
3rd qtr	+ 8.8	+ 4.8	+ 5.7	+ 3.6	+ 2.1	- 1.2	- 0.6	- 3.4	- 1.1	- 1.4	- 1.4	+ 0.5	- 1.1	+ 5.6
Short-term lending														
2001 4th qtr	+ 2.0	—	- 0.2	—	- 0.2	+ 2.6	- 0.1	- 1.2	+ 1.3	- 1.2	+ 0.9	- 0.6	+ 0.5	- 1.0
2002 1st qtr	- 7.8	—	- 0.8	—	- 0.8	- 5.1	- 0.6	- 0.5	+ 1.1	+ 0.7	- 2.3	+ 0.2	+ 1.2	+ 1.4
2nd qtr	- 6.0	—	- 0.7	—	- 0.7	- 6.5	- 0.6	- 0.5	+ 0.7	- 0.1	- 1.4	+ 0.3	- 0.9	- 3.5
3rd qtr	- 0.8	—	- 0.2	—	- 0.2	- 2.2	- 0.3	- 2.1	- 1.2	- 0.9	- 0.7	+ 0.2	- 0.8	+ 5.0
Medium-term lending 8														
2001 4th qtr	+ 1.2	—	- 0.9	—	- 0.9	+ 2.5	- 0.5	+ 0.5	+ 0.2	- 0.1	+ 0.1	- 0.0	- 0.2	+ 0.4
2002 1st qtr	- 1.5	—	- 0.6	—	- 0.6	+ 0.1	- 0.1	+ 0.3	+ 0.1	- 0.0	- 0.1	+ 0.1	+ 0.6	- 1.3
2nd qtr	- 1.3	—	- 0.5	—	- 0.5	- 1.0	- 0.2	- 1.1	+ 0.2	+ 0.0	- 0.2	- 0.0	- 0.5	+ 0.1
3rd qtr	+ 0.8	—	- 0.3	—	- 0.3	+ 0.1	- 0.1	+ 0.2	+ 0.1	- 0.0	+ 0.1	+ 0.1	+ 0.1	+ 0.2
Long-term lending 1, 9														
2001 4th qtr	+ 13.3	+ 5.8	+ 8.2	+ 4.7	+ 3.5	+ 5.5	+ 1.4	- 0.7	+ 0.6	- 0.1	- 0.5	+ 0.0	+ 0.4	+ 1.2
2002 1st qtr	+ 3.6	+ 1.6	+ 2.7	+ 1.4	+ 1.3	+ 0.9	+ 0.3	- 0.0	+ 0.2	- 0.2	- 1.2	+ 0.1	- 0.0	- 0.0
2nd qtr	+ 6.9	+ 3.7	+ 5.0	+ 3.4	+ 1.5	+ 0.5	+ 0.4	- 0.8	+ 0.4	- 0.4	- 1.1	+ 0.0	+ 0.1	+ 0.7
3rd qtr	+ 8.7	+ 4.8	+ 6.2	+ 3.6	+ 2.7	+ 0.9	- 0.2	- 1.5	+ 0.0	- 0.4	- 0.8	+ 0.2	- 0.4	+ 0.5

\* Excluding lending by foreign branches. Up to December 1998, lending by banks (excluding building and loan associations) in Germany; including lending to building and loan associations. From 1999, lending by monetary financial institutions (MFIs) in Germany; breakdown of lending by building and loan associations by areas and sectors estimated. 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 t / e t, are not specially marked. — 1 Up to December 1998, including loans on a trust basis; from 1999, loans on a trust basis are no longer included in lending. — 2 Including quarrying. — 3 Including the maintenance and repair of motor vehicles and durable consumer goods. — 4 Up to December 1998, excluding credit institutions



IV. Banks

											Lending to employees and other individuals		Lending to non-profit institutions		Period											
Services sector (including the professions) 5				enterprises			Total	Housing loans	Other lending			Total	Housing loans													
Total	Housing enterprises	Holding companies	Other real estate enterprises	Lending to self-employed persons 6	Lending to craft enterprises	Total			Housing loans	Total	Instalment loans 7			Debit balances on wage, salary and pension accounts		Total	Housing loans									
<b>End of year or quarter *</b>													<b>Lending, total</b>													
663.1	154.1	42.8	168.3	449.4	73.9	871.4	655.7	215.7	105.7	23.6	13.7	3.6	1999													
700.8	162.3	46.8	183.1	459.0	75.0	905.5	683.0	222.6	108.6	24.3	14.0	3.7	2000													
712.9	168.7	49.0	190.3	458.5	75.5	920.6	698.6	222.0	110.3	23.9	13.9	3.6	2001 Sep.													
723.3	169.4	50.3	194.3	458.6	74.7	926.7	704.3	222.4	110.7	22.9	14.1	3.5	Dec.													
719.7	168.9	49.2	195.6	455.5	75.1	925.4	706.4	219.0	109.5	22.3	13.8	3.5	2002 Mar.													
720.9	169.4	48.8	197.9	456.1	74.7	932.5	710.8	221.7	112.3	22.7	14.1	3.5	June													
721.9	171.1	47.8	199.8	453.5	74.0	942.1	716.4	225.8	114.6	23.9	14.5	3.4	Sept.													
											<b>Short-term lending</b>															
112.2	18.6	17.1	27.5	55.9	15.6	51.1	5.7	45.4	2.5	23.6	1.3	0.0	1999													
122.1	19.6	18.1	30.0	57.1	16.2	52.6	5.2	47.4	2.3	24.3	1.2	0.0	2000													
125.6	20.7	19.7	32.2	56.3	16.8	51.0	5.3	45.6	2.9	23.9	1.3	0.0	2001 Sep.													
130.1	21.6	20.4	34.1	56.0	15.8	50.3	5.3	45.0	2.8	22.9	1.4	0.0	Dec.													
123.8	20.8	18.2	33.3	54.9	16.5	47.9	5.0	42.9	2.5	22.3	1.1	0.0	2002 Mar.													
122.6	20.8	18.2	32.5	54.8	16.3	48.2	4.9	43.2	2.5	22.7	1.3	0.0	June													
121.0	20.9	17.3	33.0	53.8	16.1	49.2	5.0	44.2	2.5	23.9	1.7	0.0	Sept.													
											<b>Medium-term lending 8</b>															
57.0	7.1	4.0	12.3	33.3	5.6	72.7	29.2	43.5	31.0	-	0.7	0.1	1999													
61.4	6.8	6.3	13.6	33.1	5.5	72.2	26.4	45.8	33.0	-	0.6	0.1	2000													
60.5	7.0	5.6	14.8	31.7	5.4	71.6	25.4	46.2	33.9	-	0.6	0.1	2001 Sep.													
61.9	6.7	6.5	14.7	31.2	5.3	70.5	25.0	45.4	33.4	-	0.6	0.1	Dec.													
62.2	6.7	7.2	14.9	30.7	5.1	68.9	24.5	44.4	32.7	-	0.6	0.1	2002 Mar.													
63.2	6.7	6.9	15.4	31.6	5.0	69.7	24.2	45.5	34.1	-	0.6	0.1	June													
62.6	6.6	6.6	15.9	31.3	4.9	70.5	24.1	46.4	35.0	-	0.6	0.1	Sept.													
											<b>Long-term lending 1, 9</b>															
493.9	128.5	21.8	128.5	360.1	52.7	747.5	620.8	126.7	72.2	-	11.7	3.5	1999													
517.3	135.9	22.5	139.5	368.7	53.2	780.8	651.4	129.4	73.3	-	12.2	3.6	2000													
526.8	141.0	23.7	143.4	370.4	53.3	798.1	667.9	130.2	73.5	-	12.1	3.5	2001 Sep.													
531.3	141.1	23.4	145.6	371.3	53.7	806.0	674.0	132.0	74.4	-	12.1	3.5	Dec.													
533.7	141.4	23.8	147.4	369.8	53.4	808.6	676.9	131.7	74.4	-	12.1	3.4	2002 Mar.													
535.1	142.0	23.6	150.0	369.6	53.4	814.7	681.7	132.9	75.7	-	12.2	3.4	June													
538.3	143.5	24.0	150.9	368.3	53.0	822.4	687.3	135.1	77.0	-	12.2	3.4	Sept.													
<b>Change during quarter *</b>													<b>Lending, total</b>													
+	10.1	+	0.8	+	1.7	+	4.0	+	0.3	-	0.9	+	5.8	+	6.4	-	0.5	-	0.1	-	1.0	+	0.1	-	0.0	2001 4th qtr
-	4.2	-	0.5	-	0.8	+	1.1	-	2.7	+	0.3	-	1.3	+	1.7	-	3.0	-	1.0	-	0.5	-	0.2	-	0.0	2002 1st qtr
+	1.0	+	0.6	-	0.5	+	2.3	-	0.7	-	0.3	+	6.3	+	4.2	+	2.2	+	1.6	+	0.4	+	0.3	-	0.0	2nd qtr
+	1.0	+	1.3	-	0.2	+	2.2	-	2.1	-	0.7	+	9.6	+	6.4	+	3.3	+	2.1	+	1.2	+	0.4	-	0.0	3rd qtr
													<b>Short-term lending</b>													
+	3.9	+	0.8	+	0.7	+	1.8	-	0.3	-	1.1	-	0.7	-	0.1	-	0.6	-	0.1	-	1.0	+	0.1	-	0.0	2001 4th qtr
-	7.0	-	0.7	-	2.2	-	0.8	-	1.1	+	0.7	-	2.3	-	0.3	-	2.1	-	0.3	-	0.5	-	0.3	+	0.0	2002 1st qtr
-	1.1	-	0.0	+	0.1	-	0.8	-	0.1	+	0.2	+	0.4	-	0.1	+	0.4	+	0.1	+	0.4	+	0.2	+	0.0	2nd qtr
-	1.6	+	0.1	-	1.0	+	0.5	-	0.9	-	0.2	+	1.1	+	0.1	+	1.0	+	0.0	+	1.2	+	0.4	+	0.0	3rd qtr
													<b>Medium-term lending 8</b>													
+	1.5	-	0.2	+	0.9	+	0.0	-	0.4	-	0.1	-	1.3	-	0.4	-	0.8	-	0.6	-	-	+	0.0	-	0.0	2001 4th qtr
+	0.5	-	0.1	+	0.9	+	0.2	-	0.5	-	0.1	-	1.6	-	0.5	-	1.0	-	0.8	-	-	+	0.0	+	0.0	2002 1st qtr
+	0.5	-	0.0	-	0.4	+	0.5	-	0.2	-	0.1	-	0.3	-	0.3	-	0.0	+	0.2	-	+	0.0	-	0.0	2nd qtr	
-	0.6	-	0.1	-	0.1	+	0.3	-	0.3	-	0.1	+	0.8	-	0.1	+	0.9	+	1.0	-	-	+	0.0	-	0.0	3rd qtr
													<b>Long-term lending 1, 9</b>													
+	4.7	+	0.2	+	0.1	+	2.2	+	1.0	+	0.3	+	7.8	+	6.9	+	0.9	+	0.5	-	-	+	0.0	-	0.0	2001 4th qtr
+	2.2	+	0.4	+	0.5	+	1.7	-	1.1	-	0.3	+	2.6	+	2.5	+	0.1	+	0.1	-	+	0.0	-	0.1	2002 1st qtr	
+	1.6	+	0.6	-	0.2	+	2.5	-	0.4	-	0.0	+	6.3	+	4.6	+	1.7	+	1.3	-	+	0.1	-	0.0	2nd qtr	
+	3.2	+	1.2	+	1.0	+	1.4	-	1.0	-	0.3	+	7.8	+	6.4	+	1.4	+	1.1	-	+	0.0	-	0.0	3rd qtr	

(other than building and loan associations); from 1999, excluding banks (MFIs) and excluding financial leasing institutions; see also footnote 5. — 5 From 1999, including financial leasing institutions. — 6 From 1999, including sole proprietors; up to December 1998, sole proprietors were assigned to enterprises. — 7 Excluding mortgage loans and housing loans,

even in the form of instalment credit. — 8 Up to December 1998, maturity or period of notice of more than 1 year to less than 4 years; from 1999, more than 1 year up to and including 5 years. — 9 Up to December 1998, maturity or period of notice of 4 years and more; from 1999, of more than 5 years.

#### IV. Banks

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

€ billion

Period	Deposits, total	Sight deposits	Time deposits 1, 2					Savings deposits 3	Bank savings bonds 4	Memo item		
			Total	for up to and including 1 year	for more than 1 year 2		Loans on a trust basis			Subordinated liabilities (excluding negotiable debt securities)	Included in time deposits: liabilities arising from repos	
					Total	for up to and including 2 years						for more than 2 years
<b>Domestic non-banks, total</b>											<b>End of year or month *</b>	
1999	1,905.3	420.4	759.6	239.7	519.9	4.5	515.4	614.7	110.7	42.1	25.6	0.4
2000	1,945.8	443.4	819.9	274.7	545.2	9.0	536.2	573.5	109.0	42.1	25.9	-
2001	2,034.0	526.4	827.0	268.7	558.3	10.3	548.0	574.5	106.0	43.3	26.2	3.1
2001 Dec.	2,034.0	526.4	827.0	268.7	558.3	10.3	548.0	574.5	106.0	43.3	26.2	3.1
2002 Jan.	2,009.8	511.5	819.9	257.8	562.1	10.2	551.9	573.4	105.1	42.4	26.1	1.1
Feb.	2,007.8	511.3	819.7	256.3	563.5	8.6	554.8	572.0	104.8	42.2	26.2	1.2
Mar.	2,006.6	509.2	821.7	256.4	565.3	8.5	556.8	570.8	104.9	42.1	26.3	1.5
Apr.	1,999.3	515.7	816.8	252.5	564.3	8.3	556.0	561.8	104.9	42.0	26.3	1.2
May	2,009.4	523.8	820.6	255.9	564.7	8.3	556.4	560.1	105.0	41.9	26.3	2.0
June	2,021.4	536.2	820.6	256.6	564.0	8.4	555.6	558.9	105.7	41.5	26.6	1.4
July	2,016.2	531.6	821.1	256.3	564.9	8.5	556.4	557.5	106.0	41.6	26.9	1.5
Aug.	2,013.9	527.2	823.0	259.4	563.6	8.5	555.2	557.8	105.9	41.6	27.1	2.0
Sep.	2,025.0	540.8	820.6	257.8	562.8	8.4	554.3	558.3	105.3	41.6	27.5	6.7
Oct.	2,037.6	543.1	829.8	264.2	565.6	8.5	557.1	559.7	105.0	41.6	27.7	7.2
Nov.	2,062.1	572.4	822.6	254.0	568.7	8.7	560.0	562.4	104.7	41.5	27.9	3.0
											<b>Changes *</b>	
2000	+ 41.3	+ 22.3	+ 61.1	+ 34.8	+ 26.2	+ 4.5	+ 21.8	- 40.5	- 1.7	- 0.0	+ 0.3	- 0.4
2001	+ 88.5	+ 82.3	+ 8.1	- 6.0	+ 14.1	+ 1.3	+ 12.8	+ 1.1	- 2.9	+ 1.0	+ 0.3	+ 3.1
2001 Dec.	+ 34.7	+ 15.4	+ 4.5	+ 0.4	+ 4.1	+ 0.0	+ 4.1	+ 16.4	- 1.5	+ 0.8	- 0.1	+ 0.5
2002 Jan.	- 24.4	- 15.2	- 7.1	- 10.9	+ 3.9	- 0.1	+ 4.0	- 1.2	- 0.9	- 0.9	- 0.1	- 2.0
Feb.	- 2.0	- 0.2	- 0.1	- 1.5	+ 1.4	- 1.5	+ 2.9	- 1.4	- 0.3	- 0.2	+ 0.1	+ 0.2
Mar.	- 1.2	- 2.0	+ 2.0	+ 0.1	+ 1.8	- 0.2	+ 2.0	- 1.2	+ 0.1	- 0.1	+ 0.1	+ 0.3
Apr.	- 7.3	+ 6.5	- 4.9	- 3.9	- 1.0	- 0.2	- 0.8	- 9.0	+ 0.1	- 0.1	+ 0.0	- 0.4
May	+ 11.1	+ 8.2	+ 4.5	+ 3.9	+ 0.6	+ 0.1	+ 0.5	- 1.7	+ 0.1	- 0.1	+ 0.1	+ 0.8
June	+ 11.1	+ 11.9	- 0.3	+ 0.6	- 0.8	+ 0.0	- 0.9	- 1.2	+ 0.7	- 0.3	+ 0.1	- 0.6
July	- 5.3	- 4.7	+ 0.5	- 0.3	+ 0.9	+ 0.1	+ 0.8	- 1.4	+ 0.3	+ 0.0	+ 0.3	+ 0.1
Aug.	- 2.3	- 4.4	+ 1.9	+ 3.1	- 1.2	+ 0.0	- 1.2	+ 0.3	- 0.1	- 0.0	+ 0.2	+ 0.5
Sep.	+ 10.9	+ 13.5	- 2.6	- 1.7	- 0.9	- 0.1	- 0.8	+ 0.5	- 0.5	- 0.0	+ 0.4	+ 4.7
Oct.	+ 12.8	+ 2.3	+ 9.5	+ 6.4	+ 3.1	+ 0.1	+ 3.0	+ 1.4	- 0.3	+ 0.0	+ 0.4	+ 0.5
Nov.	+ 24.5	+ 29.3	- 7.2	- 10.3	+ 3.1	+ 0.2	+ 2.9	+ 2.7	- 0.3	- 0.1	+ 0.2	- 4.3
<b>Domestic public authorities</b>											<b>End of year or month *</b>	
1999	124.4	14.7	104.4	42.0	62.4	0.4	61.9	3.2	2.0	35.9	1.2	-
2000	149.1	16.6	127.7	62.1	65.5	1.2	64.4	2.7	2.1	36.0	1.4	-
2001	122.7	16.1	102.3	37.7	64.5	1.2	63.3	2.3	2.1	36.6	1.4	-
2001 Dec.	122.7	16.1	102.3	37.7	64.5	1.2	63.3	2.3	2.1	36.6	1.4	-
2002 Jan.	120.6	14.1	102.3	36.0	66.4	1.2	65.2	2.2	2.0	35.9	1.3	-
Feb.	119.6	14.5	101.0	34.7	66.2	1.2	65.1	2.1	2.0	35.8	1.3	-
Mar.	117.4	13.8	99.5	34.2	65.3	1.1	64.2	2.1	2.0	35.6	1.3	-
Apr.	113.7	12.4	97.3	32.9	64.4	0.9	63.5	2.0	2.1	35.5	1.3	-
May	116.9	12.7	100.1	35.5	64.6	1.0	63.6	2.0	2.1	35.5	1.3	-
June	118.5	14.5	99.9	35.7	64.2	1.0	63.2	2.0	2.1	35.2	1.3	-
July	116.6	14.3	98.2	34.0	64.2	1.0	63.3	2.0	2.1	35.6	1.3	-
Aug.	115.4	13.4	97.8	33.5	64.4	1.0	63.4	2.0	2.1	35.6	1.3	-
Sep.	114.3	13.6	96.6	33.7	62.9	0.8	62.1	2.0	2.1	35.5	1.3	-
Oct.	109.7	13.8	91.9	29.0	62.9	0.8	62.1	2.0	2.0	35.6	1.3	-
Nov.	109.5	13.6	92.0	29.0	63.0	0.8	62.1	2.0	2.0	35.6	1.3	-
											<b>Changes *</b>	
2000	+ 24.8	+ 1.9	+ 23.3	+ 20.1	+ 3.2	+ 0.8	+ 2.4	- 0.5	+ 0.1	+ 0.1	+ 0.3	-
2001	- 26.4	- 0.6	- 25.4	- 24.4	- 1.0	+ 0.0	- 1.1	- 0.5	- 0.0	+ 0.7	- 0.0	-
2001 Dec.	- 4.3	+ 0.0	- 4.3	- 4.5	+ 0.2	+ 0.1	+ 0.1	+ 0.0	- 0.0	+ 0.5	+ 0.0	-
2002 Jan.	- 2.1	- 2.0	+ 0.1	- 1.8	+ 1.9	- 0.0	+ 1.9	- 0.1	- 0.1	- 0.7	- 0.1	-
Feb.	- 0.9	+ 0.5	- 1.4	- 1.2	- 0.1	- 0.0	- 0.1	- 0.0	- 0.0	- 0.2	- 0.0	-
Mar.	- 2.3	- 0.8	- 1.5	- 0.6	- 0.9	- 0.0	- 0.9	- 0.1	+ 0.0	- 0.2	- 0.0	-
Apr.	- 3.6	- 1.4	- 2.2	- 1.3	- 0.9	- 0.2	- 0.7	- 0.0	+ 0.0	- 0.0	- 0.0	-
May	+ 3.4	+ 0.4	+ 3.1	+ 2.9	+ 0.2	+ 0.0	+ 0.1	+ 0.0	+ 0.0	- 0.1	+ 0.0	-
June	+ 1.5	+ 1.8	- 0.2	+ 0.2	- 0.4	+ 0.0	- 0.4	- 0.0	+ 0.0	- 0.3	- 0.0	-
July	- 1.9	- 0.2	- 1.7	- 1.7	+ 0.0	- 0.0	+ 0.1	- 0.0	+ 0.0	+ 0.4	+ 0.0	-
Aug.	- 1.2	- 0.9	- 0.3	- 0.5	+ 0.2	-	+ 0.2	+ 0.1	- 0.0	- 0.0	+ 0.0	-
Sep.	- 1.1	+ 0.2	- 1.2	+ 0.2	- 1.4	- 0.1	- 1.3	- 0.0	+ 0.0	- 0.1	+ 0.0	-
Oct.	- 4.6	+ 0.2	- 4.7	- 4.7	- 0.0	- 0.0	- 0.0	- 0.0	- 0.1	+ 0.1	- 0.0	-
Nov.	- 0.1	- 0.2	+ 0.1	+ 0.1	+ 0.0	+ 0.0	+ 0.0	+ 0.0	- 0.0	+ 0.0	+ 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 Including subordinated liabilities and liabilities arising from registered debt securities. —

IV. Banks

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

€ billion

Period	Deposits, total	Sight deposits	Time deposits 1, 2					Savings deposits 3	Bank savings bonds 4	Memo item				
			Total	for up to and including 1 year	for more than 1 year 2					Loans on a trust basis	Subordinated liabilities (excluding negotiable debt securities)	Included in time deposits: liabilities arising from repos		
					Total	for up to and including 2 years	for more than 2 years							
<b>Domestic enterprises and individuals</b>													<b>End of year or month *</b>	
1999	1,781.0	405.7	655.2	197.6	457.6	4.1	453.5	611.4	108.7	6.2	24.5	0.4		
2000	1,796.7	426.8	692.2	212.6	479.6	7.8	471.8	570.8	106.9	6.1	24.5	-		
2001	1,911.3	510.4	724.7	231.0	493.7	9.1	484.6	572.3	103.9	6.6	24.8	3.1		
2001 Dec.	1,911.3	510.4	724.7	231.0	493.7	9.1	484.6	572.3	103.9	6.6	24.8	3.1		
2002 Jan.	1,889.3	497.4	717.5	221.8	495.7	9.0	486.7	571.2	103.1	6.4	24.8	1.1		
Feb.	1,888.2	496.7	718.8	221.6	497.2	7.5	489.7	569.8	102.8	6.4	24.9	1.2		
Mar.	1,889.2	495.4	722.2	222.2	500.0	7.3	492.6	568.7	102.8	6.5	25.0	1.5		
Apr.	1,885.5	503.3	719.5	219.6	499.9	7.4	492.5	559.8	102.9	6.4	25.0	1.2		
May	1,892.5	511.1	720.5	220.4	500.1	7.4	492.8	558.0	102.9	6.4	25.0	2.0		
June	1,903.0	521.8	720.8	220.9	499.8	7.4	492.4	556.9	103.6	6.3	25.3	1.4		
July	1,899.6	517.3	722.9	222.3	500.6	7.5	493.1	555.5	103.8	6.0	25.6	1.5		
Aug.	1,898.5	513.8	725.2	225.9	499.3	7.5	491.7	555.8	103.8	6.0	25.8	2.0		
Sep.	1,910.7	527.3	724.0	224.1	499.8	7.6	492.2	556.3	103.2	6.1	26.2	6.7		
Oct.	1,927.9	529.3	737.9	235.2	502.7	7.7	495.0	557.7	103.0	5.9	26.3	7.2		
Nov.	1,952.5	558.8	730.6	224.9	505.7	7.8	497.9	560.5	102.7	5.9	26.5	3.0		
<b>Changes *</b>														
2000	+ 16.5	+ 20.4	+ 37.8	+ 14.8	+ 23.1	+ 3.7	+ 19.3	- 40.0	- 1.8	- 0.1	+ 0.0	- 0.4		
2001	+ 115.0	+ 82.9	+ 33.5	+ 18.4	+ 15.1	+ 1.3	+ 13.8	+ 1.5	- 2.9	+ 0.3	+ 0.3	+ 3.1		
2001 Dec.	+ 39.0	+ 15.4	+ 8.8	+ 4.9	+ 3.9	- 0.1	+ 4.0	+ 16.4	- 1.5	+ 0.3	- 0.1	+ 0.5		
2002 Jan.	- 22.2	- 13.2	- 7.2	- 9.1	+ 2.0	- 0.1	+ 2.1	- 1.1	- 0.8	- 0.2	+ 0.0	- 2.0		
Feb.	- 1.1	- 0.6	+ 1.2	- 0.3	+ 1.5	- 1.5	+ 3.0	- 1.4	- 0.3	+ 0.0	+ 0.1	+ 0.2		
Mar.	+ 1.1	- 1.3	+ 3.4	+ 0.7	+ 2.7	- 0.1	+ 2.9	- 1.1	+ 0.0	+ 0.1	+ 0.1	+ 0.3		
Apr.	- 3.7	+ 7.9	- 2.7	- 2.6	- 0.1	+ 0.0	- 0.1	- 8.9	+ 0.0	- 0.1	+ 0.0	- 0.4		
May	+ 7.6	+ 7.9	+ 1.4	+ 1.0	+ 0.5	+ 0.1	+ 0.4	- 1.7	+ 0.0	- 0.0	+ 0.1	+ 0.8		
June	+ 9.5	+ 10.1	- 0.1	+ 0.4	- 0.5	+ 0.0	- 0.5	- 1.2	+ 0.7	- 0.1	+ 0.1	- 0.6		
July	- 3.4	- 4.5	+ 2.2	+ 1.4	+ 0.8	+ 0.1	+ 0.7	- 1.3	+ 0.3	- 0.3	+ 0.3	+ 0.1		
Aug.	- 1.1	- 3.5	+ 2.3	+ 3.6	- 1.4	+ 0.0	- 1.4	+ 0.2	- 0.1	- 0.0	+ 0.2	+ 0.5		
Sep.	+ 12.0	+ 13.3	- 1.4	- 1.9	+ 0.5	+ 0.0	+ 0.5	+ 0.5	- 0.5	+ 0.1	+ 0.4	+ 4.7		
Oct.	+ 17.4	+ 2.0	+ 14.2	+ 11.1	+ 3.1	+ 0.1	+ 3.0	+ 1.4	- 0.2	- 0.1	+ 0.4	+ 0.5		
Nov.	+ 24.6	+ 29.5	- 7.3	- 10.3	+ 3.1	+ 0.2	+ 2.9	+ 2.7	- 0.3	- 0.0	+ 0.2	- 4.3		
<b>of which: Domestic enterprises</b>													<b>End of year or month *</b>	
1999	593.2	142.1	421.8	82.3	339.5	1.5	338.0	5.5	23.7	6.1	13.7	0.4		
2000	635.1	158.1	447.6	89.0	358.5	2.7	355.8	5.2	24.2	5.9	14.1	-		
2001	668.4	180.0	461.3	91.7	369.6	2.9	366.8	4.3	22.8	6.4	14.3	3.1		
2001 Dec.	668.4	180.0	461.3	91.7	369.6	2.9	366.8	4.3	22.8	6.4	14.3	3.1		
2002 Jan.	654.1	171.4	455.7	84.1	371.7	2.9	368.8	4.3	22.7	6.2	14.3	1.1		
Feb.	649.7	164.4	458.4	85.1	373.3	1.4	371.9	4.3	22.6	6.2	14.4	1.2		
Mar.	650.0	160.1	462.9	87.3	375.6	1.4	374.3	4.3	22.6	6.3	14.4	1.5		
Apr.	651.9	162.1	463.1	87.6	375.5	1.4	374.0	4.3	22.5	6.2	14.4	1.2		
May	659.0	167.8	464.5	88.9	375.6	1.4	374.2	4.2	22.5	6.2	14.4	2.0		
June	665.5	172.7	466.1	90.8	375.2	1.4	373.8	4.3	22.6	6.1	14.7	1.4		
July	666.4	171.3	468.4	92.6	375.8	1.4	374.4	4.4	22.4	5.8	15.0	1.5		
Aug.	663.0	166.4	469.8	95.6	374.2	1.4	372.8	4.4	22.4	5.8	15.1	2.0		
Sep.	676.4	180.1	469.7	95.3	374.4	1.4	373.0	4.4	22.2	5.8	15.5	6.7		
Oct.	690.0	180.7	482.7	105.6	377.1	1.5	375.7	4.3	22.2	5.7	15.5	7.2		
Nov.	692.6	189.0	476.9	97.4	379.5	1.6	378.0	4.3	22.3	5.7	15.7	3.0		
<b>Changes *</b>														
2000	+ 42.8	+ 15.3	+ 27.3	+ 6.7	+ 20.5	+ 1.2	+ 19.3	- 0.3	+ 0.5	- 0.1	+ 0.4	- 0.4		
2001	+ 33.6	+ 21.2	+ 14.7	+ 2.6	+ 12.1	+ 0.1	+ 11.9	- 0.9	- 1.3	+ 0.3	+ 0.2	+ 3.1		
2001 Dec.	+ 14.8	+ 10.8	+ 4.7	+ 4.2	+ 0.5	- 0.1	+ 0.5	- 0.0	- 0.6	+ 0.3	- 0.0	+ 0.5		
2002 Jan.	- 14.5	- 8.9	- 5.5	- 7.6	+ 2.1	+ 0.0	+ 2.0	- 0.0	- 0.1	- 0.2	+ 0.0	- 2.0		
Feb.	- 4.5	- 6.9	+ 2.5	+ 1.0	+ 1.4	- 1.5	+ 2.9	+ 0.0	- 0.2	+ 0.0	+ 0.1	+ 0.2		
Mar.	+ 0.4	- 4.2	+ 4.6	+ 2.2	+ 2.4	- 0.0	+ 2.4	+ 0.0	+ 0.0	+ 0.1	+ 0.1	+ 0.3		
Apr.	+ 1.9	+ 1.9	+ 0.1	+ 0.3	- 0.2	+ 0.0	- 0.2	- 0.1	- 0.1	- 0.1	- 0.0	- 0.4		
May	+ 7.4	+ 5.7	+ 1.7	+ 1.5	+ 0.2	+ 0.0	+ 0.2	- 0.0	+ 0.0	- 0.0	+ 0.0	+ 0.8		
June	+ 5.7	+ 4.4	+ 1.2	+ 1.7	- 0.5	+ 0.0	- 0.5	+ 0.0	+ 0.1	- 0.1	+ 0.1	- 0.6		
July	+ 1.2	- 1.4	+ 2.7	+ 1.7	+ 0.9	+ 0.0	+ 0.9	+ 0.1	- 0.2	- 0.3	+ 0.2	+ 0.1		
Aug.	- 3.5	- 4.9	+ 1.4	+ 3.0	- 1.5	+ 0.0	- 1.5	+ 0.0	- 0.0	- 0.0	+ 0.1	+ 0.5		
Sep.	+ 12.8	+ 13.2	- 0.2	- 0.4	+ 0.2	+ 0.0	+ 0.2	- 0.0	- 0.2	+ 0.1	+ 0.4	+ 4.7		
Oct.	+ 13.8	+ 0.6	+ 13.2	+ 10.3	+ 2.9	+ 0.1	+ 2.9	- 0.0	+ 0.0	- 0.1	+ 0.3	+ 0.5		
Nov.	+ 2.6	+ 8.3	- 5.8	- 8.2	+ 2.4	+ 0.1	+ 2.3	- 0.0	+ 0.1	- 0.0	+ 0.2	- 4.3		

2 Including deposits under savings and loan contracts (see table IV. 12). —  
3 Excluding deposits under savings and loan contracts (see also foot-

note 2). — 4 Including liabilities arising from non-negotiable bearer debt securities.

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

€ billion

Period	Sight deposits						Time deposits 1, 2					
	Deposits of domestic individuals and non-commercial organisations, total	by creditor group					Domestic non-commercial organisations	by creditor group				
		Domestic individuals						Domestic individuals				
		Total	Total	Self-employed	Employees	Other individuals		Total	Total	Self-employed	Employees	Other individuals
<b>End of year or month *</b>												
1999	1,187.8	263.5	254.6	50.2	170.3	34.1	9.0	233.4	216.6	35.2	161.6	19.9
2000	1,161.5	268.7	259.3	47.7	176.0	35.6	9.4	244.6	225.5	34.9	168.9	21.7
2001	1,242.9	330.4	320.1	55.8	220.9	43.4	10.2	263.4	242.9	36.3	182.4	24.2
2002 June	1,237.4	349.1	338.0	57.0	234.3	46.7	11.1	254.7	234.9	34.7	178.0	22.2
July	1,233.2	346.0	335.2	58.8	230.3	46.1	10.9	254.6	235.2	35.1	177.8	22.2
Aug.	1,235.5	347.4	336.4	59.8	230.6	46.0	11.0	255.4	235.5	35.3	177.9	22.3
Sep.	1,234.3	347.1	335.6	58.7	229.3	47.6	11.5	254.2	235.2	35.0	177.5	22.8
Oct.	1,237.9	348.6	337.4	60.5	229.1	47.7	11.2	255.2	235.9	35.3	177.8	22.9
Nov.	1,260.0	369.7	358.6	63.6	244.5	50.4	11.1	253.7	235.1	34.9	177.2	23.0
<b>Changes *</b>												
2000	- 26.3	+ 5.2	+ 4.7	- 2.5	+ 5.7	+ 1.5	+ 0.4	+ 10.6	+ 8.2	- 0.2	+ 6.8	+ 1.7
2001	+ 81.3	+ 61.7	+ 60.8	+ 8.1	+ 45.0	+ 7.8	+ 0.8	+ 18.8	+ 17.4	+ 1.4	+ 13.5	+ 2.5
2002 June	+ 3.8	+ 5.7	+ 5.6	- 0.9	+ 5.7	+ 0.8	+ 0.1	- 1.3	- 1.1	- 0.4	- 0.6	- 0.1
July	- 4.6	- 3.1	- 2.9	+ 1.7	- 4.1	- 0.6	- 0.2	- 0.5	+ 0.3	+ 0.4	- 0.2	+ 0.0
Aug.	+ 2.4	+ 1.4	+ 1.3	+ 1.1	+ 0.4	- 0.1	+ 0.1	+ 0.8	+ 0.3	+ 0.2	+ 0.1	+ 0.1
Sep.	- 0.8	+ 0.2	- 0.4	- 1.1	+ 0.6	+ 0.1	+ 0.5	- 1.1	- 0.3	- 0.3	+ 0.1	- 0.1
Oct.	+ 3.6	+ 1.5	+ 1.7	+ 1.8	- 0.2	+ 0.1	- 0.3	+ 1.0	+ 0.7	+ 0.3	+ 0.3	+ 0.1
Nov.	+ 22.1	+ 21.1	+ 21.2	+ 3.1	+ 15.5	+ 2.7	- 0.1	- 1.5	- 0.8	- 0.4	- 0.6	+ 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 subordinated liabilities and liabilities arising from registered debt securities. — 2 Including

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

€ billion

Period	Deposits												
	Domestic public authorities, total	Federal Government and its special funds 1					Länder Governments						
		Total	Sight deposits	Time deposits		Savings deposits and bank savings bonds 2	Memo item Loans on a trust basis	Total	Sight deposits	Time deposits		Savings deposits and bank savings bonds 2	Memo item Loans on a trust basis
				for up to and including 1 year	for more than 1 year					for up to and including 1 year	for more than 1 year		
<b>End of year or month *</b>													
1999	124.4	45.9	1.0	4.6	40.3	0.0	12.7	21.0	2.8	4.2	14.0	0.1	23.1
2000	149.1	67.6	2.1	22.6	42.8	0.0	12.5	20.3	3.1	2.1	15.0	0.1	23.3
2001	122.7	46.9	1.6	2.7	42.7	0.0	13.2	19.2	2.7	1.8	14.6	0.1	23.2
2002 June	118.5	45.9	0.8	2.6	42.5	0.0	12.3	21.0	2.8	3.4	14.7	0.1	22.7
July	116.6	45.8	0.5	2.6	42.7	0.0	12.6	21.4	3.2	3.4	14.7	0.1	22.7
Aug.	115.4	45.8	0.6	2.4	42.8	0.0	12.6	19.9	1.8	3.2	14.7	0.1	22.8
Sep.	114.3	46.7	0.6	4.2	41.9	0.0	12.6	21.3	2.8	3.7	14.7	0.1	22.7
Oct.	109.7	46.8	1.1	3.7	41.9	0.1	12.7	19.6	2.5	2.3	14.7	0.1	22.7
Nov.	109.5	46.3	0.6	3.6	42.0	0.1	12.7	18.1	2.0	1.3	14.8	0.1	22.7
<b>Changes *</b>													
2000	+ 24.8	+ 21.6	+ 1.2	+ 18.0	+ 2.5	- 0.0	- 0.2	+ 0.5	+ 0.3	- 0.9	+ 1.1	+ 0.0	+ 0.2
2001	- 26.4	- 20.4	- 0.4	- 19.9	- 0.1	- 0.0	+ 0.5	- 1.2	- 0.6	- 0.2	- 0.4	+ 0.0	+ 0.1
2002 June	+ 1.5	+ 0.3	+ 0.4	+ 0.2	- 0.3	+ 0.0	- 0.2	+ 2.4	+ 1.3	+ 1.2	- 0.1	+ 0.0	- 0.1
July	- 1.9	- 0.1	- 0.3	+ 0.0	+ 0.2	+ 0.0	+ 0.3	+ 0.3	+ 0.4	+ 0.0	- 0.0	- 0.0	+ 0.0
Aug.	- 1.2	+ 0.0	+ 0.1	- 0.2	+ 0.1	-	- 0.0	- 1.5	- 1.4	- 0.2	+ 0.1	- 0.0	+ 0.0
Sep.	- 1.1	+ 0.8	+ 0.1	+ 1.8	- 1.0	+ 0.0	+ 0.0	+ 1.4	+ 1.0	+ 0.5	- 0.0	+ 0.0	- 0.1
Oct.	- 4.6	+ 0.1	+ 0.5	- 0.5	+ 0.0	+ 0.1	+ 0.1	- 1.6	- 0.3	- 1.3	- 0.0	- 0.0	+ 0.0
Nov.	- 0.1	- 0.5	- 0.5	- 0.1	+ 0.1	-	- 0.0	- 1.5	- 0.5	- 1.1	+ 0.1	+ 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

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					Savings deposits <sup>3</sup>				Memo item			
Domestic non-commercial organisations	by maturity				Total	Domestic individuals	Domestic non-commercial organisations	Bank savings bonds <sup>4</sup>	Loans on a trust basis	Subordinated liabilities (excluding negotiable debt securities) <sup>5</sup>	Included in time deposits: liabilities arising from repos	Period
	up to and including 1 year	more than 1 year <sup>2</sup>										
		Total	up to and including 2 year	more than 2 years								
End of year or month <sup>*</sup>												
16.8	115.4	118.0	2.5	115.5	605.9	595.5	10.4	85.0	0.2	10.8	–	1999
19.2	123.6	121.1	5.1	116.0	565.5	555.8	9.7	82.7	0.2	10.4	–	2000
20.6	139.3	124.1	6.2	117.9	568.0	558.6	9.4	81.1	0.2	10.5	–	2001
19.8	130.1	124.6	6.0	118.6	552.6	543.5	9.1	81.0	0.2	10.6	–	2002 June
19.4	129.7	124.9	6.1	118.8	551.2	542.1	9.1	81.4	0.2	10.7	–	July
19.9	130.3	125.1	6.2	118.9	551.4	542.3	9.1	81.4	0.2	10.7	–	Aug.
19.0	128.9	125.4	6.2	119.2	551.9	542.9	9.1	81.0	0.2	10.7	–	Sep.
19.3	129.7	125.5	6.2	119.3	553.4	544.4	9.0	80.8	0.2	10.8	–	Oct.
18.6	127.5	126.2	6.3	119.9	556.1	547.3	8.8	80.4	0.2	10.8	–	Nov.
Changes <sup>*</sup>												
+ 2.4	+ 8.0	+ 2.5	+ 2.5	+ 0.0	– 39.7	– 39.0	– 0.7	– 2.3	+ 0.0	– 0.4	–	2000
+ 1.4	+ 15.8	+ 3.0	+ 1.1	+ 1.9	+ 2.5	+ 2.8	– 0.3	– 1.6	+ 0.0	+ 0.0	± 0.0	2001
– 0.2	– 1.3	+ 0.1	+ 0.0	+ 0.0	– 1.2	– 1.1	– 0.0	+ 0.6	– 0.0	– 0.0	–	2002 June
– 0.8	– 0.4	– 0.1	+ 0.1	– 0.2	– 1.5	– 1.5	+ 0.0	+ 0.4	+ 0.0	+ 0.1	–	July
+ 0.5	+ 0.6	+ 0.2	+ 0.0	+ 0.2	+ 0.2	+ 0.2	+ 0.0	– 0.0	+ 0.0	+ 0.0	–	Aug.
– 0.9	– 1.5	+ 0.3	+ 0.0	+ 0.3	+ 0.5	+ 0.6	– 0.0	– 0.4	+ 0.0	+ 0.0	–	Sep.
+ 0.3	+ 0.8	+ 0.1	+ 0.0	+ 0.1	+ 1.5	+ 1.5	– 0.0	– 0.2	– 0.0	+ 0.1	–	Oct.
– 0.7	– 2.1	+ 0.7	+ 0.1	+ 0.6	+ 2.8	+ 3.0	– 0.2	– 0.3	+ 0.0	+ 0.0	–	Nov.

deposits under savings and loan contracts (see table IV. 12). — <sup>3</sup> Excluding deposits under savings and loan contracts (see also footnote 2). —

<sup>4</sup> Including liabilities arising from non-negotiable bearer debt securities. — <sup>5</sup> Included in time deposits.

Local authorities and local authority associations (including municipal special-purpose associations)						Social security funds						
Total	Sight deposits	Time deposits <sup>3</sup>		Savings deposits and bank savings bonds <sup>2,4</sup>	Memo item Loans on a trust basis	Total	Sight deposits	Time deposits		Savings deposits and bank savings bonds <sup>2</sup>	Memo item Loans on a trust basis	Period
		for up to and including 1 year	for more than 1 year					for up to and including 1 year	for more than 1 year			
End of year or month <sup>*</sup>												
28.5	8.2	14.4	2.2	3.7	0.1	28.9	2.8	18.9	5.8	1.4	0.1	1999
30.2	8.9	15.7	2.0	3.6	0.1	31.1	2.5	21.7	5.7	1.2	0.1	2000
27.8	9.2	13.8	1.8	3.1	0.2	28.7	2.7	19.5	5.4	1.1	0.1	2001
25.6	8.2	12.5	1.9	3.0	0.2	25.9	2.7	17.2	5.0	1.0	0.1	2002 June
25.0	8.1	12.0	1.9	2.9	0.2	24.3	2.5	16.0	4.9	1.0	0.1	July
26.9	8.6	13.4	1.9	3.0	0.2	22.7	2.4	14.4	4.9	1.0	0.1	Aug.
25.2	8.0	12.4	1.9	2.9	0.2	21.1	2.2	13.4	4.5	1.0	0.1	Sep.
24.3	8.0	11.5	1.9	2.9	0.2	18.9	2.2	11.4	4.5	0.9	0.1	Oct.
25.2	8.6	11.9	1.9	2.9	0.2	19.9	2.5	12.3	4.3	0.9	0.1	Nov.
Changes <sup>*</sup>												
+ 1.7	+ 0.8	+ 1.3	– 0.2	– 0.2	+ 0.0	+ 1.0	– 0.3	+ 1.7	– 0.1	– 0.2	– 0.0	2000
– 2.4	+ 0.2	– 2.0	– 0.2	– 0.4	+ 0.0	– 2.4	+ 0.2	– 2.3	– 0.3	– 0.0	– 0.0	2001
– 1.0	– 0.5	– 0.6	+ 0.1	– 0.0	– 0.0	– 0.1	+ 0.6	– 0.7	– 0.1	– 0.0	– 0.0	2002 June
– 0.5	– 0.0	– 0.5	+ 0.0	– 0.0	+ 0.0	– 1.6	– 0.2	– 1.2	– 0.1	– 0.0	–	July
+ 1.9	+ 0.5	+ 1.4	– 0.0	+ 0.0	+ 0.0	– 1.6	– 0.1	– 1.5	+ 0.0	+ 0.0	–	Aug.
– 1.7	– 0.7	– 1.0	– 0.0	– 0.0	+ 0.0	– 1.6	– 0.2	– 1.0	– 0.4	– 0.0	– 0.0	Sep.
– 0.9	+ 0.0	– 0.9	– 0.0	– 0.0	–	– 2.2	+ 0.0	– 2.0	– 0.0	– 0.2	–	Oct.
+ 0.9	+ 0.6	+ 0.3	– 0.0	– 0.0	+ 0.0	+ 1.0	+ 0.3	+ 0.9	– 0.2	– 0.0	–	Nov.

following Monthly Report, are not specially marked. — <sup>1</sup> Federal Railways Fund, Indemnification Fund, Redemption Fund for Inherited Liabilities, ERP Special Fund, "German Unity" Fund, Equalisation of Burdens Fund. —

<sup>2</sup> Including liabilities arising from non-negotiable bearer debt securities. — <sup>3</sup> Including deposits under savings and loan contracts. — <sup>4</sup> Excluding deposits under savings and loan contracts (see also footnote 3).

#### IV. Banks

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

€ billion

Period	Savings deposits <sup>1</sup>								Memo item Interest credited on savings deposits	Bank savings bonds, <sup>3</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	
			Total	of which Special savings facilities <sup>2</sup>	Total	of which Special savings facilities <sup>2</sup>							
End of year or month *													
1999	626.6	614.7	504.4	338.8	110.2	88.3	11.9	9.1	20.0	116.4	110.7	101.8	5.7
2000	585.2	573.5	450.5	309.0	123.0	104.4	11.7	8.3	19.3	115.9	109.0	94.4	6.8
2001	586.5	574.5	461.9	327.2	112.7	97.2	12.0	8.8	19.9	112.8	106.0	87.2	6.8
2002 July	568.3	557.5	453.6	326.5	103.9	90.4	10.8	7.9	0.5	113.0	106.0	87.6	7.0
Aug.	568.6	557.8	453.8	327.5	104.0	90.3	10.8	7.9	0.4	112.9	105.9	87.6	7.0
Sep.	569.1	558.3	454.7	328.4	103.6	90.0	10.8	7.8	0.5	112.3	105.3	87.2	7.0
Oct.	570.4	559.7	456.9	331.1	102.8	89.1	10.7	7.8	0.5	111.9	105.0	86.9	6.9
Nov.	573.1	562.4	460.2	334.4	102.2	88.5	10.7	7.9	0.5	111.7	104.7	86.7	6.9
Changes *													
2000	+ 40.7	- 40.5	- 53.6	- 31.1	+ 13.1	+ 15.8	- 0.2	- 0.8	.	- 0.5	- 1.7	- 7.4	+ 1.1
2001	+ 1.3	+ 1.1	+ 11.4	+ 15.5	- 10.4	- 7.2	+ 0.3	+ 0.5	.	- 2.9	- 2.9	- 7.1	- 0.0
2002 July	- 1.5	- 1.4	- 1.5	- 0.0	+ 0.1	- 0.0	- 0.1	- 0.1	.	+ 0.4	+ 0.3	+ 0.2	+ 0.2
Aug.	+ 0.3	+ 0.3	+ 0.1	+ 1.0	+ 0.2	- 0.1	- 0.0	- 0.0	.	- 0.1	- 0.1	+ 0.0	- 0.0
Sep.	+ 0.5	+ 0.5	+ 1.0	+ 0.9	- 0.5	- 0.3	- 0.0	- 0.0	.	- 0.6	- 0.5	- 0.4	- 0.0
Oct.	+ 1.4	+ 1.4	+ 2.2	+ 2.6	- 0.8	- 0.9	- 0.0	+ 0.0	.	- 0.4	- 0.3	- 0.3	- 0.1
Nov.	+ 2.7	+ 2.7	+ 3.3	+ 3.4	- 0.6	- 0.6	- 0.0	+ 0.0	.	- 0.2	- 0.3	- 0.2	+ 0.1

\* 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 Excluding deposits under

savings and loan contracts, which are classified as time deposits. — 2 Savings deposits bearing interest at a rate which exceeds the minimum or basic rate of interest. — 3 Including liabilities arising from non-negotiable bearer debt securities.

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

€ billion

Period	Negotiable bearer debt securities and money market paper								Non-negotiable bearer debt securities and money market paper <sup>6</sup>				Subordinated	
	Total <sup>1</sup>	of which				with maturities of			Total	of which with maturities of				
		Floating- rate notes <sup>2</sup>	Zero- coupon bonds <sup>2, 3</sup>	Foreign currency bonds <sup>4, 5</sup>	Certifi- cates of deposit	up to and including 1 year <sup>1</sup>	more than 1 year including 2 years <sup>1</sup>	more than 2 years <sup>1</sup>		up to and including 1 year	more than 1 year including 2 years	more than 2 years		
		1999	1,310.3	208.2	14.7	98.7	13.1	73.6		47.0	1,189.8	2.6	0.5	0.8
2000	1,412.5	283.1	22.1	128.2	19.7	87.9	62.7	1,261.9	2.7	0.4	1.0	1.3	38.3	2.4
2001	1,472.3	324.0	16.3	144.1	17.6	46.5	124.9	1,300.9	5.8	3.7	1.0	1.2	43.3	2.4
2002 July	1,466.2	332.0	14.9	152.1	27.0	56.5	120.0	1,289.7	10.0	7.9	0.9	1.3	44.6	2.4
Aug.	1,483.1	345.9	16.9	156.4	27.9	59.0	119.0	1,305.2	9.3	7.2	0.8	1.3	44.6	2.4
Sep.	1,486.9	346.5	19.3	160.1	31.8	62.3	118.9	1,305.6	9.4	7.3	0.8	1.3	44.0	2.4
Oct.	1,482.3	341.7	18.0	164.9	32.6	65.2	115.8	1,301.2	9.3	7.1	0.8	1.4	43.4	2.4
Nov.	1,491.4	341.2	18.2	166.4	34.3	71.5	118.1	1,301.8	10.0	7.9	0.7	1.4	43.2	2.4
Changes *														
2000	+ 102.0	+ 65.5	+ 7.0	+ 26.6	+ 6.4	+ 14.1	+ 15.8	+ 72.1	+ 0.2	+ 0.0	+ 0.2	+ 0.0	+ 5.6	- 0.1
2001	+ 56.2	+ 33.3	- 5.5	+ 15.9	- 2.1	- 41.4	+ 61.7	+ 35.9	+ 3.2	+ 3.4	- 0.1	- 0.1	+ 5.0	± 0.0
2002 July	+ 3.6	+ 3.6	+ 0.4	+ 10.2	+ 3.2	+ 5.2	+ 0.7	- 2.2	- 0.0	- 0.1	- 0.0	+ 0.1	+ 0.5	+ 0.0
Aug.	- 0.8	+ 4.9	+ 0.9	+ 1.3	+ 0.1	+ 1.7	- 1.0	- 1.5	+ 0.0	+ 0.1	- 0.0	+ 0.0	- 1.0	-
Sep.	+ 3.8	+ 0.6	- 0.8	+ 3.7	+ 4.0	+ 3.4	- 0.0	+ 0.5	+ 0.1	+ 0.1	- 0.0	- 0.0	- 0.6	- 0.0
Oct.	- 4.6	- 4.8	- 1.3	+ 4.9	+ 0.8	+ 2.9	- 3.1	- 4.4	- 0.1	- 0.1	- 0.0	+ 0.1	- 0.5	- 0.0
Nov.	+ 9.1	- 0.5	+ 0.1	+ 1.4	+ 1.7	+ 6.3	+ 2.3	+ 0.5	+ 0.7	+ 0.8	- 0.0	- 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 Decreases in June 2002 caused by transition to net recording of outstanding debt securities (ie less own debt securities). The statistical break has been eliminated from the

changes. — 2 Including debt securities denominated in foreign currencies. — 3 Issue value when floated. — 4 Including floating-rate notes and zero-coupon bonds denominated in foreign currencies. — 5 Bonds denominated in non-euro-area currencies. — 6 Non-negotiable bearer debt securities are classified among bank savings bonds; see also table IV. 10, footnote 3.

IV. Banks

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

€ 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) 5		Deposits of non-banks (non-MFIs)		Bearer debt securities outstanding 7	Capital (including published reserves) 7	Memo item: New contracts entered into in year or month 8
			Balances and loans (except building loans) 1	Building loans 2	Bank debt securities 3	Building loans			Securities (including Treasury bills and Treasury discount paper) 4	Deposits under savings and loan contracts	Sight and time deposits	Deposits under savings and loan contracts	Sight and time deposits 6			
						Loans under savings and loan contracts	Interim and bridging loans	Other building loans								
<b>All building and loan associations</b>																
2001	29	158.4	23.8	0.2	11.8	42.7	54.3	7.2	9.7	0.5	29.3	96.6	3.1	6.9	7.5	75.7
2002 Sep.	28	160.7	24.4	0.2	11.6	41.5	57.1	7.7	9.7	0.4	29.0	97.4	3.3	7.4	7.1	6.3
Oct.	28	160.5	24.0	0.2	11.5	41.4	57.4	7.7	9.8	0.4	28.9	97.3	3.4	7.2	7.1	6.7
Nov.	28	161.4	24.5	0.2	11.6	41.1	57.8	7.7	9.9	0.4	29.1	97.7	3.4	7.2	7.1	7.1
<b>Private building and loan associations</b>																
2002 Sep.	17	115.5	19.7	0.1	6.3	26.9	40.5	7.1	7.1	0.2	21.0	66.2	3.2	7.4	4.6	4.1
Oct.	17	115.2	19.1	0.1	6.3	26.8	40.8	7.1	7.2	0.2	20.8	66.2	3.2	7.2	4.6	4.3
Nov.	17	115.8	19.6	0.1	6.3	26.6	41.1	7.1	7.2	0.2	21.0	66.4	3.3	7.2	4.6	4.5
<b>Public building and loan associations</b>																
2002 Sep.	11	45.2	4.7	0.1	5.3	14.6	16.6	0.6	2.5	0.1	8.1	31.1	0.1	—	2.5	2.2
Oct.	11	45.3	4.8	0.1	5.2	14.6	16.6	0.6	2.6	0.1	8.1	31.2	0.1	—	2.5	2.4
Nov.	11	45.5	4.9	0.1	5.2	14.5	16.7	0.6	2.7	0.1	8.1	31.3	0.1	—	2.5	2.7

Trends in building and loan association business

€ billion

Period	Changes in deposits under savings and loan contracts			Capital promised		Capital paid out						Outpayment commitments outstanding at end of period		Interest and repayments received on building loans 10		Memo item: Housing bonuses received 12
	Amounts paid into savings accounts under savings and loan contracts 9	Interest credited on deposits under savings and loan contracts	Repayments of deposits under cancelled savings and loan contracts	Total	of which: Net allocations 11	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 9							
							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>																
2001	22.0	2.7	4.5	46.5	32.7	44.2	19.7	4.3	10.7	3.4	13.8	10.4	7.7	14.7	11.8	0.5
2002 Sep.	1.8	0.0	0.3	3.2	2.1	3.2	1.3	0.3	0.7	0.2	1.2	10.6	7.8	1.2	2.6	0.0
Oct.	1.8	0.0	0.4	3.9	2.6	3.7	1.5	0.4	0.9	0.3	1.3	10.6	7.9	1.2	0.0	0.0
Nov.	1.9	0.0	0.4	3.4	2.1	3.0	1.2	0.3	0.6	0.2	1.2	10.8	7.8	1.1	0.0	0.0
<b>Private building and loan associations</b>																
2002 Sep.	1.2	0.0	0.2	2.2	1.3	2.3	0.9	0.2	0.5	0.2	0.9	6.3	4.0	0.8	1.7	0.0
Oct.	1.2	0.0	0.2	2.8	1.8	2.7	1.1	0.3	0.6	0.2	1.0	6.4	4.1	0.8	0.0	0.0
Nov.	1.2	0.0	0.2	2.3	1.3	2.2	0.8	0.2	0.4	0.2	0.9	6.4	4.0	0.8	0.0	0.0
<b>Public building and loan associations</b>																
2002 Sep.	0.6	0.0	0.1	1.0	0.8	0.9	0.4	0.1	0.3	0.1	0.2	4.3	3.8	0.4	0.9	0.0
Oct.	0.6	0.0	0.1	1.1	0.8	1.0	0.4	0.1	0.3	0.1	0.2	4.2	3.8	0.4	0.0	0.0
Nov.	0.6	0.0	0.1	1.1	0.8	0.9	0.4	0.1	0.2	0.1	0.3	4.4	3.8	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 Including equalisation claims. — 5 Including liabilities to building and loan associations. — 6 Including small

amounts of savings deposits. — 7 Including participation rights capital and fund for general banking risks. — 8 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. — 9 For outpayments of deposits under savings and loan contracts arising from the allocation of contracts see "Capital paid out". — 10 Including housing bonuses credited. — 11 Only allocations accepted by the beneficiaries; including allocations applied to settlement of interim and bridging loans. — 12 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

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

€ billion

Period	Number of		balance sheet total	Lending to banks (MFIs)					Lending to non-banks (non-MFIs)					Other assets	
	German banks (MFIs) with foreign branches and/or foreign subsidiaries	foreign branches and/or foreign subsidiaries <sup>1</sup>		Total	Balances and loans and advances not evidenced by certificates			Money market paper, securities <sup>2, 3</sup>	Total	Loans and advances not evidenced by certificates			Money market paper, securities <sup>2</sup>		
					Total	German banks	Foreign banks			Total	to German non-banks	of which enterprises and individuals			to foreign non-banks
<b>Foreign branches</b>															
<b>End of year or month *</b>															
1999	66	187	1,311.9	714.6	614.2	177.0	437.2	100.4	533.9	386.2	26.6	20.8	359.6	147.7	63.4
2000	71	212	1,558.2	829.4	722.1	211.0	511.1	107.3	656.7	501.5	21.7	17.1	479.9	155.2	72.0
2001	68	216	1,689.3	870.6	761.6	213.6	548.0	109.0	744.9	549.0	20.6	17.2	528.4	195.9	73.9
2002 Jan.	68	216	1,755.2	934.1	821.1	226.5	594.6	113.0	750.1	553.3	20.2	16.7	533.1	196.9	71.0
Feb.	68	216	1,735.3	920.3	800.6	218.6	582.0	119.6	737.2	544.8	19.9	16.3	524.9	192.4	77.8
Mar.	65	214	1,718.9	905.4	788.3	216.0	572.3	117.1	732.8	540.8	19.1	15.4	521.7	192.0	80.7
Apr.	64	213	1,720.0	907.4	764.5	230.2	534.3	143.0	745.1	576.7	19.4	15.3	557.3	168.4	67.4
May	63	212	1,677.0	870.7	737.5	219.5	518.0	133.1	756.6	579.2	19.2	15.0	560.0	177.4	49.7
June	63	211	1,548.6	795.4	672.9	206.4	466.5	122.6	694.8	524.6	18.4	14.3	506.2	170.3	58.4
July	62	210	1,561.1	776.9	655.0	201.1	453.9	122.0	723.7	544.2	18.7	15.0	525.5	179.5	60.4
Aug.	62	210	1,577.0	764.1	642.8	203.2	439.5	121.3	756.6	569.7	18.4	14.8	551.3	186.9	56.3
Sep.	61	208	1,559.2	761.8	646.1	201.7	444.4	115.7	752.3	559.7	19.0	15.3	540.7	192.6	45.1
Oct.	59	203	1,568.0	758.9	643.9	210.0	433.9	115.0	746.0	550.5	18.7	15.0	531.8	195.5	63.1
<b>Changes *</b>															
2000	+ 5	+ 25	+214.0	+ 97.0	+ 92.3	+ 33.7	+ 58.6	+ 4.7	+108.3	+104.0	- 5.3	- 4.1	+109.4	+ 4.3	+ 8.7
2001	- 3	+ 4	+ 99.1	+ 24.8	+ 26.1	+ 2.3	+ 23.8	- 1.3	+ 72.7	+ 35.6	- 1.1	- 0.0	+ 36.7	+ 37.1	+ 1.6
2002 Jan.	-	-	+ 51.0	+ 56.7	+ 53.4	+ 12.7	+ 40.7	+ 3.3	- 2.5	- 1.5	- 0.5	- 0.6	- 1.0	- 1.0	- 3.2
Feb.	-	-	- 17.5	- 12.8	- 19.5	- 7.8	- 11.7	+ 6.8	- 11.6	- 7.5	- 0.2	- 0.4	- 7.3	- 4.1	+ 6.9
Mar.	- 3	- 2	- 10.7	- 12.1	- 9.9	- 2.5	- 7.4	- 2.2	- 1.5	- 1.9	- 0.8	- 0.8	- 1.1	+ 0.3	+ 2.9
Apr.	- 1	- 1	+ 25.5	+ 13.4	- 13.7	+ 14.1	- 27.8	+ 27.1	+ 25.0	+ 45.4	+ 0.2	- 0.2	+ 45.1	- 20.4	- 12.8
May	- 1	- 1	- 4.3	- 20.5	- 13.0	- 10.6	- 2.4	- 7.5	+ 29.9	+ 17.0	- 0.1	- 0.3	+ 17.1	+ 12.9	- 13.7
June	-	- 1	- 80.1	- 55.4	- 47.5	- 13.1	- 34.4	- 7.9	- 37.7	- 36.2	- 0.8	- 0.7	- 35.3	- 1.6	+ 13.1
July	- 1	- 1	- 8.2	- 26.9	- 25.1	- 5.3	- 19.7	- 1.9	+ 19.0	+ 11.7	+ 0.2	+ 0.7	+ 11.5	+ 7.3	- 0.2
Aug.	-	-	+ 20.8	- 10.9	- 10.7	+ 2.2	- 12.9	- 0.2	+ 35.1	+ 27.4	- 0.3	- 0.2	+ 27.6	+ 7.8	- 3.5
Sep.	- 1	- 2	- 14.1	- 1.0	+ 4.6	- 1.5	+ 6.2	- 5.6	- 2.0	- 8.3	+ 0.6	+ 0.5	- 8.9	+ 6.3	- 11.1
Oct.	- 2	- 5	+ 11.2	- 2.0	- 1.4	+ 8.3	- 9.7	- 0.6	- 4.9	- 8.0	- 0.3	- 0.4	- 7.7	+ 3.1	+ 18.1
<b>Foreign subsidiaries</b>															
<b>End of year or month *</b>															
1999	39	161	530.6	242.0	178.6	71.1	107.5	63.4	234.6	174.2	41.5	37.5	132.7	60.4	53.9
2000	40	170	580.5	248.1	183.8	82.2	101.6	64.3	263.5	203.4	45.4	42.3	158.0	60.1	69.0
2001	46	200	811.5	342.4	262.8	105.7	157.1	79.6	382.2	293.1	51.9	47.7	241.2	89.2	87.0
2002 Jan.	46	201	815.1	354.7	273.6	108.3	165.3	81.0	370.4	278.8	50.8	47.2	228.0	91.6	90.1
Feb.	46	201	803.5	348.0	268.1	101.7	166.4	79.9	367.6	277.2	49.4	45.7	227.8	90.4	87.9
Mar.	47	201	813.9	349.4	268.3	105.3	163.0	81.1	368.7	277.4	49.7	46.3	227.7	91.4	95.8
Apr.	47	200	760.9	346.8	272.6	108.6	164.0	74.2	325.8	258.1	49.4	46.1	208.7	67.7	88.3
May	48	201	751.8	343.3	269.0	113.0	156.1	74.3	317.6	259.4	49.5	46.4	209.9	58.2	90.9
June	48	201	732.2	334.7	261.9	106.2	155.7	72.8	311.4	253.9	48.4	45.2	205.5	57.6	86.0
July	48	200	712.7	328.4	255.8	116.8	139.0	72.6	306.6	248.2	48.1	45.0	200.1	58.4	77.7
Aug.	49	199	693.7	314.7	242.0	111.9	130.0	72.7	302.7	243.9	47.8	44.8	196.1	58.8	76.3
Sep.	48	198	695.5	317.8	246.0	111.0	135.0	71.8	304.2	245.3	47.1	44.2	198.2	58.9	73.5
Oct.	47	200	700.6	320.4	249.4	111.4	138.0	71.0	306.6	245.5	46.6	43.7	198.9	61.1	73.6
<b>Changes *</b>															
2000	+ 1	+ 9	+ 38.4	+ 2.1	+ 2.4	+ 11.1	- 8.7	- 0.3	+ 21.8	+ 21.8	+ 3.9	+ 4.8	+ 17.9	+ 0.0	+ 14.5
2001	+ 6	+ 30	+229.9	+ 92.5	+ 78.0	+ 23.5	+ 54.6	+ 14.5	+119.5	+ 89.1	+ 6.5	+ 5.3	+ 82.7	+ 30.4	+ 17.9
2002 Jan.	-	+ 1	- 0.5	+ 10.5	+ 9.7	+ 2.6	+ 7.0	+ 0.8	- 13.8	- 16.1	- 1.0	- 0.4	- 15.1	+ 2.4	+ 2.8
Feb.	-	-	- 11.0	- 6.3	- 5.3	- 6.6	+ 1.3	- 1.0	- 2.5	- 1.4	- 1.4	- 1.5	-	- 1.1	- 2.2
Mar.	+ 1	-	+ 11.6	+ 2.0	+ 0.6	+ 3.6	- 2.9	+ 1.4	+ 1.6	+ 0.7	+ 0.3	+ 0.6	+ 0.4	+ 0.9	+ 8.0
Apr.	-	- 1	- 47.2	+ 0.3	+ 6.1	+ 3.3	+ 2.9	- 5.9	- 40.3	- 16.7	- 0.3	- 0.2	- 16.4	- 23.6	- 7.2
May	+ 1	+ 1	- 1.2	+ 0.7	- 0.6	+ 4.4	- 5.0	+ 1.3	- 5.1	+ 4.4	+ 0.1	+ 0.2	+ 4.3	- 9.5	+ 3.1
June	-	-	- 9.6	- 3.5	- 3.6	- 6.8	+ 3.2	+ 0.1	- 1.8	- 1.2	- 1.1	- 1.2	- 0.1	- 0.6	- 4.3
July	-	- 1	- 23.8	- 8.6	- 7.7	+ 10.7	- 18.3	- 0.9	- 6.6	- 7.4	- 0.3	- 0.2	- 7.1	+ 0.8	- 8.5
Aug.	+ 1	- 1	- 17.9	- 13.0	- 13.4	- 4.9	- 8.5	+ 0.3	- 3.4	- 3.8	- 0.3	- 0.3	- 3.5	+ 0.4	- 1.4
Sep.	- 1	- 1	+ 2.2	+ 3.3	+ 4.1	- 0.9	+ 5.0	- 0.8	+ 1.7	+ 1.6	- 0.7	- 0.6	+ 2.3	+ 0.1	- 2.8
Oct.	- 1	+ 2	+ 5.5	+ 2.7	+ 3.5	+ 0.4	+ 3.1	- 0.8	+ 2.5	+ 0.4	- 0.5	- 0.4	+ 0.8	+ 2.2	+ 0.2

\* From March 2000, including the foreign branches of building and loan associations. 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. (Breaks owing to changes in the range

of reporting institutions have, in principle, not been eliminated from the flow figures in the case of the foreign subsidiaries). 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



IV. Banks

Deposits														Money market paper and debt securities outstanding <sup>5</sup>	Working capital and own funds	Other liabilities <sup>6</sup>	Period
of banks (MFIs)				of non-banks (non-MFIs)						Foreign non-banks							
Total	Total	German banks	foreign banks	Total	German non-banks <sup>4</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			
988.6	671.8	148.3	523.6	316.7	60.7	57.9	52.8	2.8	2.7	256.0	234.4	14.0	75.0	1999			
1,186.1	799.5	158.2	641.4	386.5	60.9	58.4	51.6	2.5	2.4	325.7	272.3	22.0	77.9	2000			
1,271.3	855.3	194.0	661.2	416.0	57.4	54.2	51.2	3.2	3.0	358.6	316.8	24.0	77.2	2001			
1,314.8	896.7	192.4	704.3	418.1	65.8	62.7	60.4	3.2	3.0	352.3	334.3	24.3	81.8	2002 Jan.			
1,323.0	883.6	190.0	693.6	439.4	65.8	62.6	60.2	3.2	3.0	373.6	303.9	24.3	84.1	Feb.			
1,306.0	882.5	199.4	683.1	423.5	62.8	59.6	56.9	3.3	3.1	360.7	310.3	24.3	78.3	Mar.			
1,334.9	883.5	209.5	674.0	451.4	77.8	74.5	71.1	3.3	3.2	373.6	303.7	24.5	56.9	Apr.			
1,298.2	850.1	213.0	637.1	448.1	75.1	71.8	68.0	3.3	3.2	373.1	293.4	25.0	60.3	May			
1,200.4	791.3	209.8	581.5	409.1	63.6	60.3	56.6	3.3	3.2	345.5	264.5	24.9	58.8	June			
1,212.9	788.3	212.5	575.8	424.5	67.2	63.9	60.0	3.4	3.3	357.3	263.1	25.0	60.1	July			
1,236.0	791.6	219.1	572.4	444.4	66.1	62.7	58.9	3.4	3.3	378.3	257.0	25.1	58.9	Aug.			
1,223.7	787.6	231.3	556.3	436.0	63.8	60.5	57.7	3.4	3.3	372.2	249.5	25.0	61.0	Sep.			
1,241.7	804.7	241.6	563.0	437.0	66.3	62.9	59.3	3.3	3.3	370.7	236.1	25.0	65.2	Oct.			
Changes *														Foreign subsidiaries			
+ 170.8	+ 108.8	+ 9.1	+ 99.6	+ 62.0	- 0.0	+ 0.4	- 1.3	- 0.4	- 0.4	+ 62.0	+ 37.9	+ 8.0	- 2.7	2000			
+ 53.8	+ 36.3	+ 35.2	+ 1.1	+ 17.5	- 3.7	- 4.4	- 0.6	+ 0.7	+ 0.6	+ 21.2	+ 44.6	+ 2.1	- 1.3	2001			
+ 31.6	+ 33.6	- 1.8	+ 35.4	- 2.0	+ 8.4	+ 8.4	+ 9.2	- 0.0	- 0.0	- 10.4	+ 17.4	+ 0.2	+ 1.7	2002 Jan.			
+ 9.7	- 11.9	- 2.4	- 9.5	+ 21.7	- 0.0	- 0.0	- 0.2	+ 0.0	+ 0.0	+ 21.7	- 30.4	- 0.0	+ 3.1	Feb.			
- 12.4	+ 1.8	+ 9.5	- 7.7	- 14.2	- 2.9	- 3.0	- 3.3	+ 0.1	+ 0.1	- 11.2	+ 6.4	- 0.0	- 4.8	Mar.			
+ 48.2	+ 13.5	+ 10.1	+ 3.4	+ 34.7	+ 15.0	+ 14.9	+ 14.2	+ 0.0	+ 0.1	+ 19.7	- 6.6	+ 0.2	- 16.2	Apr.			
- 8.4	- 15.6	+ 3.5	- 19.0	+ 7.2	- 2.7	- 2.7	- 3.1	+ 0.0	+ 0.0	+ 9.9	- 10.3	+ 0.5	+ 13.8	May			
- 63.1	- 36.5	- 3.2	- 33.4	- 26.6	- 11.4	- 11.5	- 11.3	+ 0.0	+ 0.0	- 15.1	- 29.0	- 0.1	+ 12.1	June			
- 2.1	- 11.6	+ 2.7	- 14.3	+ 9.5	+ 3.6	+ 3.5	+ 3.4	+ 0.1	+ 0.1	+ 5.9	- 1.4	+ 0.1	- 4.8	July			
+ 26.9	+ 5.3	+ 6.6	- 1.4	+ 21.6	- 1.1	- 1.1	- 1.1	+ 0.0	- 0.0	+ 22.7	- 6.1	+ 0.1	- 0.1	Aug.			
- 10.5	- 2.4	+ 12.2	- 14.5	- 8.1	- 2.3	- 2.3	- 1.2	- 0.0	- 0.0	- 5.8	- 7.5	- 0.1	+ 3.9	Sep.			
+ 19.5	+ 18.0	+ 10.3	+ 7.6	+ 1.6	+ 2.4	+ 2.5	+ 1.6	- 0.0	- 0.0	- 0.9	- 13.4	- 0.0	+ 5.2	Oct.			
383.4	250.7	56.9	193.8	132.7	21.6	19.8	18.3	1.7	1.7	111.1	51.5	29.0	66.7	1999			
414.6	267.9	61.0	207.0	146.7	32.5	29.2	21.9	3.2	3.2	114.2	56.3	34.7	74.9	2000			
576.5	362.5	79.2	283.3	214.0	36.4	32.5	23.9	3.9	3.8	177.6	99.8	47.3	87.9	2001			
580.0	369.6	70.1	299.5	210.4	35.0	31.2	25.7	3.8	3.8	175.4	98.4	48.0	88.6	2002 Jan.			
568.8	361.3	61.9	299.4	207.5	33.0	29.2	24.1	3.8	3.8	174.5	98.9	48.3	87.5	Feb.			
578.1	376.1	65.6	310.5	202.0	32.9	29.1	24.1	3.8	3.8	169.1	101.0	48.0	86.8	Mar.			
547.7	344.3	66.6	277.7	203.4	33.7	29.9	25.4	3.8	3.7	169.7	81.9	47.1	84.1	Apr.			
539.5	339.9	71.3	268.7	199.6	32.3	28.5	24.4	3.8	3.7	167.3	82.1	46.4	83.8	May			
521.7	326.3	72.5	253.8	195.4	31.8	28.1	24.0	3.7	3.7	163.6	81.4	45.4	83.7	June			
500.8	307.6	71.5	236.1	193.3	31.7	24.8	20.6	6.9	6.8	161.6	82.9	45.6	83.4	July			
490.1	304.0	75.7	228.3	186.1	27.6	23.3	22.8	4.3	4.2	158.5	81.4	44.0	78.2	Aug.			
488.8	300.6	78.0	222.6	188.2	28.8	24.1	23.6	4.6	4.6	159.4	81.6	43.3	81.7	Sep.			
495.9	301.0	79.1	221.9	194.9	27.7	23.1	22.6	4.6	4.5	167.2	81.7	43.2	79.7	Oct.			
Changes *																	
+ 20.6	+ 9.9	+ 2.9	+ 7.0	+ 10.7	+ 10.9	+ 9.4	+ 3.6	+ 1.5	+ 1.5	- 0.3	+ 4.8	+ 5.4	+ 7.6	2000			
+ 160.9	+ 94.6	+ 18.2	+ 76.3	+ 66.4	+ 3.9	+ 3.3	+ 2.0	+ 0.6	+ 0.6	+ 62.5	+ 43.6	+ 13.7	+ 11.7	2001			
- 0.0	+ 4.7	- 9.1	+ 13.8	- 4.7	- 1.4	- 1.4	+ 1.8	- 0.0	- 0.0	- 3.4	- 1.4	+ 0.7	+ 0.2	2002 Jan.			
- 10.7	- 7.9	- 8.2	+ 0.3	- 2.9	- 2.0	- 2.0	- 1.6	- 0.0	- 0.0	- 0.8	+ 0.5	+ 0.3	- 1.0	Feb.			
+ 10.5	+ 15.5	+ 3.7	+ 11.7	- 5.0	- 0.1	- 0.1	- 0.0	-	-	- 4.9	+ 2.1	- 0.3	- 0.6	Mar.			
- 25.1	- 28.1	+ 1.0	- 29.1	+ 3.0	+ 0.7	+ 0.8	+ 1.3	- 0.1	- 0.1	+ 2.2	- 19.2	- 0.9	- 2.1	Apr.			
- 0.9	+ 0.4	+ 4.6	- 4.2	- 1.4	- 1.4	- 1.4	- 1.0	- 0.0	- 0.0	+ 0.0	+ 0.3	- 0.7	+ 0.2	May			
- 8.7	- 7.4	+ 1.3	- 8.7	- 1.3	- 0.4	- 0.4	- 0.4	- 0.0	- 0.0	- 0.9	- 0.7	- 1.0	+ 0.9	June			
- 25.0	- 21.4	- 1.0	- 20.3	- 3.6	- 0.1	- 3.3	- 3.4	+ 3.2	+ 3.2	- 3.5	+ 1.5	+ 0.2	- 0.5	July			
- 9.6	- 2.8	+ 4.3	- 7.1	- 6.7	- 4.1	- 1.5	+ 2.2	- 2.6	- 2.6	- 2.7	- 1.5	- 1.6	- 5.2	Aug.			
- 1.0	- 3.1	+ 2.3	- 5.4	+ 2.1	+ 1.2	+ 0.8	+ 0.8	+ 0.4	+ 0.4	+ 1.0	+ 0.2	- 0.7	+ 3.6	Sep.			
+ 7.4	+ 0.5	+ 1.1	- 0.5	+ 6.8	- 1.1	- 1.0	- 1.0	- 0.1	- 0.1	+ 7.9	+ 0.1	- 0.1	- 1.9	Oct.			

marked. — 1 Several branches in a given country of domicile are regarded as a single branch. — 2 Treasury bills, Treasury discount paper and other money market paper, debt securities. — 3 Including own debt securities. — 4 Excluding subordinated liabilities and non-negotiable

debt securities and money market paper. — 5 Issues of negotiable and non-negotiable debt securities and money market paper. — 6 Including subordinated liabilities.

## 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 Regulation of the European Central Bank of 1 December 1998 on the application of 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 (€ billion)</b>							
2002 Mar.	6,557.5	131.2	0.6	130.6	131.1	0.5	0.0
Apr.	6,578.6	131.6	0.6	131.0	131.5	0.5	0.0
May	6,581.0	131.6	0.6	131.0	131.7	0.6	0.0
June	6,560.9	131.2	0.6	130.7	131.3	0.6	0.0
July	6,490.8	129.8	0.6	129.3	129.7	0.5	0.0
Aug.	6,477.9	129.6	0.6	129.0	129.5	0.5	0.0
Sep.	6,411.9	128.2	0.6	127.7	128.2	0.5	0.0
Oct. r	6,460.4	129.2	0.6	128.7	129.2	0.5	0.0
Nov. p	6,465.4	129.3	0.5	128.8	129.4	0.6	0.0
<b>Of which: Germany (€ million)</b>							
2002 Mar.	1,891,284	37,826	246	37,580	37,812	232	6
Apr.	1,899,520	37,990	246	37,745	37,931	187	1
May	1,903,413	38,068	245	37,823	38,100	276	4
June	1,899,951	37,999	242	37,757	38,040	282	1
July	1,896,682	37,934	238	37,696	37,867	171	4
Aug.	1,892,420	37,848	234	37,614	37,823	209	2
Sep.	1,879,343	37,587	232	37,354	37,545	190	1
Oct.	1,894,298	37,886	232	37,654	37,895	240	5
Nov. p	1,887,201	37,744	231	37,513	37,727	214	38

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 Regulation of the European Central Bank of 1 December 1998 on the application of 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 Regulation of the European Central Bank of 1 December 1998 on the application of 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

% p.a.			
Applicable from	Deposit facility	Main refinancing operations <sup>1</sup>	Marginal lending facility
1999 Jan. 1	2.00	3.00	4.50
Jan. 4	2.75	3.00	3.25
Jan. 22	2.00	3.00	4.50
Apr. 9	1.50	2.50	3.50
Nov. 5	2.00	3.00	4.00
2000 Feb. 4	2.25	3.25	4.25
Mar. 17	2.50	3.50	4.50
Apr. 28	2.75	3.75	4.75
June 9	3.25	4.25	5.25
Sep. 1	3.50	4.50	5.50
Oct. 6	3.75	4.75	5.75
2001 May 11	3.50	4.50	5.50
Aug. 31	3.25	4.25	5.25
Sep. 18	2.75	3.75	4.75
Nov. 9	2.25	3.25	4.25
2002 Dec. 6	1.75	2.75	3.75

### 2. Discount and lombard rates of the Bundesbank

% p.a.			
Applicable from	Discount rate	Lombard rate 2, 4, 5	
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 to	2 1/2	4 1/2	
1998 Dec. 31			

### 3. Base rates

% p.a.		Base rate as per Discount Rate Transition Act 3, 4, 5
Applicable from		
1999 Jan. 1		2.50
May 1		1.95
2000 Jan. 1		2.68
May 1		3.42
Sep. 1		4.26
2001 Sep. 1		3.62
2002 Jan. 1 to		2.71
Apr. 3		
		Base rate as per Civil Code <sup>6</sup>
2002 Jan. 1		2.57
July 1		2.47
2003 Jan. 1		1.97

<sup>1</sup> Up to 21 June 2000 fixed rate tenders, from 28 June 2000 variable rate tenders at minimum bid rate. — <sup>2</sup> From 1 August 1990 to 31 December 1993 this was also the rate for cash advances; from 1 January 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 also footnote 4 a and 5). Pursuant to the Discount Rate Transition Act, read in conjunction with the Lombard Rate Transition Regulation, the lombard rate is replaced from 1 January 1999 by the rate applied by the European Central Bank (ECB) for its marginal lending facility wherever the lombard rate is used as a reference variable for interest and other payments (see also footnote 4 b and 5). — <sup>3</sup> Pursuant to the Discount Rate Transition Act, read in conjunction with the Regulation Governing the Use of the Base Rate as a Reference Variable, this rate replaces the discount rate from 1 January 1999 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 31 December 1998. It changes from January 1, May 1 and September 1 of each year, and will change for the first time on 1 May 1999 if the interest rate applied by the ECB to its longer-term refinancing operations (marginal rate) has changed by at least 0.5 percentage points (see also footnote 4 c and 5). — <sup>4</sup> Wherever the rates listed in this column are used as a reference variable for interest and other payments in Federal legislation (in

the field of civil law and judicial procedural law), in state legislation (as stipulated in the Act Introducing the Civil Code) or in executory instruments and contracts based on such regulations, the following changes apply as from 1 January 2002: a) the rate for cash advances of the Federal Government is replaced by the base rate in the Civil Code increased by 1.5%, b) the lombard rate is replaced by the ECB's marginal lending facility rate, c) the base rate pursuant to the Discount Rate Transition Act is replaced by the base rate pursuant to section 247 of the Civil Code (see also footnote 5). — <sup>5</sup> Pursuant to Article 4 section 1 of the Act on the Amendment of Provisions concerning the Evaluation of Insurance Enterprises' Capital Investment and the Repeal of the Discount Rate Transition Act, the Discount Rate Transition Act, the Regulation Governing the Use of the Base Rate as a Reference Variable and the Lombard Rate Transition Regulation are repealed. Pursuant to Article 4 section 2 of this act, from 4 April 2002 the discount rate and the base rate under the Discount Rate Transition Act are replaced by the base rate pursuant to section 247 of the Civil Code, the lombard rate is replaced by the interest rate on the marginal lending facility of the ECB, and the interest rate for cash advances of the Federal Government by the base rate pursuant to section 247 of the Civil Code increased by 1.5 percentage points. — <sup>6</sup> Starting at 3.62%, it is adjusted on January 1 and July 1 of each year (for the first time on 1 January 2002) by the percentage points by which the reference variable (most recent main refinancing operation of the ECB, marginal rate) has increased or decreased since the last change in the base rate.

### 4. Eurosystem monetary policy operations allotted through tenders \*

Date of settlement	Bids Amount € millions	Allotment Amount	Fixed rate tenders		Variable rate tenders		Running for ... days
			Fixed rate	Minimum bid rate	Marginal rate <sup>1</sup>	Weighted average rate	
			% p.a.				
<b>Main refinancing operations</b>							
2002 Nov. 20	120,351	99,000	—	3.25	3.27	3.29	14
Nov. 27	108,905	62,000	—	3.25	3.29	3.31	14
Dec. 4	111,791	111,791	—	3.25	3.25	3.25	14
Dec. 11	100,511	65,000	—	2.75	2.82	2.83	13
Dec. 18	103,502	103,502	—	2.75	2.75	2.87	13
Dec. 24	146,157	88,000	—	2.75	3.02	3.08	15
Dec. 31	117,377	92,000	—	2.75	2.85	2.95	15
2003 Jan. 8	133,781	82,000	—	2.75	2.83	2.84	14
Jan. 15	120,349	79,000	—	2.75	2.80	2.81	14
<b>Longer-term refinancing operations</b>							
2002 Sep. 26	25,728	15,000	—	—	3.23	3.26	88
Oct. 31	27,820	15,000	—	—	3.22	3.24	91
Nov. 28	38,644	15,000	—	—	3.02	3.04	91
Dec. 23	42,305	15,000	—	—	2.93	2.95	94
<b>Other tender operations</b>							
2002 Dec. 18	28,480	10,000	—	2.75	2.80	2.82	6

Source: ECB. — \* Enlargement of the euro area on 1 January 2001 to include Greece. — <sup>1</sup> Lowest or highest interest rate at which funds were

allotted or collected.

## VI. Interest rates

### 5. Money market rates, by month

% p.a.

Period	Money market rates reported by Frankfurt banks <sup>1</sup>				EONIA <sup>2</sup>	EURIBOR <sup>3</sup>					
	Day-to-day money		Three-month funds			One-week funds	One-month funds	Three-month funds	Six-month funds	Nine-month funds	Twelve-month funds
	Monthly averages	Lowest and highest rates	Monthly averages	Lowest and highest rates		Monthly averages					
2000 Dec.	4.82	4 4.69 – 5.40	4.92	4.81 – 5.02	4.83	4.86	4.95	4.94	4.92	4.90	4.88
2001 Jan.	4.75	4.15 – 4.88	4.75	4.65 – 4.84	4.76	4.81	4.80	4.77	4.68	4.60	4.57
Feb.	4.98	4.73 – 5.75	4.74	4.67 – 4.81	4.99	4.83	4.80	4.76	4.67	4.61	4.59
Mar.	4.77	4.20 – 4.93	4.69	4.52 – 4.78	4.78	4.82	4.78	4.71	4.58	4.49	4.47
Apr.	5.04	4.71 – 5.80	4.66	4.52 – 4.80	5.06	4.88	4.78	4.68	4.57	4.50	4.48
May	4.64	4.41 – 4.90	4.62	4.49 – 4.81	4.65	4.66	4.66	4.64	4.56	4.53	4.52
June	4.53	4.30 – 4.85	4.43	4.37 – 4.50	4.54	4.56	4.53	4.45	4.35	4.33	4.31
July	4.51	4.25 – 4.63	4.45	4.38 – 4.50	4.51	4.54	4.52	4.47	4.39	4.33	4.31
Aug.	4.49	4.35 – 4.53	4.33	4.21 – 4.43	4.49	4.51	4.46	4.35	4.22	4.14	4.11
Sep.	3.97	2.95 – 5.50	3.96	3.60 – 4.27	3.99	4.08	4.05	3.98	3.88	3.80	3.77
Oct.	3.96	3.65 – 4.76	3.58	3.48 – 3.65	3.97	3.83	3.72	3.60	3.46	3.39	3.37
Nov.	3.51	3.15 – 4.20	3.37	3.28 – 3.50	3.51	3.48	3.43	3.39	3.26	3.20	3.20
Dec.	3.32	5 2.90 – 4.05	3.33	3.26 – 3.36	3.34	3.38	3.42	3.34	3.26	3.24	3.30
2002 Jan.	3.29	2.45 – 3.57	3.32	3.24 – 3.38	3.29	3.35	3.35	3.34	3.34	3.39	3.48
Feb.	3.27	2.90 – 3.35	3.34	3.31 – 3.38	3.28	3.32	3.34	3.36	3.40	3.48	3.59
Mar.	3.25	2.90 – 3.45	3.37	3.33 – 3.45	3.26	3.33	3.35	3.39	3.50	3.65	3.82
Apr.	3.30	3.11 – 3.75	3.39	3.35 – 3.45	3.32	3.32	3.34	3.41	3.54	3.70	3.86
May	3.31	3.21 – 3.50	3.44	3.35 – 3.52	3.31	3.34	3.37	3.47	3.63	3.80	3.96
June	3.35	3.28 – 3.65	3.45	3.40 – 3.48	3.35	3.36	3.38	3.46	3.59	3.73	3.87
July	3.30	3.15 – 3.40	3.39	3.34 – 3.44	3.30	3.34	3.36	3.41	3.48	3.56	3.64
Aug.	3.29	3.26 – 3.36	3.33	3.29 – 3.37	3.29	3.32	3.33	3.35	3.38	3.40	3.44
Sep.	3.31	3.26 – 3.60	3.29	3.25 – 3.34	3.32	3.32	3.32	3.31	3.27	3.23	3.24
Oct.	3.30	3.27 – 3.50	3.24	3.18 – 3.31	3.30	3.31	3.31	3.26	3.17	3.12	3.13
Nov.	3.30	3.10 – 3.48	3.11	3.00 – 3.23	3.30	3.32	3.23	3.12	3.04	3.01	3.02
Dec.	3.07	6 2.85 – 3.75	2.93	2.83 – 3.03	3.09	3.02	2.98	2.94	2.89	2.87	2.87

<sup>1</sup> Money market rates are not fixed or quoted officially; the monthly averages computed from daily quotations are unweighted. — <sup>2</sup> Euro OverNight Index Average: weighted average overnight rate for interbank operations calculated by the European Central Bank since 4 January 1999 on the basis of real turnover according to the act/360 method and published via

Moneyline Telerate (formerly Bridge Telerate). — <sup>3</sup> Euro Interbank Offered Rate: unweighted average rate calculated by Moneyline Telerate (formerly Bridge Telerate) since 30 December 1998 according to the act/360 method. — <sup>4</sup> At the end of December 5.00% to 5.40%. — <sup>5</sup> At the end of December 3.50% to 4.05%. — <sup>6</sup> At the end of December 3.00% to 3.05%.

### 6. Euro area retail bank interest rates <sup>\*, °</sup>

% p.a.; period averages

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
1999	0.65	2.44	2.45	3.57	2.15	2.76	5.65	5.10	9.39	5.29
2000	0.85	3.45	3.45	4.52	2.25	3.79	6.60	6.23	9.87	6.34
2001 <sup>1</sup>	0.94	3.49	3.49	4.12	2.40	3.59	6.83	6.15	10.12	5.97
2001 Nov.	0.78	2.84	2.83	3.65	2.19	2.75	6.31	5.71	9.87	5.48
Dec.	0.74	2.79	2.78	3.77	2.17	2.79	6.26	5.69	9.81	5.52
2002 Jan.	0.73	2.77	2.77	3.83	2.17	2.80	6.18	5.63	9.78	5.53
Feb.	0.73	2.78	2.79	3.95	2.15	2.91	6.16	5.75	9.81	5.61
Mar.	0.73	2.84	2.84	4.07	2.15	3.00	6.09	5.85	9.76	5.74
Apr.	0.74	2.89	2.90	4.13	2.14	3.07	6.17	5.96	9.81	5.81
May	0.74	2.91	2.92	4.15	2.15	3.08	6.20	5.98	9.85	5.82
June	0.74	2.93	2.94	4.09	2.13	3.08	6.18	5.92	9.82	5.77
July	0.74	2.89	2.90	4.02	2.13	3.02	6.16	5.79	9.76	5.68
Aug.	0.73	2.84	2.85	3.81	2.12	2.94	6.14	5.70	9.77	5.53
Sep.	0.73	2.77	2.77	3.64	2.13	2.73	6.11	5.61	9.82	5.37
Oct.	0.72	2.74	2.74	3.58	2.11	2.63	6.12	5.54	9.70	5.26
Nov.	0.71	2.70	2.69	3.53	2.11	2.55	6.09	5.50	9.67	5.20

\* These euro area retail bank interest rates should be used with caution and for statistical purposes only, primarily to analyse 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 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. — <sup>1</sup> Enlargement of the euro area on 1 January 2001 to include Greece.

° 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 € 100,000		€ 100,000 and more but less than € 500,000		€ 500,000 and more but less than € 2.5 million		Bills of less than € 50,000 refinancable at the Bundesbank		
	Average interest rate	Spread	Average interest rate	Spread	Average interest rate	Spread	Average interest rate	Spread	
2000 Dec.	11.39	8.90 – 13.25	10.27	8.00 – 12.75	9.12	7.00 – 12.00	6.98	5.05 – 10.00	
2001 Jan.	11.35	8.75 – 13.50	10.30	8.00 – 12.95	9.12	7.00 – 12.25	6.99	5.50 – 10.00	
Feb.	11.13	8.00 – 13.25	10.15	7.50 – 12.95	8.95	7.00 – 12.00	6.98	5.40 – 9.81	
Mar.	11.17	7.00 – 13.25	10.03	6.50 – 13.00	8.86	6.00 – 12.00	7.00	5.50 – 10.00	
Apr.	11.14	6.80 – 13.25	10.07	6.50 – 13.00	8.85	6.00 – 12.25	6.96	5.39 – 10.00	
May	11.12	6.50 – 13.25	10.09	6.00 – 12.75	8.84	5.60 – 12.00	6.86	4.78 – 10.00	
June	11.21	6.50 – 13.25	10.13	6.50 – 12.95	8.79	5.50 – 12.00	6.91	5.42 – 10.00	
July	11.12	6.50 – 13.25	9.99	6.00 – 12.95	8.73	5.50 – 12.00	6.91	5.43 – 10.00	
Aug.	11.11	6.20 – 13.25	10.03	6.00 – 12.95	8.79	5.50 – 12.10	6.84	5.18 – 10.00	
Sep.	11.06	6.00 – 13.25	9.98	6.00 – 12.75	8.75	5.50 – 12.10	6.69	5.00 – 10.00	
Oct.	10.97	5.50 – 13.25	9.93	5.50 – 12.75	8.57	5.00 – 12.00	6.57	4.55 – 10.25	
Nov.	10.87	5.50 – 13.00	9.77	5.00 – 12.75	8.49	4.90 – 12.00	6.43	4.36 – 10.25	
Dec.	10.66	6.00 – 13.00	9.64	5.50 – 12.75	8.44	4.90 – 12.00	6.23	3.46 – 10.00	
2002 Jan. ◦	10.86	6.00 – 13.00	9.62	5.50 – 12.75	8.40	4.50 – 12.00	6.34	4.30 – 10.25	
Feb.	10.84	6.00 – 13.00	9.58	6.00 – 12.75	8.42	5.50 – 12.00	6.36	4.35 – 10.25	
Mar.	10.88	6.45 – 13.00	9.64	6.00 – 12.60	8.39	4.50 – 12.00	6.28	4.25 – 10.00	
Apr.	10.90	6.00 – 13.00	9.69	6.00 – 12.75	8.49	5.00 – 12.00	6.34	4.30 – 10.25	
May	10.93	6.00 – 13.00	9.69	5.50 – 12.75	8.55	4.50 – 12.00	6.36	4.35 – 10.25	
June	10.88	6.30 – 13.00	9.76	6.00 – 12.75	8.48	4.50 – 12.00	6.42	4.45 – 10.25	
July	10.99	6.00 – 13.00	9.70	5.50 – 12.75	8.57	4.50 – 12.00	6.40	4.38 – 10.00	
Aug.	11.00	6.00 – 13.00	9.72	5.50 – 12.75	8.57	4.50 – 12.00	6.41	4.34 – 10.25	
Sep.	10.86	5.50 – 13.00	9.78	6.00 – 12.75	8.54	4.50 – 12.00	6.37	4.30 – 10.25	
Oct.	10.92	5.50 – 13.00	9.77	5.40 – 12.75	8.58	4.50 – 12.00	6.36	4.26 – 10.25	
Nov.	10.97	5.50 – 13.00	9.73	5.50 – 12.50	8.55	4.50 – 12.00	6.29	4.10 – 10.25	
Dec.	10.88	5.50 – 13.00	9.69	5.00 – 12.75	8.56	4.00 – 12.00	6.19	3.93 – 10.25	

Reporting period 1	Personal credit lines (overdraft facilities granted to individuals)						Long-term fixed-rate loans to enterprises and self-employed persons (excluding lending to the housing sector) 5			
	Instalment credits						€ 100,000 and more but less than € 500,000		€ 500,000 and more but less than € 5 million	
	€ 5,000 and more but not more than € 15,000 2						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	
2000 Dec.	12.61	11.25 – 13.50	0.41	0.35 – 0.50	10.80	8.95 – 12.83	7.04	6.05 – 8.70	6.84	5.85 – 8.30
2001 Jan.	12.63	11.00 – 13.50	0.41	0.34 – 0.50	10.82	8.95 – 12.95	6.89	5.82 – 8.57	6.66	5.68 – 8.25
Feb.	12.61	10.75 – 13.50	0.41	0.34 – 0.50	10.82	8.88 – 12.91	6.89	5.79 – 8.64	6.65	5.63 – 8.25
Mar.	12.67	11.25 – 13.75	0.41	0.34 – 0.50	10.76	8.77 – 12.77	6.78	5.75 – 8.50	6.56	5.64 – 8.05
Apr.	12.70	11.25 – 13.75	0.41	0.33 – 0.49	10.71	8.76 – 12.77	6.77	5.75 – 8.57	6.53	5.57 – 8.05
May	12.70	11.50 – 13.50	0.41	0.33 – 0.49	10.75	8.69 – 12.89	6.81	5.83 – 8.65	6.60	5.69 – 8.01
June	12.68	11.50 – 13.50	0.41	0.34 – 0.49	10.76	8.76 – 12.89	6.82	5.81 – 8.66	6.62	5.75 – 8.20
July	12.68	11.25 – 13.50	0.41	0.35 – 0.49	10.78	8.92 – 12.91	6.82	5.85 – 8.63	6.60	5.70 – 8.30
Aug.	12.66	11.25 – 13.50	0.41	0.35 – 0.49	10.80	8.89 – 12.76	6.74	5.63 – 8.60	6.52	5.50 – 8.30
Sep.	12.66	11.25 – 13.50	0.41	0.35 – 0.49	10.80	8.95 – 12.89	6.64	5.49 – 8.50	6.43	5.38 – 8.25
Oct.	12.61	11.25 – 13.50	0.41	0.35 – 0.49	10.76	8.80 – 12.95	6.44	5.26 – 8.50	6.21	5.17 – 8.17
Nov.	12.54	11.25 – 13.50	0.41	0.34 – 0.49	10.65	8.68 – 12.86	6.28	5.15 – 8.50	6.05	5.04 – 8.12
Dec.	12.48	11.00 – 13.50	0.41	0.34 – 0.49	10.64	8.78 – 12.63	6.40	5.36 – 8.50	6.16	5.25 – 8.05
2002 Jan. ◦	12.47	11.25 – 13.50	0.41	0.33 – 0.49	10.65	8.62 – 12.68	6.48	5.50 – 8.55	6.23	5.28 – 8.25
Feb.	12.47	11.00 – 13.50	0.41	0.34 – 0.49	10.73	8.87 – 12.77	6.57	5.55 – 8.60	6.36	5.41 – 8.50
Mar.	12.44	11.00 – 13.50	0.41	0.34 – 0.49	10.71	8.87 – 12.68	6.77	5.80 – 8.80	6.55	5.41 – 8.55
Apr.	12.44	10.51 – 13.50	0.41	0.34 – 0.49	10.68	8.76 – 12.80	6.82	5.80 – 8.80	6.63	5.70 – 8.45
May	12.47	11.00 – 13.50	0.41	0.34 – 0.49	10.73	8.87 – 12.96	6.86	5.90 – 8.60	6.63	5.75 – 8.45
June	12.49	11.20 – 13.50	0.41	0.33 – 0.50	10.73	8.48 – 13.00	6.75	5.77 – 8.53	6.53	5.64 – 8.25
July	12.48	11.00 – 13.50	0.41	0.33 – 0.49	10.74	8.83 – 13.00	6.68	5.71 – 8.60	6.45	5.48 – 8.25
Aug.	12.47	10.50 – 13.50	0.42	0.33 – 0.50	10.71	8.82 – 13.00	6.51	5.33 – 8.52	6.26	5.21 – 8.25
Sep.	12.49	10.75 – 13.50	0.41	0.34 – 0.49	10.76	8.76 – 13.00	6.37	5.12 – 8.57	6.13	4.99 – 8.25
Oct.	12.52	11.00 – 13.50	0.41	0.34 – 0.50	10.74	8.56 – 13.05	6.32	5.17 – 8.57	6.13	4.93 – 8.25
Nov.	12.53	11.00 – 13.50	0.42	0.34 – 0.50	10.70	8.50 – 13.07	6.26	4.99 – 8.52	6.05	4.74 – 8.20
Dec.	12.53	11.20 – 13.50	0.41	0.33 – 0.50	10.64	8.47 – 13.00	6.13	4.88 – 8.50	5.93	4.62 – 8.20

\* 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. — ◦ For simplicity, the amount categories were redenominated to euro as from January 2002 by halving the previous Deutsche Mark amounts. — 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.

## VI. Interest rates

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

% p.a.

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			
	Average interest rate	Spread	Average interest rate	Spread	Average interest rate	Spread	Average interest rate	Spread
2000 Dec.	6.20	5.64 – 6.98	6.19	5.81 – 6.75	6.44	6.17 – 6.86	6.81	5.90 – 8.03
2001 Jan.	5.95	5.41 – 6.60	5.93	5.59 – 6.54	6.22	5.96 – 6.70	6.72	5.64 – 8.11
Feb.	5.94	5.43 – 6.59	5.90	5.59 – 6.51	6.17	5.96 – 6.54	6.71	5.61 – 8.03
Mar.	5.85	5.27 – 6.49	5.80	5.47 – 6.35	6.12	5.85 – 6.54	6.67	5.56 – 8.03
Apr.	5.80	5.27 – 6.54	5.78	5.43 – 6.33	6.11	5.85 – 6.54	6.64	5.48 – 8.03
May	5.88	5.34 – 6.59	5.87	5.54 – 6.43	6.20	5.77 – 6.64	6.66	5.59 – 8.03
June	5.80	5.27 – 6.54	5.84	5.54 – 6.33	6.22	5.85 – 6.59	6.64	5.48 – 8.03
July	5.78	5.22 – 6.45	5.85	5.54 – 6.37	6.24	5.77 – 6.59	6.64	5.43 – 8.03
Aug.	5.62	5.06 – 6.35	5.69	5.43 – 6.22	6.13	5.88 – 6.54	6.57	5.43 – 8.03
Sep.	5.41	4.75 – 6.22	5.57	5.22 – 6.22	6.08	5.85 – 6.43	6.45	5.38 – 7.82
Oct.	5.12	4.49 – 5.96	5.36	5.01 – 6.03	5.91	5.64 – 6.43	6.30	4.96 – 7.73
Nov.	4.95	4.33 – 5.79	5.20	4.75 – 5.75	5.70	5.38 – 6.14	6.12	4.80 – 7.71
Dec.	5.13	4.59 – 5.90	5.42	4.90 – 5.90	5.87	5.20 – 6.22	6.15	4.85 – 7.60
2002 Jan.	5.19	4.65 – 5.91	5.52	5.10 – 6.06	5.95	5.36 – 6.27	6.13	4.85 – 7.50
Feb.	5.38	4.85 – 6.11	5.66	5.32 – 6.17	6.05	5.62 – 6.42	6.14	4.80 – 7.50
Mar.	5.61	5.12 – 6.27	5.89	5.54 – 6.33	6.26	5.84 – 6.61	6.16	4.70 – 7.50
Apr.	5.70	5.22 – 6.38	5.96	5.56 – 6.43	6.30	6.00 – 6.69	6.26	5.10 – 7.60
May	5.73	5.22 – 6.38	5.96	5.69 – 6.43	6.30	6.01 – 6.70	6.22	4.95 – 7.50
June	5.63	5.08 – 6.27	5.86	5.54 – 6.38	6.21	5.91 – 6.59	6.21	5.02 – 7.50
July	5.47	4.85 – 6.17	5.71	5.41 – 6.27	6.10	5.85 – 6.54	6.13	4.96 – 7.49
Aug.	5.17	4.54 – 5.90	5.42	5.08 – 6.06	5.84	5.57 – 6.38	6.04	4.87 – 7.23
Sep.	4.95	4.28 – 5.75	5.22	4.85 – 5.96	5.69	5.38 – 6.26	6.02	4.79 – 7.49
Oct.	4.86	4.28 – 5.75	5.14	4.75 – 5.80	5.67	5.33 – 6.22	5.93	4.59 – 7.34
Nov.	4.76	4.07 – 5.59	5.08	4.75 – 5.75	5.62	5.27 – 6.17	5.90	4.59 – 7.34
Dec.	4.62	3.92 – 5.54	4.96	4.59 – 5.64	5.52	5.20 – 6.17	5.83	4.44 – 7.50

### Deposit rates

% p.a.

Reporting period 1	Higher-yielding sight deposits of individuals 7									
	Time deposits with agreed maturities									
	of 1 month									
	less than € 50,000		€ 50,000 and more but less than € 500,000		€ 500,000 and more but less than € 2.5 million		€ 50,000 and more but less than € 500,000			
Average interest rate	Spread	Average interest rate	Spread	Average interest rate	Spread	Average interest rate	Spread	Average interest rate	Spread	
2000 Dec.	2.41	0.50 – 4.00	3.62	2.65 – 4.35	4.05	3.10 – 4.60	4.42	3.50 – 4.92	4.19	3.35 – 4.80
2001 Jan.	2.43	0.50 – 4.00	3.56	2.60 – 4.25	3.96	3.20 – 4.50	4.33	3.60 – 4.75	4.06	3.39 – 4.60
Feb.	2.50	0.50 – 4.00	3.46	2.55 – 4.15	3.87	3.20 – 4.45	4.21	3.50 – 4.70	4.01	3.30 – 4.50
Mar.	2.48	0.50 – 4.00	3.53	2.75 – 4.25	3.95	3.25 – 4.50	4.31	3.50 – 4.75	4.05	3.40 – 4.50
Apr.	2.49	0.50 – 4.00	3.48	2.59 – 4.20	3.91	3.20 – 4.50	4.27	3.50 – 4.70	3.99	3.25 – 4.50
May	2.44	0.50 – 4.00	3.46	2.50 – 4.20	3.85	3.10 – 4.40	4.20	3.50 – 4.65	3.95	3.20 – 4.50
June	2.42	0.50 – 3.90	3.34	2.50 – 4.00	3.73	3.10 – 4.25	4.07	3.50 – 4.44	3.84	3.15 – 4.35
July	2.41	0.50 – 3.88	3.34	2.50 – 4.00	3.73	3.10 – 4.20	4.08	3.50 – 4.50	3.83	3.20 – 4.41
Aug.	2.39	0.50 – 3.75	3.31	2.50 – 4.00	3.70	3.00 – 4.20	4.05	3.40 – 4.45	3.76	3.10 – 4.30
Sep.	2.26	0.50 – 3.50	3.00	2.20 – 3.85	3.38	2.70 – 4.00	3.66	2.95 – 4.15	3.47	2.60 – 4.00
Oct.	2.10	0.50 – 3.24	2.69	2.00 – 3.40	3.07	2.40 – 3.50	3.36	2.75 – 3.75	3.12	2.40 – 3.65
Nov.	1.96	0.50 – 2.96	2.42	1.75 – 3.00	2.77	2.20 – 3.15	3.00	2.50 – 3.30	2.83	2.17 – 3.45
Dec.	1.92	0.50 – 2.95	2.41	1.75 – 3.00	2.76	2.23 – 3.15	3.03	2.50 – 3.40	2.78	2.20 – 3.15
2002 Jan. °	1.90	0.50 – 2.85	2.37	1.70 – 3.00	2.73	2.20 – 3.10	3.00	2.50 – 3.30	2.76	2.20 – 3.11
Feb.	1.86	0.50 – 2.85	2.30	1.65 – 3.00	2.66	2.09 – 3.05	2.89	2.45 – 3.23	2.75	2.20 – 3.13
Mar.	1.88	0.50 – 2.80	2.34	1.70 – 3.00	2.70	2.20 – 3.10	2.94	2.40 – 3.25	2.77	2.25 – 3.17
Apr.	1.87	0.50 – 3.00	2.34	1.70 – 3.00	2.69	2.25 – 3.05	2.94	2.50 – 3.25	2.78	2.22 – 3.20
May	1.85	0.50 – 2.75	2.33	1.67 – 3.00	2.70	2.25 – 3.05	2.94	2.40 – 3.25	2.79	2.23 – 3.20
June	1.85	0.50 – 2.75	2.35	1.70 – 3.00	2.70	2.25 – 3.10	2.94	2.50 – 3.30	2.83	2.25 – 3.25
July	1.85	0.50 – 2.80	2.35	1.75 – 3.00	2.71	2.20 – 3.10	2.95	2.50 – 3.30	2.81	2.25 – 3.25
Aug.	1.82	0.50 – 2.75	2.33	1.66 – 3.00	2.69	2.17 – 3.10	2.92	2.40 – 3.25	2.77	2.20 – 3.10
Sep.	1.80	0.50 – 2.75	2.29	1.65 – 3.00	2.65	2.10 – 3.07	2.89	2.35 – 3.22	2.74	2.20 – 3.10
Oct.	1.76	0.50 – 2.75	2.29	1.65 – 3.00	2.64	2.10 – 3.02	2.88	2.40 – 3.22	2.72	2.20 – 3.10
Nov.	1.77	0.50 – 2.75	2.24	1.57 – 2.90	2.60	2.00 – 3.00	2.84	2.30 – 3.20	2.65	2.10 – 3.00
Dec.	1.66	0.50 – 2.55	2.04	1.45 – 2.65	2.37	1.90 – 2.80	2.60	2.10 – 3.00	2.41	1.90 – 2.90

For footnotes \*, °, 1 to 5 see page 45\*. — 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). — 7 Only such interest rates are taken into account as are above the relevant standard terms of the banks included in the survey.

VI. Interest rates

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

% p.a.

Reporting period 1	Bank savings bonds with regular interest payments		Savings deposits							
			with minimum rates of return <sup>8</sup>				with higher rates of return <sup>9</sup> (without a duration of contract being agreed)			
	maturity of 4 years		with agreed notice of 3 months		with agreed notice of 3 months					
					less than € 5,000		€ 5,000 and more but less than € 10,000		€ 10,000 and more but less than € 25,000	
Average interest rate	Spread	Average interest rate	Spread	Average interest rate	Spread	Average interest rate	Spread	Average interest rate	Spread	
2000 Dec.	4.76	4.30 – 5.25	1.25	1.00 – 2.00	2.39	1.50 – 4.00	2.99	1.75 – 4.20	3.22	2.00 – 4.34
2001 Jan.	4.47	4.10 – 5.00	1.26	1.00 – 2.00	2.37	1.50 – 3.80	2.95	1.80 – 4.10	3.21	2.00 – 4.33
Feb.	4.42	4.00 – 4.75	1.25	1.00 – 2.00	2.35	1.50 – 3.75	2.94	1.80 – 4.00	3.17	2.00 – 4.25
Mar.	4.37	4.00 – 4.75	1.24	1.00 – 2.00	2.36	1.50 – 3.75	2.97	1.80 – 4.00	3.20	2.00 – 4.32
Apr.	4.27	3.95 – 4.60	1.23	1.00 – 2.00	2.36	1.50 – 3.75	2.95	1.95 – 4.00	3.18	2.00 – 4.30
May	4.31	4.00 – 4.65	1.24	1.00 – 2.00	2.33	1.50 – 3.75	2.92	1.80 – 4.00	3.14	2.00 – 4.26
June	4.31	3.95 – 4.60	1.21	1.00 – 2.00	2.29	1.50 – 3.66	2.87	1.75 – 4.00	3.09	2.00 – 4.00
July	4.26	3.90 – 4.60	1.20	1.00 – 2.00	2.26	1.50 – 3.50	2.85	1.75 – 4.00	3.07	2.00 – 4.00
Aug.	4.16	3.75 – 4.50	1.18	1.00 – 1.75	2.20	1.50 – 3.35	2.77	1.75 – 3.75	3.02	2.00 – 4.00
Sep.	3.99	3.60 – 4.35	1.16	1.00 – 1.75	2.11	1.35 – 3.25	2.63	1.60 – 3.50	2.88	1.85 – 3.90
Oct.	3.77	3.40 – 4.20	1.14	1.00 – 1.75	2.01	1.25 – 3.05	2.47	1.50 – 3.50	2.69	1.85 – 3.50
Nov.	3.48	3.00 – 4.00	1.11	0.75 – 1.50	1.86	1.25 – 2.75	2.25	1.50 – 3.00	2.49	1.75 – 3.20
Dec.	3.65	3.10 – 4.00	1.08	0.75 – 1.50	1.81	1.25 – 2.75	2.18	1.50 – 3.00	2.42	1.75 – 3.00
2002 Jan. °	3.73	3.25 – 4.10	1.07	0.75 – 1.50	1.78	1.25 – 2.75	2.15	1.50 – 2.75	2.40	1.70 – 3.00
Feb.	3.90	3.25 – 4.25	1.06	0.75 – 1.50	1.78	1.25 – 2.70	2.14	1.50 – 2.75	2.37	1.60 – 3.00
Mar.	4.07	3.30 – 4.50	1.05	0.75 – 1.50	1.79	1.25 – 2.75	2.14	1.50 – 2.80	2.38	1.60 – 3.00
Apr.	4.15	3.30 – 4.50	1.04	0.75 – 1.50	1.78	1.25 – 2.60	2.15	1.50 – 2.80	2.38	1.60 – 3.00
May	4.15	3.30 – 4.50	1.04	0.75 – 1.50	1.79	1.25 – 2.60	2.16	1.50 – 2.80	2.40	1.75 – 3.00
June	4.12	3.30 – 4.50	1.04	0.75 – 1.50	1.78	1.25 – 2.50	2.15	1.50 – 2.80	2.40	1.75 – 3.00
July	4.01	3.30 – 4.40	1.03	0.75 – 1.50	1.78	1.15 – 2.60	2.16	1.50 – 2.81	2.40	1.75 – 3.00
Aug.	3.70	3.12 – 4.05	1.01	0.75 – 1.50	1.76	1.00 – 2.50	2.14	1.50 – 2.80	2.36	1.60 – 3.00
Sep.	3.50	3.05 – 4.00	1.00	0.75 – 1.50	1.75	1.25 – 2.50	2.12	1.50 – 2.75	2.34	1.50 – 3.00
Oct.	3.38	2.85 – 4.00	0.99	0.75 – 1.50	1.71	1.01 – 2.50	2.10	1.40 – 2.75	2.32	1.50 – 3.00
Nov.	3.35	2.85 – 3.75	0.99	0.75 – 1.50	1.69	1.00 – 2.50	2.07	1.35 – 2.75	2.31	1.50 – 3.00
Dec.	3.23	2.75 – 3.70	0.96	0.75 – 1.50	1.63	1.00 – 2.50	1.97	1.25 – 2.75	2.19	1.50 – 2.95

Reporting period 1	Savings deposits with higher rates of return <sup>9</sup> and with duration of contract being agreed for € 10,000 and more but less than € 25,000 (total rate of return) <sup>10</sup>									
	with agreed notice of 3 months and a duration of contract of						with agreed notice of more than 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
2000 Dec.	4.15	2.50 – 4.75	4.51	3.25 – 5.15	4.74	3.64 – 5.62	4.21	2.30 – 4.75	4.82	4.28 – 5.40
2001 Jan.	3.98	3.00 – 4.50	4.18	3.25 – 4.75	4.59	3.60 – 5.30	4.01	2.30 – 4.50	4.51	4.04 – 5.05
Feb.	3.86	2.90 – 4.40	4.11	3.25 – 4.75	4.54	3.60 – 5.30	3.99	2.50 – 4.50	4.49	4.08 – 4.83
Mar.	3.84	2.99 – 4.35	4.06	3.30 – 4.62	4.52	3.60 – 5.30	3.99	2.50 – 4.50	4.42	3.95 – 4.78
Apr.	3.71	2.90 – 4.25	3.96	3.25 – 4.50	4.47	3.60 – 5.25	3.91	2.50 – 4.50	4.33	3.95 – 4.75
May	3.74	3.00 – 4.25	3.99	3.25 – 4.35	4.50	3.64 – 5.22	3.91	2.60 – 4.35	4.36	3.95 – 4.75
June	3.67	2.80 – 4.20	3.93	3.25 – 4.30	4.48	3.64 – 5.22	3.85	2.50 – 4.25	4.35	3.90 – 4.78
July	3.64	2.80 – 4.15	3.91	3.25 – 4.45	4.48	3.64 – 5.25	3.80	2.50 – 4.05	4.33	3.90 – 4.75
Aug.	3.52	2.60 – 4.00	3.83	3.20 – 4.30	4.42	3.60 – 5.40	3.68	2.50 – 4.00	4.22	3.84 – 4.73
Sep.	3.32	2.40 – 3.90	3.62	2.61 – 4.25	4.32	3.36 – 5.42	3.33	2.50 – 3.65	4.06	3.72 – 4.73
Oct.	2.94	2.25 – 3.45	3.36	2.60 – 3.88	4.17	3.00 – 5.40	3.01	2.50 – 3.50	3.85	3.50 – 4.50
Nov.	2.64	2.00 – 3.25	3.09	2.48 – 3.50	4.01	2.66 – 5.40	2.75	2.00 – 3.50	3.53	2.93 – 4.30
Dec.	2.63	1.75 – 3.10	3.14	2.48 – 4.00	3.98	2.88 – 5.40	2.79	2.20 – 3.20	3.63	3.00 – 4.30
2002 Jan. °	2.67	2.00 – 3.10	3.23	2.50 – 4.25	3.98	2.91 – 5.08	2.80	2.00 – 3.20	3.74	3.25 – 4.25
Feb.	2.76	2.00 – 3.25	3.32	2.60 – 4.00	4.07	2.91 – 5.13	2.91	2.20 – 3.50	3.84	3.25 – 4.20
Mar.	2.84	2.10 – 3.30	3.45	2.50 – 4.25	4.15	3.13 – 5.13	3.00	2.40 – 3.50	3.96	3.25 – 4.40
Apr.	2.89	2.10 – 3.40	3.50	2.25 – 4.25	4.17	2.91 – 5.13	3.07	2.50 – 3.70	3.97	3.25 – 4.44
May	2.91	2.10 – 3.40	3.48	2.50 – 4.25	4.20	2.91 – 5.13	3.08	2.20 – 4.00	3.98	3.25 – 4.50
June	2.93	2.10 – 3.40	3.52	2.25 – 4.25	4.21	2.91 – 5.15	3.08	2.20 – 4.00	3.97	3.10 – 4.50
July	2.89	2.10 – 3.30	3.48	2.25 – 4.10	4.14	2.91 – 5.08	3.02	2.50 – 3.50	3.90	3.15 – 4.29
Aug.	2.73	2.00 – 3.25	3.19	2.25 – 4.00	4.02	2.91 – 5.02	2.94	2.45 – 3.50	3.68	2.85 – 4.21
Sep.	2.61	1.90 – 3.20	3.08	2.42 – 3.80	3.90	2.90 – 5.02	2.73	2.25 – 3.25	3.54	3.00 – 4.04
Oct.	2.53	1.95 – 3.25	2.88	2.12 – 3.50	3.84	2.75 – 5.08	2.63	2.25 – 3.00	3.43	2.70 – 4.04
Nov.	2.46	1.75 – 3.00	2.84	2.08 – 3.44	3.80	2.75 – 5.08	2.55	2.15 – 3.00	3.41	2.75 – 4.00
Dec.	2.34	1.75 – 2.80	2.77	2.08 – 3.44	3.68	2.50 – 4.82	2.41	1.95 – 3.00	3.30	2.75 – 3.75

For footnotes \*, °, 1 to 5 see page 45\*; for footnotes 6 and 7 see page 46\*. — <sup>8</sup> Only a minimum rate of return is granted, but no premium or bonus. — <sup>9</sup> An interest rate above the minimum rate of return and/or a pre-

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

## 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													
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	254,359	233,519	191,341	– 649	41,529	20,840	148,250	117,352	31,751	– 853	106,109		
1997	332,655	250,688	184,911	– 1,563	64,214	81,967	204,378	144,177	60,201	–	128,276		
1998	418,841	308,201	254,367	– 3,143	50,691	110,640	245,802	203,342	42,460	–	173,038		
€ million													
1999	292,727	198,068	156,399	– 2,184	39,485	94,659	155,808	74,728	81,080	–	136,920		
2000	229,167	157,994	120,154	– 12,605	25,234	71,173	156,532	91,447	65,085	–	72,635		
2001	180,377	86,656	55,918	– 14,473	16,262	93,721	140,648	35,848	104,800	–	39,729		
2002 Aug.	2,376	3,273	– 2,661	– 806	5,128	– 897	– 2,280	– 5,920	3,640	–	4,656		
Sep.	36,007	31,748	– 22,228	– 2,569	6,951	– 4,259	– 26,516	– 4,303	22,213	–	9,491		
Oct.	4,453	2,865	– 4,326	– 3,035	4,157	– 1,588	– 6,338	– 9,674	16,012	–	1,885		
Nov.	35,022	25,770	– 9,937	– 561	15,272	– 9,252	– 33,313	– 17,377	15,936	–	1,709		
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							
DM million													
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	72,491	–	34,212	–	38,280	–	55,962	–	12,627	–	43,335	–	16,529
1997	119,522	–	22,239	–	97,280	–	96,844	–	8,547	–	88,297	–	22,677
1998	249,504	–	48,796	–	200,708	–	149,151	–	20,252	–	128,899	–	100,352
€ million													
1999	149,980	–	36,010	–	113,969	–	103,487	–	18,637	–	84,850	–	46,493
2000	138,535	–	22,733	–	115,802	–	156,274	–	23,293	–	132,981	–	17,738
2001	80,107	–	17,575	–	62,532	–	6,663	–	14,714	–	8,051	–	86,769
2002 Aug.	–	1,828	– 255	–	2,083	–	1,194	–	439	–	1,633	–	634
Sep.	–	4,275	– 706	–	4,981	–	4,063	–	3,644	–	419	–	212
Oct.	–	3,107	– 573	–	2,534	–	2,286	–	1,285	–	1,001	–	821
Nov.	–	81	– 264	–	345	–	1,275	–	1,823	–	548	–	1,194

\* Until the end of 1999, debt securities comprise the bonds and money market paper of domestic banks, from January 2000 all fixed-interest securities. 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 invest-

ment funds. — 7 Net purchases or net sales (–) of domestic debt securities by non-residents; transaction 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 \*)

Until the end of 1998 DM nominal million value, from 1999 € million nominal value

Period	Bank debt securities 1						Industrial bonds 2	Public debt securities 3	Memo item: Foreign DM/euro bonds issued by German-managed syndicates			
	Total	All bank debt securities	Mortgage bonds (Hypothekendarlehenbriefe)	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			
€ million												
1999	571,269	448,216	27,597	187,661	59,760	173,200	2,570	120,483	57,202			
2000	659,148	500,895	34,528	143,107	94,556	228,703	8,114	150,137	31,597			
2001	687,988	505,646	34,782	112,594	106,166	252,103	11,328	171,012	10,605			
2002 July	74,794	44,289	2,111	8,271	12,101	21,806	1,861	28,645	–			
Aug.	54,522	36,213	1,776	6,771	8,161	19,506	608	17,701	–			
Sep.	74,271	57,798	4,810	12,010	10,889	30,090	1,617	14,856	–			
Oct.	70,276	46,917	2,606	10,905	10,711	22,694	697	22,663	500			
Nov.	83,424	59,197	3,362	10,096	14,294	31,446	353	23,874	–			
<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	82,409			
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			
€ million												
1999	324,888	226,993	16,715	124,067	37,778	48,435	2,565	95,331	44,013			
2000	319,330	209,187	20,724	102,664	25,753	60,049	6,727	103,418	27,008			
2001	299,751	202,337	16,619	76,341	42,277	67,099	7,479	89,933	6,480			
2002 July	27,850	10,367	235	2,738	3,490	3,903	1,490	15,994	–			
Aug.	21,973	10,660	667	3,468	1,468	5,057	153	11,159	–			
Sep.	30,255	25,604	1,978	6,395	2,610	14,622	1,555	3,096	–			
Oct.	24,393	14,004	866	4,894	3,218	5,026	534	9,856	500			
Nov.	32,633	13,389	527	5,950	3,539	3,372	290	18,954	–			
<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	–	180	243,049	43,701
1994	270,088	116,519	–	18,184	–	54,316	–	6,897	–	62	153,630	21,634
1995	205,482	173,797	–	18,260	–	96,125	–	3,072	–	354	32,039	61,020
1996	238,427	195,058	–	11,909	–	121,929	–	6,020	–	585	42,788	69,951
1997	257,521	188,525	–	16,471	–	115,970	–	12,476	–	1,560	67,437	63,181
1998	327,991	264,627	–	22,538	–	162,519	–	18,461	–	3,118	60,243	84,308
€ million												
1999	209,096	170,069	–	2,845	–	80,230	–	31,754	–	2,185	36,840	22,728
2000	155,615	122,774	–	5,937	–	29,999	–	30,089	–	7,320	25,522	–
2001	84,122	60,905	–	6,932	–	9,254	–	28,808	–	8,739	14,479	–
2002 July	16,041	2,735	–	66	–	4,844	–	5,502	–	1,733	11,572	–
Aug.	5,853	423	–	813	–	1,785	–	362	–	557	5,719	–
Sep.	33,336	23,775	–	2,762	–	2,906	–	2,654	–	1,562	7,999	–
Oct.	–	2,230	–	5,555	–	970	–	1,864	–	502	2,823	–
Nov.	20,206	10,675	–	1,917	–	1,016	–	5,774	–	652	10,184	–

\* 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 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 \*

Until the end of 1998 DM million nominal value, from 1999 € million nominal value

End of year or month	Bank debt securities <sup>1</sup>						Industrial bonds	Public debt securities	Memo item: Foreign DM/euro bonds issued by German- managed syndicates
	Total	All bank debt securities	Mortgage bonds (Hypotheken- pfandbriefe)	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
€ million									
1999	2,097,926	1,322,863	134,814	655,024	163,284	369,741	6,280	768,783	339,560
2000	2,265,121	1,445,736	140,751	685,122	157,374	462,488	13,599	805,786	322,856
2001	2,349,243	1,506,640	147,684	675,868	201,721	481,366	22,339	820,264	292,199
2002 Sep.	2,501,644	1,582,403	157,925	664,958	217,726	541,795	36,173	883,068	259,197
Oct.	2,499,415	1,576,848	156,954	659,697	219,590	540,607	36,676	885,891	256,325
Nov.	2,519,621	1,587,523	155,037	658,680	225,364	548,442	36,023	896,075	250,639
Breakdown by remaining period to maturity <sup>2</sup>									
Position at end- November 2002									
Maturity in years									
less than 2	942,250	643,066	61,736	242,414	65,348	273,568	4,454	294,729	86,855
2 to less than 4	591,898	418,966	37,536	187,632	68,211	125,587	13,333	159,600	51,508
4 to less than 6	389,488	241,343	30,744	120,444	31,877	58,278	7,459	140,687	54,334
6 to less than 8	250,300	146,615	15,141	71,586	22,304	37,585	3,145	100,541	35,044
8 to less than 10	189,091	70,898	9,328	22,073	15,542	23,955	6,283	111,910	8,707
10 to less than 15	40,945	31,832	543	10,655	6,934	13,700	545	8,568	8,335
15 to less than 20	18,646	12,970	9	2,166	6,464	4,331	522	5,154	2,384
20 and more	97,003	21,834	-	1,711	8,684	11,439	284	74,885	3,472

\* Including debt securities temporarily held in the issuers' portfolios. —  
1 Excluding debt securities handed to the trustee for temporary safe  
custody. — 2 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

Until the end of 1998 DM million nominal value, from 1999 € 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
€ million											
1999	133,513	11,747	5,519	2,008	190	1,075	-	2,099	1,560	-	708
2000	147,629	14,115	3,620	3,694	618	8,089	-	1,986	1,827	-	1,745
2001	166,187	18,561	7,987	4,057	1,106	8,448	-	1,018	905	-	3,152
2002 Sep.	168,246	-	270	316	170	24	-	941	19	-	310
Oct.	168,558	312	285	76	4	3	-	329	348	-	39
Nov.	168,910	353	150	20	35	231	-	24	24	-	130

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

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

VII. Capital market

5. Yields and indices on German securities

Period	Yields on bonds outstanding issued by residents 1									Price indices 2, 3				
	Public bonds				Bank debt securities			Industrial bonds	Memo item: Foreign DM/euro bonds issued by German-managed syndicates 1,5	Bonds		Shares		
	Total	Listed Federal securities			Total	With residual maturities of over 9 to 10 years 4	Total			With residual maturities of over 9 to 10 years	German bond index (REX)	iBoxx-€-Germany-price index	CDAX share price index	German share index (DAX)
		Total	Total	With residual maturities of over 9 to 10 years 4										
% p.a.	Average daily rate	End-1998=100	End-1987=100	End-1987=1000										
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	6.5	6.8	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	100.00	343.64	5,002.39		
1999	4.3	4.3	4.3	4.5	4.3	4.9	5.0	5.4	110.60	92.52	445.95	6,958.14		
2000	5.4	5.3	5.2	5.3	5.6	5.8	6.2	6.3	112.48	94.11	396.59	6,433.61		
2001	4.8	4.7	4.7	4.8	4.9	5.3	5.9	6.2	113.12	94.16	319.38	5,160.10		
2002	4.7	4.6	4.6	4.8	4.7	5.1	6.0	5.6	117.56	97.80	188.46	2,892.63		
2002 Aug.	4.5	4.4	4.4	4.6	4.5	4.9	5.8	5.6	115.02	95.79	238.16	3,712.94		
2002 Sep.	4.2	4.2	4.2	4.4	4.3	4.7	5.9	5.3	116.61	97.31	181.34	2,769.03		
2002 Oct.	4.3	4.2	4.2	4.5	4.3	4.8	6.0	5.3	115.60	96.27	204.83	3,152.85		
2002 Nov.	4.2	4.2	4.2	4.5	4.2	4.8	6.1	5.1	115.65	96.30	214.18	3,320.32		
2002 Dec.	4.1	4.1	4.1	4.3	4.1	4.6	5.9	4.9	117.56	97.80	188.46	2,892.63		

1 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. — 2 End of year or month. — 3 Source: German Stock Exchange plc. — 4 Only bonds eligible as underlying instruments for futures contracts are included; calculated as unweighted averages. — 5 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						Non-residents 4			
	Sales = total purchases	Total	Investment funds open to the general public				Specialised investment funds	Foreign funds 3	Total	Credit institutions including building and loan associations 1		Non-banks 2						
			Total	Money market funds	Securities-based funds	Open-end real estate funds				Total	of which Foreign investment fund certificates	Total	of which Foreign investment fund certificates					
of which														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	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	-	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	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	-	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	2,318	
1997	145,805	138,945	31,501	-	5,001	30,066	6,436	107,445	6,860	149,977	35,924	340	114,053	6,520	-	4,172	4,172	
1998	187,641	169,748	38,998	5,772	27,814	4,690	130,750	17,893	190,416	43,937	961	146,479	16,507	-	2,775	-	2,775	
€ million																		
1999	111,253	97,197	37,684	3,347	23,269	7,395	59,513	14,056	105,492	19,862	-	637	85,630	14,693	-	5,761	5,761	
2000	117,688	85,160	39,712	-	2,188	36,818	-	2,824	45,448	32,528	106,749	14,454	92	92,295	32,436	-	10,939	10,939
2001	95,937	76,811	35,522	12,410	9,195	10,159	41,289	19,126	94,815	10,251	2,703	84,564	16,423	-	1,122	-	1,122	
2002 Aug.	6,977	5,804	2,507	1,049	661	869	3,298	1,173	5,712	100	236	5,612	937	-	1,265	-	1,265	
2002 Sep.	3,120	2,690	360	140	-	468	819	2,330	3,677	-	160	4,940	590	-	557	-	557	
2002 Oct.	7,247	6,140	740	602	-	603	888	5,399	1,107	7,328	456	-	6,872	1,238	-	81	81	
2002 Nov.	5,524	4,786	2,402	-	92	1,916	597	2,385	738	5,485	3,526	278	1,959	460	-	39	39	

1 Book values. — 2 Residual. — 3 Net purchases or net sales (-) of foreign investment fund certificates by residents; transaction values. — 4 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 \*

Up to the end of 1998, DM billion / from 1999, € 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							
1992	904.1	731.7	1,013.9	285.7	134.0	304.8	100.6	101.1	86.1	-109.8	609.1	617.4	- 8.3	1,436.0	1,554.2	-118.1
1993	928.7	749.1	1,060.2	296.8	136.0	340.5	102.1	97.0	87.3	-131.5	660.8	658.7	+ 2.1	1,492.1	1,621.5	-129.4
1994	995.2	786.2	1,102.2	315.5	137.3	353.4	114.0	93.2	86.5	-106.9	694.1	693.7	+ 0.4	1,596.4	1,702.9	-106.5
1995	1,026.4	814.2	1,136.4	324.8	135.5	367.2	129.0	90.1	86.3	-110.1	731.2	743.8	-12.5	1,664.9	1,787.5	-122.6
1996	1,000.3	800.0	1,121.8	326.2	137.0	362.2	130.7	83.9	80.1	-121.5	769.4	784.0	-14.6	1,665.6	1,801.6	-136.1
1997	1,014.3	797.2	1,108.9	325.0	135.7	356.3	132.1	80.1	79.2	- 94.5	797.3	794.5	+ 2.9	1,705.3	1,797.0	- 91.7
1998	1,072.1	833.0	1,128.8	325.4	137.4	373.7	133.7	79.7	79.8	- 56.7	812.2	808.9	+ 3.3	1,765.5	1,818.9	- 53.4
1999 p	566.0	453.1	592.9	168.7	72.4	202.7	69.8	40.8	38.0	- 27.0	429.1	425.7	+ 3.5	925.1	948.6	- 23.5
2000 pe	613.3	467.3	594.8	169.0	73.7	205.5	67.6	40.8	38.0	+ 18.5	434.0	434.1	- 0.1	975.7	957.3	+ 18.4
2001 pe	553.5	446.2	601.8	169.8	70.1	213.6	66.6	40.9	39.5	- 48.3	444.2	448.4	- 4.2	920.4	972.9	- 52.5
2001 1st qtr 7	126.7	105.1	147.8	39.5	16.4	55.5	22.0	6.5	7.8	- 21.1	108.8	109.7	- 0.9	213.5	235.5	- 22.0
2nd qtr	139.4	110.9	136.7	39.3	15.8	54.0	12.6	8.0	6.4	+ 2.6	110.1	111.8	- 1.7	229.6	228.7	+ 0.9
3rd qtr	136.3	109.5	146.2	40.1	15.6	52.2	19.0	10.0	9.3	- 9.9	109.6	111.9	- 2.3	227.4	239.5	- 12.2
4th qtr p	149.3	121.3	167.7	49.5	21.8	52.4	12.7	14.5	16.0	- 18.4	115.1	114.5	+ 0.6	248.3	266.1	- 17.8
2002 1st qtr	118.3	98.6	150.2	39.9	15.3	57.9	24.0	6.5	6.0	- 31.8	111.3	112.8	- 1.5	206.4	239.8	- 33.4
2nd qtr	137.8	105.1	141.8	40.4	15.6	58.5	11.9	7.8	6.7	- 4.0	113.0	115.6	- 2.6	228.9	235.6	- 6.6
3rd qtr p	135.3	109.4	148.7	41.4	16.5	54.7	19.2	9.7	7.8	- 13.4	113.1	116.6	- 3.5	228.0	244.9	- 16.9

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 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 Owing to modifications of the system of classification, especially shifts between Other operating expenditure and Current grants.

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

Up to the end of 1998, DM billion / from 1999, € 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
1992	398.4	431.7	318.2	336.3	73.0	86.0	212.6	221.6	50.3	57.5
1993	401.6	462.5	326.5	352.8	76.4	92.5	222.5	230.9	54.4	59.0
1994	439.6	478.9	328.8	357.0	79.3	95.9	228.9	235.1	53.9	59.2
1995	439.3	489.9	338.6	370.2	88.4	101.5	225.6	237.9	58.7	60.8
1996	411.9	490.4	344.8	379.7	93.7	105.5	227.7	232.9	55.0	57.7
1997	416.8	480.3	349.2	376.5	94.3	105.2	222.9	226.9	52.6	54.2
1998	439.0	495.6	360.5	380.3	96.4	104.7	231.4	226.3	51.5	52.4
1999 p	240.3	266.5	191.6	196.6	50.0	53.3	119.8	117.5	26.1	26.3
2000 4, pe	291.4	264.6	195.6	200.4	50.5	53.9	121.4	119.9	25.6	25.6
2001 pe	240.0	261.0	183.9	207.8	49.4	53.2	119.2	123.4	24.8	25.4
2001 1st qtr	50.8	66.4	44.8	49.8	12.0	11.6	25.5	28.8	5.2	5.5
2nd qtr	57.6	59.9	46.3	47.5	11.5	11.8	28.8	28.1	5.8	5.8
3rd qtr	62.3	66.3	44.6	49.4	11.7	12.5	29.6	29.9	6.1	6.2
4th qtr p	69.1	68.3	47.5	60.3	14.1	16.3	35.4	36.0	7.5	7.7
2002 1st qtr	47.4	68.9	42.4	49.4	10.2	12.0	24.7	29.1	5.2	5.4
2nd qtr	56.3	62.6	43.3	48.8	11.1	11.9	28.8	29.1	5.9	5.8
3rd qtr p	62.7	70.6	45.3	49.3	11.8	12.9	29.1	30.5	6.1	6.2

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. 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 various special accounts. — 4 Including receipts from the UMTS licence auctions.

VIII. Public finance in Germany

3. Finances of the Government in the national accounts \*

Up to the end of 1998, DM billion / from 1999, € billion

Item	1995 1	1996	1997	1998	1999	2000 2	2001 pe	2002 pe
Receipts	1,647.8	1,704.0	1,726.8	1,775.9	943.4	963.7	951.5	953.2
of which								
Taxes	825.8	850.0	856.9	897.4	490.4	511.7	488.3	486.7
Social security contributions	662.5	696.7	720.1	727.7	375.7	378.5	383.6	388.4
Expenditure	1,764.9	1,826.6	1,826.5	1,859.6	973.2	991.8	1,009.0	1,030.4
of which								
Intermediate input	143.2	142.7	140.2	144.1	76.9	78.5	81.6	84.1
Employee compensation	315.9	319.6	319.0	319.3	165.4	165.6	164.9	166.0
Interest	128.9	131.7	133.2	136.4	68.8	68.2	67.8	67.9
Social security benefits 3	902.8	970.7	984.7	998.4	523.1	534.7	548.1	572.2
Gross capital formation	80.5	76.4	69.4	69.9	37.8	37.0	35.8	33.6
Financial balance	- 117.1	- 122.7	- 99.7	- 83.7	- 29.7	- 28.0	- 57.5	- 77.2
as a percentage of the gross domestic product	- 3.3	- 3.4	- 2.7	- 2.2	- 1.5	- 1.4	- 2.8	- 3.7
Memo item								
Deficit of the Treuhand agency	.	.	.	.	.	.	.	.
Debt as defined in Maastricht Treaty as a percentage of the gross domestic product	57.1	59.8	61.0	60.9	61.2	60.2	59.5	.

Source: Federal Statistical Office. — \* Figures according to ESA 95. Notwithstanding the figures shown by the Federal Statistical Office, calculated including – with no impact on the balance – customs duties, the EU share in VAT revenue and EU subsidies. — 1 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 9.8% of GDP. — 2 Adjusted for receipts from UMTS licence auctions. In the accounts of the Federal Statistical Office, such receipts (50.85 € billion) are recorded under "net increase in non-produced assets", with the result that government spending is lower and a surplus (22.8 € billion or 1.1% of GDP) is shown. — 3 Monetary social security benefits and social benefits in kind.

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

Up to the end of 1998, DM million / from 1999, € million

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				
1991	661,920	577,150	321,334	224,321	19,139	31,495	84,633	2,540	+ 137
1992	731,738	638,423	356,849	247,372	23,807	34,203	93,374	4,034	- 58
1993	749,119	653,015	360,250	256,131	27,542	36,634	95,809	5,863	+ 295
1994	786,162	688,785	386,145	261,947	32,052	40,692	97,116	7,677	+ 260
1995	814,190	719,332	390,807	288,520	.	40,005	94,498	8,460	+ 359
1996	799,998	706,071	372,390	294,232	.	39,449	94,641	7,175	- 714
1997	797,154	700,739	368,244	290,771	.	41,724	96,531	7,703	- 117
1998	833,013	727,888	379,491	306,127	.	42,271	104,960	8,841	+ 164
1999	453,068	396,734	211,727	164,724	.	20,284	56,333	4,810	+ 1
2000	467,253	410,117	219,034	169,249	.	21,833	57,241	4,895	- 104
2001	446,248	392,189	213,342	159,115	.	19,732	54,047	4,590	+ 12
2002 2nd qtr	104,433	91,656	48,960	37,171	.	5,525	12,255	1,131	+ 522
3rd qtr P	109,260	96,068	54,091	38,718	.	3,259	12,964	...	+ 228
2002 July	.	31,119	17,755	12,676	.	688	.	.	.
Aug.	.	29,448	17,200	11,273	.	976	.	.	.
Sep.	.	35,501	19,136	14,769	.	1,595	.	.	.
Oct. P	.	29,706	16,364	11,752	.	1,590	.	.	.
Nov. P	.	26,838	14,569	10,667	.	1,602	.	.	.

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.

## VIII. Public finance in Germany

### 5. Tax revenue, by type

Up to the end of 1998, DM million / from 1999, € million

Period	Joint taxes										Federal taxes 8	Länder taxes 8	EU customs duties	Memo item Local authorities' share in income taxes 9
	Income taxes 2					Turnover taxes 5, 6								
	Total 1	Total	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				
1991	615,506	298,804	214,175	41,532	31,716	11,381	179,672	98,797	80,875	5,986	92,583	29,113	8,307	38,356
1992	681,751	331,310	247,322	41,531	31,184	11,273	197,712	117,274	80,438	6,923	104,802	32,963	7,742	43,328
1993	697,988	341,785	257,987	33,234	27,830	22,734	216,306	174,492	41,814	4,181	93,678	34,720	7,240	44,973
1994	734,234	343,055	266,522	25,510	19,569	31,455	235,698	195,265	40,433	6,271	105,410	36,551	7,173	45,450
1995	765,374	344,554	282,701	13,997	18,136	29,721	234,622	198,496	36,126	8,412	134,013	36,602	7,117	46,042
1996	746,958	317,807	251,278	11,616	29,458	25,456	237,208	200,381	36,827	8,945	137,865	38,540	6,592	40,887
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	775,028	340,231	258,276	11,116	36,200	34,640	250,214	203,684	46,530	10,284	130,513	37,300	6,486	47,140
1999	422,012	184,408	133,809	10,887	22,359	17,353	137,155	111,600	25,555	5,463	72,235	19,564	3,186	25,277
2000	436,115	192,381	135,733	12,225	23,575	20,849	140,871	107,140	33,732	5,521	75,504	18,444	3,394	25,998
2001	417,358	170,817	132,626	8,771	- 426	29,845	138,935	104,463	34,472	5,510	79,277	19,628	3,191	25,170
2002 2nd qtr	97,670	38,032	31,000	3,331	- 1,961	5,662	33,468	25,417	8,050	1,402	19,241	4,820	708	6,014
3rd qtr	102,229	40,904	31,896	3,317	965	4,726	34,226	25,937	8,290	1,411	20,297	4,638	753	6,160
2002 July	32,976	12,401	11,753	- 1,307	- 563	2,517	10,998	8,124	2,874	963	6,711	1,656	249	1,857
Aug.	31,154	9,578	10,593	- 1,278	- 1,122	1,384	11,947	9,130	2,817	442	7,368	1,564	255	1,706
Sep.	38,099	18,925	9,550	5,901	2,650	825	11,282	8,683	2,599	6	6,219	1,418	249	2,598
Oct. p	31,276	10,998	9,539	- 1,037	203	1,392	11,382	8,591	2,791	999	7,019	1,535	244	1,571
Nov. p	28,421	8,066	9,597	- 1,209	- 1,068	746	12,418	9,491	2,928	454	5,847	1,380	256	1,583

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. — 4 From February 1993 including revenue from the tax on interest income, in which the local authorities have a share of 12%. — 5 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, from 2000 50.25% to the Federal Government, 49.75% to the Länder Governments, from 2002 49.6% to the Federal Government, 50.4% 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 From 1998 including the share in turnover taxes.

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

Up to the end of 1998, DM million / from 1999, € million

Period	Federal taxes						Länder taxes					Local authority taxes		
	Mineral oil tax	Tobacco tax	Spirits tax	Insurance tax	Electricity tax	Other Federal taxes 1	Motor vehicle tax	Property tax	Inheritance tax	Beer tax	Other Länder taxes	Trade tax 2	Taxes on land and buildings	Other local taxes 3
1991	47,266	19,592	5,648	5,862	.	14,215	11,012	6,729	2,636	1,647	7,090	41,297	9,921	1,181
1992	55,166	19,253	5,545	8,094	.	16,744	13,317	6,750	3,030	1,625	8,241	44,848	10,783	1,281
1993	56,300	19,459	5,134	9,290	.	3,495	14,059	6,784	3,044	1,769	9,065	42,266	11,663	1,383
1994	63,847	20,264	4,889	11,400	.	5,011	14,169	6,627	3,479	1,795	10,482	44,086	12,664	1,445
1995	64,888	20,595	4,837	14,104	.	29,590	13,806	7,855	3,548	1,779	9,613	42,058	13,744	1,426
1996	68,251	20,698	5,085	14,348	.	29,484	13,743	9,035	4,054	1,718	9,990	45,880	14,642	1,463
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	50,508	16,228	1,532
1999	36,444	11,655	2,233	7,116	1,816	12,973	7,039	537	3,056	846	8,086	27,060	8,636	824
2000	37,826	11,443	2,151	7,243	3,356	13,485	7,015	433	2,982	844	7,171	27,025	8,849	784
2001	40,690	12,072	2,143	7,427	4,322	12,622	8,376	290	3,069	829	7,064	24,534	9,076	790
2002 2nd qtr	10,107	3,291	461	1,497	1,167	2,717	2,078	43	791	213	1,697	5,423	2,560	182
3rd qtr p	10,154	3,577	511	1,804	1,407	2,845	1,816	72	798	226	1,726	5,639	2,634	169
2002 July	3,397	1,191	184	410	614	915	693	25	251	74	614	.	.	.
Aug.	3,166	1,705	220	1,029	516	733	578	42	274	78	593	.	.	.
Sep.	3,591	681	107	365	277	1,198	545	5	274	74	520	.	.	.
Oct. p	3,442	1,738	207	373	563	697	596	16	269	71	583	.	.	.
Nov. p	3,379	683	166	561	393	664	529	12	242	66	531	.	.	.

Source: Federal Ministry of Finance. — 1 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. — 2 On returns and capital. — 3 Including tax-like receipts.

VIII. Public finance in Germany

7. Indebtedness of the public sector \*

Up to the end of 1998, DM million / from 1999, € million

End of year or month	Total	Bundes- bank advances	Treasury discount paper <sup>1</sup>	Treasury notes <sup>2, 3</sup>	5-year special Federal bonds <sup>2</sup>	Federal savings bonds	Debt secur- ities <sup>2</sup>	Direct lending by credit institu- tions <sup>4</sup>	Loans from non-banks		Old debt		
									Social security funds	Other <sup>4</sup>	owing to German unifica- tion <sup>5</sup>	Equalisa- tion claims	Other <sup>6</sup>
<b>Public authorities</b>													
1995	1,993,476	-	8,072	240,514	170,719	78,456	586,573	764,875	1,263	40,621	15,106	87,079	198
1996	2,126,320	-	27,609	231,102	176,164	96,391	618,262	836,582	770	39,450	9,960	89,826	203
1997	2,215,893	-	26,336	249,507	177,721	99,317	662,516	879,021	663	29,907	1,315	89,376	216
1998	2,280,154	-	25,631	227,536	199,774	92,698	723,403	894,456	550	26,073	1,249	88,582	202
1999	1,199,975	-	12,594	102,364	120,998	41,621	416,051	450,111	281	10,200	476	45,175	105
2000	1,211,439	-	11,616	109,951	126,276	35,991	438,888	433,443	211	10,524	285	44,146	108
2001 Dec.	1,223,929	-	23,036	151,401	130,045	26,395	448,148	422,440	174	13,110	85	8,986	108
2002 Mar.	1,249,857	-	17,817	158,695	133,421	22,648	461,617	431,066	218	15,234	49	8,986	109
June	1,251,125	-	22,252	176,996	133,289	20,636	463,906	408,991	239	15,681	51	8,986	101
Sep. <sup>P</sup>	1,269,119	-	31,440	193,052	135,502	19,752	462,459	401,797	227	16,893	50	7,848	102
<b>Federal Government <sup>7, 8</sup></b>													
1995	756,834	-	8,072	52,354	170,719	78,456	402,307	26,572	15	8,119	1,360	8,684	176
1996	839,883	-	26,789	55,289	176,164	96,391	434,295	32,988	5	7,766	1,330	8,684	183
1997	905,691	-	25,286	78,848	177,721	99,317	481,619	31,845	5	870	1,300	8,684	197
1998	957,983	-	24,666	84,760	199,274	92,698	519,718	24,125	-	2,603	1,270	8,684	186
1999	714,069	-	11,553	44,335	120,498	41,621	379,808	67,872	60	2,568	476	45,175	104
2000	715,819	-	11,516	44,678	123,642	35,991	400,490	52,836	29	2,099	285	44,146	107
2001 Dec.	701,077	-	21,136	59,643	119,911	26,395	416,195	47,111	26	1,481	85	8,986	107
2002 Mar.	721,619	-	16,917	59,622	123,287	22,648	429,270	59,356	12	1,365	49	8,986	108
June	716,787	-	21,389	66,445	123,155	20,636	431,039	43,600	12	1,374	51	8,986	100
Sep.	726,896	-	30,982	72,762	125,316	19,752	429,452	39,392	0	1,242	50	7,848	101
<b>West German Länder Governments</b>													
1995	442,536	-	-	91,152	.	.	.	339,084	358	11,940	.	.	2
1996	477,361	-	320	91,969	.	.	.	372,449	54	12,567	.	.	2
1997	505,297	-	350	86,639	.	.	.	406,499	47	11,760	.	.	2
1998	525,380	-	520	83,390	.	.	.	430,709	43	10,716	.	.	2
1999	274,208	-	150	43,033	.	.	.	226,022	23	4,979	.	.	1
2000	282,431	-	-	48,702	.	.	.	227,914	22	5,792	.	.	1
2001 Dec.	305,788	-	1,800	67,721	.	.	.	228,270	5	7,991	.	.	1
2002 Mar.	310,210	-	800	73,844	.	.	.	225,475	58	10,032	.	.	1
June	314,447	-	750	83,192	.	.	.	219,729	79	10,697	.	.	1
Sep. <sup>P</sup>	320,617	-	250	92,220	.	.	.	216,121	79	11,946	.	.	1
<b>East German Länder Governments</b>													
1995	69,151	-	-	25,345	.	.	.	43,328	17	461	.	.	.
1996	80,985	-	500	26,820	.	.	.	53,483	-	182	.	.	.
1997	90,174	-	700	27,540	.	.	.	61,697	15	222	.	.	.
1998	98,192	-	445	27,228	.	.	.	70,289	-	230	.	.	.
1999	53,200	-	891	14,517	.	.	.	37,602	-	189	.	.	.
2000	55,712	-	100	16,092	.	.	.	39,339	-	182	.	.	.
2001 Dec.	58,771	-	100	20,135	.	.	.	37,382	-	1,154	.	.	.
2002 Mar.	59,143	-	100	21,328	.	.	.	36,256	-	1,460	.	.	.
June	60,156	-	112	23,387	.	.	.	35,399	-	1,258	.	.	.
Sep. <sup>P</sup>	61,533	-	208	24,097	.	.	.	35,860	-	1,368	.	.	.
<b>West German local authorities <sup>9</sup></b>													
1995	157,271	.	.	-	.	.	1,000	151,127	283	4,861	.	.	.
1996	158,613	.	.	200	.	.	1,280	152,311	174	4,648	.	.	.
1997	160,162	.	.	300	.	.	1,330	154,145	149	4,238	.	.	.
1998	158,960	.	.	300	.	.	1,330	153,208	119	4,003	.	.	.
1999	81,511	.	.	153	.	.	680	78,726	53	1,898	.	.	.
2000	81,414	.	.	153	.	.	680	78,656	33	1,891	.	.	.
2001 Dec.	82,203	.	.	153	.	.	629	79,470	29	1,922	.	.	.
2002 Mar.	82,900	.	.	153	.	.	629	80,168	30	1,920	.	.	.
June	83,700	.	.	153	.	.	629	80,968	30	1,920	.	.	.
Sep. <sup>P</sup>	84,000	.	.	153	.	.	629	81,268	30	1,920	.	.	.
<b>East German local authorities <sup>9</sup></b>													
1995	36,830	.	.	225	.	.	400	35,427	347	431	.	.	.
1996	38,976	.	.	225	.	.	400	37,922	308	121	.	.	.
1997	38,688	.	.	225	.	.	400	37,623	273	167	.	.	.
1998	39,873	.	.	225	.	.	460	38,777	255	156	.	.	.
1999	20,726	.	.	51	.	.	335	20,138	124	78	.	.	.
2000	17,048	.	.	51	.	.	335	16,497	114	50	.	.	.
2001 Dec.	17,005	.	.	-	.	.	284	16,581	107	33	.	.	.
2002 Mar.	16,880	.	.	-	.	.	284	16,456	110	30	.	.	.
June	16,700	.	.	-	.	.	284	16,276	110	30	.	.	.
Sep. <sup>P</sup>	16,700	.	.	-	.	.	284	16,276	110	30	.	.	.

For footnotes see end of the table.

## VIII. Public finance in Germany

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

Up to the end of 1998, DM million / from 1999, € million

End of year or month	Total	Bundes- bank advances	Treasury discount paper 1	Treasury notes 2, 3	5-year special Federal bonds 2	Federal savings bonds	Debt secur- ities 2	Direct lending by credit institu- tions 4	Loans from non-banks		Old debt		
									Social security funds	Other 4	owing to German unifica- tion 5	Equalisa- tion claims	Other 6
<b>"German Unity" Fund / Indemnification Fund 7</b>													
1995	87,146	.	-	8,891	-	.	44,398	31,925	5	1,927	.	.	.
1996	83,556	.	-	-	-	.	44,321	38,020	5	1,210	.	.	.
1997	79,717	.	-	-	-	.	44,347	34,720	5	645	.	.	.
1998	79,413	.	-	-	-	.	47,998	30,975	-	440	.	.	.
1999	40,234	.	-	275	500	.	28,978	10,292	-	189	.	.	.
2000	40,629	.	-	275	2,634	.	29,797	7,790	-	133	.	.	.
2001 Dec.	39,923	.	-	3,748	10,134	.	21,577	4,315	-	149	.	.	.
2002 Mar.	40,006	.	-	3,748	10,134	.	21,732	4,315	-	77	.	.	.
June	40,028	.	-	3,820	10,134	.	21,902	4,147	-	26	.	.	.
Sep.	40,047	.	-	3,820	10,134	.	22,049	4,019	-	26	.	.	.
<b>ERP Special Fund 7</b>													
1995	34,200	.	.	.	.	.	10,745	23,455	-	-	.	.	.
1996	34,135	.	.	.	.	.	10,750	23,385	-	-	.	.	.
1997	33,650	.	.	.	.	.	10,810	22,840	-	-	.	.	.
1998	34,159	.	.	.	.	.	11,944	20,988	-	1,227	.	.	.
1999	16,028	.	.	.	.	.	6,250	9,458	21	299	.	.	.
2000	18,386	.	.	.	.	.	7,585	10,411	13	377	.	.	.
2001 Dec.	19,161	.	.	.	.	.	9,462	9,310	8	381	.	.	.
2002 Mar.	19,098	.	.	.	.	.	9,701	9,039	8	350	.	.	.
June	19,308	.	.	.	.	.	10,052	8,873	8	376	.	.	.
Sep.	19,327	.	.	.	51	.	10,045	8,863	8	361	.	.	.
<b>Federal Railways Fund 7, 8</b>													
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	77,254	.	.	1,927	-	.	25,634	44,807	115	4,772	.	.	.
1998	77,246	.	.	-	500	.	31,648	42,488	79	2,531	.	.	.
1999 June	39,231	.	.	-	1,023	.	16,805	20,401	34	968	.	.	.
<b>Debt-Processing Fund / Redemption Fund for Inherited Liabilities 7, 8</b>													
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	322,032	.	-	54,028	-	.	98,377	81,616	54	7,233	15	80,692	17
1998	304,978	.	-	31,633	-	.	110,006	79,226	54	4,167	-20	79,899	15
1999 June	151,097	.	-	11,127	2,000	.	58,897	36,133	27	2,015	-9	40,902	4
<b>"Use of Hard Coal" Equalisation Fund 7, 8</b>													
1995	2,220	.	.	.	.	.	-	2,220	-	-	.	.	.
1996	3,108	.	.	.	.	.	-	3,108	-	-	.	.	.
1997	3,229	.	.	.	.	.	-	3,229	-	-	.	.	.
1998	3,971	.	.	.	.	.	300	3,671	-	-	.	.	.
1999 June	2,302	.	.	.	.	.	153	2,148	-	-	.	.	.

Source: Bundesbank calculations based on data from the Federal Statistical Office. — \* Excluding public authorities' mutual indebtedness. — 1 Predominantly Treasury discount paper. — 2 Excluding paper in the issuers' portfolios. — 3 Länder Treasury paper also covers the long-term maturity category. — 4 Mainly loans against borrowers' notes. Including loans raised abroad. Other loans from non-banks, including loans from supplementary public pension funds and liabilities arising from the investment assistance levy. — 5 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. — 6 Old debt mainly expressed in foreign currency, in

accordance with the London Debts agreement; excluding debt securities in own portfolios. — 7 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. — 8 Since July 1, 1999 the Federal Government has assumed joint responsibility for the debts of the Redemption Fund for Inherited Liabilities, the Federal Railway Fund and the Equalisation Fund for Safeguarding the Use of Coal. The special funds mentioned are only recorded under the Federal Government from July. — 9 Data other than end-of-year figures have been estimated. Including indebtedness of municipal special-purpose associations.



VIII. Public finance in Germany

8. Changes in public sector indebtedness \*

Item	Level at end of		Net borrowing 1								
	2001	Sep. 2002 P	2001						2002		
			Total	1st qtr	2nd qtr	3rd qtr	4th qtr	1st qtr	2nd qtr	3rd qtr P	
€ million											
<b>Borrowers</b>											
Federal Government 2	701,077	726,896	- 14,908	- 16,138	- 8,256	+ 6,820	+ 2,665	+ 20,542	- 4,833	+ 10,110	
"German Unity" Fund	39,638	39,702	- 787	+ 748	- 739	- 41	- 754	+ 64	-	-	
ERP Special Fund	19,161	19,327	+ 775	+ 513	+ 91	+ 449	- 278	+ 63	+ 210	+ 19	
Indemnification Fund	285	344	+ 81	+ 21	+ 22	+ 21	+ 17	+ 19	+ 21	+ 19	
West German Länder Governments	305,788	320,617	+ 23,357	+ 3,307	+ 2,310	+ 7,422	+ 10,318	+ 4,422	+ 4,237	+ 6,170	
East German Länder Governments	58,771	61,533	+ 3,059	+ 318	+ 154	+ 1,365	+ 1,222	+ 372	+ 1,013	+ 1,377	
West German local authorities 3	82,203	84,000	+ 2,487	+ 815	+ 435	- 460	+ 1,697	+ 275	+ 1,000	+ 900	
East German local authorities 3	17,005	16,700	+ 162	- 22	- 102	-	+ 286	- 31	- 180	- 30	
<b>Total</b>	<b>1,223,929</b>	<b>1,269,119</b>	<b>+ 14,224</b>	<b>- 10,438</b>	<b>- 6,086</b>	<b>+ 15,576</b>	<b>+ 15,173</b>	<b>+ 25,601</b>	<b>+ 1,468</b>	<b>+ 18,564</b>	
<b>Types of debt</b>											
Treasury discount paper 4	23,036	31,440	+ 11,420	+ 182	+ 1,948	+ 5,803	+ 3,488	- 5,219	+ 4,434	+ 9,188	
Treasury notes 5	151,401	193,052	+ 41,449	+ 8,866	+ 5,676	+ 12,724	+ 14,183	+ 7,294	+ 18,301	+ 16,056	
Five-year special Federal bonds 5	130,045	135,502	+ 3,770	+ 1,464	+ 2,153	+ 1,067	- 913	+ 3,375	- 132	+ 2,213	
Federal savings bonds	26,395	19,752	- 9,596	- 1,431	- 4,315	- 1,422	- 2,428	- 3,748	- 2,012	- 884	
Debt securities 5	448,148	462,459	+ 9,260	+ 4,838	+ 2,059	+ 336	+ 2,027	+ 13,469	+ 2,289	- 1,446	
Direct lending by credit institutions 6	422,440	401,797	- 9,100	+ 10,382	- 14,596	- 1,802	- 3,086	+ 8,297	- 21,875	- 6,624	
Loans from social security funds	174	227	- 37	- 8	- 18	- 3	+ 8	+ 44	+ 21	- 12	
Other loans 6	13,070	16,852	+ 2,586	- 643	+ 994	+ 36	+ 2,199	+ 2,124	+ 447	+ 1,212	
Old debt 7	193	152	- 200	- 45	+ 2	- 17	- 140	- 36	- 6	- 0	
Equalisation claims	8,986	7,847	- 35,328	- 34,044	+ 11	- 1,144	- 150	-	-	- 1,139	
Investment assistance levy	40	41	- 0	- 0	- 0	- 0	- 0	+ 0	-	+ 0	
<b>Total</b>	<b>1,223,929</b>	<b>1,269,119</b>	<b>+ 14,224</b>	<b>- 10,438</b>	<b>- 6,086</b>	<b>+ 15,576</b>	<b>+ 15,173</b>	<b>+ 25,601</b>	<b>+ 1,468</b>	<b>+ 18,564</b>	
<b>Creditors</b>											
<b>Banking system</b>											
Bundesbank	4,440	4,440	-	-	-	-	-	-	-	-	
Credit institutions	534,400	532,700	- 29,304	- 3,235	- 11,848	- 11,361	- 2,859	+ 11,671	- 13,200	+ 270	
<b>Domestic non-banks</b>											
Social security funds	174	227	- 31	- 0	- 5	- 20	- 5	+ 44	+ 21	- 12	
Other 8	243,710	256,152	+ 42,436	+ 4,566	+ 6,222	+ 12,028	+ 19,620	+ 6,689	+ 2,947	+ 2,806	
Foreign creditors pe	441,205	475,600	+ 1,123	- 11,769	- 456	+ 14,930	- 1,583	+ 7,195	+ 11,700	+ 15,500	
<b>Total</b>	<b>1,223,929</b>	<b>1,269,119</b>	<b>+ 14,224</b>	<b>- 10,438</b>	<b>- 6,086</b>	<b>+ 15,576</b>	<b>+ 15,173</b>	<b>+ 25,601</b>	<b>+ 1,468</b>	<b>+ 18,564</b>	

Source: Bundesbank calculations based on data from the Federal Statistical Office. — \* Excluding public authorities' mutual indebtedness. — 1 Net borrowing differs from the change in indebtedness, which includes the assumption and reduction of debts. — 2 See Table VIII. 7, footnote 8. — 3 Data other than end-of-year figures have been estimated. Including indebtedness of municipal special-purpose associations and municipal hospitals. — 4 Excluding mobilisation and liquidity paper. Predominantly

Treasury discount paper. — 5 Excluding paper in the issuers' portfolios. — 6 Including loans raised abroad. — 7 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. — 8 Ascertained as a difference.

9. Loans raised by public authorities against borrowers' notes

Up to the end of 1998, DM million / from 1999, € million

End of year or month	Total 1	Federal Government 2, 3	"German Unity" Fund	ERP Special Fund	Länder Governments	Local authorities 4, 5	Federal Railways Fund 3	Inherited Liabilities Fund 3	"Use of Hard Coal" Equalisation Fund 3
1998	898,030	23,094	31,415	22,215	504,148	184,942	45,098	83,447	3,671
1999	444,031	64,704	10,481	9,778	264,158	94,909	-	-	-
2000	431,364	54,731	7,178	10,801	268,362	90,292	-	-	-
2001 Sep.	418,633	47,487	4,418	9,998	267,602	89,129	-	-	-
Dec.	416,068	44,791	4,464	9,699	267,988	89,126	-	-	-
2002 Mar.	409,176	41,751	4,392	9,397	264,741	88,895	-	-	-
June	404,661	40,431	4,172	9,256	262,574	88,228	-	-	-
Sep. P	401,432	39,267	4,044	9,231	260,611	88,280	-	-	-

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

3 See Table VIII. 7, footnote 8. — 4 Data other than end-of-year figures have been estimated. Including municipal special-purpose associations and municipal hospitals. — 5 Including contractually agreed loans.

## VIII. Public finance in Germany

### 10. Indebtedness of the Federal Government

Up to the end of 1998, DM million / from 1999, € million

End of year or month	Treasury discount paper 1			Federal Treasury paper/ Treasury notes 2	5-year special Federal bonds 2	Federal savings bonds	Debt secur- ities 2	Direct lending by credit institu- tions 3, 4	Indebtedness to non-banks		Old debt		
	Total	Total	of which Treasury financing paper						Social security funds	Other 3, 5, 6	owing to German unifica- tion 7	Equal- isation claims	Other 8
1996	839,883	26,789	7,166	55,289	176,164	96,391	434,295	32,988	5	7,766	1,330	8,684	183
1997	905,691	25,286	5,221	78,848	177,721	99,317	481,619	31,845	5	870	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
1999 9	714,069	11,553	1,584	44,335	120,498	41,621	379,808	67,872	60	2,568	476	45,175	104
2000	715,819	11,516	1,805	44,678	123,642	35,991	400,490	52,836	29	2,099	285	44,146	107
2001	701,077	21,136	1,658	59,643	119,911	26,395	416,195	47,111	26	1,481	85	8,986	107
2001 Dec.	701,077	21,136	1,658	59,643	119,911	26,395	416,195	47,111	26	1,481	85	8,986	107
2002 Jan.	713,928	16,852	1,658	58,910	119,373	24,779	427,130	56,198	26	1,481	85	8,986	109
Feb.	716,611	16,886	1,693	59,226	122,524	24,752	428,296	54,242	26	1,481	85	8,986	108
Mar.	721,619	16,917	1,724	59,622	123,287	22,648	429,270	59,356	12	1,365	49	8,986	108
Apr.	714,032	11,709	1,787	64,533	123,500	22,666	431,935	49,165	12	1,366	54	8,986	106
May	715,840	16,623	1,788	64,891	123,015	21,967	430,935	47,891	12	1,366	50	8,986	103
June	716,787	21,389	1,776	66,445	123,155	20,636	431,039	43,600	12	1,374	51	8,986	100
July	726,077	21,253	1,763	71,385	123,144	20,773	430,911	49,222	12	1,374	54	7,848	102
Aug.	723,931	26,149	1,724	71,540	124,334	20,057	430,140	42,323	12	1,374	52	7,848	101
Sep.	726,896	30,982	1,700	72,762	125,316	19,752	429,452	39,392	0	1,242	50	7,848	101
Oct.	728,799	30,977	1,663	78,405	125,954	18,011	425,750	40,487	0	1,242	26	7,848	99
Nov.	734,678	30,466	1,622	78,933	126,472	17,852	434,650	37,089	0	1,242	28	7,848	99
Dec. p	724,960	30,197	1,587	78,584	127,326	17,889	422,307	39,442	0	1,242	28	7,848	99

1 Excluding mobilisation and liquidity paper. In November 1999, including cash bills. — 2 Excluding paper in the issuers' portfolios. — 3 Including loans raised abroad. — 4 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 Since July 1, 1999 the Federal Government has assumed joint responsibility for the debts of the Redemption Fund for Inherited Liabilities, the Federal Railway Fund and the Equalisation Fund for Safeguarding the Use of Coal. The special funds mentioned are ascribed to the Federal Government from July 1999.

### 11. Federal Government borrowing in the market

Up to the end of 1998, DM billion / from 1999, € billion

Period	Total new borrowing		of which								Change in money market deposits	
			Debt Securities		5-year special Federal bonds		Other securities 2		Loans against borrowers' notes			Money market debt
	gross 1	net	gross 1	net	gross 1	net	gross 1	net	gross	net		
1996	+ 185,696	+ 83,049	+ 54,038	+ 31,988	+ 45,445	+ 5,445	+ 67,015	+ 39,586	+ 15,050	+ 1,906	+ 4,148	+ 6,548
1997	+ 250,074	+ 65,808	+ 79,323	+ 47,323	+ 59,557	+ 1,557	+ 98,275	+ 24,983	+ 12,950	- 8,009	- 30	- 3,304
1998	+ 228,050	+ 52,292	+ 78,304	+ 38,099	+ 55,078	+ 21,553	+ 85,706	- 1,327	+ 12,023	- 2,927	- 3,065	- 5,440
1999	+ 139,865	+ 31,631	+ 53,931	+ 114,080	+ 22,229	+ 18,610	+ 44,904	- 5,836	+ 14,861	+ 52,897	+ 3,937	+ 1,832
2000	+ 122,725	+ 1,750	+ 49,395	+ 20,682	+ 26,342	+ 3,144	+ 45,278	- 5,323	+ 7,273	- 9,973	- 5,563	- 940
2001	+ 135,018	- 14,741	+ 36,511	+ 15,705	+ 19,603	- 3,730	+ 69,971	+ 14,989	+ 5,337	- 9,941	+ 3,595	- 1,495
2001 Jan.-Dec.	+ 135,018	- 14,741	+ 36,511	+ 15,705	+ 19,603	- 3,730	+ 69,971	+ 14,989	+ 5,337	- 9,941	+ 3,595	- 1,495
2002 Jan.-Dec. p	+ 178,173	+ 23,883	+ 41,378	+ 6,112	+ 36,037	+ 7,415	+ 93,823	+ 19,495	+ 4,716	- 10,155	+ 2,221	+ 22
2001 Dec.	- 1,007	- 7,817	- 233	- 233	+ 166	+ 166	+ 9,383	+ 4,618	+ 571	- 1,317	- 10,893	- 342
2002 Jan.	+ 25,679	+ 12,851	+ 10,935	+ 10,935	- 539	- 539	+ 4,961	- 6,634	+ 686	- 549	+ 9,635	+ 630
Feb.	+ 10,575	+ 2,683	+ 1,165	+ 1,165	+ 9,669	+ 3,151	+ 572	+ 323	+ 117	- 1,009	- 948	+ 83
Mar.	+ 15,492	+ 5,009	+ 975	+ 975	+ 763	+ 763	+ 6,740	- 1,677	+ 548	- 1,482	+ 6,467	+ 9
Apr.	+ 3,637	- 7,587	+ 2,665	+ 2,665	+ 214	+ 214	+ 9,919	- 278	+ 708	- 321	- 9,870	- 307
May	+ 9,842	+ 1,807	- 1,000	- 1,000	+ 6,025	- 485	+ 5,543	+ 4,574	+ 522	- 28	- 1,247	- 190
June	+ 8,533	+ 947	+ 104	+ 104	+ 140	+ 140	+ 11,512	+ 4,988	+ 88	- 971	- 3,311	- 41
July	+ 27,272	+ 9,291	+ 10,400	- 127	- 11	- 11	+ 9,934	+ 4,941	+ 610	- 716	+ 6,338	+ 133
Aug.	+ 6,663	- 2,147	- 772	- 772	+ 8,739	+ 1,189	+ 5,360	+ 4,337	+ 135	- 100	- 6,799	+ 228
Sep.	+ 9,231	+ 2,966	- 688	- 688	+ 983	+ 983	+ 11,072	+ 5,748	+ 590	- 348	- 2,727	+ 1,413
Oct.	+ 20,715	+ 1,903	+ 8,082	- 3,702	+ 637	+ 637	+ 10,797	+ 3,897	+ 94	- 10	+ 1,106	- 1,181
Nov.	+ 23,264	+ 5,880	+ 8,900	+ 8,900	+ 8,562	+ 518	+ 5,171	- 141	+ 543	- 3,487	+ 88	- 564
Dec. p	+ 17,270	- 9,718	+ 611	- 12,344	+ 854	+ 854	+ 12,242	- 582	+ 76	- 1,134	+ 3,487	- 191

1 After deduction of repurchases. — 2 Federal Treasury notes, Federal savings bonds, Treasury discount paper, Treasury financing paper.

VIII. Public finance in Germany

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

Up to the end of 1998, DM million / from 1999, € 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>													
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 8	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	305,606	248,463	54,896	295,635	246,011	17,892	+ 9,971	14,659	10,179	1,878	2,372	230	9,261
1998	317,340	250,063	65,191	304,155	254,783	18,636	+ 13,185	18,194	14,201	1,493	2,274	226	9,573
1999	169,124	128,191	39,884	159,819	134,536	9,910	+ 9,305	13,623	11,559	824	1,127	114	4,904
2000 P	173,020	128,057	43,638	166,569	139,189	10,253	+ 6,451	14,350	11,459	1,676	1,105	110	4,889
2001 8, P	178,293	130,064	46,710	172,382	143,863	10,610	+ 5,911	13,973	10,646	1,517	1,699	111	4,917
2001 3rd qtr	44,023	32,123	11,530	43,229	36,469	2,688	+ 794	11,543	8,201	1,532	1,704	106	4,973
4th qtr	47,452	35,514	11,588	43,530	36,400	2,701	+ 3,922	13,973	10,646	1,517	1,699	111	4,917
2002 1st qtr	43,411	30,893	12,212	43,792	36,898	2,719	- 381	11,943	8,712	1,427	1,698	106	4,933
2nd qtr	44,541	31,949	12,222	43,927	36,784	2,711	+ 614	10,663	7,490	1,366	1,696	111	4,954
3rd qtr	45,371	32,663	12,280	44,799	37,746	2,872	+ 572	8,911	5,919	1,182	1,689	121	4,947
<b>Eastern Germany</b>													
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	79,351	48,939	20,065	87,424	70,500	5,388	- 8,073	.	.	.	.	.	.
1998	81,072	47,764	23,564	90,863	73,040	5,757	- 9,791	.	.	.	.	.	.
1999	43,214	24,015	14,744	47,641	38,383	3,040	- 4,427	.	.	.	.	.	.
2000 P	43,513	22,655	15,224	49,385	39,414	3,112	- 5,872	.	.	.	.	.	.
2001 P	44,462	21,984	16,383	50,943	40,254	3,152	- 6,481	.	.	.	.	.	.
2001 3rd qtr	10,540	5,372	4,070	12,881	10,240	796	- 2,341	.	.	.	.	.	.
4th qtr	11,446	5,860	4,107	12,857	10,221	788	- 1,411	.	.	.	.	.	.
2002 1st qtr	11,070	5,157	4,410	13,106	10,373	793	- 2,036	.	.	.	.	.	.
2nd qtr	11,493	5,455	4,558	13,046	10,228	797	- 1,553	.	.	.	.	.	.
3rd qtr	10,757	5,275	4,334	13,391	10,530	832	- 2,634	.	.	.	.	.	.

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

Up to the end of 1998, DM million / from 1999, € 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>													
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
1999	47,954	45,141	1,467	51,694	25,177	16,604	8,573	20,558	10,480	10,078	279	- 3,740	3,739
2000	49,606	46,359	1,403	50,473	23,946	15,615	8,331	20,324	10,534	9,790	294	- 868	867
2001	50,682	47,337	1,640	52,613	25,036	16,743	8,294	20,713	11,094	9,619	268	- 1,931	1,931
2001 3rd qtr	12,692	11,748	437	12,549	5,899	3,974	1,926	5,024	2,664	2,361	8	+ 143	0
4th qtr	14,319	13,045	770	13,866	6,321	4,366	1,955	5,637	2,973	2,664	3	+ 453	- 2,771
2002 1st qtr	11,502	11,188	51	13,093	6,587	4,608	1,979	4,665	2,523	2,142	139	- 1,591	3,720
2nd qtr	12,200	11,459	433	14,141	7,098	5,005	2,093	5,230	2,903	2,327	97	- 1,941	2,200
3rd qtr	12,710	11,808	528	13,905	6,708	4,839	1,869	5,182	2,849	2,334	7	- 1,195	854

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	1998	1999	2000	2001	2002	1999	2000	2001	2002	1999	2000	2001	2002
	DM billion	€ billion				Change from previous year in %				% of total			
<b>at 1995 prices</b>													
<b>I. Origin of domestic product</b>													
Producing sector (excluding construction)	855.2	429.4	445.6	447.3	445.5	- 1.8	3.8	0.4	- 0.4	22.4	22.6	22.6	22.5
Construction	205.3	105.5	102.6	96.0	90.2	0.5	- 2.7	- 6.5	- 6.1	5.5	5.2	4.8	4.5
Distribution, catering trade, and transportation <sup>1</sup>	614.6	335.3	352.9	361.8	367.6	6.7	5.3	2.5	1.6	17.5	17.9	18.3	18.5
Financing, rents and corporate services <sup>2</sup>	1,028.6	548.3	572.6	585.2	593.8	4.3	4.4	2.2	1.5	28.6	29.1	29.5	29.9
Public and private services <sup>3</sup>	737.6	380.6	387.3	391.6	396.0	0.9	1.8	1.1	1.1	19.9	19.7	19.8	20.0
All economic sectors	3,487.2	1,823.3	1,885.3	1,906.5	1,917.3	2.3	3.4	1.1	0.6	95.2	95.7	96.2	96.6
Memo item: Enterprise sector	3,041.7	1,595.6	1,656.7	1,679.3	1,690.7	2.6	3.8	1.4	0.7	83.3	84.1	84.8	85.2
Economic sectors, adjusted <sup>4</sup>	3,320.2	1,730.3	1,785.5	1,801.4	1,807.8	1.9	3.2	0.9	0.4	90.4	90.7	90.9	91.1
Gross domestic product	3,669.9	1,914.8	1,969.5	1,980.8	1,984.2	2.0	2.9	0.6	0.2	100	100	100	100
<b>II. Expenditure of domestic product</b>													
Private consumption <sup>5</sup>	2,072.8	1,099.2	1,114.8	1,131.6	1,126.2	3.7	1.4	1.5	- 0.5	57.4	56.6	57.1	56.8
Government consumption	726.3	375.0	379.6	382.6	388.5	1.0	1.2	0.8	1.5	19.6	19.3	19.3	19.6
Machinery and equipment	292.5	160.3	175.5	165.4	151.5	7.2	9.5	- 5.8	- 8.4	8.4	8.9	8.3	7.6
Construction	479.5	248.7	242.1	227.7	214.2	1.4	- 2.6	- 6.0	- 5.9	13.0	12.3	11.5	10.8
Other investment <sup>6</sup>	40.0	23.2	25.2	26.5	27.1	13.5	8.4	5.0	2.5	1.2	1.3	1.3	1.4
Changes in stocks <sup>7</sup>	3.2	- 6.6	- 2.7	- 15.2	- 14.3	.	.	.	.	- 0.3	- 0.1	- 0.8	- 0.7
Domestic demand	3,614.3	1,899.8	1,934.5	1,918.6	1,893.2	2.8	1.8	- 0.8	- 1.3	99.2	98.2	96.9	95.4
Net exports	55.6	15.0	35.0	62.2	91.0	.	.	.	.	0.8	1.8	3.1	4.6
Exports	1,078.6	582.5	662.1	695.4	715.7	5.6	13.7	5.0	2.9	30.4	33.6	35.1	36.1
Imports	1,023.0	567.4	627.1	633.1	624.7	8.5	10.5	1.0	- 1.3	29.6	31.8	32.0	31.5
Gross domestic product	3,669.9	1,914.8	1,969.5	1,980.8	1,984.2	2.0	2.9	0.6	0.2	100	100	100	100
<b>at current prices</b>													
<b>III. Expenditure of domestic product</b>													
Private consumption <sup>5</sup>	2,173.3	1,156.5	1,190.9	1,232.2	1,243.6	4.1	3.0	3.5	0.9	58.5	58.7	59.5	58.9
Government consumption	722.7	378.8	387.2	393.5	402.7	2.5	2.2	1.6	2.3	19.1	19.1	19.0	19.1
Machinery and equipment	293.5	159.6	175.8	166.3	153.6	6.4	10.2	- 5.4	- 7.7	8.1	8.7	8.0	7.3
Construction	475.3	245.2	240.2	226.2	212.6	0.9	- 2.1	- 5.8	- 6.0	12.4	11.8	10.9	10.1
Other investment <sup>6</sup>	38.3	21.4	22.8	23.7	24.1	9.1	6.7	4.1	1.7	1.1	1.1	1.1	1.1
Changes in stocks <sup>7</sup>	14.1	0.9	5.2	- 9.4	- 8.0	.	.	.	.	0.0	0.3	- 0.5	- 0.4
Domestic demand	3,717.2	1,962.3	2,022.2	2,032.6	2,028.7	3.3	3.0	0.5	- 0.2	99.2	99.6	98.1	96.0
Net exports	56.4	16.3	7.8	38.6	83.8	.	.	.	.	0.8	0.4	1.9	4.0
Exports	1,095.6	587.0	685.4	726.9	748.6	4.8	16.8	6.1	3.0	29.7	33.8	35.1	35.4
Imports	1,039.2	570.7	677.6	688.3	664.8	7.4	18.7	1.6	- 3.4	28.8	33.4	33.2	31.5
Gross domestic product	3,773.6	1,978.6	2,030.0	2,071.2	2,112.4	2.6	2.6	2.0	2.0	100	100	100	100
<b>IV. Prices (1995=100)</b>													
Private consumption	104.8	105.2	106.8	108.9	110.4	0.4	1.5	1.9	1.4	.	.	.	.
Gross domestic product	102.8	103.3	103.1	104.6	106.5	0.5	- 0.3	1.4	1.8	.	.	.	.
Terms of trade	100.0	100.2	95.8	96.2	98.3	0.2	- 4.4	0.4	2.2	.	.	.	.
<b>V. Distribution of national income</b>													
Wages and salaries	2,015.6	1,058.0	1,099.0	1,120.4	1,131.5	2.7	3.9	1.9	1.0	72.0	72.8	73.2	72.6
Entrepreneurial and property income	805.0	411.1	410.3	410.9	428.1	- 0.1	- 0.2	0.2	4.2	28.0	27.2	26.8	27.4
National income	2,820.6	1,469.0	1,509.2	1,531.2	1,559.5	1.9	2.7	1.5	1.8	100	100	100	100
Memo item: Gross national income (Gross nat. product)	3,746.2	1,965.9	2,020.9	2,055.8	2,099.7	2.6	2.8	1.7	2.1	.	.	.	.

Source: Federal Statistical Office; figures computed in January 2003. Preliminary figure. — 1 Including telecommunications. — 2 Financial intermediation, real estate activities, rents and corporate services. — 3 Including care-at-home services. — 4 Gross value added after deduction of assumed

bank charges, but excluding taxes on products (offset against subsidies on products). — 5 Including private non-commercial organisations. — 6 Intangible fixed capital formation (inter alia, EDP software, copyrights) and economically useful animals and plants. — 7 Including net increase in valuables.

IX. Economic conditions

2. Output in the producing sector

Adjusted for working-day variations <sup>o</sup>

Period	Producing sector, total		Industry 1								Energy <sup>5</sup>		Construction	
			Total		Intermediate goods <sup>2</sup>		Capital goods <sup>3</sup>		Consumer goods <sup>4</sup>					
	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>														
1998	106.2	+ 3.4	109.6	+ 4.7	108.7	+ 3.0	116.2	+ 8.8	101.6	+ 1.1	100.4	- 1.3	87.2	- 3.2
1999	107.7	+ 1.4	111.5	+ 1.7	110.7	+ 1.8	118.0	+ 1.5	103.3	+ 1.7	100.0	- 0.4	87.9	+ 0.8
2000	113.4	+ 5.3	119.1	+ 6.8	116.9	+ 5.6	130.9	+ 10.9	105.6	+ 2.2	99.7	- 0.3	84.9	- 3.4
2001	113.2	- 0.2	119.9	+ 0.7	116.1	- 0.7	134.3	+ 2.6	105.2	- 0.4	98.1	- 1.6	79.0	- 6.9
2001 Nov.	117.3	- 4.0	123.4	- 4.2	117.6	- 4.9	138.8	- 3.6	110.6	- 3.9	105.4	- 1.1	84.7	- 5.3
Dec.	105.5	- 4.4	111.5	- 5.0	96.9	- 8.3	137.0	- 3.9	98.7	- 1.6	111.8	+ 4.7	61.2	- 6.3
2002 Jan.	100.9	- 4.2	107.6	- 4.4	107.4	- 4.6	114.4	- 5.2	98.2	- 2.3	111.1	- 0.9	48.4	- 5.3
Feb.	104.2	- 4.6	111.7	- 4.9	110.6	- 3.7	121.8	- 7.2	98.9	- 2.8	98.8	- 1.6	57.7	- 2.2
Mar.	7 117.7	- 2.7	125.5	- 3.5	123.0	- 1.7	139.5	- 6.3	109.1	- 1.3	103.4	- 0.6	7 75.3	+ 3.4
Apr.	7 111.6	- 1.4	117.8	- 1.5	116.9	- 0.2	130.1	- 2.3	101.5	- 2.4	97.4	- 1.0	7 79.6	- 1.4
May <sup>6</sup>	7 108.3	- 3.6	114.3	- 3.5	115.4	- 1.7	122.9	- 5.8	100.2	- 2.4	94.3	+ 2.2	7 78.3	- 8.6
June <sup>6</sup>	7 116.1	- 1.4	124.2	- 1.0	121.1	- 0.5	141.1	- 1.3	104.5	- 1.9	87.0	+ 1.6	7 83.0	- 7.2
July	7 111.7	- 1.2	118.3	- 0.5	118.5	+ 0.4	129.8	- 0.8	101.0	- 2.0	88.2	- 0.9	7 84.7	- 6.8
Aug.	7 104.2	- 1.1	109.7	- 0.6	111.7	+ 1.2	116.1	- 0.9	97.0	- 3.8	90.0	+ 2.4	7 76.9	- 8.8
Sep.	7 118.9	- 0.8	126.4	- 0.4	124.1	+ 2.5	141.1	- 2.7	108.9	- 1.4	93.4	+ 1.4	7 86.6	- 7.2
Oct. <sup>x</sup>	117.6	- 0.8	123.6	- 0.6	122.6	+ 1.3	134.5	- 0.9	109.3	- 3.5	103.8	+ 5.5	87.1	- 7.6
Nov. <sup>x</sup>	120.3	+ 2.6	127.0	+ 2.9	122.0	+ 3.7	144.4	+ 4.0	109.7	- 0.8	110.6	+ 4.9	82.1	- 3.1
<b>Western Germany</b>														
1998	105.9	+ 3.4	108.7	+ 4.4	107.6	+ 2.5	115.7	+ 8.6	99.9	+ 1.0	101.2	- 1.2	87.7	- 1.9
1999	107.2	+ 1.2	110.1	+ 1.3	109.0	+ 1.3	117.1	+ 1.2	101.1	+ 1.2	100.6	- 0.6	88.9	+ 1.4
2000	112.7	+ 5.1	117.1	+ 6.4	114.3	+ 4.9	129.8	+ 10.8	102.8	+ 1.7	99.8	- 0.8	87.5	- 1.6
2001	112.4	- 0.3	117.6	+ 0.4	113.2	- 1.0	132.9	+ 2.4	101.9	- 0.9	97.9	- 1.9	82.2	- 6.1
2001 Nov.	116.0	- 4.2	120.5	- 4.5	114.3	- 5.1	136.6	- 4.0	106.9	- 4.2	105.3	- 1.4	87.9	- 4.4
Dec.	104.8	- 4.6	109.2	- 5.4	94.4	- 8.6	135.2	- 4.4	95.3	- 2.0	111.5	+ 4.4	63.8	- 5.5
2002 Jan.	100.3	- 4.4	105.3	- 4.8	104.6	- 5.0	113.0	- 5.7	95.1	- 2.5	110.9	- 1.1	50.8	- 3.2
Feb.	103.6	- 5.0	109.4	- 5.4	107.7	- 4.3	120.4	- 7.7	95.7	- 3.3	98.7	- 1.8	60.9	- 2.2
Mar.	7 116.9	- 3.2	122.7	- 4.1	119.8	- 2.4	137.7	- 6.6	105.3	- 1.8	103.2	- 0.7	7 80.5	+ 4.8
Apr.	7 110.8	- 1.6	115.3	- 1.9	113.6	- 0.6	128.7	- 2.7	98.2	- 2.5	97.2	- 1.1	7 85.2	+ 0.5
May <sup>6</sup>	7 107.2	- 3.8	111.5	- 3.9	111.8	- 2.3	121.4	- 6.0	96.3	- 2.7	94.2	+ 2.5	7 83.3	- 7.1
June <sup>6</sup>	7 115.1	- 1.5	121.3	- 1.5	117.5	- 0.8	139.3	- 1.6	100.7	- 2.3	86.6	+ 1.5	7 88.0	- 5.4
July	7 110.9	- 1.1	115.8	- 0.7	115.1	+ 0.2	128.7	- 0.7	97.8	- 2.1	87.9	- 1.0	7 90.2	- 4.7
Aug.	7 102.4	- 1.3	106.4	- 1.0	107.8	+ 0.8	113.7	- 1.2	93.1	- 4.0	89.8	+ 2.6	7 80.1	- 6.8
Sep.	7 117.7	- 1.0	123.4	- 0.8	120.5	+ 2.4	138.9	- 3.3	105.1	- 2.0	93.4	+ 1.6	7 91.5	- 5.5
Oct. <sup>x</sup>	116.4	- 0.9	120.7	- 0.8	119.1	+ 1.3	132.5	- 1.3	105.7	- 3.6	103.6	+ 5.5	91.9	- 6.9
Nov. <sup>x</sup>	119.1	+ 2.7	123.9	+ 2.8	118.4	+ 3.6	142.1	+ 4.0	105.8	- 1.0	110.6	+ 5.0	86.4	- 1.7
<b>Eastern Germany</b>														
1998	109.1	+ 2.9	126.2	+ 9.2	125.9	+ 11.3	126.3	+ 11.5	126.5	+ 3.8	94.0	- 2.3	85.1	- 8.3
1999	114.4	+ 4.9	135.7	+ 7.5	137.1	+ 8.9	135.5	+ 7.3	134.0	+ 5.9	95.1	+ 1.2	84.2	- 1.1
2000	121.5	+ 6.2	152.7	+ 12.5	157.0	+ 14.5	153.2	+ 13.1	145.7	+ 8.7	98.3	+ 3.4	75.6	- 10.2
2001	123.0	+ 1.2	160.1	+ 4.8	162.6	+ 3.6	163.7	+ 6.9	152.6	+ 4.7	99.5	+ 1.2	67.1	- 11.2
2001 Nov.	132.8	- 1.7	172.5	- 0.1	170.2	- 1.4	186.4	+ 3.0	162.3	- 1.3	106.6	+ 1.4	73.2	- 9.1
Dec.	114.1	- 1.0	149.7	- 0.5	135.7	- 5.5	174.5	+ 3.7	146.5	+ 2.2	114.3	+ 7.4	51.9	- 9.6
2002 Jan.	108.4	- 1.3	146.7	+ 0.5	151.6	+ 0.1	143.7	+ 2.0	142.1	- 0.2	113.1	+ 1.1	39.7	- 13.7
Feb.	111.2	+ 1.3	151.0	+ 2.0	155.9	+ 3.3	151.0	- 0.3	143.7	+ 2.2	99.5	+ 0.2	46.2	- 1.7
Mar.	7 126.9	+ 2.6	171.9	+ 4.0	174.3	+ 6.6	177.1	+ 0.6	163.2	+ 3.8	105.4	+ 0.9	7 56.5	- 3.3
Apr.	7 120.8	+ 0.8	160.6	+ 3.5	169.3	+ 5.2	159.6	+ 5.5	148.2	- 1.5	98.6	- 0.4	7 59.5	- 9.7
May <sup>6</sup>	7 121.4	- 1.9	161.9	+ 1.4	171.9	+ 4.2	154.0	+ 4.8	154.5	+ 0.2	95.2	+ 0.1	7 60.3	- 15.4
June <sup>6</sup>	7 128.2	- 0.2	172.4	+ 3.4	177.2	+ 3.1	179.4	+ 4.8	158.3	+ 2.5	90.2	+ 2.3	7 65.1	- 14.8
July	7 121.2	- 2.6	159.8	+ 0.8	172.3	+ 3.5	153.9	- 1.9	146.6	- 0.8	90.8	+ 0.3	7 65.0	- 16.0
Aug.	7 124.7	- 0.8	165.7	+ 3.4	173.7	+ 5.1	166.6	+ 4.8	152.5	- 1.0	91.9	+ 1.2	7 65.3	- 16.7
Sep.	7 132.7	+ 0.5	177.6	+ 4.7	180.2	+ 2.6	188.1	+ 7.9	163.2	+ 4.7	93.5	- 0.3	7 68.8	- 14.5
Oct. <sup>x</sup>	131.7	- 0.2	172.7	+ 2.1	177.4	+ 1.7	178.0	+ 7.9	160.4	- 3.0	105.4	+ 5.0	69.8	- 11.1
Nov. <sup>x</sup>	134.7	+ 1.4	178.8	+ 3.7	178.9	+ 5.1	193.5	+ 3.8	164.3	+ 1.2	110.5	+ 3.7	66.6	- 9.0

Source of the unadjusted figures: Federal Statistical Office. — <sup>o</sup> By means of the Census X-12-ARIMA method, version 0.2.8. — 1 Manufacturing sector, unless assigned to the main grouping energy, plus mining and quarrying. — 2 Including mining and quarrying except energy-producing materials. — 3 Including manufacture of motor vehicles, trailers and semi-trailers. — 4 Including printing and service activities related to printing. — 5 Electricity, gas, steam and hot water supply, mining and quarrying of energy-pro-

ducing materials, and especially manufacture of refined petroleum products. — 6 Influenced by the exceptional working-day situation. — 7 Provisional up to adjustment to the figures of the annual overall survey in the construction sector. — <sup>x</sup> Provisional; adjusted in advance by the Federal Statistical Office, by way of estimates, to the results of the Quarterly Production Survey for the fourth quarter (industry in Germany: + 1.6%).

IX. Economic conditions

3. Orders received by industry \*

Adjusted for working-day variations ◦

Period	Industry											
	Total		Domestic orders		Foreign orders		Intermediate goods		Capital goods 1		Consumer goods 2	
	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>												
1998	111.0	+ 3.7	103.0	+ 4.0	125.4	+ 3.2	105.4	- 0.2	119.9	+ 8.1	100.1	+ 0.8
1999	113.3	+ 2.1	102.7	- 0.3	132.3	+ 5.5	106.3	+ 0.9	123.9	+ 3.3	101.0	+ 0.9
2000	128.9	+ 13.8	111.2	+ 8.3	161.0	+ 21.7	121.3	+ 14.1	144.1	+ 16.3	105.2	+ 4.2
2001	126.8	- 1.6	108.6	- 2.3	159.7	- 0.8	116.4	- 4.0	143.3	- 0.6	106.8	+ 1.5
2001 Nov.	123.3	- 8.6	105.8	- 8.4	155.0	- 8.8	111.8	- 10.4	140.3	- 8.8	104.7	- 2.1
2001 Dec.	120.9	- 5.5	99.9	- 4.2	158.9	- 7.0	102.6	- 8.1	147.6	- 4.4	92.6	- 2.3
2002 Jan.	123.0	- 4.3	103.9	- 5.0	157.4	- 3.5	113.0	- 7.5	138.4	- 2.3	104.7	- 2.4
2002 Feb.	123.0	- 5.9	102.6	- 7.7	159.7	- 3.7	114.6	- 4.4	135.3	- 7.5	109.5	- 4.1
2002 Mar.	137.5	- 2.7	112.3	- 8.3	183.0	+ 4.4	124.8	- 2.9	155.5	- 2.8	119.3	- 1.3
2002 Apr.	125.6	+ 0.7	105.0	- 2.9	162.9	+ 5.4	118.3	+ 1.7	140.3	+ 0.1	102.6	+ 0.5
2002 May	127.3	+ 0.7	101.4	- 5.1	174.0	+ 7.6	116.5	- 1.0	147.9	+ 2.9	96.3	- 2.5
2002 June	130.4	- 1.6	107.0	- 2.1	172.7	- 0.9	121.5	- 0.7	148.6	- 2.0	101.1	- 2.2
2002 July	126.1	+ 0.3	106.5	- 2.0	161.5	+ 3.3	118.4	+ 1.5	142.3	+ 0.6	99.4	- 4.6
2002 Aug.	118.3	+ 1.2	100.7	- 3.3	150.1	+ 7.1	108.7	+ 0.7	133.1	+ 3.7	101.1	- 6.6
2002 Sep.	131.4	+ 3.2	109.4	- 1.3	171.2	+ 8.9	121.6	+ 4.9	146.8	+ 3.2	113.0	- 1.6
2002 Oct.	129.4	+ 4.7	108.7	+ 1.6	166.9	+ 8.7	121.0	+ 4.8	144.8	+ 6.7	107.3	- 2.6
2002 Nov. P	131.4	+ 6.6	108.4	+ 2.5	173.0	+ 11.6	120.8	+ 8.1	150.4	+ 7.2	104.5	- 0.2
<b>Western Germany</b>												
1998	110.2	+ 3.0	102.4	+ 3.6	123.5	+ 2.0	104.0	- 0.9	119.8	+ 7.1	99.0	+ 0.5
1999	112.3	+ 1.9	101.8	- 0.6	130.2	+ 5.4	104.5	+ 0.5	123.9	+ 3.4	99.7	+ 0.7
2000	127.5	+ 13.5	109.7	+ 7.8	158.0	+ 21.4	118.7	+ 13.6	144.0	+ 16.2	103.1	+ 3.4
2001	124.8	- 2.1	106.7	- 2.7	155.8	- 1.4	112.9	- 4.9	142.8	- 0.8	104.4	+ 1.3
2001 Nov.	121.3	- 8.7	103.7	- 8.8	151.6	- 8.6	108.4	- 10.9	140.1	- 8.7	102.0	- 1.9
2001 Dec.	118.6	- 5.4	97.5	- 4.1	154.8	- 6.8	99.3	- 9.0	146.4	- 3.6	90.3	- 2.3
2002 Jan.	121.0	- 4.8	101.9	- 5.7	153.8	- 3.7	108.9	- 8.6	138.8	- 2.2	102.2	- 2.8
2002 Feb.	120.9	- 6.1	100.7	- 8.4	155.7	- 3.4	111.0	- 4.1	134.9	- 8.0	107.3	- 4.3
2002 Mar.	133.1	- 4.4	110.0	- 8.8	172.8	+ 1.0	120.0	- 4.1	151.0	- 5.3	116.9	- 1.4
2002 Apr.	123.4	+ 0.8	103.1	- 2.6	158.4	+ 5.0	114.3	+ 1.2	140.0	+ 0.7	99.9	+ 0.4
2002 May	125.4	+ 1.0	99.2	- 5.3	170.3	+ 8.2	112.5	- 1.6	148.4	+ 3.8	93.3	- 2.9
2002 June	127.9	- 2.0	104.4	- 3.0	168.2	- 1.0	117.6	- 1.0	147.7	- 2.6	98.2	- 2.7
2002 July	124.4	+ 0.4	104.6	- 2.1	158.4	+ 3.4	114.3	+ 1.1	143.1	+ 1.2	97.3	- 4.8
2002 Aug.	115.1	+ 0.2	98.0	- 4.2	144.4	+ 5.7	104.1	± 0.0	131.0	+ 2.3	98.4	- 7.3
2002 Sep.	129.0	+ 3.4	107.0	- 1.3	166.8	+ 8.9	117.3	+ 4.8	146.3	+ 3.6	110.4	- 1.8
2002 Oct.	126.8	+ 4.4	106.0	+ 1.0	162.4	+ 8.2	116.7	+ 4.5	143.8	+ 6.1	104.5	- 2.9
2002 Nov. P	128.4	+ 5.9	105.9	+ 2.1	167.0	+ 10.2	116.7	+ 7.7	148.4	+ 5.9	101.5	- 0.5
<b>Eastern Germany</b>												
1998	124.0	+ 15.6	109.6	+ 8.1	196.3	+ 43.0	126.6	+ 7.7	121.3	+ 27.3	124.3	+ 6.0
1999	129.7	+ 4.6	113.9	+ 3.9	209.7	+ 6.8	134.7	+ 6.4	124.6	+ 2.7	131.8	+ 6.0
2000	153.4	+ 18.3	129.8	+ 14.0	272.8	+ 30.1	162.6	+ 20.7	145.3	+ 16.6	151.5	+ 14.9
2001	161.2	+ 5.1	133.0	+ 2.5	303.9	+ 11.4	172.9	+ 6.3	150.3	+ 3.4	160.9	+ 6.2
2001 Nov.	156.5	- 6.7	131.8	- 4.6	281.4	- 11.3	167.2	- 4.3	144.2	- 10.0	166.2	- 2.9
2001 Dec.	160.3	- 6.2	130.7	- 4.3	309.8	- 10.1	156.0	+ 3.6	168.0	- 13.8	144.5	- 4.0
2002 Jan.	155.5	+ 1.5	128.8	+ 1.9	290.3	+ 0.6	179.0	+ 6.5	131.8	- 4.5	162.1	+ 2.3
2002 Feb.	156.4	- 3.6	126.2	- 1.2	308.9	- 8.3	170.7	- 7.6	142.1	+ 0.8	159.6	- 1.6
2002 Mar.	210.6	+ 19.5	140.8	- 3.4	563.7	+ 70.3	201.3	+ 10.1	227.7	+ 33.2	175.8	+ 1.7
2002 Apr.	162.4	- 0.9	129.3	- 6.0	329.9	+ 10.9	181.2	+ 7.3	144.1	- 9.8	165.3	+ 2.2
2002 May	159.8	- 2.4	129.5	- 2.3	312.8	- 2.7	180.2	+ 5.3	139.3	- 11.7	164.9	+ 3.5
2002 June	172.8	+ 4.9	140.0	+ 7.4	338.6	- 0.1	183.9	+ 2.5	163.5	+ 7.4	168.2	+ 5.0
2002 July	154.3	- 1.5	130.3	- 2.1	275.4	± 0.0	183.4	+ 5.4	128.6	- 9.2	147.5	- 2.3
2002 Aug.	172.8	+ 14.9	135.1	+ 7.0	363.3	+ 33.6	182.1	+ 7.7	166.7	+ 26.7	161.5	+ 3.9
2002 Sep.	172.1	+ 2.0	139.9	- 0.5	334.7	+ 7.4	189.4	+ 5.9	155.6	- 2.6	172.8	+ 2.6
2002 Oct.	174.2	+ 10.5	142.2	+ 6.9	336.2	+ 19.1	189.5	+ 8.2	160.4	+ 16.0	172.6	+ 1.5
2002 Nov. P	182.6	+ 16.7	140.4	+ 6.5	396.2	+ 40.8	185.7	+ 11.1	181.9	+ 26.1	173.8	+ 4.6

Source of the unadjusted figures: Federal Statistical Office. — \* Economic activities of the manufacturing sector, in particular, excluding manufacture of food products, beverages, tobacco and refined petroleum products; results for kinds of activity units; figures excluding value-added tax. — ◦ By

means of the Census X-12-ARIMA method, version 0.2.8. — 1 Including manufacture of motor vehicles, trailers and semitrailers. — 2 Including printing and service activities related to printing.

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	Change from previous year in %	1995 = 100			1995 = 100	Change from previous year in %	1995 = 100		
1998	84.0	- 0.5	82.4	79.9	90.1	86.6	+ 0.6	83.4	86.7	88.8	77.7	- 3.4	80.4	64.7	93.8
1999	82.2	- 2.1	78.2	80.2	87.6	87.3	+ 0.8	84.0	88.7	88.1	69.9	- 10.0	66.2	61.1	86.2
2000	75.1	- 8.6	65.4	75.6	82.1	81.2	- 7.0	73.3	84.9	82.7	60.5	- 13.4	49.2	54.4	80.3
2001	71.0	- 5.5	54.2	73.3	81.3	79.2	- 2.5	64.2	84.9	83.3	51.6	- 14.7	33.6	47.1	75.6
2001 Oct.	69.2	- 5.6	50.5	67.5	85.7	77.0	- 4.9	59.3	77.6	89.0	50.6	- 8.5	32.4	44.7	76.8
Nov.	61.2	- 3.2	39.9	69.4	67.7	66.7	- 2.6	47.1	79.7	65.6	48.2	- 4.7	25.3	46.1	73.6
Dec.	59.7	- 14.0	39.4	67.0	66.7	69.1	- 10.5	48.5	80.6	70.6	37.5	- 26.2	20.9	36.1	55.7
2002 Jan.	47.1	- 8.2	38.0	51.9	48.4	53.6	- 8.2	47.3	59.7	51.0	31.7	- 7.6	19.1	34.0	40.7
Feb.	55.5	- 3.0	40.9	62.7	58.1	60.1	- 7.5	49.7	66.8	59.7	44.8	+ 16.1	23.0	53.6	53.7
Mar.	83.9	+ 5.4	55.6	96.4	90.8	98.5	+ 10.5	69.5	118.8	95.7	49.6	- 13.4	27.2	45.8	77.1
Apr.	71.4	- 4.9	52.8	72.3	85.0	80.1	- 6.8	64.8	82.1	88.7	51.0	+ 2.6	28.3	50.1	74.5
May	69.3	- 14.1	51.3	67.3	85.8	75.9	- 15.2	62.4	77.0	84.3	53.6	- 10.1	28.6	45.3	90.1
June	79.8	- 11.4	55.2	77.6	101.9	88.2	- 10.3	66.6	88.9	102.8	60.1	- 15.2	31.9	52.0	99.2
July	70.4	- 5.5	45.3	72.4	87.7	78.4	- 4.2	55.1	83.8	88.7	51.7	- 9.6	25.2	46.8	84.9
Aug.	66.4	- 11.2	46.4	64.8	83.9	70.8	- 13.3	54.5	72.2	80.8	55.9	- 4.3	29.9	48.1	92.5
Sep.	76.5	- 2.4	50.6	76.3	97.1	84.0	- 4.1	61.0	85.9	98.3	58.7	+ 3.9	29.2	54.5	93.6
Oct.	63.5	- 8.2	44.1	64.2	77.9	69.9	- 9.2	55.2	72.7	77.0	48.5	- 4.2	21.3	44.8	80.4

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 en-

gineering". — ◦ Bundesbank calculation. — 1 Including the railways and post office.

5. Retail trade turnover \*)  
Germany

Period	Retail trade 1										e te					
	by enterprises' main product range										Retail trade plus retail sales of motor vehicles and motorcycles plus sales of automotive fuel					
	Total		Food, beverages, tobacco 2		Pharmaceutical and medical goods, cosmetic and toilet articles 2		Clothing, footwear and leather goods 2		Furniture and lighting equipment 2		Retail trade plus retail sales of motor vehicles and motorcycles plus sales of automotive fuel		Retail sales of motor vehicles 3			
2000 = 100	Change from previous year in %	not adjusted	price-adjusted 4	2000 = 100	Change from previous year in %	2000 = 100	Change from previous year in %	2000 = 100	Change from previous year in %	2000 = 100	Change from previous year in %	2000 = 100	Change from previous year in %	2000 = 100	Change from previous year in %	
1998	96.9	+ 1.0	+ 1.1	97.1	+ 1.5	88.2	+ 5.8	100.3	- 1.1	104.4	+ 3.9	97.5	+ 1.8	+ 1.5	99.2	+ 5.5
1999	97.7	+ 0.8	+ 0.5	98.0	+ 0.9	94.7	+ 7.4	100.2	- 0.1	102.3	- 2.0	98.7	+ 1.2	+ 0.8	102.9	+ 3.7
2000	100.0	+ 2.4	+ 1.2	100.0	+ 2.0	100.0	+ 5.6	100.0	- 0.2	100.0	- 2.2	100.0	+ 1.3	+ 0.1	100.0	- 2.8
2001	101.9	+ 1.9	+ 0.2	104.7	+ 4.7	107.4	+ 7.4	99.6	- 0.4	98.8	- 1.2	101.9	+ 1.9	+ 0.4	102.3	+ 2.3
2001 June	96.9	+ 4.8	+ 2.2	104.4	+ 6.5	104.3	+ 8.3	88.1	+ 2.4	89.8	+ 3.0	99.1	+ 4.4	+ 2.1	106.5	+ 3.1
July	98.0	+ 2.8	+ 0.3	102.1	+ 6.6	108.1	+ 10.1	93.1	- 0.6	89.0	- 4.6	99.9	+ 3.4	+ 1.2	106.3	+ 4.9
Aug.	98.7	+ 2.3	+ 0.3	104.8	+ 7.7	106.4	+ 8.1	89.0	- 4.2	88.3	+ 0.2	98.5	+ 2.3	+ 0.3	96.9	+ 2.0
Sep.	97.4	- 0.9	- 2.2	97.4	+ 1.2	100.3	+ 3.0	110.3	+ 6.0	92.2	- 4.1	96.6	- 0.6	- 1.8	94.0	+ 1.6
Oct.	104.4	+ 2.8	+ 1.4	106.0	+ 7.7	110.2	+ 8.5	104.6	- 5.4	105.7	+ 0.6	104.7	+ 4.4	+ 3.0	106.5	+ 11.3
Nov.	110.6	+ 2.5	+ 1.4	111.5	+ 6.9	113.0	+ 7.7	109.9	+ 1.6	112.7	- 2.7	109.7	+ 3.5	+ 2.4	108.0	+ 8.3
Dec.	123.2	- 0.2	- 1.4	123.2	+ 4.0	124.0	+ 7.7	124.7	- 3.2	116.8	- 4.6	116.6	- 0.3	- 1.5	93.8	- 0.1
2002 Jan.	92.6	- 2.6	- 4.1	95.9	+ 1.9	108.2	+ 1.8	83.6	- 5.3	87.4	- 7.3	91.3	- 1.9	- 3.6	87.4	+ 0.9
Feb.	86.9	- 1.3	- 2.7	93.3	+ 2.9	100.4	+ 4.0	72.9	- 5.0	86.1	- 7.9	87.8	- 0.5	- 2.1	92.0	+ 3.4
Mar.	102.6	- 2.0	- 3.4	110.6	+ 2.5	109.0	+ 2.2	99.4	- 0.2	93.4	- 14.8	104.3	- 3.1	- 4.5	111.0	- 6.4
Apr.	101.0	± 0.0	- 1.0	105.6	+ 0.4	113.6	+ 10.3	98.0	- 4.8	92.4	- 5.3	104.6	+ 2.0	+ 0.7	117.9	+ 9.4
May	99.9	- 4.4	- 4.7	108.2	- 0.8	109.4	- 0.2	97.0	- 10.1	83.0	- 13.5	101.8	- 4.7	- 5.2	108.4	- 5.0
June	93.2	- 3.8	- 3.5	101.1	- 3.2	106.1	+ 1.7	85.9	- 2.5	78.1	- 13.0	96.6	- 2.5	- 2.6	108.9	+ 2.3
July	99.2	+ 1.2	+ 1.7	104.7	+ 2.5	114.8	+ 6.2	93.2	+ 0.1	87.6	- 1.6	102.2	+ 2.3	+ 2.1	112.8	+ 6.1
Aug.	96.3	- 2.4	- 2.1	105.4	+ 0.6	109.4	+ 2.8	86.1	- 3.3	80.6	- 8.7	96.3	- 2.2	- 2.2	95.4	- 1.5
Sep.	96.3	- 1.1	- 0.8	98.9	+ 1.5	107.4	+ 7.1	99.7	- 9.6	85.6	- 7.2	96.8	+ 0.2	+ 0.1	98.5	+ 4.8
Oct.	103.9	- 0.5	- 0.4	106.6	+ 0.6	112.0	+ 1.6	107.8	+ 3.1	97.7	- 7.6	104.7	± 0.0	- 0.1	108.7	+ 2.1
Nov. 5	103.6	- 6.3	- 6.0	104.5	- 6.3	114.2	+ 1.1	100.6	- 8.5	102.9	- 8.7	102.5	- 6.6	- 6.5	99.8	- 7.6

Source: Federal Statistical Office. — \* Excluding value-added tax; figures from 2001 provisional, partly revised and, judging by past experience, subject to considerable uncertainty in the most recent months. — 1 Excluding

sales of motor vehicles and motorcycles and excluding the sale of automotive fuel. — 2 Retail sales in stores. — 3 Including motor vehicle parts and accessories. — 4 At 1995 prices.

IX. Economic conditions

6. Labour market \*

Period	Employed 1,2			Employees 1		Persons in employment 3		Short-time workers	Persons employed under employment-promotion schemes 5	Persons undergoing vocational further training	Unemployed		Unemployment rate 6 in %	Vacancies, thousands		
	Thousands	Change from previous year		Thousands	Change from previous year in %	Mining and manufacturing sector	Construction 4				Thousands	Thousands			Thousands	Change from previous year, thousands
		in %	Thousands													
<b>Germany</b>																
2000	38,753	+ 1.8	+ 675	34,748	+ 1.8	6,373	1,053	86	316	352	3,889	- 211	9.6	514		
2001	38,919	+ 0.4	+ 166	34,835	+ 0.3	6,395	958	123	243	345	3,852	- 37	9.4	506		
2002	...	...	...	...	...	...	...	207	192	332	4,060	+ 209	9.8	451		
2001 Dec.	39,139	- 0.2	- 67			6,336	921	176	215	319	3,964	+ 155	9.6	389		
2002 Jan.	38,354	- 0.2	- 69			6,272	864	212	198	317	4,290	+ 197	10.4	422		
Feb.	38,343	- 0.2	- 81	34,302	- 0.3	6,247	840	246	192	326	4,296	+ 184	10.4	487		
Mar.	38,495	- 0.3	- 104			6,237 <sup>9</sup>	879	258	187	335	4,156	+ 156	10.0	527		
Apr.	38,698	- 0.3	- 120			6,219	897	245	185	345	4,024	+ 156	9.7	537		
May	38,753	- 0.5	- 189	34,637	- 0.5	6,207	897	201	184	348	3,946	+ 226 <sup>7</sup>	9.5	517		
June	38,722	- 0.6	- 247			6,198	896	202	185	336	3,954	+ 260	9.5	497		
July	38,653	- 0.7	- 262			6,214	894	173	187	315	4,047	+ 248	9.7	471		
Aug.	38,670	- 0.9	- 332	34,644	- 0.9	6,220	895	145	191	320	4,018	+ 229	9.6	458		
Sep.	38,857	- 0.9	- 356			6,215	893	216	199	337	3,942	+ 199	9.5	420		
Oct.	○ 38,927	○ - 0.9	○ - 361			6,187	884	214	202	342	3,930	+ 204	9.4	378		
Nov.	...	...	...	...	...	...	...	205	197	339	4,026	+ 237	9.7	344		
Dec.	...	...	...	...	...	...	...	165	180	318	4,225	+ 262	10.1	324		
<b>Western Germany</b>																
2000	.	.	.	.	.	5,761	749	62	70	212	2,529	- 226	7.8	452		
2001	.	.	.	.	.	5,769	696	96	61	209	2,478	- 51	7.4	440		
2002	.	.	.	.	.	...	...	165	50	203	2,649	+ 171	7.9	382		
2001 Dec.	.	.	.	.	.	5,708	674	147	54	189	2,584	+ 130	7.7	334		
2002 Jan.	.	.	.	.	.	5,649	640	179	52	190	2,791	+ 169	8.3	367		
Feb.	.	.	.	.	.	5,626	624	207	51	197	2,789	+ 166	8.3	419		
Mar.	.	.	.	.	.	5,616 <sup>9</sup>	652	217	50	204	2,683	+ 144	8.0	449		
Apr.	.	.	.	.	.	5,597	666	206	50	212	2,603	+ 129	7.8	457		
May	.	.	.	.	.	5,585	665	166	50	215	2,561	+ 176 <sup>7</sup>	7.6	439		
June	.	.	.	.	.	5,575	663	168	50	209	2,560	+ 180	7.6	421		
July	.	.	.	.	.	5,590	662	145	50	193	2,636	+ 191	7.8	398		
Aug.	.	.	.	.	.	5,592	662	106	50	195	2,631	+ 185	7.8	379		
Sep.	.	.	.	.	.	5,585	660	143	49	207	2,594	+ 173	7.7	350		
Oct.	.	.	.	.	.	5,559	654	156	49	211	2,605	+ 193	7.7	317		
Nov.	.	.	.	.	.	...	...	159 <sup>8</sup>	49 <sup>8</sup>	208 <sup>8</sup>	2,650 <sup>8</sup>	+ 182 <sup>8</sup>	7.8 <sup>8</sup>	289		
Dec.	.	.	.	.	.	...	...	135	45	195	2,780	+ 196	8.2	274		
<b>Eastern Germany</b>																
2000	.	.	.	.	.	612	305	24	246	140	1,359	+ 16	17.4	62		
2001	.	.	.	.	.	626	262	27	182	136	1,374	+ 14	17.5	66		
2002	.	.	.	.	.	...	...	41	142	129	1,411	+ 38	18.0	69		
2001 Dec.	.	.	.	.	.	628	247	29	161	130	1,380	+ 24	17.6	55		
2002 Jan.	.	.	.	.	.	623	224	33	147	128	1,499	+ 28	19.1	56		
Feb.	.	.	.	.	.	622	215	39	141	129	1,507	+ 17	19.2	68		
Mar.	.	.	.	.	.	621 <sup>9</sup>	227	41	137	131	1,473	+ 13	18.8	78		
Apr.	.	.	.	.	.	622	231	40	136	133	1,421	+ 27	18.1	80		
May	.	.	.	.	.	622	232	35	135	133	1,385	+ 49 <sup>7</sup>	17.7	78		
June	.	.	.	.	.	623	232	35	135	128	1,394	+ 80	17.8	76		
July	.	.	.	.	.	624	232	28	137	122	1,411	+ 57	18.0	73		
Aug.	.	.	.	.	.	628	232	38	141	125	1,387	+ 45	17.7	79		
Sep.	.	.	.	.	.	630	233	74	150	130	1,347	+ 26	17.2	70		
Oct.	.	.	.	.	.	628	231	57	153	131	1,325	+ 12	16.9	61		
Nov.	.	.	.	.	.	...	...	46 <sup>8</sup>	149 <sup>8</sup>	131 <sup>8</sup>	1,376 <sup>8</sup>	+ 55 <sup>8</sup>	17.6 <sup>8</sup>	55		
Dec.	.	.	.	.	.	...	...	30	136	123	1,446	+ 66	18.4	50		

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. — 2 Annual figures, calculated by the Bundesbank; deviations from the official figures are due to rounding. — 3 Including active proprietors. — 4 The figures refer to the economic classifications "Site preparation" and "Building of complete constructions or parts thereof; civil engineering". — 5 Employees involved in job creation schemes and structural adjustment measures (SAM). — 6 Relative to the

total civilian labour force. — 7 From May 2002 calculated on the basis of new labour force figures. — 8 From November 2002, change against previous periods understated for western Germany and overstated for eastern Germany owing to restructuring of labour exchange districts in Berlin. — 9 The figures from March 2002 onwards are positively influenced by the fact that construction firms which are required to report and which have been identified in the course of drawing up the corporate register are included for the first time. — ○ First preliminary estimate.



IX. Economic conditions

7. Prices  
Germany

Period	Consumer price index for all households							Overall construction price level 1	Index of producer prices of industrial products sold on the domestic market 2	Index of producer prices of farm products 2	Indices of foreign trade prices		Index of world market prices of raw materials 3
	By region		By product group				Exports				Imports		
	Western Germany	Eastern Germany	Food	Other durable and non-durable consumer goods	Services excluding house rents 1	House rents							
	1995 = 100												
	Index level												
1999	104.9	104.8	105.7	101.9	102.8	106.4	109.2	98.5	98.5	89.9	100.9	100.2	113.4
2000	106.9	106.9	107.5	101.5	106.1	108.0	110.6	99.2	101.8	95.4	104.4	111.4	172.2
2001	109.6	109.4	110.6	106.8	108.3	111.2	112.0	99.4	104.9	100.8	105.4	112.1	157.5
2002	111.0	110.9	111.8	108.0	109.1	113.6	113.5	99.5	...	...	...	...	151.0
2001 Jan.	108.3	108.2	109.1	103.5	107.3	109.8	111.4		104.4	96.2	105.3	112.9	158.9
Feb.	109.0	108.9	109.8	103.9	108.1	111.0	111.5	99.5	104.7	98.5	105.4	113.6	167.4
Mar.	109.1	109.0	110.0	105.1	108.2	110.7	111.6		104.9	102.7	105.6	113.3	161.3
Apr.	109.5	109.3	110.4	107.0	108.5	110.4	111.7		105.4	103.0	105.7	113.9	166.4
May	110.0	109.8	111.1	109.0	109.2	110.3	111.8	99.5	105.6	103.7	106.0	115.0	175.4
June	110.2	110.0	111.2	109.3	109.0	111.2	111.9		105.7	100.3	106.0	114.7	176.0
July	110.2	110.0	111.3	108.7	108.4	112.7	112.0		105.2	100.5	105.8	113.0	166.0
Aug.	110.0	109.8	111.0	107.3	108.4	112.5	112.1	99.4	105.1	101.9	105.4	111.7	160.7
Sep.	110.0	109.8	111.0	107.1	108.9	111.7	112.2		105.2	102.6	105.3	111.1	157.2
Oct.	109.7	109.5	110.7	107.2	108.2	111.2	112.3		104.3	100.9	105.0	109.3	138.9
Nov.	109.5	109.3	110.5	106.6	107.9	111.1	112.4	99.3	104.0	100.5	104.9	108.7	131.9
Dec.	109.6	109.4	110.7	107.2	107.8	111.4	112.5		103.7	99.8	104.8	108.5	130.2
2002 Jan.	110.6	110.4	111.7	110.4	108.7	112.2	112.9		104.3	98.2	104.9	109.1	135.1
Feb.	110.9	110.7	111.9	109.8	108.9	113.0	113.0	99.4	104.4	99.4	104.9	109.6	141.1
Mar.	111.1	110.9	112.0	109.6	109.4	113.0	113.2		104.7	99.7	105.2	110.5	157.5
Apr.	111.2	111.0	112.1	109.5	109.8	112.6	113.3		104.6	96.0	105.4	110.7	162.9
May	111.2	111.0	112.0	109.4	109.4	113.2	113.4	99.5	104.6	94.5	105.4	110.1	157.5
June	111.1	110.9	111.7	108.4	109.1	113.9	113.5		104.5	r 93.7	105.4	108.7	147.9
July	111.3	111.2	111.9	107.7	108.9	115.2	113.6		104.2	r 93.5	105.3	108.2	147.0
Aug.	111.2	111.1	111.7	106.8	108.9	115.0	113.7	99.5	104.1	r 93.4	105.4	108.8	152.0
Sep.	111.1	111.0	111.8	106.6	109.3	114.2	113.7		104.3	94.6	105.5	109.5	158.8
Oct.	111.1	111.0	111.6	106.2	109.4	114.0	113.8		104.6	p 94.1	105.5	109.5	156.5
Nov.	110.7	110.5	111.3	105.7	108.9	113.4	113.9	99.4	104.4	p 94.8	105.4	108.0	144.2
Dec.	110.8	110.7	111.3	106.0	109.0	113.6	114.0		...	...	...	...	151.9
	Change from previous year in %												
1999	+ 0.6	+ 0.7	+ 0.4	- 1.1	+ 0.9	+ 0.3	+ 1.1	- 0.3	- 1.0	- 6.0	- 0.5	- 0.5	+ 16.9
2000	+ 1.9	+ 2.0	+ 1.7	- 0.4	+ 3.2	+ 1.5	+ 1.3	+ 0.7	+ 3.4	+ 6.1	+ 3.5	+ 11.2	+ 51.9
2001	+ 2.5	+ 2.3	+ 2.9	+ 5.2	+ 2.1	+ 3.0	+ 1.3	+ 0.2	+ 3.0	+ 5.7	+ 1.0	+ 0.6	- 8.5
2002	+ 1.3	+ 1.4	+ 1.1	+ 1.1	+ 0.7	+ 2.2	+ 1.3	+ 0.1	...	...	...	...	- 4.1
2001 Jan.	+ 2.4	+ 2.4	+ 2.5	+ 2.2	+ 2.7	+ 2.7	+ 1.3		+ 4.6	+ 5.7	+ 2.8	+ 6.5	+ 8.2
Feb.	+ 2.6	+ 2.6	+ 2.7	+ 1.9	+ 3.2	+ 3.2	+ 1.2	+ 0.6	+ 4.7	+ 5.7	+ 2.5	+ 5.4	+ 6.5
Mar.	+ 2.5	+ 2.5	+ 2.8	+ 3.8	+ 2.8	+ 3.1	+ 1.2		+ 4.9	+ 8.7	+ 2.4	+ 4.2	- 0.1
Apr.	+ 2.9	+ 2.8	+ 3.2	+ 5.0	+ 3.4	+ 2.5	+ 1.2		+ 5.0	+ 9.1	+ 2.0	+ 5.1	+ 11.0
May	+ 3.5	+ 3.4	+ 3.8	+ 6.7	+ 3.9	+ 3.1	+ 1.2	+ 0.3	+ 4.6	+ 9.0	+ 1.6	+ 4.0	+ 1.9
June	+ 3.1	+ 3.0	+ 3.4	+ 6.9	+ 2.9	+ 3.1	+ 1.2		+ 4.3	+ 3.9	+ 1.6	+ 3.6	+ 3.4
July	+ 2.6	+ 2.5	+ 3.2	+ 6.8	+ 2.2	+ 3.0	+ 1.2		+ 3.1	+ 3.4	+ 1.1	+ 1.7	- 1.0
Aug.	+ 2.6	+ 2.4	+ 3.0	+ 6.2	+ 2.2	+ 3.0	+ 1.2	+ 0.1	+ 2.7	+ 4.5	+ 0.4	- 0.9	- 10.3
Sep.	+ 2.1	+ 2.0	+ 2.8	+ 6.4	+ 1.2	+ 3.1	+ 1.2		+ 1.9	+ 5.0	- 0.3	- 3.6	- 20.4
Oct.	+ 2.0	+ 2.0	+ 2.7	+ 6.6	+ 0.7	+ 3.2	+ 1.2		+ 0.6	+ 1.8	- 0.8	- 5.6	- 29.9
Nov.	+ 1.7	+ 1.5	+ 2.0	+ 5.4	+ 0.1	+ 2.8	+ 1.3	- 0.2	+ 0.1	+ 0.3	- 0.9	- 6.6	- 34.4
Dec.	+ 1.7	+ 1.6	+ 2.2	+ 5.3	+ 0.3	+ 2.8	+ 1.3		+ 0.1	+ 1.0	- 0.7	- 4.7	- 21.2
2002 Jan.	+ 2.1	+ 2.0	+ 2.4	+ 6.7	+ 1.3	+ 2.2	+ 1.3		- 0.1	+ 2.1	- 0.4	- 3.4	- 15.0
Feb.	+ 1.7	+ 1.7	+ 1.9	+ 5.7	+ 0.7	+ 1.8	+ 1.3	- 0.1	- 0.3	+ 0.9	- 0.5	- 3.5	- 15.7
Mar.	+ 1.8	+ 1.7	+ 1.8	+ 4.3	+ 1.1	+ 2.1	+ 1.4		- 0.2	- 2.9	- 0.4	- 2.5	- 2.4
Apr.	+ 1.6	+ 1.6	+ 1.5	+ 2.3	+ 1.2	+ 2.0	+ 1.4		- 0.8	- 6.8	- 0.3	- 2.8	- 2.1
May	+ 1.1	+ 1.1	+ 0.8	+ 0.4	+ 0.2	+ 2.6	+ 1.4	± 0.0	- 0.9	- 8.9	- 0.6	- 4.3	- 10.2
June	+ 0.8	+ 0.8	+ 0.4	- 0.8	+ 0.1	+ 2.4	+ 1.4		- 1.1	r - 6.6	- 0.6	- 5.2	- 16.0
July	+ 1.0	+ 1.1	+ 0.5	- 0.9	+ 0.5	+ 2.2	+ 1.4		- 1.0	r - 7.0	- 0.5	- 4.2	- 11.4
Aug.	+ 1.1	+ 1.2	+ 0.6	- 0.5	+ 0.5	+ 2.2	+ 1.4	+ 0.1	- 1.0	r - 8.3	± 0.0	- 2.6	- 5.4
Sep.	+ 1.0	+ 1.1	+ 0.7	- 0.5	+ 0.4	+ 2.2	+ 1.3		- 0.9	- 7.8	+ 0.2	- 1.4	+ 1.0
Oct.	+ 1.3	+ 1.4	+ 0.8	- 0.9	+ 1.1	+ 2.5	+ 1.3		+ 0.3	p - 6.7	+ 0.5	+ 0.2	+ 12.7
Nov.	+ 1.1	+ 1.1	+ 0.7	- 0.8	+ 0.9	+ 2.1	+ 1.3	+ 0.1	+ 0.4	p - 5.7	+ 0.5	- 0.6	+ 9.3
Dec.	+ 1.1	+ 1.2	+ 0.5	- 1.1	+ 1.1	+ 2.0	+ 1.3		...	...	...	...	+ 16.7

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 euro basis.

## IX. Economic conditions

### 8. Households' income \* Germany

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

Period	Gross wages and salaries 1		Net wages and salaries 2		Monetary social benefits received 3		"Mass income" 4		Disposable income 5		Saving 6		Saving ratio 7
	DM / €	Change from previous year in %	DM / €	Change from previous year in %	DM / €	Change from previous year in %	DM / €	Change from previous year in %	DM / €	Change from previous year in %	DM / €	Change from previous year in %	
1991	1,355.4	.	941.4	.	426.2	.	1,367.6	.	1,917.5	.	250.1	.	13.0
1992	1,467.3	8.3	1,003.0	6.5	473.9	11.2	1,476.9	8.0	2,054.3	7.1	266.1	6.4	13.0
1993	1,505.9	2.6	1,032.7	3.0	511.2	7.9	1,543.9	4.5	2,120.6	3.2	261.3	- 1.8	12.3
1994	1,528.1	1.5	1,029.3	- 0.3	529.4	3.6	1,558.6	1.0	2,181.9	2.9	254.0	- 2.8	11.6
1995	1,577.1	3.2	1,037.9	0.8	553.7	4.6	1,591.7	2.1	2,256.4	3.4	252.1	- 0.7	11.2
1996	1,594.0	1.1	1,032.7	- 0.5	595.7	7.6	1,628.3	2.3	2,307.5	2.3	249.5	- 1.0	10.8
1997	1,591.3	- 0.2	1,015.9	- 1.6	609.6	2.3	1,625.5	- 0.2	2,356.5	2.1	244.7	- 1.9	10.4
1998	1,624.3	2.1	1,038.9	2.3	621.5	1.9	1,660.3	2.1	2,422.8	2.8	249.6	2.0	10.3
1999	855.4	3.0	549.3	3.4	328.6	3.4	877.8	3.4	1,281.6	3.5	125.1	- 2.0	9.8
2000	885.5	3.5	572.8	4.3	339.5	3.3	912.3	3.9	1,320.4	3.0	129.5	3.5	9.8
2001	904.6	2.2	593.1	3.5	347.1	2.3	940.2	3.1	1,370.2	3.8	138.1	6.7	10.1
2000 3rd qtr	221.8	3.6	147.5	4.1	84.1	2.8	231.6	3.6	325.2	3.3	26.6	2.7	8.2
4th qtr	249.6	3.2	158.8	4.2	86.1	3.3	244.9	3.9	339.1	1.1	29.0	- 2.8	8.6
2001 1st qtr	208.6	3.2	137.0	3.9	87.1	2.0	224.0	3.1	340.0	3.8	45.8	4.6	13.5
2nd qtr	217.2	2.5	140.2	4.1	86.0	2.4	226.1	3.5	342.3	4.2	32.6	8.6	9.5
3rd qtr	225.4	1.7	152.0	3.1	86.5	2.9	238.5	3.0	335.6	3.2	28.0	5.0	8.3
4th qtr	253.4	1.5	163.9	3.2	87.6	1.7	251.5	2.7	352.3	3.9	31.7	9.3	9.0
2002 1st qtr	211.1	1.2	138.4	1.0	91.1	4.6	229.4	2.4	343.9	1.1	47.5	3.6	13.8
2nd qtr	219.5	1.0	141.2	0.8	90.1	4.7	231.3	2.3	343.1	0.2	32.9	1.0	9.6
3rd qtr	228.3	1.3	153.7	1.1	92.0	6.4	245.7	3.0	341.0	1.6	29.2	4.4	8.6

Source: Federal Statistical Office; figures computed in November 2002. — \* Households including non-profit institutions which serve households. — 1 Residence concept. — 2 After deducting the wage tax payable on gross wages and salaries and employees' contributions to the social security funds. — 3 Cash benefits from the social security funds, central, regional and local authorities and foreign countries, pension payments (net), social security benefits from private insurance schemes, less social security contributions on social benefits, consumption-related taxes and public

charges. — 4 Net wages and salaries plus monetary social benefits received. — 5 "Mass income" plus operating surplus, self-employed persons' income, property income (net), other current transfers received, income of non-profit organisations which serve households, less taxes (excluding wage tax and consumption-related taxes) and other current transfers paid. Including the increase in claims on company pension funds. — 6 Including the increase in claims on company pension funds. — 7 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 1				Wages and salaries per employee (work-place concept) 2		Negotiated wage and salary level 1				Wages and salaries per employee (work-place concept) 3	
	on an hourly basis		on a monthly basis		1995=100	% from previous year	on an hourly basis		on a monthly basis		1995=100	% from previous year
	1995=100	% from previous year	1995=100	% from previous year			1995=100	% from previous year	1995=100	% from previous year		
1991	76.7	.	78.6	.	82.4	.	73.4	.	76.9	.	77.6	.
1992	85.8	12.0	87.3	11.0	91.0	10.4	82.9	12.9	85.9	11.7	88.4	13.9
1993	92.2	7.5	92.9	6.5	95.0	4.4	90.6	9.3	92.0	7.1	92.3	4.4
1994	95.4	3.4	95.6	2.9	96.9	2.0	94.3	4.1	94.8	3.0	96.1	4.1
1995	100.0	4.9	100.0	4.6	100.0	3.2	100.0	6.1	100.0	5.5	100.0	4.1
1996	102.6	2.6	102.4	2.4	101.4	1.4	103.8	3.8	102.9	2.9	102.9	2.9
1997	104.1	1.5	103.9	1.5	101.7	0.3	105.8	1.9	104.6	1.7	104.7	1.7
1998	106.2	2.0	105.8	1.8	102.7	1.0	107.7	1.8	106.4	1.7	106.4	1.6
1999	109.2	2.8	108.6	2.7	104.3	1.5	110.9	3.0	109.4	2.9	108.3	1.8
2000	111.4	2.0	110.8	2.0	106.0	1.7	113.2	2.0	111.6	2.0	111.2	2.7
2001	113.6	2.0	113.0	2.0	108.0	1.9	115.2	1.8	113.6	1.8	113.7	2.2
2000 4th qtr	125.9	2.1	125.2	2.1	117.9	1.7	125.2	2.3	123.5	2.3	120.6	2.5
2001 1st qtr	103.8	2.1	103.2	2.1	100.8	2.3	104.1	1.6	102.6	1.6	107.2	3.1
2nd qtr	104.8	1.8	104.3	1.8	103.9	2.0	105.4	1.5	104.0	1.5	115.6	2.4
3rd qtr	117.3	2.0	116.7	1.9	107.5	1.6	123.5	2.0	121.9	2.0	109.2	2.0
4th qtr	128.6	2.2	127.9	2.1	120.0	1.8	127.7	2.0	125.9	2.0	122.6	1.7
2002 1st qtr	106.3	2.4	105.7	2.4	102.3	1.5	106.3	2.1	104.9	2.2	108.2	0.9
2nd qtr	107.7	2.8	107.2	2.8	105.5	1.6	109.1	3.5	107.7	3.5	117.8	1.9
3rd qtr	120.2	2.5	119.6	2.5	109.8	2.2	127.3	3.1	125.7	3.1	112.9	3.4
2002 May	108.4	3.0	107.8	3.0	.	.	111.1	4.5	109.6	4.5	118.5	0.7
June	108.0	2.9	107.5	2.9	.	.	109.5	3.6	108.1	3.7	122.0	2.9
July	144.1	2.2	143.4	2.2	.	.	163.1	2.7	161.0	2.7	116.3	4.3
Aug.	108.2	2.9	107.6	2.9	.	.	109.4	3.3	107.9	3.4	111.8	2.0
Sep.	108.4	2.5	107.8	2.5	.	.	109.5	3.4	108.1	3.5	110.4	3.6
Oct.	108.5	2.6	107.9	2.6	.	.	109.8	3.6	108.3	3.6	114.4	2.3
Nov.	178.4	2.3	177.4	2.3	.	.	176.7	3.4	174.4	3.4	.	.

1 Current data are normally revised upwards on account of additional reports. — 2 Source: Federal Statistical Office; figures computed in November 2002. — 3 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 European monetary union \*

€ million

Position	1999	2000	2001 <sup>1</sup>	2002					
				1st qtr	2nd qtr	3rd qtr	Aug.	Sep.	Oct.
A. Current account	- 19,025	- 60,364	- 13,778	+ 11,749	+ 5,153	+ 20,326	+ 9,720	+ 8,019	+ 3,718
1. Foreign trade									
Exports (f.o.b.) incl. supplementary items	818,251	989,822	1,032,971	254,309	267,605	262,240	80,814	88,414	97,635
Imports (f.o.b.) incl. supplementary items	742,552	958,233	957,141	227,976	234,896	225,082	69,123	77,125	85,937
Balance	+ 75,702	+ 31,592	+ 75,830	+ 26,330	+ 32,710	+ 37,159	+ 11,691	+ 11,290	+ 11,698
2. Services									
Receipts	247,385	287,014	321,572	71,586	83,839	87,492	28,437	29,398	28,708
Expenditure	258,096	298,546	320,648	76,068	77,524	81,439	27,132	25,513	27,316
Balance	- 10,711	- 11,535	+ 921	- 4,483	+ 6,315	+ 6,054	+ 1,306	+ 3,885	+ 1,392
3. Factor income (balance)	- 37,296	- 27,023	- 39,746	- 7,387	- 15,404	- 11,954	- 52	- 2,612	- 3,071
4. Current transfers									
Transfer payments from non-residents	64,821	67,634	75,686	31,047	15,350	16,591	5,459	5,337	5,117
Transfer payments to non-residents	111,544	121,035	126,469	33,760	33,819	27,525	8,684	9,881	11,419
Balance	- 46,720	- 53,398	- 50,783	- 2,712	- 18,468	- 10,934	- 3,225	- 4,544	- 6,302
B. Balance of capital transfers	+ 12,797	+ 9,836	+ 8,924	+ 3,105	+ 3,462	+ 2,381	+ 653	+ 1,194	+ 1,469
C. Financial account (net capital exports: -)	+ 11,651	+ 69,955	- 40,508	- 26,472	- 22,341	- 43,238	- 11,763	- 20,287	- 21,469
1. Direct investment	- 120,118	- 12,289	- 101,495	- 14,997	- 4,372	- 5,340	+ 1,694	- 3,417	- 5,019
Investment outside the euro area	- 320,505	- 436,259	- 255,835	- 56,017	- 41,186	- 22,997	- 170	- 13,517	- 11,390
Foreign investment in the euro area	+ 200,384	+ 423,970	+ 154,343	+ 41,020	+ 36,814	+ 17,657	+ 1,864	+ 10,100	+ 6,371
2. Investment in securities	- 42,955	- 115,170	+ 38,137	- 51,808	+ 67,090	+ 34,499	+ 4,469	+ 15,831	+ 19,419
Investment outside the euro area	- 311,299	- 411,316	- 287,957	- 72,983	- 49,473	- 17,552	- 3,448	+ 1,819	- 2,359
Equities	- 156,464	- 287,914	- 108,569	- 33,606	- 12,946	+ 9,617	+ 4,050	+ 12,756	+ 639
Bonds and notes	- 154,953	- 114,573	- 158,723	- 20,817	- 22,917	- 15,490	- 9,188	- 3,302	- 6,738
Money market paper	+ 118	- 8,829	- 20,668	- 18,561	- 13,611	- 11,679	+ 1,690	- 7,635	+ 3,739
Foreign investment in the euro area	+ 268,347	+ 296,146	+ 326,091	+ 21,175	+ 116,564	+ 52,050	+ 7,917	+ 14,012	+ 21,779
Equities	+ 92,300	+ 50,749	+ 231,137	+ 30,372	+ 34,167	+ 1,560	- 728	- 688	- 4,176
Bonds and notes	+ 117,005	+ 232,191	+ 90,440	+ 994	+ 55,168	+ 29,911	+ 1,052	+ 11,030	+ 12,082
Money market paper	+ 59,042	+ 13,206	+ 4,514	- 10,190	+ 27,228	+ 20,580	+ 7,593	+ 3,670	+ 13,872
3. Financial derivatives	+ 3,767	- 2,163	- 3,736	+ 1,567	- 2,755	- 8,014	- 1,923	+ 878	- 28
4. Credit transactions and other investment (balance)	+ 160,829	+ 182,012	+ 8,765	+ 41,829	- 89,047	- 59,871	- 17,784	- 29,814	- 37,977
Eurosysteem	+ 4,587	- 221	+ 5,004	+ 775	- 4,072	+ 134	- 4,887	+ 1,913	- 407
Public authorities	- 9,707	- 1,247	+ 1,870	- 9,042	+ 3,601	- 2,670	- 1,789	+ 729	+ 1,037
Credit institutions	+ 177,500	+ 159,021	+ 6,815	+ 44,219	- 73,607	- 22,269	- 3,956	- 25,570	- 31,862
long-term	+ 6,611	+ 3,052	- 24,299	+ 8,163	+ 14,219	+ 1,889	- 400	- 7,723	+ 3,068
short-term	+ 170,896	+ 155,970	+ 31,123	+ 36,055	- 87,828	- 24,158	- 3,556	- 17,847	- 34,930
Enterprises and individuals	- 11,554	+ 24,465	- 4,924	+ 5,877	- 14,966	- 35,066	- 7,152	- 6,886	- 6,745
5. Change in the monetary reserves of the eurosystem (Increase: -)	+ 10,128	+ 17,568	+ 17,815	- 3,063	+ 6,741	- 4,513	+ 1,780	- 3,765	+ 2,136
D. Balance of unclassifiable transactions	- 5,420	- 19,427	+ 45,356	+ 11,617	+ 13,726	+ 20,533	+ 1,390	+ 11,075	+ 16,282

\* Source: European Central Bank. — <sup>1</sup> From January 2001, including Greece.

## X. Foreign trade and payments

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

Period	Current account						Capital transfers and purchases / sales of intangible non-produced assets 7	Financial account 7	Change in the monetary reserves at transaction values 8	Balance of unclassifiable transactions	Memo item: Change in the Bundesbank's net external assets at transaction values 8
	Balance of current account 1	Foreign trade 1 2 3	Supplementary trade items 4 5	Services 6	Factor income	Current transfers					
DM million											
1989	+ 107,346	+ 134,576	- 4,107	- 15,210	+ 26,872	- 34,784	- 2,064	- 110,286	- 5,405	+ 10,409	+ 18,997
1990	+ 79,475	+ 105,382	- 3,833	- 19,664	+ 32,859	- 35,269	- 4,975	- 89,497	- 11,611	+ 26,608	- 10,976
1991	- 30,416	+ 21,899	- 2,804	- 24,842	+ 33,144	- 57,812	- 4,565	+ 12,614	+ 9,605	+ 12,762	+ 319
1992	- 22,924	+ 33,656	- 1,426	- 37,894	+ 33,962	- 51,222	- 1,963	+ 69,792	- 52,888	+ 7,983	- 68,745
1993	- 16,155	+ 60,304	- 3,038	- 45,080	+ 27,373	- 55,714	- 1,915	+ 21,442	+ 22,795	- 26,167	+ 35,766
1994	- 38,805	+ 71,762	- 1,104	- 54,374	+ 4,852	- 59,940	- 2,637	+ 57,871	+ 2,846	- 19,276	- 12,242
1995	- 29,671	+ 85,303	- 4,722	- 54,720	+ 178	- 55,710	- 3,845	+ 63,647	- 10,355	- 19,776	- 17,754
1996	- 11,959	+ 98,538	- 5,264	- 55,330	+ 1,391	- 51,294	- 3,283	+ 23,613	+ 1,882	- 10,253	+ 1,610
1997	- 4,727	+ 116,467	- 7,360	- 58,715	- 2,376	- 52,742	+ 52	+ 76	+ 6,640	- 1,889	+ 8,468
1998	- 10,905	+ 126,970	- 5,934	- 65,301	- 13,337	- 53,304	+ 1,289	+ 17,042	- 7,128	- 298	- 8,231
1999	- 34,991	+ 127,542	- 13,643	- 81,088	- 17,535	- 50,266	- 301	- 51,015	+ 24,517	+ 61,790	- 72,364
2000	- 44,225	+ 115,645	- 13,390	- 86,887	- 6,503	- 53,089	+ 13,351	+ 67,177	+ 11,429	- 47,731	+ 94,329
2001	+ 7,728	+ 186,771	- 9,559	- 92,650	- 24,660	- 52,174	- 1,892	- 57,230	+ 11,797	+ 39,597	+ 63,911
2001 4th qtr	+ 13,883	+ 49,488	- 1,085	- 17,990	- 2,481	- 14,049	- 932	- 56,304	+ 4,078	+ 39,275	+ 71,755
2001 Dec.	+ 2,624	+ 16,215	- 337	- 4,961	- 5,092	- 3,201	- 305	- 22,446	+ 5,636	+ 14,491	+ 60,895
€ million											
1999	- 17,891	+ 65,211	- 6,976	- 41,460	- 8,966	- 25,701	- 154	- 26,084	+ 12,535	+ 31,593	- 36,999
2000	- 22,612	+ 59,128	- 6,846	- 44,425	- 3,325	- 27,144	+ 6,826	+ 34,347	+ 5,844	- 24,405	+ 48,230
2001	+ 3,951	+ 95,495	- 4,887	- 47,371	- 12,609	- 26,676	- 967	- 29,261	+ 6,032	+ 20,246	+ 32,677
2000 1st qtr	- 1,231	+ 16,372	- 1,368	- 10,011	- 788	- 5,436	+ 160	+ 38,650	- 751	- 36,828	+ 32,016
2nd qtr	- 2,845	+ 16,406	- 1,272	- 11,559	+ 121	- 6,542	+ 330	+ 28,540	+ 2,388	- 27,753	- 23,447
3rd qtr	- 11,690	+ 13,116	- 1,745	- 12,778	- 3,122	- 7,161	+ 7,412	- 14,904	+ 2,155	+ 17,026	+ 22,523
4th qtr	- 6,846	+ 13,234	- 2,462	- 10,077	+ 464	- 8,005	- 416	- 17,939	+ 2,052	+ 23,150	+ 17,137
2001 1st qtr	- 497	+ 22,540	- 1,413	- 12,613	- 3,523	- 5,487	+ 552	+ 10	+ 4,072	- 4,137	- 11,749
2nd qtr	- 3,863	+ 22,104	- 1,517	- 12,154	- 4,307	- 7,988	- 597	+ 5,355	+ 2,039	- 2,934	+ 21,099
3rd qtr	+ 1,212	+ 25,547	- 1,402	- 13,406	- 3,510	- 6,017	- 446	- 5,838	- 2,165	+ 7,236	- 13,360
4th qtr	+ 7,098	+ 25,303	- 555	- 9,198	- 1,269	- 7,183	- 476	- 28,788	+ 2,085	+ 20,081	+ 36,688
2002 1st qtr	+ 10,533	+ 31,822	- 1,265	- 10,589	- 4,410	- 5,025	+ 160	- 24,494	- 1,352	+ 15,153	- 18,496
2nd qtr	+ 11,872	+ 29,897	- 970	- 7,750	- 1,138	- 8,166	- 67	- 28,772	+ 2,432	+ 14,534	+ 1,694
3rd qtr	+ 10,873	+ 33,163	- 1,629	- 11,167	- 3,753	- 5,741	+ 63	- 25,260	+ 87	+ 14,238	- 17,588
2000 July	- 2,795	+ 5,943	- 422	- 3,251	- 2,018	- 3,046	+ 105	+ 2,542	+ 1,180	- 1,031	+ 23,600
Aug.	- 5,727	+ 2,920	- 808	- 4,870	- 349	- 2,620	+ 7,766	- 11,981	+ 345	+ 9,529	+ 11,758
Sep.	- 3,167	+ 4,254	- 515	- 4,657	- 755	- 1,494	- 458	- 5,465	+ 630	+ 8,461	- 12,834
Oct.	- 1,121	+ 6,794	- 955	- 4,531	+ 556	- 2,985	- 125	- 4,453	+ 538	+ 5,162	+ 19,591
Nov.	- 2,589	+ 4,765	- 395	- 3,112	- 990	- 2,857	- 143	- 4,991	+ 466	+ 2,527	+ 5,015
Dec.	- 3,136	+ 1,675	- 1,111	- 2,435	+ 898	- 2,164	- 149	- 8,495	+ 1,047	+ 10,733	- 7,468
2001 Jan.	- 5,506	+ 5,662	- 565	- 4,749	- 5,357	- 497	+ 515	- 6,239	+ 1,400	+ 9,830	- 5,988
Feb.	+ 1,315	+ 7,171	- 522	- 2,793	- 2,95	- 2,246	+ 119	- 2,756	+ 1,180	+ 143	- 3,873
Mar.	+ 3,695	+ 9,707	- 326	- 5,071	+ 2,129	- 2,744	- 83	+ 9,006	+ 1,492	- 14,110	- 1,888
Apr.	+ 1,215	+ 6,166	- 647	- 2,938	+ 868	- 2,235	- 149	+ 773	+ 1,205	- 3,043	+ 9,404
May	- 290	+ 8,212	- 465	- 4,060	- 1,320	- 2,657	- 732	+ 19,583	+ 508	- 19,068	- 53
June	- 4,787	+ 7,727	- 405	- 5,156	- 3,856	- 3,097	+ 284	- 15,001	+ 326	+ 19,178	+ 11,749
July	+ 2,618	+ 9,441	- 394	- 4,950	- 4,115	- 2,599	- 226	+ 1,826	- 151	+ 1,169	- 10,589
Aug.	+ 3,271	+ 9,038	- 584	- 4,803	+ 1,085	- 1,465	- 172	+ 3,583	+ 460	- 7,142	- 4,247
Sep.	+ 559	+ 7,069	- 424	- 3,653	- 480	- 1,953	- 47	- 11,248	- 2,474	+ 13,209	+ 1,476
Oct.	+ 4,201	+ 9,661	- 98	- 3,850	+ 1,282	- 2,793	- 140	- 886	- 1,001	- 2,174	- 1,307
Nov.	+ 1,555	+ 7,351	- 284	- 2,811	+ 53	- 2,754	- 180	- 16,425	+ 204	+ 14,846	+ 6,860
Dec.	+ 1,342	+ 8,290	- 172	- 2,536	- 2,603	- 1,637	- 156	- 11,477	+ 2,882	+ 7,409	+ 31,135
2002 Jan.	+ 510	+ 10,076	- 448	- 4,081	- 5,761	+ 724	+ 477	- 198	- 1,747	+ 958	- 17,916
Feb.	+ 3,009	+ 10,008	- 387	- 3,237	- 360	- 3,015	- 155	- 15,109	+ 67	+ 12,187	+ 1,535
Mar.	+ 7,013	+ 11,738	- 431	- 3,271	+ 1,711	- 2,734	- 162	- 9,188	+ 328	+ 2,008	- 2,116
Apr.	+ 3,964	+ 9,390	- 360	- 2,654	+ 380	- 2,792	- 147	- 2,389	+ 1,657	- 3,086	- 9,839
May	+ 3,894	+ 9,742	- 405	- 2,267	- 815	- 2,360	+ 50	- 1,715	+ 1,379	- 3,607	+ 3,826
June	+ 4,015	+ 10,765	- 204	- 2,829	- 703	- 3,014	+ 30	- 24,668	- 603	+ 21,227	+ 7,707
July	+ 163	+ 11,872	- 564	- 4,642	- 4,753	- 1,749	- 203	- 12,392	- 548	+ 12,980	- 15,567
Aug.	+ 4,152	+ 10,387	- 478	- 3,876	- 388	- 1,493	+ 87	- 7,351	+ 886	+ 2,226	- 5,579
Sep.	+ 6,557	+ 10,904	- 586	- 2,649	+ 1,388	- 2,499	+ 179	- 5,517	- 252	- 968	+ 3,559
Oct.	+ 4,938	+ 11,065	- 583	- 3,516	+ 1,224	- 3,252	- 82	- 22,253	+ 570	+ 16,827	- 5,279
Nov. P	+ 8,455	+ 12,038	- 453	- 2,102	+ 941	- 1,970	- 137	- 9,848	- 842	+ 2,373	+ 4,265

o From July 1990 including the external transactions of the former GDR. — 1 From the beginning of 1993 figures subject to significant uncertainty owing to changes in the method of data collection in foreign trade. — 2 Special trade according to the official foreign trade statistics: imports c.i.f., exports f.o.b. — 3 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. — 4 Mainly warehouse transactions for account of residents and deduction of goods returned. — 5 See footnote 3. — 6 Excluding the expenditure on freight and insurance included in the c.i.f. import value. — 7 Capital exports: -. — 8 Increase: -.

X. Foreign trade and payments

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

€ million

Group of countries / Country		1999	2000	2001	2002					
					Jan. / Oct.	July	August	September	October	November P
All countries 1	Exports	510,008	597,440	638,268	538,691	54,839	51,920	55,019	58,575	58,709
	Imports	444,797	538,311	542,774	432,743	42,967	41,532	44,115	47,510	46,671
	Balance	+ 65,211	+ 59,128	+ 95,495	+ 105,947	+ 11,872	+ 10,387	+ 10,904	+ 11,065	+ 12,038
I. Industrialised countries	Exports	396,139	460,422	481,991	402,297	40,710	37,956	40,845	43,798	...
	Imports	332,947	389,927	390,269	307,361	30,500	29,006	30,879	33,295	...
	Balance	+ 63,192	+ 70,495	+ 91,722	+ 94,936	+ 10,210	+ 8,951	+ 9,966	+ 10,503	...
1. EU member countries	Exports	293,377	337,375	351,611	294,095	29,518	27,374	29,719	31,606	...
	Imports	239,652	273,951	277,034	221,921	22,196	20,938	22,763	23,953	...
	Balance	+ 53,725	+ 63,424	+ 74,577	+ 72,174	+ 7,321	+ 6,436	+ 6,957	+ 7,653	...
of which										
EMU member countries	Exports	229,837	264,870	275,384	228,756	23,230	20,590	22,717	24,640	...
	Imports	193,146	217,946	221,680	179,424	18,331	16,719	18,507	19,178	...
	Balance	+ 36,691	+ 46,924	+ 53,704	+ 49,332	+ 4,900	+ 3,871	+ 4,210	+ 5,462	...
of which										
Austria	Exports	28,295	32,436	33,486	27,554	2,730	2,625	2,813	3,130	...
	Imports	18,288	20,497	20,664	17,397	1,863	1,569	1,725	1,953	...
	Balance	+ 10,007	+ 11,939	+ 12,822	+ 10,157	+ 866	+ 1,056	+ 1,088	+ 1,177	...
Belgium and Luxembourg	Exports	28,821	32,728	35,187	28,492	2,772	2,682	2,772	3,078	...
	Imports	22,880	26,230	28,521	24,129	2,555	2,255	2,489	2,574	...
	Balance	+ 5,942	+ 6,499	+ 6,666	+ 4,363	+ 218	+ 427	+ 300	+ 504	...
France	Exports	58,578	67,418	69,601	58,028	5,797	5,215	5,704	6,106	...
	Imports	45,559	50,862	49,743	41,121	4,032	3,812	4,154	4,458	...
	Balance	+ 13,019	+ 16,556	+ 19,858	+ 16,908	+ 1,765	+ 1,403	+ 1,550	+ 1,649	...
Italy	Exports	38,335	45,011	47,119	39,293	4,182	3,195	3,856	4,239	...
	Imports	33,107	35,776	35,280	27,802	3,076	2,390	2,684	3,017	...
	Balance	+ 5,229	+ 9,235	+ 11,839	+ 11,491	+ 1,105	+ 805	+ 1,172	+ 1,222	...
Netherlands	Exports	34,355	38,993	40,011	32,471	3,228	3,089	3,257	3,483	...
	Imports	36,089	44,739	43,233	35,091	3,390	3,455	3,840	3,518	...
	Balance	- 1,734	- 5,745	- 3,222	- 2,619	- 162	- 366	- 584	- 35	...
Spain	Exports	22,684	26,732	27,841	24,334	2,676	1,992	2,404	2,701	...
	Imports	14,666	16,087	15,226	12,936	1,414	978	1,223	1,423	...
	Balance	+ 8,018	+ 10,645	+ 12,615	+ 11,397	+ 1,262	+ 1,013	+ 1,181	+ 1,278	...
Sweden	Exports	11,657	13,524	12,978	11,020	935	1,061	1,174	1,293	...
	Imports	8,305	10,202	8,999	7,399	739	695	741	859	...
	Balance	+ 3,352	+ 3,322	+ 3,979	+ 3,621	+ 196	+ 365	+ 433	+ 434	...
United Kingdom	Exports	43,124	49,377	52,764	45,383	4,504	4,892	4,875	4,673	...
	Imports	30,757	36,923	37,259	27,875	2,503	2,777	2,723	3,052	...
	Balance	+ 12,367	+ 12,453	+ 15,505	+ 17,507	+ 2,002	+ 2,115	+ 2,152	+ 1,621	...
2. Other European industrial countries 2	Exports	33,895	39,944	39,987	33,676	3,389	3,267	3,519	3,755	...
	Imports	30,644	36,800	39,165	32,148	3,228	2,852	3,268	3,714	...
	Balance	+ 3,251	+ 3,144	+ 821	+ 1,528	+ 161	+ 415	+ 251	+ 40	...
of which										
Switzerland	Exports	22,808	25,596	27,489	22,228	2,173	2,173	2,276	2,469	...
	Imports	17,070	18,797	19,753	16,320	1,651	1,624	1,603	1,805	...
	Balance	+ 5,738	+ 6,799	+ 7,737	+ 5,908	+ 522	+ 549	+ 673	+ 663	...
3. Non-European industrial countries	Exports	68,867	83,103	90,393	74,526	7,804	7,315	7,607	8,437	...
	Imports	62,651	79,176	74,069	53,292	5,075	5,216	4,849	5,627	...
	Balance	+ 6,216	+ 3,926	+ 16,324	+ 21,235	+ 2,728	+ 2,099	+ 2,758	+ 2,810	...
of which										
Japan	Exports	10,367	13,195	13,103	10,162	1,064	948	1,083	1,208	...
	Imports	21,779	26,847	22,910	15,958	1,605	1,629	1,504	1,786	...
	Balance	- 11,412	- 13,651	- 9,807	- 5,797	- 540	- 680	- 421	- 578	...
United States	Exports	51,425	61,764	67,824	55,957	5,736	5,532	5,618	6,329	...
	Imports	36,790	47,121	45,982	33,281	3,045	3,201	3,002	3,443	...
	Balance	+ 14,635	+ 14,643	+ 21,842	+ 22,676	+ 2,691	+ 2,331	+ 2,616	+ 2,886	...
II. Countries in transition	Exports	56,717	70,318	83,246	75,356	7,752	7,570	8,099	8,581	...
	Imports	62,533	82,900	90,341	76,894	7,825	7,708	7,877	8,746	...
	Balance	- 5,816	- 12,582	- 7,095	- 1,539	- 73	- 138	+ 222	- 164	...
of which										
Central and east European countries in transition	Exports	49,020	59,900	69,914	62,384	6,375	6,036	6,718	7,164	...
	Imports	47,723	62,781	68,701	58,517	6,061	5,685	5,910	6,437	...
	Balance	+ 1,297	- 2,882	+ 1,213	+ 3,866	+ 314	+ 351	+ 808	+ 727	...
People's Republic of China 3	Exports	6,949	9,459	12,118	11,841	1,264	1,442	1,270	1,284	...
	Imports	13,795	18,553	19,942	17,028	1,605	1,820	1,799	2,173	...
	Balance	- 6,846	- 9,094	- 7,824	- 5,187	- 341	- 378	- 529	- 889	...
III. Developing countries	Exports	55,987	65,023	71,477	59,673	6,241	6,257	5,967	5,999	...
	Imports	48,779	64,742	61,490	47,955	4,591	4,758	5,306	5,411	...
	Balance	+ 7,208	+ 282	+ 9,987	+ 11,718	+ 1,650	+ 1,500	+ 660	+ 588	...
of which										
Newly industrialising countries in south-east Asia 4	Exports	18,775	24,029	24,735	20,938	2,164	2,136	2,170	2,223	...
	Imports	22,586	30,498	28,351	21,807	2,064	2,131	2,216	2,535	...
	Balance	- 3,811	- 6,469	- 3,616	- 869	+ 100	+ 5	- 46	- 312	...
OPEC-countries	Exports	9,135	10,756	13,698	12,073	1,222	1,181	1,204	1,264	...
	Imports	6,425	10,244	8,231	5,758	616	497	641	797	...
	Balance	+ 2,710	+ 512	+ 5,467	+ 6,316	+ 605	+ 684	+ 563	+ 467	...

\* 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 Including fuel and other supplies for ships and aircraft and other data not classifiable by

region. — 2 Including Cyprus. — 3 Excluding Hong Kong. — 4 Brunei Darussalam, Hong Kong, Indonesia, Malaysia, Philippines, Singapore, Republic of Korea, Taiwan and Thailand.

## X. Foreign trade and payments

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

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

Period	Services										Investment income
	Total	Travel <sup>1</sup>	Transportation <sup>2</sup>	Financial services	Patents and licences	Government transactions <sup>3</sup>	other services			Compensation of employees <sup>5</sup>	
							Total	of which			
								Services of selfemployed persons <sup>4</sup>	Construction and assembly work, repairs		
1997	- 58,715	- 52,718	+ 5,723	+ 2,315	- 4,341	+ 6,616	- 16,310	- 2,403	- 1,669	- 1,698	- 678
1998	- 65,301	- 53,704	+ 5,449	+ 3,011	- 4,044	+ 5,462	- 21,474	- 2,586	- 2,484	- 1,584	- 11,753
1999	- 41,460	- 30,645	+ 2,881	+ 1,018	- 1,896	+ 1,973	- 14,792	- 2,245	- 409	- 836	- 8,130
2000	- 44,425	- 31,574	+ 3,379	+ 959	- 2,924	+ 2,177	- 16,443	- 2,725	- 912	- 885	- 2,440
2001	- 47,371	- 32,377	+ 4,139	+ 439	- 2,335	+ 3,301	- 20,539	- 2,576	- 1,293	- 1,471	- 11,138
2001 1st qtr	- 12,613	- 6,738	+ 828	- 106	- 654	+ 761	- 6,704	- 646	- 593	- 39	- 3,484
2nd qtr	- 12,154	- 8,656	+ 1,153	+ 208	- 532	+ 804	- 5,132	- 625	- 213	- 408	- 3,900
3rd qtr	- 13,406	- 10,723	+ 1,182	+ 175	- 579	+ 803	- 4,265	- 640	- 142	- 685	- 2,825
4th qtr	- 9,198	- 6,261	+ 976	+ 161	- 571	+ 933	- 4,437	- 665	- 346	- 340	- 929
2002 1st qtr	- 10,589	- 5,974	+ 764	- 60	- 300	+ 992	- 6,011	- 536	- 468	- 22	- 4,388
2nd qtr	- 7,750	- 7,664	+ 1,192	+ 70	- 578	+ 1,131	- 1,901	- 515	- 253	- 347	- 791
3rd qtr	- 11,167	- 10,316	+ 811	+ 188	- 452	+ 1,601	- 3,000	- 540	+ 40	- 632	- 3,121
2002 Jan.	- 4,081	- 2,206	+ 181	+ 24	- 102	+ 368	- 2,345	- 210	- 185	+ 9	- 5,770
Feb.	- 3,237	- 1,704	+ 252	- 78	- 91	+ 309	- 1,925	- 174	- 174	- 11	- 350
Mar.	- 3,271	- 2,064	+ 331	- 6	- 107	+ 315	- 1,741	- 152	- 109	- 20	+ 1,731
Apr.	- 2,654	- 2,523	+ 425	+ 64	- 197	+ 441	- 865	- 193	- 95	- 103	+ 483
May	- 2,267	- 2,584	+ 186	+ 26	- 28	+ 362	- 230	- 164	- 44	- 118	- 697
June	- 2,829	- 2,558	+ 580	- 20	- 354	+ 328	- 805	- 158	- 114	- 126	- 577
July	- 4,642	- 3,323	+ 295	+ 76	- 429	+ 380	- 1,642	- 205	- 15	- 209	- 4,545
Aug.	- 3,876	- 3,719	+ 201	- 14	+ 89	+ 852	- 1,284	- 184	+ 115	- 204	- 184
Sep.	- 2,649	- 3,273	+ 315	+ 126	- 112	+ 370	- 75	- 151	- 60	- 219	+ 1,608
Oct.	- 3,516	- 2,801	+ 390	+ 289	- 51	+ 306	- 1,649	- 137	+ 78	- 114	+ 1,339
Nov.	- 2,102	- 1,614	+ 236	+ 6	- 78	+ 367	- 1,019	- 122	- 47	- 110	+ 1,052

1 From January 2002 figures subject to significant uncertainty. — 2 Excluding the expenditure on freight included in the c.i.f. import value. — 3 Including the receipts from foreign military agencies for goods and ser-

vices supplied. — 4 Engineering and other technical services, research and development, commercial services etc. — 5 Wages and salaries.

### 5. Current transfers of the Federal Republic of Germany (Balances)

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

Period	Public 1					Private 1			DM million / € million		
	Total	Total	International Organisations <sup>2</sup>		other current transfers <sup>3</sup>	Total	Remittances by foreign workers	other current transfers	Total <sup>4</sup>	Public 1	Private 1
			Total	of which European Communities							
1997	- 52,742	- 36,812	- 31,509	- 28,502	- 5,302	- 15,930	- 7,519	- 8,411	+ 52	- 2,821	+ 2,873
1998	- 53,304	- 37,317	- 33,077	- 30,382	- 4,240	- 15,987	- 6,936	- 9,051	+ 1,289	- 2,441	+ 3,730
1999	- 25,701	- 17,404	- 15,428	- 13,846	- 1,976	- 8,296	- 3,429	- 4,867	- 154	- 1,351	+ 1,197
2000	- 27,144	- 19,045	- 17,100	- 15,398	- 1,944	- 8,100	- 3,458	- 4,642	- 1,596	- 1,186	- 410
2001	- 26,676	- 17,024	- 14,482	- 12,812	- 2,542	- 9,653	- 3,520	- 6,132	- 967	- 1,355	+ 387
2001 1st qtr	- 5,487	- 2,898	- 2,112	- 1,598	- 786	- 2,589	- 880	- 1,709	+ 552	- 323	+ 875
2nd qtr	- 7,988	- 5,144	- 5,346	- 4,927	+ 202	- 2,845	- 880	- 1,964	- 597	- 252	- 345
3rd qtr	- 6,017	- 3,956	- 3,027	- 2,467	- 929	- 2,062	- 880	- 1,182	- 446	- 327	- 118
4th qtr	- 7,183	- 5,026	- 3,997	- 3,820	- 1,029	- 2,157	- 880	- 1,277	- 476	- 452	- 24
2002 1st qtr	- 5,025	- 2,357	- 1,256	- 832	- 1,101	- 2,668	- 868	- 1,801	+ 160	- 229	+ 389
2nd qtr	- 8,166	- 5,239	- 5,254	- 4,997	+ 15	- 2,928	- 868	- 2,060	- 67	- 277	+ 210
3rd qtr	- 5,741	- 3,514	- 2,746	- 2,387	- 768	- 2,227	- 868	- 1,360	+ 63	- 348	+ 411
2002 Jan.	+ 724	+ 1,530	+ 1,921	+ 2,129	- 391	- 806	- 289	- 517	+ 477	- 74	+ 551
Feb.	- 3,015	- 2,005	- 1,575	- 1,391	- 430	- 1,010	- 289	- 721	- 155	- 75	- 80
Mar.	- 2,734	- 1,882	- 1,602	- 1,570	- 279	- 852	- 289	- 563	- 162	- 80	- 82
Apr.	- 2,792	- 2,055	- 1,889	- 1,788	- 165	- 737	- 289	- 448	- 147	- 89	- 58
May	- 2,360	- 1,489	- 1,697	- 1,633	+ 208	- 872	- 289	- 582	+ 50	- 98	+ 148
June	- 3,014	- 1,695	- 1,667	- 1,576	- 28	- 1,319	- 289	- 1,030	+ 30	- 91	+ 121
July	- 1,749	- 1,079	- 842	- 637	- 237	- 670	- 289	- 381	- 203	- 168	- 35
Aug.	- 1,493	- 760	- 397	- 272	- 363	- 733	- 289	- 444	+ 87	- 95	+ 181
Sep.	- 2,499	- 1,675	- 1,507	- 1,478	- 168	- 824	- 289	- 535	+ 179	- 86	+ 265
Oct.	- 3,252	- 2,084	- 1,538	- 1,472	- 546	- 1,168	- 289	- 879	- 82	- 104	+ 22
Nov.	- 1,970	- 1,215	- 997	- 954	- 219	- 755	- 289	- 466	- 137	- 248	+ 111

1 The classification of "public" and "private" transfers depends on which sector the participating domestic body belongs to. — 2 Current contributions 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

7. Financial account of the Federal Republic of Germany

€ million

Item	1999	2000	2001	2001		2002				
				4th qtr	1st qtr	2nd qtr	3rd qtr	Sep.	Oct.	Nov.
<b>I. Net German investment abroad (Increase/capital exports: -)</b>	- 347,069	- 353,152	- 265,061	- 19,776	- 66,243	- 79,598	- 92,969	- 39,196	- 31,520	- 38,607
1. Direct investment 1	- 102,729	- 54,045	- 48,340	- 6,162	- 2,660	- 1,161	- 13,970	- 5,840	- 3,259	+ 1,129
Equity capital	- 85,021	- 49,616	- 59,377	- 7,229	- 9,186	- 20,489	- 10,436	- 3,621	- 371	- 2,930
Reinvested earnings 2	- 4,400	- 2,300	-	-	-	-	-	-	-	-
Credit transactions of German direct investors	- 6,524	+ 3,627	+ 15,986	+ 2,336	+ 7,711	+ 20,937	- 1,484	- 1,489	- 2,464	+ 4,622
Other capital	- 6,784	- 5,756	- 4,949	- 1,269	- 1,185	- 1,609	- 2,050	- 730	- 424	- 564
2. Portfolio investment	- 177,440	- 208,511	- 128,670	- 31,829	- 34,788	- 20,224	- 10,420	+ 1,169	- 5,465	- 7,766
Equities 3	- 68,048	- 104,809	- 15,824	- 2,797	- 7,309	+ 1,329	+ 6,468	+ 5,857	- 2,770	+ 2,224
Investment fund certificates 4	- 14,057	- 32,529	- 19,126	- 4,474	- 7,409	- 2,963	- 3,121	- 430	- 1,107	- 738
Bonds and notes 5	- 94,658	- 72,758	- 94,691	- 27,512	- 15,793	- 17,555	- 10,831	- 3,871	- 1,067	- 8,171
Money market instruments	- 677	+ 1,585	+ 970	+ 2,954	+ 4,277	- 1,035	- 2,935	- 387	- 522	- 1,081
3. Financial derivatives 6	- 1,749	- 4,211	+ 6,703	- 807	+ 1,504	+ 1,263	- 3,850	+ 2,539	- 1,270	+ 926
4. Credit transactions	- 62,826	- 84,203	- 93,368	+ 19,353	- 29,871	- 59,052	- 64,388	- 37,040	- 21,437	- 32,787
Credit institutions 7	- 42,443	- 101,513	- 130,654	- 14,149	- 305	- 54,111	- 45,819	- 37,504	- 15,567	- 40,185
Long-term	- 42,717	- 40,136	- 47,642	- 16,201	- 9,717	- 8,329	- 4,224	- 1,070	- 4,233	- 2,621
Short-term	+ 274	- 61,378	- 83,012	+ 2,051	+ 9,413	- 45,782	- 41,595	- 36,435	- 11,334	- 37,564
Enterprises and individuals	+ 19,503	- 4,742	- 2,705	+ 6,465	- 14,305	- 4,873	- 4,416	- 3,040	- 357	+ 2,793
Long-term	- 2,057	+ 465	- 1,698	- 1,161	- 124	- 351	+ 2	+ 48	- 113	- 45
Short-term 7	+ 21,560	- 5,207	- 1,007	+ 7,626	- 14,180	- 4,522	- 4,418	- 3,088	- 244	+ 2,838
General government	+ 7,658	- 19,920	+ 15,977	- 7,537	+ 3,164	+ 123	+ 4,249	+ 241	- 158	+ 304
Long-term	- 376	- 1,079	+ 254	+ 5	+ 114	+ 151	- 61	- 221	- 5	+ 59
Short-term 7	+ 8,034	- 18,841	+ 15,723	- 7,542	+ 3,050	- 27	+ 4,310	+ 462	- 153	+ 245
Bundesbank	- 47,544	+ 41,972	+ 24,015	+ 34,575	- 18,425	- 191	- 18,402	+ 3,264	- 5,355	+ 4,302
5. Other investment 8	- 2,324	- 2,183	- 1,385	- 330	- 428	- 424	- 341	- 24	- 90	- 108
<b>II. Net foreign investment in Germany (Increase/capital imports: +)</b>	+ 320,985	+ 387,499	+ 235,799	- 9,012	+ 41,749	+ 50,826	+ 67,709	+ 33,679	+ 9,268	+ 28,758
1. Direct investment 1	+ 51,392	+ 211,786	+ 35,574	+ 10,392	+ 12,810	+ 17,333	+ 2,659	+ 3,389	+ 2,430	+ 2,285
Equity capital	+ 24,754	+ 114,495	+ 31,916	+ 5,586	+ 13,033	+ 10,760	+ 2,043	+ 1,053	- 71	+ 246
Reinvested earnings 2	- 5,400	- 3,600	- 3,600	- 900	- 900	- 900	- 900	- 300	- 300	- 300
Credit transactions of foreign direct investors	+ 32,286	+ 101,226	+ 7,403	+ 5,757	+ 704	+ 7,504	+ 1,613	+ 2,715	+ 2,813	+ 2,340
Other capital	- 249	- 335	- 145	- 51	- 28	- 31	- 97	- 78	- 12	- 1
2. Portfolio investment	+ 166,624	+ 49,104	+ 129,732	+ 20,389	+ 13,464	+ 29,810	+ 35,245	+ 8,711	- 1,095	+ 2,904
Equities 3	+ 21,942	- 34,469	+ 88,882	+ 434	+ 6,014	+ 10,275	- 576	- 223	+ 871	+ 1,156
Investment fund certificates	+ 5,761	+ 10,938	+ 1,121	+ 4,171	+ 1,074	+ 1,002	+ 963	- 557	- 81	+ 39
Bonds and notes 5	+ 97,615	+ 69,159	+ 54,878	+ 17,729	+ 22,509	+ 18,565	+ 18,316	+ 4,322	- 898	+ 63
Money market instruments	+ 41,306	+ 3,475	- 15,149	- 1,945	- 16,133	+ 1,971	+ 16,543	+ 5,169	- 987	+ 1,646
3. Credit transactions	+ 103,075	+ 126,564	+ 70,462	- 39,792	+ 15,452	+ 3,637	+ 29,763	+ 21,583	+ 7,933	+ 23,574
Credit institutions 7	+ 95,394	+ 115,294	+ 54,316	- 44,403	+ 13,852	+ 5,533	+ 28,422	+ 18,620	+ 5,569	+ 21,410
Long-term	+ 35,241	+ 15,665	+ 4,394	- 11,433	+ 4,285	+ 5,127	+ 5,534	- 1,311	+ 4,720	- 1,936
Short-term	+ 60,153	+ 99,629	+ 49,922	- 32,970	+ 9,567	+ 406	+ 22,888	+ 19,932	+ 849	+ 23,346
Enterprises and individuals	+ 20,926	+ 10,101	+ 13,063	+ 2,700	+ 3,710	- 3,551	+ 1,089	+ 2,036	+ 2,126	+ 1,741
Long-term	+ 3,836	+ 4,400	+ 9,027	+ 469	+ 1,151	- 551	+ 461	+ 106	+ 1,920	+ 1,056
Short-term 7	+ 17,090	+ 5,701	+ 4,036	+ 2,231	+ 2,559	- 3,000	+ 628	+ 1,929	+ 206	+ 685
General Government	- 11,255	+ 756	+ 452	+ 1,883	- 3,391	+ 2,203	- 476	+ 380	+ 731	- 382
Long-term	- 8,306	- 142	- 602	+ 152	- 318	- 150	+ 531	- 222	- 173	- 322
Short-term 7	- 2,949	+ 898	+ 1,054	+ 1,731	- 3,072	+ 2,353	- 1,007	+ 603	+ 904	- 60
Bundesbank	- 1,991	+ 414	+ 2,631	+ 28	+ 1,281	- 548	+ 728	+ 547	- 493	+ 806
4. Other investment	- 106	+ 45	+ 32	- 2	+ 23	+ 46	+ 42	- 4	- 0	- 5
<b>III. Balance of all statistically recorded financial movements (Net capital exports: -)</b>	- 26,084	+ 34,347	- 29,261	- 28,788	- 24,494	- 28,772	- 25,260	- 5,517	- 22,253	- 9,848

1 From 1996, new definition for direct investment. — 2 Estimated. — 3 Including participation rights. — 4 From 1991 including accumulated earnings. — 5 From 1975 excluding accrued interest. — 6 Options, whether or not evidenced by securities, and financial futures contracts. — 7 The trans-

action values shown here are mostly derived from changes in stocks. As far as possible, purely statistical changes have been eliminated. — 8 In particular, subscriptions of the Federal Government to International Organisations.

## X. Foreign trade and payments

### 8. 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				Loans and other claims on non- residents 3	Total	Liabilities arising from external trans- actions 4	Liabilities arising from liquidity Treasury discount paper		
		Total	Gold	Foreign currency balances 1	Reserve position in the Inter- national Monetary Fund and special drawing rights					Claims on the ECB 2 (net)	
1	2	3	4	5	6	7	8	9	10	11	
1990	106,446	104,023	13,688	64,517	7,373	18,445	2,423	52,259	52,259	–	54,188
1991	97,345	94,754	13,688	55,424	8,314	17,329	2,592	42,335	42,335	–	55,010
1992	143,959	141,351	13,688	85,845	8,199	33,619	2,608	26,506	26,506	–	117,453
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

\* 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.

### 9. External position of the Bundesbank in the European monetary union °

€ 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 3	Net external position of the Bundesbank (col.1 less col.9)	
	Total	Monetary reserves				Other claims on non-euro- area residents 1 3				Claims within the Eurosistem (net) 2
		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	
1999 Jan. 4	95,316	93,940	29,312	8,461	56,167	140	1,225	11	8,169	87,146
1999	141,958	93,039	32,287	8,332	52,420	9,162	39,746	11	6,179	135,779
2000	100,762	93,815	32,676	7,762	53,377	313	6,620	14	6,592	94,170
2001	76,147	93,215	35,005	8,721	49,489	312	17,385	5	8,752	67,396
2002	103,948	85,002	36,208	8,272	40,522	312	18,466	167	9,005	94,942
2001 July	107,437	92,879	33,708	7,980	51,191	312	14,240	6	7,005	100,432
Aug.	109,011	89,890	33,414	7,765	48,711	312	18,803	6	6,860	102,151
Sep.	112,045	94,538	35,399	8,989	50,151	312	17,189	6	8,658	103,387
Oct.	115,487	95,552	34,531	8,643	52,378	312	19,616	7	10,783	104,704
Nov.	108,934	95,395	34,309	8,745	52,341	312	13,217	9	11,093	97,841
Dec.	76,147	93,215	35,005	8,721	49,489	312	17,385	5	8,752	67,396
2002 Jan.	98,116	97,392	36,220	8,855	52,316	312	409	3	10,455	87,661
Feb.	98,392	99,230	38,095	8,874	52,260	312	1,152	2	10,354	88,038
Mar.	99,489	98,130	38,505	8,840	50,786	312	1,045	1	10,077	89,412
Apr.	106,936	94,779	38,072	8,205	48,502	312	11,842	2	9,298	97,638
May	100,886	91,942	38,649	8,040	45,253	312	8,630	2	8,448	92,438
June	88,199	86,649	35,435	8,848	42,366	312	1,236	1	9,219	78,980
July	105,187	87,718	34,596	8,897	44,225	312	17,156	1	10,163	95,025
Aug.	110,682	87,466	35,197	8,797	43,471	312	22,902	1	9,432	101,250
Sep.	108,889	88,937	36,225	8,751	43,961	312	19,639	1	9,966	98,923
Oct.	112,748	87,441	35,530	8,594	43,317	312	24,993	2	9,473	103,276
Nov.	108,615	87,610	35,517	8,542	43,551	312	20,688	5	10,272	98,343
Dec.	103,948	85,002	36,208	8,272	40,522	312	18,466	167	9,005	94,942

° Claims and liabilities vis-à-vis all countries within and outside EMU. Until December 2000, the levels at the end of each quarter are shown, by virtue of revaluations, at market prices; within each quarter, however, the levels are computed on the basis of cumulative transaction values. From January 2001 onwards, all end-of-month levels will be valued at market prices. — 1 Including loans to the World Bank. — 2 Including the balances in the

Deutsche Bundesbank's cross-border payments within the Eurosistem. From November 2000 including the TARGET positions which were previously shown (in columns 6 and 9) as bilateral assets and liabilities vis-à-vis national central banks outside the Eurosistem. — 3 See footnote 2. — 4 Euro opening balance sheet of the Bundesbank as at January 1, 1999.



X. Foreign trade and payments

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

Until the end of 1998 DM million, from 1999 € 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>														
1998	502,610	140,729	361,881	169,889	191,992	176,485	15,507	429,240	81,092	348,148	220,628	127,520	87,576	39,944
1999	277,331	52,774	224,557	115,564	108,993	100,777	8,216	293,849	56,632	237,217	166,026	71,191	52,047	19,144
2000	320,874	43,462	277,412	152,752	124,660	116,971	7,689	446,060	52,663	393,397	309,024	84,373	63,093	21,280
2001	358,120	62,434	295,686	171,939	123,747	114,857	8,890	505,266	60,132	445,134	354,561	90,573	65,988	24,585
2002 Aug.	341,476	80,947	260,529	143,574	116,955	108,148	8,807	517,057	63,509	453,548	372,148	81,400	55,162	26,238
Sep.	350,948	81,997	268,951	148,669	120,282	111,998	8,284	528,330	61,613	466,717	381,222	85,495	59,295	26,200
Oct.	354,285	81,816	272,469	149,634	122,835	114,073	8,762	533,337	62,308	471,029	383,637	87,392	59,850	27,542
Nov.	345,871	78,624	267,247	143,786	123,461	115,369	8,092	538,202	63,289	474,913	386,839	88,074	61,309	26,765
<b>EU countries</b>														
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
1999	157,617	47,992	109,625	56,450	53,175	48,500	4,675	194,809	49,243	145,566	111,605	33,961	27,532	6,429
2000	177,782	39,563	138,219	78,298	59,921	55,718	4,203	323,049	45,473	277,576	237,583	39,993	32,457	7,536
2001	198,118	58,039	140,079	79,205	60,874	55,371	5,503	372,937	53,683	319,254	275,749	43,505	34,716	8,789
2002 Aug.	212,441	76,218	136,223	80,442	55,781	50,277	5,504	395,942	58,377	337,565	299,307	38,258	28,369	9,889
Sep.	217,989	77,105	140,884	83,219	57,665	52,363	5,302	403,861	56,593	347,268	306,777	40,491	30,755	9,736
Oct.	221,960	77,070	144,890	85,780	59,110	53,577	5,533	407,441	57,164	350,277	308,427	41,850	31,623	10,227
Nov.	214,009	73,792	140,217	81,124	59,093	54,227	4,866	408,285	58,269	350,016	308,230	41,786	32,075	9,711
<b>of which: EMU member countries <sup>1</sup></b>														
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
1999	104,071	25,946	78,125	38,747	39,378	36,074	3,304	151,179	38,117	113,062	88,763	24,299	20,173	4,126
2000	120,976	22,737	98,239	52,976	45,263	42,389	2,874	247,830	33,698	214,132	185,595	28,537	23,569	4,968
2001	126,519	33,787	92,732	46,599	46,133	42,771	3,362	295,943	38,361	257,582	225,711	31,871	24,878	6,993
2002 Aug.	136,159	45,524	90,635	48,671	41,964	38,397	3,567	326,723	42,437	284,286	255,996	28,290	20,303	7,987
Sep.	139,717	46,889	92,828	49,732	43,096	39,707	3,389	332,227	41,325	290,902	260,984	29,918	22,233	7,685
Oct.	137,812	44,700	93,112	48,959	44,153	40,610	3,543	335,225	41,527	293,698	262,999	30,699	22,538	8,161
Nov.	132,230	39,106	93,124	48,678	44,446	41,258	3,188	336,807	42,163	294,644	263,919	30,725	23,007	7,718
<b>Other industrial countries <sup>3</sup></b>														
1998	109,682	8,246	101,436	61,999	39,437	36,162	3,275	102,058	7,655	94,403	61,741	32,662	26,292	6,370
1999	71,958	3,595	68,363	45,540	22,823	21,220	1,603	68,024	4,870	63,154	44,518	18,636	15,387	3,249
2000	84,502	2,925	81,577	54,272	27,305	25,673	1,632	84,464	4,711	79,753	56,986	22,767	18,621	4,146
2001	100,786	3,364	97,422	71,842	25,580	24,082	1,498	93,269	4,178	89,091	64,595	24,496	19,648	4,848
2002 Aug.	74,999	3,190	71,809	46,918	24,891	23,558	1,333	81,524	3,074	78,450	57,874	20,576	15,624	4,952
Sep.	77,671	3,065	74,606	49,004	25,602	24,468	1,134	83,851	3,008	80,843	59,103	21,740	16,688	5,052
Oct.	78,018	3,044	74,974	48,144	26,830	25,541	1,289	85,655	3,170	82,485	60,459	22,026	16,612	5,414
Nov.	76,045	2,917	73,128	47,002	26,126	24,843	1,283	89,404	3,140	86,264	63,840	22,424	17,348	5,076
<b>Countries in transition</b>														
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
1999	16,402	231	16,171	4,603	11,568	10,934	634	6,256	78	6,178	481	5,697	3,119	2,578
2000	19,082	240	18,842	5,028	13,814	13,104	710	8,202	113	8,089	928	7,161	4,384	2,777
2001	20,444	204	20,240	6,103	14,137	13,449	688	9,095	151	8,944	1,699	7,245	4,341	2,904
2002 Aug.	20,175	255	19,920	5,844	14,076	13,330	746	9,719	190	9,529	1,911	7,618	4,305	3,313
Sep.	20,384	265	20,119	5,807	14,312	13,590	722	10,152	185	9,967	2,081	7,886	4,734	3,152
Oct.	20,449	328	20,121	5,611	14,510	13,780	730	10,590	185	10,405	2,177	8,228	4,841	3,387
Nov.	20,821	271	20,550	5,594	14,956	14,195	761	10,678	109	10,569	2,060	8,509	5,071	3,438
<b>Developing countries <sup>2</sup></b>														
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
1999	31,354	956	30,398	8,971	21,427	20,123	1,304	24,760	2,441	22,319	9,422	12,897	6,009	6,888
2000	39,508	734	38,774	15,154	23,620	22,476	1,144	30,345	2,366	27,979	13,527	14,452	7,631	6,821
2001	38,772	827	37,945	14,789	23,156	21,955	1,201	29,965	2,120	27,845	12,518	15,327	7,283	8,044
2002 Aug.	33,861	1,284	32,577	10,370	22,207	20,983	1,224	29,872	1,868	28,004	13,056	14,948	6,864	8,084
Sep.	34,904	1,562	33,342	10,639	22,703	21,577	1,126	30,466	1,827	28,639	13,261	15,378	7,118	8,260
Oct.	33,858	1,374	32,484	10,099	22,385	21,175	1,210	29,651	1,789	27,862	12,574	15,288	6,774	8,514
Nov.	34,996	1,644	33,352	10,066	23,286	22,104	1,182	29,835	1,771	28,064	12,709	15,355	6,815	8,540

\* 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 total

are not comparable with the figures shown in Table X, 7. — 1 Including Greece from January 2001. — 2 Including Cyprus until April 2002. — 3 Including Cyprus from May 2002.

## X. Foreign trade and payments

### 11. Deutsche Mark and euro exchange rates of selected currencies \*

Yearly or monthly average	United States	Japan	Denmark	Sweden	United Kingdom	Norway	Switzerland	Canada	Australia	New Zealand
	USD	JPY	DKK	SEK	GBP	NOK	CHF	CAD	AUD 1	NZD 1
Historic spot middle rates on the Frankfurt exchange (1 or 100 currency units = DEM ...)										
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
Euro reference exchange rates published by the European Central Bank (EUR 1 = currency units ...) <sup>2</sup>										
1999	1.0658	121.32	7.4355	8.8075	0.65874	8.3104	1.6003	1.5840	1.6523	2.0145
2000	0.9236	99.47	7.4538	8.4452	0.60948	8.1129	1.5579	1.3706	1.5889	2.0288
2001	0.8956	108.68	7.4521	9.2551	0.62187	8.0484	1.5105	1.3864	1.7319	2.1300
2002	0.9456	118.06	7.4305	9.1611	0.62883	7.5086	1.4670	1.4838	1.7376	2.0366
2001 Feb.	0.9217	107.08	7.4630	8.9770	0.63400	8.2125	1.5358	1.4027	1.7236	2.1184
Mar.	0.9095	110.33	7.4643	9.1264	0.62915	8.1600	1.5355	1.4167	1.8072	2.1753
Apr.	0.8920	110.36	7.4633	9.1120	0.62168	8.1146	1.5287	1.3903	1.7847	2.1975
May	0.8742	106.50	7.4612	9.0576	0.61328	7.9927	1.5334	1.3473	1.6813	2.0723
June	0.8532	104.30	7.4539	9.2106	0.60890	7.9360	1.5225	1.3016	1.6469	2.0589
July	0.8607	107.21	7.4447	9.2637	0.60857	7.9714	1.5135	1.3153	1.6890	2.1074
Aug.	0.9005	109.34	7.4450	9.3107	0.62672	8.0552	1.5144	1.3857	1.7169	2.0895
Sep.	0.9111	108.20	7.4413	9.6744	0.62291	7.9985	1.4913	1.4260	1.8036	2.1781
Oct.	0.9059	109.86	7.4367	9.5780	0.62393	7.9970	1.4793	1.4224	1.7955	2.1863
Nov.	0.8883	108.68	7.4452	9.4166	0.61838	7.9224	1.4663	1.4153	1.7172	2.1322
Dec.	0.8924	113.38	7.4431	9.4359	0.62012	7.9911	1.4749	1.4075	1.7348	2.1456
2002 Jan.	0.8833	117.12	7.4329	9.2275	0.61659	7.9208	1.4745	1.4135	1.7094	2.0826
Feb.	0.8700	116.23	7.4299	9.1828	0.61160	7.7853	1.4775	1.3880	1.6963	2.0771
Mar.	0.8758	114.75	7.4324	9.0594	0.61574	7.7183	1.4678	1.3903	1.6695	2.0261
Apr.	0.8858	115.81	7.4341	9.1358	0.61407	7.6221	1.4658	1.4008	1.6537	1.9995
May	0.9170	115.86	7.4356	9.2208	0.62823	7.5207	1.4572	1.4210	1.6662	1.9859
June	0.9554	117.80	7.4330	9.1137	0.64405	7.4043	1.4721	1.4627	1.6793	1.9517
July	0.9922	117.11	7.4301	9.2689	0.63870	7.4050	1.4624	1.5321	1.7922	2.0646
Aug.	0.9778	116.31	7.4270	9.2489	0.63633	7.4284	1.4636	1.5333	1.8045	2.1076
Sep.	0.9808	118.38	7.4271	9.1679	0.63059	7.3619	1.4649	1.5434	1.7927	2.0847
Oct.	0.9811	121.57	7.4297	9.1051	0.62994	7.3405	1.4650	1.5481	1.7831	2.0381
Nov.	1.0014	121.65	7.4280	9.0818	0.63709	7.3190	1.4673	1.5735	1.7847	2.0155
Dec.	1.0183	124.20	7.4264	9.0961	0.64218	7.2948	1.4679	1.5872	1.8076	1.9947

\* Calculated from daily quotations. — 1 Exchange rates from Australia and New Zealand; those for New Zealand calculated from rates as at the middle and end of the month. — 2 The ECB publishes daily euro reference exchange rates, which are calculated on the basis of the concertation between

central banks at 2.15 p.m. For additional euro reference exchange rates of the ECB, see Statistical Supplement to the Monthly Report 5, Exchange rate statistics.

### 12. Exchange rates for the national currencies of the EMU countries, the Deutsche Mark value of the ECU \* and euro conversion rates

Yearly average	France	Italy	Netherlands	Belgium/ Luxembourg	Austria	Spain	Finland	Ireland	Portugal	Greece GRD 100/ EUR 1 <sup>2</sup>	ECU values <sup>1</sup>
	FRF 100	ITL 1,000	NLG 100	BEF/LUF 100	ATS 100	ESP 100	FIM 100	IEP 1	PTE 100		ECU 1
Historic spot middle rates on the Frankfurt exchange in DEM											
1991	29.409	1.3377	88.742	4.857	14.211	1.597	41.087	2.671	1.149	0.9103	2.05076
1992	29.500	1.2720	88.814	4.857	14.211	1.529	34.963	2.656	1.157	0.8178	2.02031
1993	29.189	1.0526	89.017	4.785	14.214	1.303	28.915	2.423	1.031	0.7213	1.93639
1994	29.238	1.0056	89.171	4.8530	14.214	1.2112	31.108	2.4254	0.9774	0.6683	1.92452
1995	28.718	0.8814	89.272	4.8604	14.214	1.1499	32.832	2.2980	0.9555	0.6182	1.87375
1996	29.406	0.9751	89.243	4.8592	14.214	1.1880	32.766	2.4070	0.9754	0.6248	1.90954
1997	29.705	1.0184	88.857	4.8464	14.210	1.1843	33.414	2.6297	0.9894	0.6349	1.96438
1998	29.829	1.0132	88.714	4.8476	14.213	1.1779	32.920	2.5049	0.9763	0.5952	1.96913
1999	.	.	.	.	.	.	.	.	.	325.76	.
2000	.	.	.	.	.	.	.	.	.	336.63	.
Irrevocable euro conversion rates (EUR 1 = currency units ...) <sup>3</sup>											
	6.55957	1936.27	2.20371	40.3399	13.7603	166.386	5.94573	0.787564	200.482	4	340.750
										5	1.95583

\* Calculated from daily quotations. — 1 According to data from the European Commission. — 2 Until 1998 reciprocal values of the exchange rates for the Deutsche Mark, published by the Bank of Greece; from 1999 euro refer-

ence exchange rates of the ECB (EUR 1 = GRD ...). — 3 Applicable from 1 January 1999. — 4 Applicable from 1 January 2001. — 5 Deutsche Mark conversion rate.

X. Foreign trade and payments

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

1st qtr 1999 = 100

Period	Effective exchange rate of the euro				Memo item: Indicators of the German economy's price competitiveness 3 4				Effective nominal exchange rates of selected foreign currencies against the currencies of 19 industrial countries 3 5 6				
	Narrow group 1		Broad group 2		19 industrial countries 5		49 countries 7		US dollar	Pound sterling	Canadian dollar	Swiss franc	Japanese yen
	Nominal	Real on the basis of consumer prices	Nominal	Real on the basis of consumer prices	on the basis of the deflators of total sales 8	on the basis of consumer prices	on the basis of consumer prices	on the basis of consumer prices					
1995	107.8	108.8	93.2	107.8	109.6	110.4	110.2	86.1	84.0	106.4	105.4	115.6	
1996	107.9	108.8	95.4	105.9	106.2	106.8	105.2	90.9	85.9	108.8	104.2	100.6	
1997	99.1	99.5	90.4	96.6	100.7	101.4	99.0	98.8	99.8	109.7	97.9	95.9	
1998	101.5	101.3	96.6	99.1	100.9	101.1	100.1	103.4	103.3	103.5	99.9	89.7	
1999	95.7	95.7	96.6	95.8	97.8	98.0	97.7	100.8	102.3	102.2	98.3	105.1	
2000	85.7	86.5	88.2	86.3	91.9	93.2	91.7	105.4	105.2	103.6	96.8	117.9	
2001	87.3	88.9	91.0	88.1	p 92.1	94.2	92.4	112.0	103.6	100.5	100.5	106.7	
2002	90.0	92.8	95.6	91.9	p 93.7	95.1	93.6	110.7	104.2	98.7	104.9	100.8	
1998 1st qtr	98.8	98.8	92.6	96.4	99.4	99.8	98.8	103.2	104.5	107.3	100.1	92.5	
2nd qtr	100.2	100.1	94.2	97.4	100.7	100.7	99.1	104.8	104.8	106.5	98.5	86.8	
3rd qtr	102.5	102.5	97.8	100.2	101.7	102.1	101.0	106.3	104.1	102.0	99.4	83.7	
4th qtr	104.2	103.8	101.7	102.4	101.9	101.8	101.5	99.4	99.8	98.0	101.6	95.7	
1999 1st qtr	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.9	100.0	100.0	100.1	
2nd qtr	96.1	96.0	96.5	96.0	98.6	98.3	97.8	102.8	102.9	103.5	98.6	99.0	
3rd qtr	94.6	94.7	95.5	94.6	97.2	97.8	97.2	101.4	102.4	102.3	97.7	106.2	
4th qtr	92.2	92.2	94.2	92.6	95.5	95.9	95.5	99.1	104.1	102.8	96.7	115.2	
2000 Jan.	90.2	90.8	92.4	90.7	.	95.9	94.8	99.7	106.5	104.8	95.4	115.5	
Feb.	89.2	89.8	91.2	89.6	93.8	95.5	94.1	102.3	106.5	105.2	95.2	112.5	
Mar.	87.7	88.3	89.7	88.1	.	94.3	92.9	102.4	106.3	104.6	94.7	116.8	
Apr.	86.1	86.6	88.4	86.7	.	93.2	91.9	103.0	107.7	104.3	95.9	118.6	
May	84.5	85.0	86.9	85.1	92.1	92.1	91.0	106.4	106.0	103.0	96.3	118.3	
June	87.4	88.1	89.9	88.1	.	93.8	92.7	103.6	102.5	103.7	97.2	118.3	
July	86.9	87.9	89.4	87.5	.	94.3	92.7	104.5	103.4	103.9	97.7	116.8	
Aug.	84.6	85.5	87.0	85.1	91.4	92.8	90.9	106.3	104.9	104.0	96.7	118.6	
Sep.	82.8	83.6	85.3	83.3	.	91.8	89.8	107.7	103.5	104.3	97.2	122.3	
Oct.	81.6	82.4	84.4	82.2	.	90.9	88.9	109.4	106.4	102.7	97.8	121.4	
Nov.	82.3	83.3	85.1	82.9	90.3	91.3	89.3	110.2	104.6	100.7	97.5	121.1	
Dec.	85.4	86.4	88.1	85.8	.	92.8	91.3	108.7	104.1	101.5	99.4	115.1	
2001 Jan.	89.2	90.2	91.7	89.0	.	95.2	93.3	107.7	102.4	102.7	100.0	108.3	
Feb.	88.3	89.4	91.0	88.3	92.7	95.2	93.2	108.8	102.0	101.6	99.2	109.9	
Mar.	88.4	89.8	91.4	88.9	.	95.0	93.2	111.5	102.9	99.7	99.3	106.0	
Apr.	87.6	89.1	91.0	88.4	.	94.2	92.7	113.0	103.7	100.0	99.4	104.9	
May	85.9	87.6	89.3	86.7	91.6	93.6	91.7	113.1	104.3	101.3	98.3	107.5	
June	84.7	86.3	88.1	85.4	.	93.1	90.9	114.1	104.4	102.7	98.5	108.3	
July	85.4	87.1	89.1	86.2	.	93.8	91.8	114.3	104.9	102.5	99.5	105.8	
Aug.	87.7	89.3	91.8	88.6	p 91.7	94.7	92.9	111.6	103.0	101.1	100.4	106.4	
Sep.	88.0	89.7	92.6	89.3	.	94.3	93.1	110.7	103.9	99.1	102.2	108.2	
Oct.	88.0	90.0	92.8	89.5	.	93.9	92.7	111.8	103.7	99.0	103.0	106.2	
Nov.	86.8	88.8	91.3	88.0	p 92.3	93.2	91.7	113.3	104.0	97.8	103.4	106.3	
Dec.	87.7	89.9	91.9	88.6	.	93.8	92.1	114.1	104.3	99.0	103.3	102.1	
2002 Jan.	87.6	90.3	91.6	88.4	.	95.1	92.6	116.4	104.9	97.9	103.3	98.3	
Feb.	86.8	89.4	91.1	87.8	p 92.3	94.6	92.1	117.3	105.4	98.5	102.7	98.2	
Mar.	86.8	89.6	91.3	88.2	.	94.3	92.0	116.1	104.6	98.7	103.4	99.8	
Apr.	87.2	90.1	91.7	88.5	.	93.9	91.6	115.3	105.2	99.0	103.8	99.4	
May	88.6	91.5	93.7	90.4	p 93.1	94.3	92.6	112.0	103.5	100.4	105.1	101.2	
June	90.6	93.6	96.4	92.8	.	95.4	94.0	109.0	101.9	101.0	104.9	101.7	
July	91.7	94.7	98.2	94.4	.	96.3	95.4	106.0	103.5	99.4	106.0	104.3	
Aug.	91.1	94.0	97.7	93.8	p 94.2	95.5	94.7	107.3	103.5	98.0	105.7	104.3	
Sep.	91.2	94.2	98.0	94.0	.	95.4	94.5	107.6	104.7	97.7	105.6	102.5	
Oct.	91.7	94.8	98.5	94.5	.	95.3	94.5	108.5	105.0	97.6	105.8	99.8	
Nov.	92.5	95.5	99.3	94.8	p 95.2	95.4	94.3	106.8	104.3	97.7	106.1	100.8	
Dec.	93.6	96.6	100.4	95.8	.	95.8	94.7	106.0	104.0	98.3	106.5	99.6	

\* The effective exchange rate corresponds to the weighted external value of the currency concerned. — 1 ECB calculations based on the weighted averages of the effective exchange rates of the euro or, prior to 1999, of the exchange rates of the currencies preceding the euro against the currencies of the following countries: Australia, Canada, Denmark, Greece, Hong Kong, Japan, Norway, Singapore, South Korea, Sweden, Switzerland, United Kingdom and United States. The weights used in these calculations are based on manufactured goods trade between 1995 and 1997 and capture third-market effects. From January 2001, Greece ceased to be a partner country in the effective exchange rate of the euro; the weighting scheme was adjusted accordingly. Due to change in the weighting scheme, effective exchange rate data as from January 2001 are not fully comparable with earlier observations. For the prices are not yet available, estimates have been used. For the definition of the method see: ECB, Monthly Bulletin,

April 2000, page 39 ff. — 2 ECB calculations; in addition to the countries belonging to the narrow group (see footnote 1), this group also includes the following countries: Algeria, Argentina, Brazil, China, Croatia, Cyprus, Czech Republic, Estonia, Hungary, India, Indonesia, Israel, Malaysia, Mexico, Morocco, New Zealand, Philippines, Poland, Romania, Russia, Slovakia, Slovenia, South Africa, Taiwan, Thailand and Turkey. — 3 The method of calculation is consistent with the procedure used by the ECB to compute the effective exchange rates of the euro (see Monthly Bulletin, November 2001, page 50 ff.). — 4 Decline in the values implies an increase in competitiveness. — 5 EMU countries and narrow group of the ECB except Australia, Hong Kong, Singapore and South Korea. — 6 Figures up to end-1998, computed by linking with the figures published up to October 2001. — 7 EMU countries and broad group of the ECB. — 8 Annual and quarterly averages.



## Overview of publications by the Deutsche Bundesbank

This overview provides information about selected recent economic and statistical publications by the Deutsche Bundesbank. Unless otherwise indicated, these publications are available in both English and German, in printed form and on the internet.

The publications are available free of charge from the Press and Public Relations Division. For a small fee to cover costs, a file which is updated monthly and contains approximately 40,000 time series published by the Bundesbank can be obtained on magnetic tape cassette or ZIP disk from the Division Statistical data processing, mathematical methods. Orders should be sent, in writing, to one of the addresses listed on the reverse of the title page. Selected time series can also be downloaded from the internet.

### Annual Report

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### Monthly Report

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For information on the articles published between 1990 and 2002 see the index attached to the January 2003 *Monthly Report*.

#### February 2002

- The economic scene in Germany around the turn of 2001–02

#### March 2002

- Circulation of the Deutsche Mark – from currency reform to European monetary union
- German balance of payments in 2001
- The pass-through from market interest rates to bank lending rates in Germany

#### April 2002

- Government benefits for families
- German enterprises' profitability and financing in 2000
- RTGS<sup>plus</sup> – successfully established

#### May 2002

- The economic scene in Germany in spring 2002

#### June 2002

- Overall financial flows in 2001
- The evolution of accounting standards for credit institutions
- Consequences of increasing capital flows for exchange rate policy – observations and prospects worldwide
- Direct investment in the real and financial sector – the Bundesbank Spring Conference 2002

#### July 2002

- Consumer prices and the changeover from Deutsche Mark to euro
- Funded old-age provision and the financial markets
- Monetary policy and investment behaviour – an empirical study
- Reports from the Economic Research Centre

#### August 2002

- The economic scene in Germany in summer 2002

#### September 2002

- The performance of German credit institutions in 2001
- Productivity developments in Germany
- Quotas and voting shares in the IMF

#### October 2002

- Amendments to the Banking Act caused by the Fourth Financial Market Promotion Act
- The development of bank lending to the private sector
- Fundamental determinants of real exchange rate movements in the central and east European accession countries

#### November 2002

- The economic scene in Germany in autumn 2002

#### December 2002

- Recent tax revenue trends
- Macroeconomic development of earnings and costs since the early 1990s
- Developments in the external economic relations of the EU accession countries in central and eastern Europe
- Reports from the Economic Research Centre

#### January 2003

- Reserve assets: their development and importance in monetary union
- Role and importance of interest rate derivatives
- The new "Minimum requirements for the credit business of credit institutions" and Basel II
- Reports from the Economic Research Centre

## 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)

- 3 Aufbau der bankstatistischen Tabellen,  
January 2000<sup>3</sup>
- 4 Financial accounts for Germany 1991 to 2001,  
September 2002<sup>5</sup>
- 5 Annual accounts of west German enterprises  
1971 to 1996, March 1999<sup>1</sup>
- 6 Ratios from the annual accounts of west and  
east German enterprises for 1998, September  
2001<sup>1,5</sup>
- 7 Erläuterungen zu den Leistungspositionen der  
Zahlungsbilanz, September 2001<sup>3</sup>

## 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>

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

Europäische Organisationen und Gremien im Be-  
reich von Währung und Wirtschaft, May 1997<sup>3</sup>

Die Zahlungsbilanz der ehemaligen DDR 1975 bis  
1989, August 1999<sup>3</sup>

The market for German Federal securities, May  
2000

Macro-Econometric Multi-Country Model: MEMMOD,  
June 2000

Bundesbank Act, September 2002

8 Balance of payments statistics of the Federal  
Republic of Germany, 2nd edition, February  
1991<sup>o</sup>

9 Securities deposits,  
August 2002

10 International capital links,  
May 2002<sup>1</sup>

11 Balance of payments by region,  
August 2002

12 Technologische Dienstleistungen in der Zah-  
lungsbilanz, May 2002<sup>3</sup>

## Special Statistical Publications

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1 Banking statistics guidelines and customer clas-  
sification, January 2003<sup>4,5</sup>

2 Bankenstatistik Kundensystematik Firmenver-  
zeichnisse<sup>3,6</sup>

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<sup>o</sup> Not available 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 French, Spanish, Russian and Chinese.

<sup>3</sup> Available in German only.

<sup>4</sup> Only the sections "Monthly Balance Sheet Statistics",  
"External position" and "Customer classification"  
("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.

<sup>5</sup> Only available on the internet.

<sup>6</sup> Current version available on the internet at quarterly in-  
tervals.

## Discussion papers by the Economic Research Centre

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August 2002 21/02  
Imperfect Competition, Monetary Policy and Welfare in a Currency Area

August 2002 22/02  
Monetary and fiscal policy rules in a model with capital accumulation and potentially non-superneutral money

September 2002 23/02  
Dynamic Q-investment functions for Germany using panel balance sheet data and a new algorithm for the capital stock at replacement values

October 2002 24/02  
Tail Wags Dog? Time-varying Information Shares in the Bund Market

October 2002 25/02  
Time Variation in the Tail Behaviour of Bund Futures Returns

November 2002 26/02  
Bootstrapping Autoregressions with Conditional Heteroskedasticity of Unknown Form

November 2002 27/02  
Cost-Push Shocks and Monetary Policy in Open Economies

November 2002 28/02  
Further Evidence On The Relationship Between Firm Investment And Financial Status

November 2002 29/02  
Genetic learning as an Explanation of Stylized Facts of Foreign Exchange Markets

December 2002 30/02  
Wechselkurszielzonen, wirtschaftlicher Aufholprozess und endogene Realignmenttrisiken<sup>3</sup>

Earlier discussion papers are available on the internet, in some cases as abstracts.

## Banking legislation

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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, February 2001<sup>3</sup>

2a Grundsatz I über die Eigenmittel der Institute, January 2001<sup>3</sup>

2b Grundsatz II über die Liquidität der Institute, August 1999<sup>3</sup>

7 Instruction sheet for the reporting of large exposures and loans of 3 million Deutsche Mark or more pursuant to sections 13 to 14 of the Banking Act, September 1998

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For footnotes, see p 79\*.