

Report of the  
Deutsche  
Bundesbank

for the Year 1987



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Central Bank  
Council of the  
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in the financial  
year 1987**

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Members on April 1, 1988

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**Note:** In order to expedite publication of the English version of this Report, the following sections contained in the German original have been omitted:

Part A                      Bank supervision, domestic and external monetary and foreign exchange policy regulations of the Deutsche Bundesbank

Part C                      Fund for the Purchase of Equalisation Claims

Appendices to  
Parts B and C              Nos. 1, 3, 4 and 5

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## Part A: General part

The currency  
and the economy in 1987



## I. The global economic environment

In 1987 economic activity in the Federal Republic of Germany unfolded in a difficult international environment. However, the sustained external disequilibria in the major industrial countries (involving for a while a precipitous fall in the dollar), the slump in prices in the international stock markets and the unresolved debt problems of developing countries were not entirely due to developments in 1987 but also owed something to long-term dislocations in the world economy. Hence economic policy in Germany — as in other countries too — and in particular the Bundesbank's monetary policy could not be geared exclusively to domestic requirements; external conditions likewise had to be taken into account to a high degree. First, the dampening effect on domestic business activity of the appreciation of the Deutsche Mark had to be minimised by means of appropriate economic policy measures. Second, Germany, being a major industrial country, had to consider the repercussions of its actions on the economies of its trading partners. The need for closer cooperation in economic policy has increased with the scale of the global economic tensions; this applies particularly to the major industrial countries. However, the global economic problems call for solutions which in part can only be implemented over the longer term; moreover, structural adjustments, which cannot always be made without hurting, are indispensable. The important thing for the Bundesbank was to combine the interests of international cooperation with the fulfilment of its stabilisation mandate.

Given the problems affecting the world economy, it is remarkable that economic growth in the industrial countries in 1987 was rather strong. After a period of instability at the beginning of the year, the expansionary forces strengthened distinctly as time went by; overall real GNP in the industrial countries rose by around 3%, just as it had done in 1986. The resilience of the economy in the face of new pressures emerged particularly clearly after the stock market slump and the further depreciation of the dollar towards the end of last year; contrary to widespread fears, neither development brought economic expansion to a halt, not in the fourth quarter of 1987 and not in the first few months of 1988 either. However, growth rates did fan out somewhat by region last year. While overall expansion in Western Europe was no longer quite as strong as in 1986, economic growth remained as brisk as ever in the United States in the wake of a steep increase in exports. In Japan, indeed, the expansion in 1987 was actually greater than a year before, owing in part to the greater adaptability of the economy and economic policies to the new underlying conditions in the world economy.

Despite numerous disturbances, the upswing in global business activity has now been in progress for five years — in the case of the United States, in fact, for six — and a slowdown in the growth trend is not in sight. This not only bears witness to the inherent strength of the economic growth; the expansionary forces have also been fostered by the fact that, throughout this long period, there has nowhere been any economic overheating which — as in the past — might have ushered in a downswing caused by bottlenecks on the supply side and inevitable braking efforts on the demand side. The absence of such overheating has been reflected not least in the fact that the pace of price rises in most industrial countries has not quickened significantly in the fifth and sixth years of the upswing. Consumer price increases remained moderate in 1987, at 3% (after 2½% in 1986), even though there is no mistaking the fact that in some countries it has become more difficult to keep price rises within acceptable bounds. At the same time employment went up strongly again in the industrial countries; however, in view of the expansion of the labour force owing to demographic factors, the rise was not large enough, especially in Western Europe, to reduce the number of unemployed significantly. The high level of unemployment in Europe, the underlying reasons for which are structural rather than cyclical, therefore remains one of the principal challenges facing economic policy.

Germany under the influence of tensions in the world economy

1

Strong economic growth in the industrial countries

World-wide upswing without serious capacity bottlenecks

Key economic variables for selected countries and groups of countries								
Country/Group of countries	Real GNP 1		Real domestic demand		Consumer prices 2		Balance on current account	
	1986	1987 p	1986	1987 p	1986	1987 p	1986	1987 p
	Change from previous year in %						US\$ billion	
<b>A. Industrial countries 3</b>								
of which								
European industrial countries	+ 2.6	+ 2.5	+ 3.9	+ 3.4	+ 2.9	+ 2.9	+ 57.0	+ 43.6
of which								
Germany	+ 2.5	+ 1.7	+ 3.8	+ 2.9	- 0.2	+ 0.2	+ 39.7 °(+ 85.0)	+ 45.3 °(+ 80.5)
France	+ 2.0	+ 2.1	+ 3.8	+ 3.3	+ 2.7	+ 3.1	+ 3.0	- 4.6
United Kingdom	+ 3.3	+ 4.0	+ 3.8	+ 3.8	+ 3.4	+ 4.2	+ 0.1	- 2.8
Italy	+ 2.7	+ 2.8	+ 3.2	+ 4.5	+ 5.8	+ 4.7	+ 4.1	+ 0.4
United States	+ 2.9	+ 2.9	+ 3.9	+ 2.5	+ 1.9	+ 3.7	- 141.4	- 160.7
Japan	+ 2.4	+ 3.8	+ 4.0	+ 4.7	+ 0.6	+ 0.1	+ 85.8	+ 86.7
Canada	+ 3.3	+ 3.8	+ 3.9	+ 4.3	+ 4.2	+ 4.4	- 6.7	- 7.2
Industrial countries, total	+ 2.7	+ 2.9	+ 3.8	+ 3.2	+ 2.3	+ 2.9	- 16.2	- 47.8
<b>B. Developing countries 4</b>								
By region								
of which								
Latin America	+ 4.0	+ 2.3	.	.	+ 88.4	+ 130.8	- 16.4	- 9.3
Middle East	+ 2.0	- 1.0	.	.	+ 11.3	+ 16.3	- 17.1	- 2.9
Rest of Asia	+ 6.5	+ 6.6	.	.	+ 8.0	+ 8.7	+ 5.0	+ 23.0
Developing countries, total	+ 4.1	+ 3.1	.	.	+ 29.9	+ 40.3	- 38.9	+ 4.4
<b>C. Centrally planned economies 5</b>	+ 4.1	+ 3.0	.	.	.	.	+ 0.8	+ 0.4
<b>D. Total</b>	+ 3.2	+ 3.0	.	.	<b>6 + 8.7</b>	<b>6 + 11.2</b>	<b>7 - 54.3</b>	<b>7 - 43.0</b>

1 Real GNP/GDP for the industrial countries and developing countries; net material product (real) for the centrally planned economies. — 2 Cost of living index. — 3 OECD countries excluding Greece, Portugal and Turkey. — 4 Including OPEC countries. — 5 East European countries not belonging to the IMF. — 6 Excluding centrally planned economies. — 7 Statistical discrepancy (= missing surpluses or overly large deficits). — p Provisional. — ° Calculated in DM billion.  
Sources: IMF and national statistics. BBk

### Headway in the external adjustment process

In 1987 global economic performance was hampered by the fact that the countries with external disequilibria initially made only gradual headway in the adjustment process — at least as measured by the current account balances of individual countries. However, real foreign trade flows did move in the desired direction. In the deficit country United States exports increased in volume by 15% in 1987, while imports grew by only 6% in real terms. On the other hand, in the surplus countries Japan and Germany the volume of imports continued to rise strongly while the volume of exports increased only a little or even declined somewhat. In other words, in real terms the disequilibria decreased markedly, owing no doubt in quite considerable measure to the exchange rate adjustments. Even so, in nominal terms the current account surpluses and deficits of the key countries remained exceptionally high since — as a direct consequence of the exchange rate changes — foreign trade prices initially moved in the opposite direction to foreign trade volumes. In the United States, for example, the current account deficit rose from US\$ 141 billion in 1986 to as much as US\$ 161 billion, or 3.6% of GNP, in 1987. In Japan the surplus in 1987, at ¥ 12.5 trillion (3.6% of GNP), was only a little lower than in 1986 (¥ 14.4 trillion), and in Germany it declined by DM 4.5 billion to DM 80 billion (4.0% of GNP). Of the NICs in East Asia (such as Hong Kong, Singapore, South Korea and Taiwan), some ran much higher current account surpluses in 1987 than in 1986, the levels involved being hardly consistent in some cases with the objective of a balanced global payments pattern in the long run.

Needless to say, sustained global current account disequilibria result in profound shifts in assets in the world. In absolute terms, the United States has now become the world's biggest debtor country (which fact impedes the reduction of the current account deficit, owing to the associated growing interest payments to other countries). But the persistent accumulation of external claims can lead to economic problems in the surplus countries too. In 1987 the pronounced differences in current account positions affected conditions in global financial and foreign exchange markets so much that — in contrast to the situation in earlier years — the deficits could no longer be financed smoothly, or at any rate without sharp swings in exchange rates, through the market. In an effort to prevent an even stronger depreciation of the dollar, the monetary authorities outside the United States bought huge amounts of US dollars in the foreign exchange markets and added them to their own holdings, rather as they had done when the dollar was depreciating in the late seventies. In this way the non-US central banks contributed massively to the financing of the US external deficit, even though this at the same time involved a substantial creation of money in their own monetary systems.

Financing of current account balances through the market not accomplished

In spite of the massive foreign exchange purchases of the central banks, the dollar came under pressure at times, e.g. at the beginning of 1987. Only after the finance ministers and central bank governors of the United States, Japan, Germany, France, the United Kingdom and Canada had all declared at a meeting in Paris in February 1987 that they intended to stabilise the exchange rates of their currencies at "around current levels" (the "Louvre accord") did the monetary situation quieten down for a fairly long time. Besides the central banks' massive and coordinated dollar purchases, this also owed something to the rise in interest rates in the United States (gradual at first but gathering pace in the late summer), which widened the interest rate differential in favour of US bonds, despite unavoidable interest rate increases outside the United States.

Dollar under strong downward pressure at times

On Monday, October 19, 1987 there was a sharp downturn in the US stock market; the share price index fell by 22.6%. However, share prices had been declining since September 4, 1987, when the US discount rate was raised by ½ percentage point: by Friday, October 16 they had dropped by 12.3%. The Annual Report of the economic advisers to the President of the United States says with respect to this fall that there are a host of explanations for the crash and that many different factors played a part, e.g. the steep rise in share prices since the beginning of 1987, the deficit on the trade balance and in the national budget, and the increase in US interest rates. There was, however, also a positive aspect to the stock market slump; it was instrumental in bringing about a better balance in overall economic policy. In actual fact, the efforts made in Congress to reduce the US public sector deficit were stepped up. Nevertheless, the dollar remained weak, especially since official pronouncements made immediately before the crash were understood to imply that the United States was no longer fully behind the Louvre accord. Even though the major industrial nations reaffirmed the Louvre accord in a joint statement issued a week before the year ended, the dollar continued to decline and at the end of 1987 reached new historical lows all round the world. But after the turn of the year a more positive view was taken of the US currency and the dollar began to strengthen again.

Movement of the dollar in the wake of the stock market slump

However, the sharp depreciation of the US dollar against the Deutsche Mark, the yen and other major currencies since the beginning of 1987 exaggerates the scale of the world-wide exchange rate shifts. In the first place, exchange rates in Europe remained largely stable — despite the realignment in the European Monetary System in January 1987 and despite occasional tensions in the pattern of exchange rates (which prompted the Banque de France in particular to undertake considerable intramarginal interventions). Secondly, the dollar depre-

Overall, however, relatively limited exchange rate shifts

ciated only a little or not at all against the currencies of some of the East Asian NICs. Taking the average against all other major currencies, the appreciation of the Deutsche Mark – like, conversely, the depreciation of the US dollar – was therefore far smaller than the change in the bilateral exchange rates. If, moreover, the differing inflation rates in the respective countries are eliminated, the changes in the real exchange rates of the European currencies in particular are very moderate. For example, the weighted real external value of the Deutsche Mark against the currencies of 14 industrial countries hardly changed at all from the beginning of 1987 to the first quarter of 1988.

Dollar depreciation  
an impediment to  
economic activity and  
the balance of  
payments

Even so, in many countries the weakness of the US dollar dampened the assessment of the economic outlook, if only because of its function as a global key currency. For example, the depreciation of the dollar not only impaired the sales prospects of numerous foreign suppliers in the US market and in the markets of other countries, it also had a direct adverse effect on investment conditions at times in countries with appreciating currencies. Moreover, the decline in the dollar tended to delay the external adjustment process, at least in the short run, since the relief on the import side was often more significant than the sales losses due to the decline in price competitiveness, especially in the surplus countries. In the meantime the conviction seems to have gained ground that the present exchange rate level is high enough to trigger and support the necessary adjustments to trade flows.

Closer international  
cooperation to  
remedy the external  
disequilibria

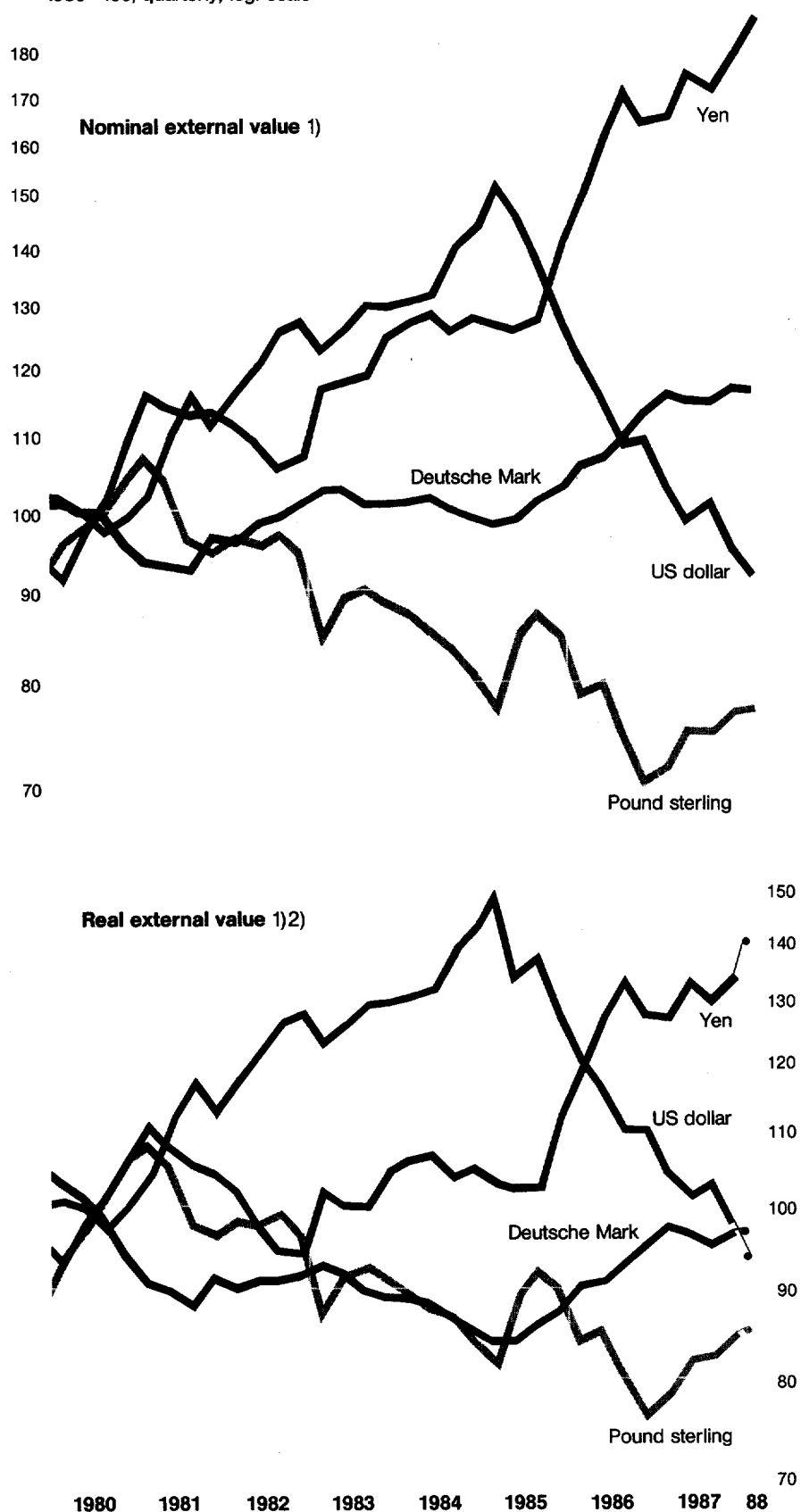
As already indicated, the major industrial countries strove to quieten the foreign exchange markets by means of closer international cooperation. A particularly important factor in this connection was that they did not confine themselves to curing the symptoms, but endeavoured to remedy the underlying causes of the disequilibria by means of economic policy adjustments. Not only in the Louvre accord but also later at the world economic summit meeting in Venice and in the statement issued by the finance ministers and central bank governors in December 1987, attention was focused on support of the external adjustment process by national economic policy. Economic and financial policies were supposed to ensure that domestic demand grows less than aggregate output in the deficit countries whereas (conversely) the rise in domestic demand is to exceed the growth of real GNP in the surplus countries. Agreement was also reached on measures to stabilise the dollar by means of central bank intervention, though without committing central banks to "target zones" for the dollar, let alone to defending a particular exchange rate for the dollar "at all costs". As past experience has shown, a particular exchange rate level cannot be maintained in the long run, contrary to the market trend, by central bank intervention alone. In 1987 too the dollar in the final analysis continued to depreciate even though central banks bought record amounts of dollars in the foreign exchange market.

Better international  
coordination of finan-  
cial policy

Financial policy has assumed a major role in the international strategy to foster the external adjustment process. By means of a restrictive financial policy, a country with a massive current account deficit can restrain the rise in domestic demand, enhance domestic saving and release economic resources for exports. It is consistent with this objective that the United States lowered its budget deficit from US\$ 221 billion in fiscal 1986 to US\$ 150 billion in fiscal 1987. However, this reduction also owed something to special factors associated with the tax reform that became effective in 1986; hence a continuation of this trend does not necessarily appear to be assured. The US Administration proposes to lower the budget deficit further; if the reductions in the deficit cannot be achieved in full by the budget laws, general expenditure cuts under the so-called Gramm-Rudman-Hollings Act come into force. The surplus countries Japan and Germany have already significantly eased their financial policies in accordance with the general policy strategy referred to above. In May 1987 Japan approved a

## Weighted external value of major currencies

1980=100, quarterly, log. scale



1) Geometrically weighted average against the currencies of 14 other industrial countries; the weighting pattern is based on the trade flows of industrial products from 1980 to 1982, after taking third-market effects into account.- 2) Nominal external value adjusted for differences in overall price movements in the respective economies (measured by the deflators of total sales).-  
●= Estimated.

programme of substantial expenditure designed to stimulate domestic demand; Germany lowered taxes again at the beginning of 1988 and, in addition, the Federal Government will accept shortfalls in budget revenue that had not originally been expected. At all events, the international coordination of financial policies has made headway, so that, viewed from that angle too, the prospects for a reduction in the external disequilibria have improved.

Adjustment process buttressed by monetary policy

In 1987 monetary policy in the major industrial countries likewise endeavoured to buttress the reduction of the external disequilibria over a relatively long period. In the United States monetary growth slackened at first in the course of 1987, interest rates moved upwards and the upturn bolstered the dollar. In the surplus countries monetary policy remained fairly easy under conditions of strong monetary growth and low interest rates; but from mid-year onwards it became more and more obvious that the rise in interest rates in the United States was not failing to have an impact on the interest rate level in the other major industrial nations.

After the crash, monetary policy easier world-wide

After the stock market crash in October 1987 the United States temporarily adopted a rather expansionary monetary policy stance and in other countries too, such as Germany, the money markets were amply provided with liquidity so as to prevent the stock market slump from having any adverse repercussions on the financial system. Not least for this reason, but also because of investors' tendency to switch out of shares into fixed interest securities, the world-wide rise in interest rates has now largely reversed again — a trend that has been fostered in Europe by a number of reductions in central bank interest rates. Since the autumn of last year the US monetary authorities have primarily been intent on keeping economic growth going by means of low interest rates, albeit without increasing the room for inflationary trends. Interest rate policies in the surplus countries are directed towards moderating the tendency towards appreciation and at the same time towards buttressing domestic economic activity. This is clearly reflected, in the first place, in the rise in the national money stock, which — particularly in Germany, Japan and the United Kingdom — has been substantially outpacing the growth of production potential since 1986. The interest rate structure, which (especially in Germany) is marked by a historically wide spread between the short end and the long end of the credit market, also attests to this expansionary monetary policy stance. Only in a few countries do the domestic markets in goods and services mirror an increase in inflationary tendencies, doing so hitherto to only a moderate degree. If, however, the money stock in most industrial countries were to go on growing at its present pace, a rekindling of global inflationary tendencies could no longer be ruled out. The comparatively high level of interest rates for financial assets with long maturities is a symptom of this assessment by market participants. Although in the short run the industrial countries could hardly have been prevented from using their monetary policy more to stabilise exchange rates and bolster business activity, the possible longer-term implications for the value of money must be kept in mind.

Protectionism no solution to the external adjustment problems

The adjustment process could be fostered not only by an internationally balanced and consistent set of financial and monetary policy measures, such as has been outlined in the various agreements, but also by dismantling existing trade barriers and bringing economic structures — some of which are too rigid — into line with the changed global economic conditions more quickly than has been the case in the past. Approaches to reducing supply-side rigidities which are hampering economic growth are discernible but, it seems, still inadequate. Extensive studies by international organisations show that the necessary structural changes could and should be speeded up by displaying greater flexibility in the labour, financial and commodity markets and by intensified government deregulation. It would be particularly tragic if the present external

disequilibria further reinforced the protectionist tendencies which are already springing up throughout the world anyway. Government intervention in the free movement of goods would at best mitigate the economic problems over the short term, but in the longer run it would entail even tougher adjustment measures. The correction of the external disequilibria can proceed without undue friction only if it takes place against the background of growth in exports and imports alike. Keeping the markets open is an essential precondition for this.

Given the magnitude of the external disequilibria that are to be run down, it appears essential to underpin international economic policy cooperation by making the market mechanisms operate in the same direction. In particular, in a free market system — and “coordination” in the world economy is effected primarily through the market — exchange rates and interest rates must be sufficiently flexible, since the elimination of disequilibria cannot be expected from the flexibility of goods prices alone, especially if a general upturn in prices is to be prevented. Changes in the “prices” of capital and foreign currencies likewise have an important part to play in the adjustment process. After the exchange rate realignments of recent years, there is a good chance that the present, largely non-inflationary economic growth will continue in the major industrial countries and at the same time that the external adjustment process will enter a phase in which the current account positions, which are intolerable in the long run, will be reduced in nominal as well as in real terms. When setting their respective economic policy priorities, the deficit and surplus countries will continue to have relatively little room for manoeuvre if they intend to meet their specific responsibilities in the world economy. Germany, in reaching its financial and monetary policy decisions, has always taken account of the commitments it has entered into under international agreements. The fact that it has found it difficult at times to reconcile wishes from abroad with domestic economic requirements emerges clearly from the following section of this Report.

Strengthening the  
market mechanisms

## II. Economic trends in the Federal Republic of Germany and central bank policy

8

### 1. Sustained economic growth in the Federal Republic of Germany fuelled by buoyant domestic demand

Strong increase in domestic demand the key stimulus to growth	<p>The economic upswing in the Federal Republic of Germany continued in 1987 in spite of being braked by the preceding appreciation of the Deutsche Mark and the further reduction in the real trade surpluses. The real gross national product showed a rise on the year, according to provisional calculations, of 1.7%. This meant that growth was indeed somewhat below the average of the preceding four years of the upswing, in which it had been 2.4%, but this owed something to the fact that in the first few months of last year there were considerable output losses owing to an unusually long period of sub-zero temperatures. Domestic demand was the pace-setter of the growth process last year: in real terms, it rose by 3% — a rate which is thoroughly respectable by international standards. The fact that the increase in aggregate output remained below this rate was due to the reduction in the real trade surpluses, which made up a good 1% of GNP at constant prices. Real net exports of goods and services had already fallen by a similar amount in 1986. The shift in the cyclical upswing forces towards domestic demand, which was necessary not least because of the braking effects mentioned, seems to have succeeded in both 1986 and 1987. At any rate, economic growth continued without domestic demand artificially ballooning and without inflationary trends arising. In actual fact, 1987 saw the maintenance of price stability in Germany, although exogenous factors such as cheaper imported commodities and energy sources played a major role in this.</p>
Further growth in production scope	<p>The longer-term basis for the growth potential in the German economy expanded in 1987 too; Bundesbank estimates show that production potential grew again by about 2%. The prime reason here was the increase in fixed assets. Admittedly, net investments are not always identical with an expansion in production capacity. For example, investments in environmental protection do not usually directly expand productive plant, but increased efforts in this direction not only do something for the environment, they also reduce resistance to new fixed assets being created in the manufacturing, energy-generating and transportation sectors; if there were fewer investments in environmental protection, expansion might well come to a halt in some areas. If, however, more of GNP goes into environmental protection in Germany than in many other industrial countries, one cannot expect industrial output to grow as strongly. A particular feature of economic trends in Germany which typified 1987 too is that the increase in production potential is not really being promoted by the production factor labour. It is true that the labour force has continued to increase fairly strongly, but average working hours have decreased again. Last year major sectors of the economy saw previously agreed reductions in weekly working hours going into force; in other areas, the annual vacation was lengthened. The labour potential — calculated from the potential number in the labour force and the potential number of man-hours worked — consequently went up only slightly, just as was the case in 1986.</p>
Sustained rise in overall output	<p>Overall output in 1987 increased to about the same extent as production potential grew. After the start of the year, however, growth was initially hampered considerably by the long, cold winter. The bad weather led to heavy losses of demand and output, especially in the construction sector, which was the main reason why real GNP fell to a more than seasonal extent in the first quarter. In the spring months, however, the upswing forces gained the upper hand again, and domestic demand, in particular, expanded strongly. These overall economic trends continued to the end of the year; in the fourth quarter of 1987 real GNP showed a 2½% rise on the year.</p>



Key economic variables in the Federal Republic of Germany									
Item	Unit	1984	1985	1986	1987	1984	1985	1986	1987
						Change from previous year in %			
<b>Aggregate demand</b>									
Private consumption	DM billion	1,003.6	1,041.0	1,080.1	1,119.6	+ 4.1	+ 3.7	+ 3.8	+ 3.7
Public consumption	DM billion	350.2	365.6	382.1	396.8	+ 4.2	+ 4.4	+ 4.5	+ 3.8
Fixed capital formation	DM billion	354.6	360.8	376.8	388.3	+ 3.1	+ 1.7	+ 4.4	+ 3.1
Machinery and equipment	DM billion	137.6	153.9	161.4	168.7	+ 1.5	+ 11.8	+ 4.9	+ 4.5
Construction	DM billion	217.1	207.0	215.4	219.7	+ 4.2	- 4.7	+ 4.1	+ 2.0
Increase in stocks	DM billion	+ 6.6	- 1.4	- 2.1	+ 8.7	.	.	.	.
Domestic expenditure	DM billion	1,715.0	1,765.9	1,836.9	1,913.4	+ 4.4	+ 3.0	+ 4.0	+ 4.2
Foreign balance <b>1</b>	DM billion	+ 54.9	+ 79.7	+ 111.9	+ 109.8	.	.	.	.
Exports	DM billion	590.8	647.0	636.3	636.6	+ 12.6	+ 9.5	- 1.6	+ 0.0
Imports	DM billion	535.9	567.3	524.4	526.8	+ 10.1	+ 5.9	- 7.6	+ 0.5
GNP at current prices	DM billion	1,769.9	1,845.6	1,948.8	2,023.2	+ 5.3	+ 4.3	+ 5.6	+ 3.8
Memorandum items									
Orders received by the manufacturing sector	1980 = 100	118.2	127.8	127.9	128.2	+ 9.6	+ 8.1	+ 0.1	+ 0.2
Domestic orders	1980 = 100	109.5	116.4	119.1	118.8	+ 6.2	+ 6.3	+ 2.4	- 0.3
Foreign orders	1980 = 100	137.1	152.3	146.9	148.4	+ 15.9	+ 11.1	- 3.5	+ 1.0
Orders received by the construction industry	1980 = 100	88.9	87.4	95.3	92.7	- 5.8	- 1.7	+ 9.1	- 2.7
<b>Distribution of income</b>									
Wage and salary income	DM billion	954.0	991.1	1,041.3	1,080.6	+ 3.6	+ 3.9	+ 5.1	+ 3.8
do. as a percentage of national income	%	70.3	69.7	68.8	68.8	.	.	.	.
Entrepreneurial and property income	DM billion	403.9	430.3	472.1	490.8	+ 10.6	+ 6.5	+ 9.7	+ 4.0
Memorandum items									
Gross income of producing enterprises	DM billion	307.2	330.9	373.8	392.3	+ 10.8	+ 7.7	+ 13.0	+ 5.0
do. as a percentage of national income	%	22.6	23.3	24.7	25.0	.	.	.	.
National income	DM billion	1,357.9	1,421.3	1,513.4	1,571.4	+ 5.6	+ 4.7	+ 6.5	+ 3.8
<b>Output</b>									
GNP at 1980 prices	DM billion	1,548.1	1,579.6	1,618.4	1,645.6	+ 3.3	+ 2.0	+ 2.5	+ 1.7
Productivity <b>2</b>	1980 = 100	110.3	112.5	115.1	117.6	+ 3.3	+ 2.0	+ 2.3	+ 2.2
Output in the producing sector (excluding construction) <b>3</b>	1985 = 100	95.7	100.0	101.8	102.4	+ 2.8	+ 4.5	+ 1.8	+ 0.6
Construction output <b>3</b>	1985 = 100	108.9	100.0	106.4	106.1	+ 1.2	- 8.2	+ 6.4	- 0.3
<b>Employment</b>									
Employed	Millions	25.4	25.5	25.8	26.0	+ 0.1	+ 0.7	+ 1.0	+ 0.7
Wage and salary earners	Millions	22.1	22.3	22.5	22.7	+ 0.2	+ 0.8	+ 1.1	+ 0.8
Memorandum item									
Total number of man-hours worked	1980 = 100	94.5	94.5	94.7	94.2	- 0.0	+ 0.0	+ 0.2	- 0.5
Unemployed	Thousands	2,265.6	2,304.0	2,228.0	2,228.8	+ 0.3	+ 1.7	- 3.3	+ 0.0
do. as a percentage of									
the total labour force	%	8.1	8.2	7.9	7.9	.	.	.	.
the dependent labour force	%	9.1	9.3	9.0	8.9	.	.	.	.
<b>Prices</b>									
GNP deflator	1980 = 100	114.3	116.8	120.4	122.9	+ 2.0	+ 2.2	+ 3.1	+ 2.1
Memorandum item									
Unit labour costs in the economy as a whole <b>4</b>	1980 = 100	108.7	110.6	113.2	115.4	+ 0.2	+ 1.7	+ 2.4	+ 1.9
Cost of living index for all households	1980 = 100	118.4	121.0	120.7	121.0	+ 2.4	+ 2.2	- 0.2	+ 0.2
Producer price index of industrial products	1980 = 100	119.2	121.8	118.2	115.6	+ 2.9	+ 2.2	- 3.0	- 2.2
Overall construction price level	1980 = 100	112.5	113.5	115.5	117.7	+ 2.4	+ 0.9	+ 1.8	+ 1.9
Index of import prices	1980 = 100	122.8	124.6	101.0	94.4	+ 6.0	+ 1.5	- 18.9	- 6.5

**1** Balance of transactions in goods and services with other countries (including the GDR). — **2** GNP at 1980 prices per man-hour worked;

calculated by the Bundesbank. — **3** Results for kinds of activity units. — **4** Index of gross wages and salaries per employee divided by

index of real GNP per employed person. — The figures from the national accounts from 1985 onwards are provisional. BBk

Change in the pattern of production under external adjustment pressure

The economy's adjustment to the changed external conditions left clear marks on the overall pattern of production. They are to be found principally in the output of the manufacturing sector, the products of which are largely destined for export and which in domestic markets is more exposed than are other areas to competition from foreign suppliers. The individual sectors of industry were admittedly affected to widely varying degrees by pressure from foreign competitors. Thus output in the capital goods sector (excluding road vehicle manufacture), which is particularly dependent on exports and sustained considerable losses of market shares at home owing to strongly rising imports of machinery and equipment, was no higher than in 1986. On the other hand, both road vehicle manufacture and the consumer goods sector were favoured by the persistently good consumption climate and were able to expand their output, although in some cases foreign manufacturers clearly gained ground here too. In the construction sector, the whole of 1987 saw somewhat lower output than 1986. However, this is only a part of total construction output. The output of the installation and building completion sector in 1987, by contrast, rose substantially. The increase in GNP last year owed much to those sectors of the economy which produce goods mainly or exclusively for the domestic market and thus profited from the strong growth in private domestic demand. This was true first and foremost of the services sector. The value added by the enterprises in this sector (including distribution and transportation) went up in 1987 by a real 3%. Its share in the total value added amounted to 43%; it is thus, in line with a long-term trend, higher than the share of the producing sector (41%).

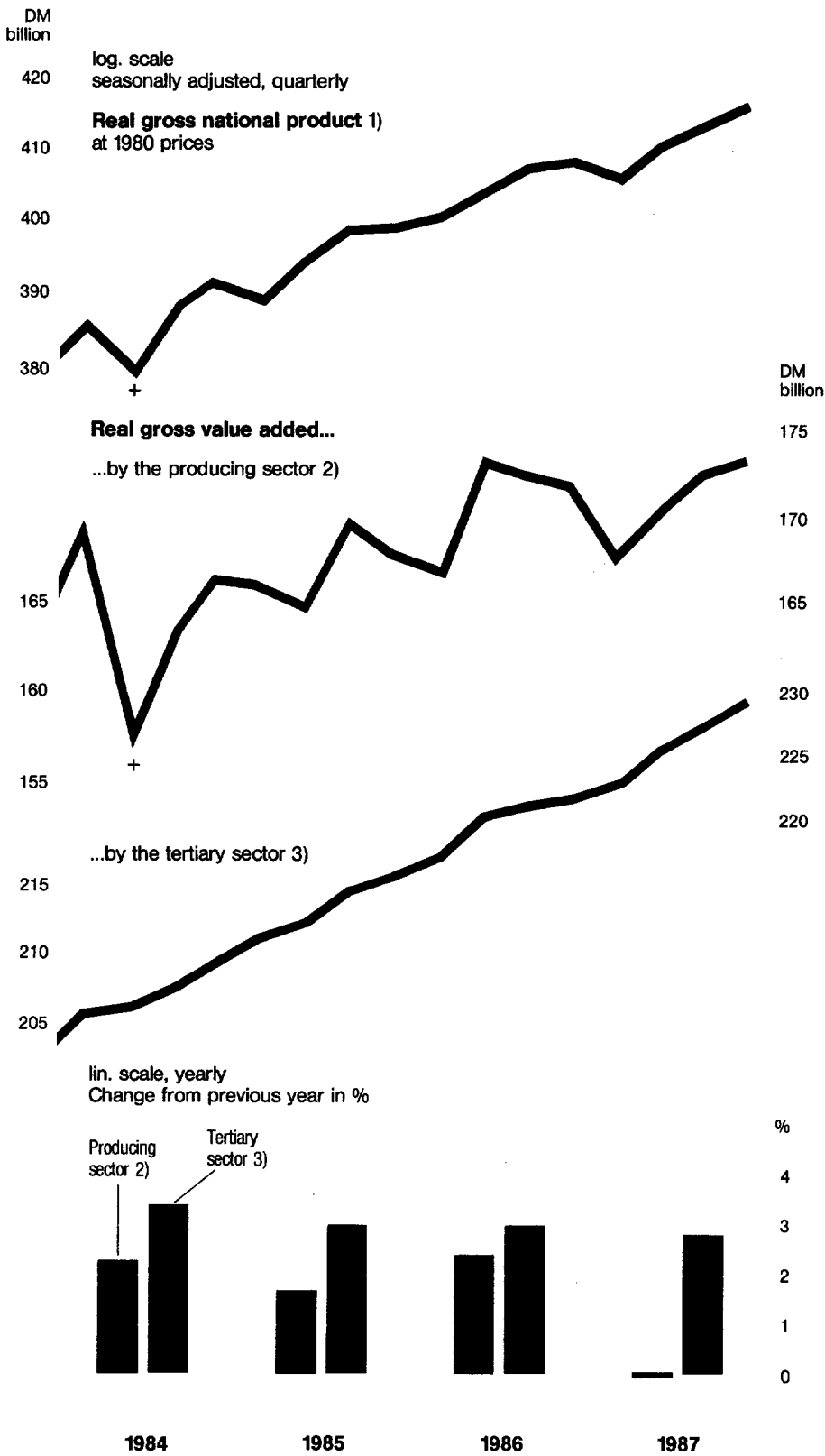
Rise in employment virtually confined to the services sector

In the labour market, economic growth with a simultaneous shortening of working hours led to a further increase in the number of employed. Taking the average of last year, about 26 million employees and self-employed persons were at work in Germany; this constitutes a rise of 180,000 over 1986 and of 640,000 over the 1983 low. The growth in employment in 1987 was somewhat weaker than a year before. In line with the differing production trends, the number of personnel increased particularly in the services sector, where, not least, female members of the workforce found improved job opportunities. Particularly distribution, the banking industry and other services (e.g. business consultants, service trades) increased their personnel numbers, as did the public sector too. By contrast, the number of those employed in the manufacturing sector hardly changed at all in 1987, although it is true to say that there were marked differences in the individual sectors. The reduction of personnel numbers continued in the construction industry.

Further growth of the labour supply

The growth in the number of employed in 1987 was roughly in line with the increase in the labour supply, which was largely due to the renewed rise in female participation in the workforce, the fact that young people born in high-birth-rate years were starting work, and the immigration into Germany of persons of working age. Consequently, the number of unemployed in 1987, which averaged 2.23 million during the year, remained unchanged against the previous year; the unemployment rate was 8.9% of the dependent labour force or — and this characterises the situation better and is more in line with the normal international definition — 7.9% of the total labour force. In the course of last year, however, unemployment increased slightly (in contrast to the situation in 1986). In the last quarter of 1987 70,000 more unemployed were registered at the labour exchanges than a year before. At the beginning of 1988 conditions eased somewhat under the influence of the mild weather; after adjustment for the normal seasonal fluctuations, the number of unemployed declined and the unemployment rate — as a percentage of the total labour force — fell to 7.8%.

**Output**



1) Adjusted for working-day variations.- 2) Including agriculture and forestry, fishing.- 3) Distribution and transportation, services, government, households and the like.- + Affected by labour disputes.

Conditions in the labour market						
Item	1984	1985	1986	1987	1986	1987
	in thousands, annual average				Change from previous year in thousands	
<b>Employment</b>						
Employed <b>p</b>	25,363	25,540	25,794	25,971	+ 254	+ 177
of whom						
Wage and salary earners <b>p</b>	22,097	22,274	22,527	22,707	+ 253	+ 180
Short-time workers	384	235	197	278	- 38	+ 81
Vacancies	88	110	154	171	+ 44	+ 17
					Unemployment rate in %	
Unemployed	2,266	2,304	2,228	2,229	<b>3</b> 7.9 <b>4</b> 9.0	<b>3</b> 7.9 <b>4</b> 8.9
<b>Structure of unemployment</b>						
by Land labour exchange district						
Schleswig-Holstein/Hamburg	189	207	209	210	11.7	11.8
Lower Saxony/Bremen	373	386	366	362	11.9	11.8
Berlin (West)	82	81	85	91	10.5	10.5
North Rhine-Westphalia	717	733	725	737	10.9	11.0
Hesse	168	165	155	155	6.8	6.7
Rhineland-Palatinate/Saarland	172	178	172	169	9.4	9.2
Baden-Württemberg	217	210	199	198	5.1	5.1
Northern Bavaria	173	166	150	144	7.8	7.3
Southern Bavaria	175	179	166	162	6.4	6.1
					Percentage of total	
Unemployed, total	2,143	2,151	2,046	2,107	100	100
by sex						
male	1,155	1,132	1,040	1,082	50.8	51.4
female	988	1,019	1,006	1,025	49.2	48.6
by vocational qualification						
qualified <b>1</b>	925	883	821	804	40.1	38.2
unqualified <b>2</b>	1,218	1,268	1,224	1,304	59.8	61.8
by length of time unemployed						
less than 6 months	1,061	1,039	978	1,019	47.8	48.4
6 months to less than 1 year	464	446	414	418	20.2	19.8
1 year and more	617	666	654	670	32.0	31.8
by age						
up to 24 years	582	564	503	479	24.6	22.7
25 to 44 years	959	951	919	953	44.9	45.2
45 to 64 years	601	636	624	676	30.5	32.1

**1** Skilled workers and salary earners of equivalent status. — **2** Unskilled workers and salary earners of equivalent status. — **3** Unemployed as % of the total labour force; annual average. — **4** Unemployed as % of the dependent labour force; annual average. — **p** As from 1985 provisional. BBK

### Structural unemployment problems

The persistently large number of unemployed in Germany is partly cyclical in origin, but to a high degree it has structural causes too; these include distortions between the demand for labour and the labour supply. This is suggested, for example, by the strong regional differences in unemployment rates and the great discrepancies in the length of time unemployed, even in regions which have equally high unemployment rates. The structural differences are also reflected in the fact that in some sectors in 1987 there was a scarcity of more highly qualified labour, in particular. This was true even of sectors such as construction, in which employment was falling. By contrast, the supply of less qualified labour was especially plentiful. This was confirmed for 1987 by the special survey which the Federal Labour Office carries out every year as at the end of September. This showed that last year, of those out of work, one in two had failed to complete a course of vocational training. Of those in employment, this is true only of one in four. The unemployment rate for less qualified members of the workforce, at an estimated 16%, is nearly twice as high as that for the labour force as a whole, and the average length of unemployment, at 15 months, is not only far longer than in general, but also increased markedly last year — unlike the situation for

persons who did complete their vocational training. Increased efforts at retraining and at improving the qualifications of the unemployed are being undertaken by the Federal Labour Office in particular, which spent a total of DM 5.7 billion on such measures in 1987, or about 27% more than in 1986; however, these measures can bear fruit only gradually. In addition to many types of rigidity which stand in the way of a solution of the labour market problem, the lower chances which less qualified job-seekers have of finding employment probably owe something to the relatively inflexible wage structure in Germany, which obstructs stronger regional and sectoral wage differentiation. In spite of increasing regional and sectoral differentiation in the labour market situation, Germany is still seeing — as during the long period of nation-wide labour shortage — the negotiation of uniform wage and salary rises and of other working conditions for large wage-bargaining sectors and for regions including several million employees.

Price trends in Germany remained steady in 1987. One of the main reasons for this was that commodities and energy could be obtained at lower prices from abroad. Prices in the international commodity and oil markets had started to rise in the second half of 1986. After the OPEC conference in December 1986 the oil price went up strongly again; until autumn 1987 it remained at the higher level reached at the start of the year and then dropped back. Around the turn of 1986-87 price rises for industrial raw materials gathered pace, and persisted for practically the entire year. As, however, many of these products are invoiced in US dollars in the international markets, Deutsche Mark prices fell as the dollar was depreciating. Thus the HWWA dollar price index for raw materials and sources of energy in 1987 was a good 4% higher than in 1986; calculated in Deutsche Mark, however, these products were 14½% cheaper. This trend was reflected clearly in import prices. Over the year as a whole imported goods cost 6½% less than in 1986.

Stability imported again

By and large, price stability was maintained in the domestic markets in 1987. It is true that prices started moving upwards again in the course of last year, not least because import prices rose at times. However, the upward trends were strictly limited. Towards the end of the year, in addition, new stability imports had a further price-curbing effect. At the industrial producer level, domestic selling prices fell again by just over 2% in 1987 on an annual average, with imported cost savings in 1986 playing a certain role. Basic and producer goods, in particular, were cheaper last year than in 1986, whereas capital goods — in spite of fiercer competition from foreign suppliers in the domestic markets — became more expensive. Construction work cost 2% more in 1987 than a year before.

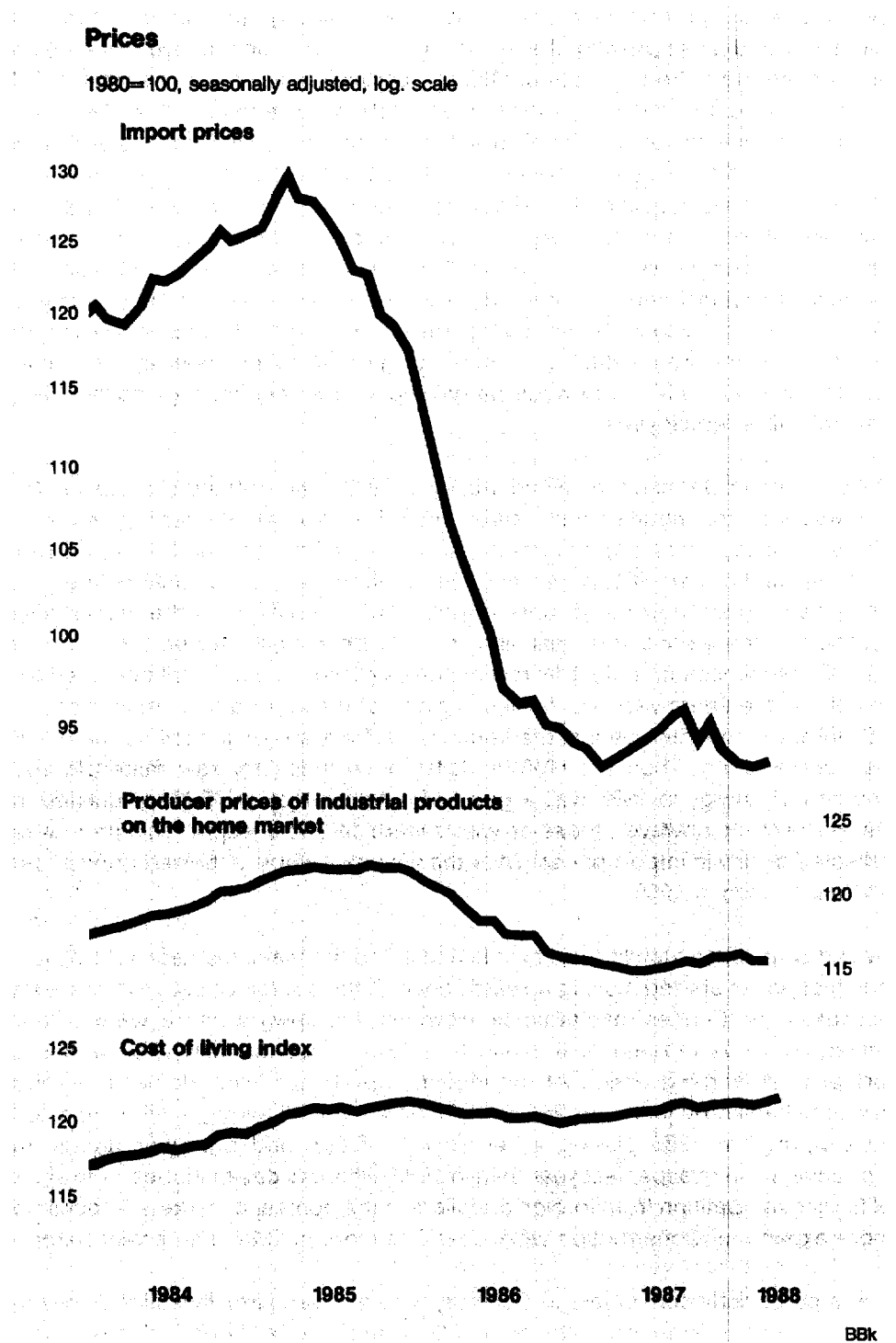
Relaxed price climate in the domestic markets

It was particularly consumers in Germany who enjoyed virtually stable prices in 1987. On an annual average, the cost of living index for all households was only 0.2% higher than in 1986; at the end of 1987, too, the rise on the year was no more than 1%, just as in March 1988. The good result for 1987 owed something not only to the after-effects of the marked drop in the oil price in the preceding year (which worked through to consumers — in the shape of lower prices for natural gas and lower heating costs — in part with a time-lag), but also to the fact that domestic cost pressure became weaker during the year. This may have contributed to the fact that the rise in the cost of services turned out markedly smaller than in 1986 and the increase in rents slackened. The price rises for industrial goods (excluding energy) were also markedly lower.

Price stability at the consumer level

In most western industrial countries price rises continued last year, in contrast to the situation in Germany. After the noticeable slowdown in price increases owing to the fall in oil prices in 1986, the upward price trend steepened again in various industrial countries in 1987. This applies not only to the United Kingdom but also to the United States, where the rise in import prices deriving from the

Sustained price differential between foreign countries and Germany



depreciation of the dollar was increasingly reflected in higher consumer prices. In the United States consumer prices went up by a good 3½% in 1987 as opposed to barely 2% in 1986. The price differential between the United States and Germany thus widened again in 1987. Vis-à-vis the EEC member countries it was somewhat narrower than in 1986 but, at 3%, it was still considerable.

Private consumption  
the most important  
driving force behind  
domestic economic  
activity

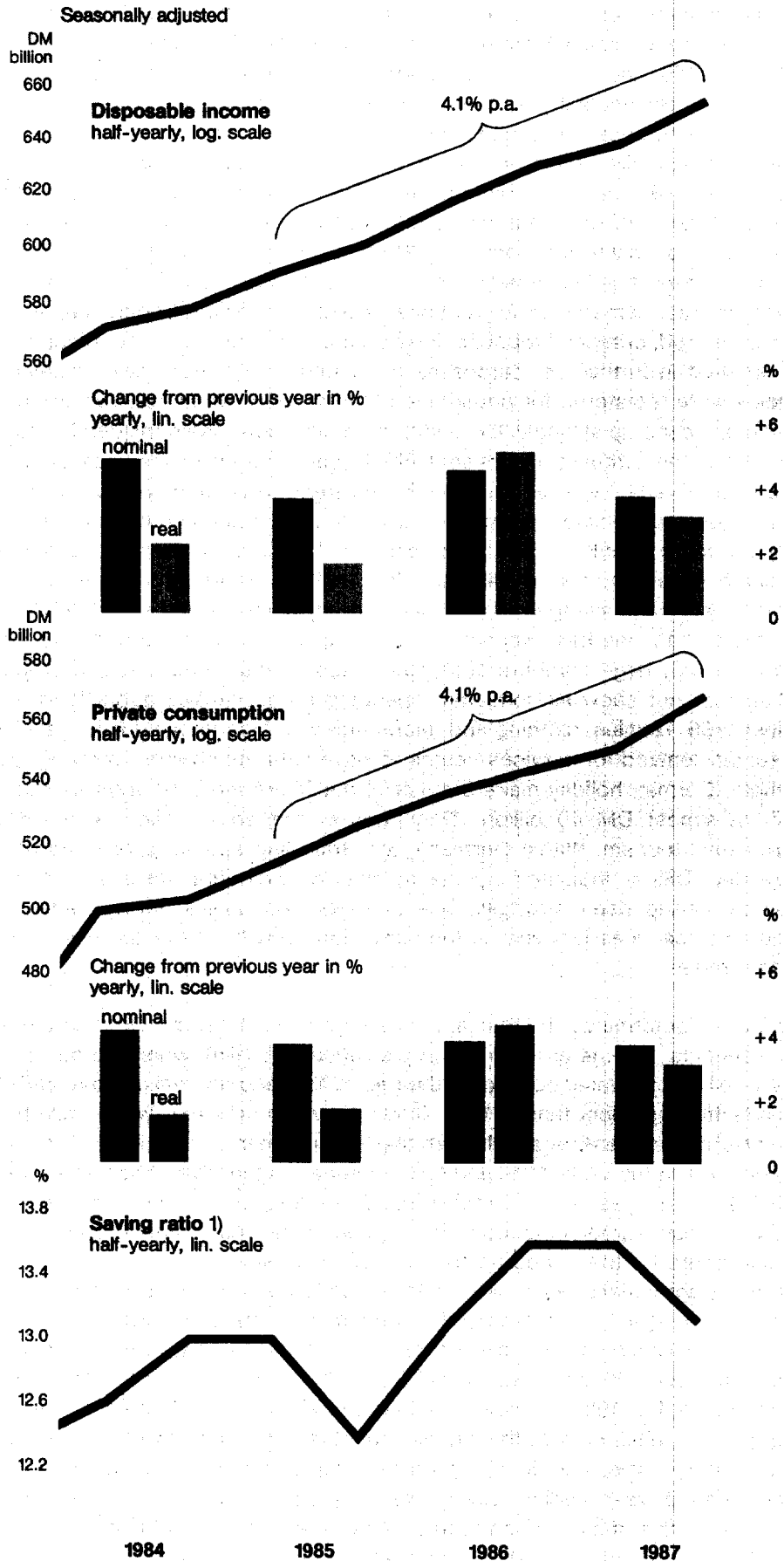
Private consumption continued to be the decisive stimulus to growth in Germany in 1987. Since the second half of 1985, when foreign demand began to decline, households' consumption spending has increasingly become the major counterbalance. Private consumption stabilised the domestic economy and supported the external adjustment process, for the growing consumer demand was to a great extent focused on imports of goods and services. In total, households expanded their consumption expenditure last year by 3½%. In real

terms, private consumption rose by 3%. Leaving aside the year 1986, which was a particularly good one for consumers because of the unexpectedly great relief afforded by the fall in the price of oil and the tax cuts, this was the strongest increase since the end of the seventies. One has to go back to 1978-79 to find two successive years in which real private consumption increased as strongly as it did in 1986 and 1987 taken together, namely by 7½%. The buoyant consumption climate last year covered practically all areas of private consumption. It even encompassed those sectors which usually lag behind the growth in income. This applies for example to the area of food (including drink and tobacco). In 1987, as shown by the retail turnover figures, consumer spending here increased by 3% in real terms (as prices were decreasing, it admittedly rose less in nominal terms, namely by 2%). Given the almost stable population level in Germany, this increased consumption is astonishing and is probably due less to stronger demand for conventional goods than to heavier consumption of up-market food, drink and tobacco. Foreign suppliers, not least, benefited from this. Interest in further car purchases continued. 4½% more new passenger vehicles were registered for households than in 1986, when new registrations had already gone up strongly. Expenditure on new cars rose considerably more sharply than the numbers of cars sold. Firstly, passenger vehicles became much more expensive last year and, secondly, the trend towards more powerful and better-equipped vehicles continued; low-pollutant cars particularly became more and more popular – not least because of the tax concessions. Last year the share accounted for by cars with low pollutant emissions in the total of newly-registered passenger vehicles was already over four-fifths; in 1986 it was little more than one-half. Household furniture and electrical appliances also found relatively large numbers of buyers in 1987; retail turnover trends, which probably do not show all consumer spending here, reveal a good 3½% rise against 1986. Textiles, clothing and shoes met with less demand last year. The consumer demand for services seems to have risen much more strongly. For example, German holiday-makers spent about 7½% more on trips abroad in 1987, at almost DM 40 billion. They thus continued to lead the world in international tourism. Within Germany, too, travelling seems to have gone up noticeably. This is indicated by the number of overnight stays at hotels in Germany having risen strongly. One proof of consumers having had more recourse to services last year is the fairly high growth rate of turnover in the service trades.

Two factors determined the buoyant consumption climate: the strong increase in households' income and the stability of prices. In 1986, when the fall in the price of oil and tax relief coincided, the rise in households' real income, at 5%, was admittedly steeper than in 1987. But in the year under review the growth, at 3%, was still impressive and higher than in any year of the first half of this decade (and, in the years 1986 and 1987 together, higher than it has been since 1978-79). In last year's wage round, major sectors of the economy saw the signing of pay agreements containing phased pay rises and reductions in working hours for the period up to and including 1989. The conclusion of this sort of pay agreement, which will run for much longer than the previously usual period of one year, shows the confidence management and labour have in the price stability which has now been attained. Such trust was warranted for 1987, is warranted for 1988 and naturally still has to be warranted for the period even further ahead. For 1987 pay rises were agreed which as a rule were somewhat lower than for 1986. In total, the overall negotiated wage and salary level in 1987 (on a monthly basis) was 3½% up on the year and actual earnings were 3% higher than a year earlier. Given the ongoing (albeit weaker) growth in employment, this implies a rise in total gross wages and salaries of just under 4%. Unlike the situation in 1986, when the first stage of tax relief went into effect, deductions of wage tax and social security contributions rose more sharply in 1987, especially as a result of the progressive effect of the tax scale.

Strong growth in real income again

### Households' income, consumption and saving



1) Private saving as a percentage of disposable income.



Consequently, net wages and salaries went up less than gross wage and salary income. By contrast, government current transfers — pensions and maintenance payments — increased much more strongly than previously, viz. by 5%. A whole series of factors contributed to this. It was especially significant in this connection that the rise in pensions in the middle of last year, at 3%, was higher than before, the number of pensions granted increased further (by about 1½%) and the baby allowance introduced in 1986 found particularly many claimants in 1987.

Saving by households in 1987 was largely in step with income trends, i.e. private saving went up by 4% and households' disposable income by a good 3½%. The saving ratio thus remained unchanged at about 13½%. As regards investments — households' financial assets expanded in 1987 by over DM 140 billion — there was a slight decrease in the very marked preference for liquidity which was characteristic of 1986. While households built up their cash holdings very strongly in 1987 too, they added less to their sight and time accounts and savings deposits at statutory notice. By contrast, purchases of securities gained somewhat more weight, having been particularly insignificant in the previous year. Here, however, the picture was influenced very strongly by trends in the last quarter of 1987, as private investors took advantage of the slump in prices in the stock markets in mid-October to buy large amounts of shares. Households' purchases of bonds also came somewhat more to the fore last year, taken as a whole. High-yielding foreign currency bonds were the focus of investors' interest, whereas domestic issuers' debt instruments were less in demand. The same is true of longer-term investments at banks. The trends which have been observable since the start of the eighties with respect to the other forms of long-term saving continued in 1987. On the one hand, the placing of funds with insurance enterprises gained further ground but, on the other hand, the weakness in saving with building and loan associations persisted. Last year households took up an extra DM 11.5 billion in debt for consumption purposes; this was somewhat more than in 1986. Consumers primarily took up longer-term personal loans in connection with their heavy purchases of passenger vehicles and other consumer durables.

Unchanged behaviour on the part of savers

In 1987 enterprises (excluding the housing sector and financial institutions) spent a total of 4½% more than a year before on fixed capital formation, and likewise 4½% more on machinery and equipment. Hence the share in GNP accounted for by enterprises' fixed capital formation rose further, as did the share taken by investment in machinery and equipment. However, considering the improvement in their profitability since the start of the upswing — in 1987 the gross income of producing enterprises rose by a further 5% — the increase in enterprises' capital formation was not particularly strong. Business could rely on favourable investment conditions from the financing point of view too last year: the cash flow increased further, the provision of liquidity was ample and outside funds were available on particularly favourable terms. The reasons for investment not having gone up more strongly in spite of this are probably to be found in the increased competitive pressure from abroad in foreign and domestic markets associated with the appreciation of the Deutsche Mark, in the uncertainty as to future trends in this area, and in the ongoing structural crisis in some particularly capital-intensive industrial sectors (mining, steel production, shipbuilding). As industry has to shoulder the main burden of the external adjustment process, it was precisely in this important sector of the economy that the propensity to invest was subdued. Restrained investment planning in industry has a detrimental impact, above all, on the growth of investment in machinery and equipment, but it also affects investment in industrial construction. Areas such as the services sector which profit particularly from the high level of domestic economic activity and are virtually not exposed to stronger competition from foreign suppliers are generally less capital-intensive than

Investment by enterprises continues to expand

industry. Moreover, their investments, e.g. those in distribution and in the hotel and catering trade, consist to a very large extent of construction projects. In total, enterprises' investment in construction work in 1987 went up by 4% in value (although it cannot be classified individually at present by the sectors carrying out the investment).

Rising direct investment abroad by German enterprises

The fact that the rise in capital formation was no stronger can partly be explained by German enterprises' increased investment abroad. External direct investment, which admittedly largely constitutes the acquisition of participations and thus not physical investment, has been expanding strongly since the beginning of the eighties. In 1980 it amounted to DM 11.5 billion, but taking the average of the years 1986-87, at DM 26 billion, it was more than twice as high. To a certain extent, this increase seems to have been a sign of the progressive international division of labour and closer capital links. This also includes the policy decision to be represented in major sales markets such as the United States not only by one's own distribution network but in some cases by one's own production facilities as well. The same applies equally to foreign enterprises and their branches and participations in Germany. Doubtless, in the last few years fears of protectionist trends abroad and of the effects of strong exchange rate fluctuations have underpinned decisions to be represented abroad by firms of one's own. The lower taxation which corporate profits attract in some countries is arguably of some significance here too. In the last two years, in addition, the low dollar rate has played a role, making direct investment in the United States relatively cheap, whereas, conversely, direct investment by non-residents from the dollar area in Germany has become relatively expensive. In earlier years, too, it was observable that transactions of this kind came and went rapidly, depending on the exchange rate situation. The fact that, where there are high current account surpluses and (closely associated therewith) an appreciation of the national currency, direct investment abroad increases, is incidentally a token of a highly developed economy in which there is often a tendency towards a relatively high level of aggregate saving, accompanied by moderate investment propensity at home. Direct investment is to this extent consistent with surpluses on current account. For deficit countries it poses far fewer problems than a continuous increase in their foreign indebtedness.

New housing construction still in the doldrums

The fact that investment needs in Germany are much less strong than they used to be in some sectors is not least apparent in housing construction. The weakness of residential construction is often measured by the trend in the number of completed dwellings; at barely 220,000 in 1987, it declined by a further 13½% and reached the lowest level since the start of the fifties. However, these figures do not adequately reflect the actual situation. Construction investment has not fallen nearly as strongly as the number of housing completions; in value terms, it was in fact somewhat higher (1%), and in volume terms only 1% lower, than in 1986. The difference is due firstly to the quality of the fittings in each new dwelling having improved further. Secondly, the discrepancy can be put down to new housing construction having lost ground, within construction as a whole, to modernisation and rehabilitation work on existing buildings. New housing construction can be expected to impart only comparatively few stimuli to growth in Germany in the years to come. One of the main reasons for this is the trend in the resident population, which has been declining slightly in the last few years and will tend to decrease further. Judging by the available information (data from the 1987 census have not yet come to hand), the number of dwellings is currently about the same as the number of households in Germany. Admittedly, there will be big differences in the housing market from one region, municipal district or rural district to another. In economically prosperous regions there is no doubt always an additional demand for housing. The management of construction activity should therefore operate mainly through the market; measures by the public sector often inhibit, rather than promote, the necessary

structural changes in Germany. That would be the case if, for instance, using the argument of creating jobs (in the construction industry), government funds were to be used to construct housing in places where additional long-term jobs are not to be expected and where the structural component in unemployment is very significant anyway. There is, incidentally, much evidence that the maintenance and renovation of existing buildings, i.e. the improvement of fittings and thorough modernisation, is increasing in importance. According to an estimate by the German Institute for Economic Research in Berlin, the construction volume in this sector in 1987 was already higher than that for the construction of new dwellings.

In 1987 the expansion of domestic demand was buttressed by the public authorities too. The central, regional and local authorities and the social security funds taken as a whole stepped up their spending by almost 4% last year. Government expenditure thus rose as sharply as nominal GNP; this also meant, however, that no further progress was made in 1987 in the gradual reduction of the "government spending ratio" (the ratio of government expenditure to GNP), which is the longer-term objective. In 1987 there was admittedly a break in the tax reductions, in accordance with the medium-term strategy, but major decisions were taken in the course of the year to continue a policy which is designed to strengthen the basis for future economic growth in Germany. Last year the central, regional and local authorities accepted the fact that the deficits were rising perceptibly, contrary to the budget plans; the main reason for this was that tax receipts were flowing in more sluggishly than envisaged (owing to economic developments). The deficits of the central, regional and local authorities in 1987, at DM 51.5 billion, were DM 9 billion higher than a year before. Their new debt accordingly increased more sharply: at the end of 1987 the level of debt of all central, regional and local authorities reached DM 850 billion. Moreover, the surpluses of the social security funds declined. If their budget results are combined with those of the central, regional and local authorities, the overall public sector deficit amounted to DM 48 billion; it thus corresponded to almost 2½% of GNP, against nearly 2% in 1986.

Domestic economic activity buttressed by financial policy

The central, regional and local authorities' expenditure grew by 3½% in 1987, and thus slightly less than a year previously (4%). Especially the further tax reductions planned for 1988 and 1990 presumably compelled them to cut back their additional spending. The 3% limit to the growth of the central, regional and local authorities' expenditure recommended for some years by the Financial Planning Council (in which the Federal and Länder Governments and local authorities coordinate the basic stance of their budgetary policy) was, however, exceeded yet again in 1987, although this limit now provides greater scope for "real" expenditure increases than it did a few years ago, given the virtual stability of prices these days. The public authorities benefit from the stable prices not only when acquiring goods but, in addition, also in so far as the rise in personnel expenditure and in social expenditure, which is in part dependent on the movement of wages and prices, is curbed over the longer term. The development of spending at the various levels of government was in part determined by the differing expenditure patterns of the Federal Government, the Länder Governments and the local authorities. In 1987 the expenditure of the Länder Governments and local authorities rose by 4%. The Federal Government, by contrast, increased its spending by only 3%. Government expenditure also includes the sums spent in Germany in the context of membership of the European Communities (mainly on interventions in the domestic agricultural market) and on transfers in favour of partner countries. (On the receipts side this expenditure is matched by the turnover tax share transferred to the EEC and the yield of customs duties and agricultural levies.) These are the transactions of a fourth, supranational level of government besides the Federal and Länder Governments and the local authorities. The expenditure in question grew

Expenditure growth still overshoots the medium-term target

## Finances of the public authorities\*

Item	1984	1985	1986 pe	1987 pe	1984	1985	1986 pe	1987 pe
	DM billion				Change from previous year in %			
<b>A. Budgetary trend</b>								
<b>Central, regional and local authorities</b>								
<i>Expenditure</i>								
Personnel expenditure	186.7	193.6	202.4	211	+ 1.6	+ 3.7	+ 4.5	+ 4.5
Other operating expenditure	93.2	97.3	100.2	103	+ 4.8	+ 4.4	+ 3.0	+ 3
Transfers 1	160.8	165.5	172.7	181.5	+ 1.7	+ 2.9	+ 4.3	+ 5
Interest	53.6	56.0	57.8	58.5	+ 4.2	+ 4.5	+ 3.3	+ 1.5
Fixed capital expenditure	49.4	52.0	55.9	57	- 2.0	+ 5.3	+ 7.5	+ 2
Financial aid 2	41.0	39.4	40.1	39.5	+ 8.6	- 3.9	+ 1.8	- 1.5
<b>Total expenditure 3</b>	<b>584.9</b>	<b>604.3</b>	<b>629.0</b>	<b>651</b>	<b>+ 2.5</b>	<b>+ 3.3</b>	<b>+ 4.1</b>	<b>+ 3.5</b>
of which								
Federal Government	253.9	259.4	263.9	271.5	+ 2.1	+ 2.2	+ 1.7	+ 3
Länder Governments	234.3	243.3	254.1	264	+ 2.6	+ 3.9	+ 4.4	+ 4
Local authorities	154.7	162.9	171.9	178	+ 2.0	+ 5.3	+ 5.5	4 + 4
<i>Receipts</i>								
Tax revenue	414.7	437.2	452.4	468.5	+ 4.6	+ 5.4	+ 3.5	+ 3.5
Other receipts	124.7	130.0	135.5	134	+ 4.1	+ 4.2	+ 4.2	- 1
<b>Total receipts 3</b>	<b>538.5</b>	<b>565.0</b>	<b>586.4</b>	<b>600</b>	<b>+ 4.5</b>	<b>+ 4.9</b>	<b>+ 3.8</b>	<b>+ 2.5</b>
of which								
Federal Government	225.2	236.7	240.6	243.5	+ 3.9	+ 5.1	+ 1.6	+ 1
Länder Governments	216.1	226.2	236.3	244	+ 4.4	+ 4.7	+ 4.5	+ 3.5
Local authorities	155.8	163.6	169.9	175.5	+ 3.7	+ 5.0	+ 3.8	4 + 4
Surplus (+) or deficit (-)	- 46.3	- 39.3	- 42.6	- 51.5	.	.	.	.
of which								
Federal Government	- 28.6	- 22.8	- 23.3	- 28	.	.	.	.
Länder Governments	- 18.2	- 17.1	- 17.7	- 20	.	.	.	.
Local authorities	+ 1.1	+ 0.7	- 2.0	- 2.5	.	.	.	.
<b>Social security funds</b>								
Expenditure	331.1	341.7	353.8	370.5	+ 4.5	+ 3.2	+ 3.5	+ 5
Receipts	328.2	343.6	360.1	374	+ 4.0	+ 4.7	+ 4.8	+ 4
Surplus (+) or deficit (-)	- 2.8	+ 1.9	+ 6.3	+ 3.5	.	.	.	.
<b>Public authorities, total</b>								
Expenditure	877.3	905.9	942.2	979	+ 3.4	+ 3.3	+ 4.0	+ 4
Receipts	828.1	868.5	905.9	931	+ 4.6	+ 4.9	+ 4.3	+ 3
Deficit (-)	- 49.2	- 37.4	- 36.3	- 48	.	.	.	.
	Level at end of year in DM billion				Change from previous year in DM billion			
<b>B. Indebtedness of the central, regional and local authorities</b>								
Borrowers' note loans	490.0	497.7	486.2	489.5	+ 15.5	+ 7.7	- 11.5	+ 3.5
Securities	205.1	243.4	293.1	339.5	+ 29.4	+ 38.3	+ 49.7	+ 46.5
Other debt	22.4	19.1	21.7	19	+ 0.9	- 3.3	+ 2.6	- 2.5
<b>Total indebtedness</b>	<b>717.5</b>	<b>760.2</b>	<b>801.0</b>	<b>848.5</b>	<b>+ 45.8</b>	<b>+ 42.7</b>	<b>+ 40.8</b>	<b>+ 47.5</b>
of which								
Federal Government	367.3	392.4	415.4	440.5	+ 25.9	+ 25.1	+ 23.0	+ 25
Länder Governments	230.6	247.4	264.4	284.5	+ 18.5	+ 16.9	+ 16.9	+ 20
Local authorities	104.8	105.6	107.3	110	+ 0.7	+ 0.8	+ 1.7	+ 3

\* Including hospitals keeping commercial accounts and other special accounts. Receipts and expenditure are shown here under the period for which they are intended, in accordance with budgetary practice. — 1 Mainly social expenditure and current grants to the enterprise

sector. — 2 Expenditure on investment grants and loans to third parties, plus the acquisition of participations. — 3 This aggregate — unlike the figures below for the Federal and Länder Governments and local authorities — does not include transfers between the various levels of

government (apart from differences in clearing transactions). — 4 Adjusted growth rates, taking due account of the elimination of double-counting in one German Land. — pe Partly estimated. Discrepancies in the totals are due to rounding. BBk

relatively sharply last year, i.e. by 11 %; including the amounts advanced in 1987 by the Federal Institution for Agricultural Market Regulation, it reached a volume of almost DM 22 billion.

The relatively large share of personnel expenditure in the Länder Governments' and local authorities' total spending (two-fifths and one-third of the total, respectively) was one of the reasons why these levels of government recorded above-average expenditure rises. The 3.4 % increase in public service pay at the beginning of 1987 had an impact here. Staff numbers were apparently also raised somewhat, however, especially at local authority level. Altogether, the central, regional and local authorities' personnel expenditure grew by a good 4 %.

Rise in personnel expenditure mainly due to wage and salary increases

The social expenditure of the central, regional and local authorities, which (like personnel expenditure) ultimately benefits private consumption most, likewise rose steeply in 1987, i.e. by 4½ %. This was a reflection of the relatively extensive recourse to the baby allowance introduced at the beginning of 1986. National expenditure in the context of agricultural policy also grew vigorously because higher grants were paid towards the cost of farmers' social security. Moreover, social assistance, which is mostly financed by the local authorities, cost far more money in 1987 than a year previously. By contrast, spending on unemployment assistance, which is paid by the Federal Government, declined slightly because the unemployment benefits financed by the Federal Labour Office have been granted for a longer period than before since the middle of 1987, and therefore fewer jobless persons have had to change over to unemployment assistance. Smaller sums than in 1986 also had to be spent on children's benefits and war victims' pensions and related benefits, as the number of beneficiaries is shrinking for demographic reasons. Government subsidies to the enterprise sector went up sharply in 1987. A particularly significant factor was that the decline in the dollar led to a heavier demand for coking coal subsidies. The so-called coking coal allowance (amounting to DM 2.25 billion in 1987) is paid to German hard coal mines to facilitate sales of coal and coke to the steel industry, i.e. to improve the competitiveness of domestic coking coal relative to cheaper foreign coal.

Sharp increase in social transfers and subsidies

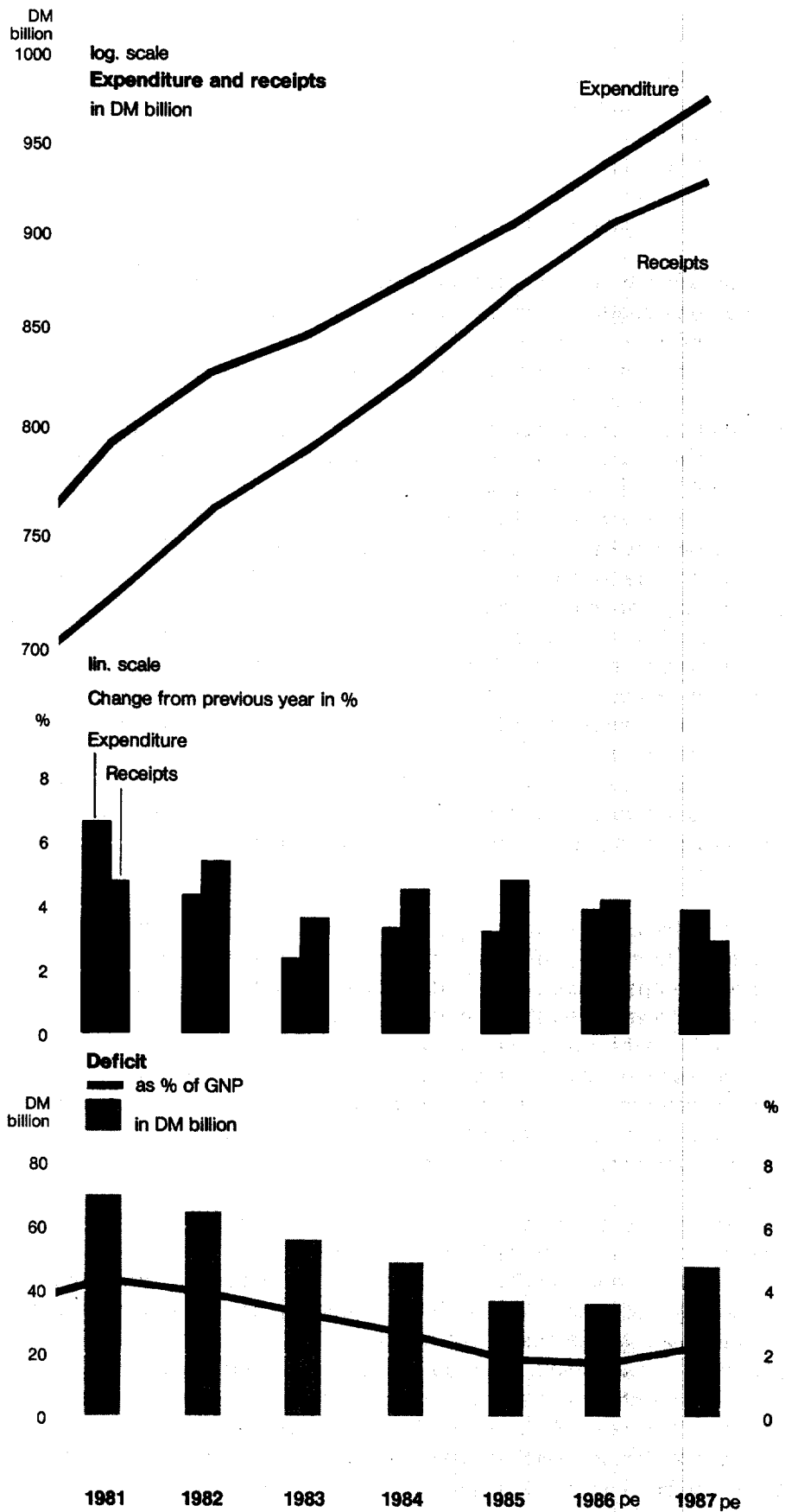
On the other hand, the central, regional and local authorities' interest expenditure rose little further in 1987. To a large extent its movement was determined by the borrowing operations conducted in 1986, as interest payments usually do not begin until a year after the loan has been taken up. A factor which mitigated the further rise in the level of debt in 1986 was the decline in interest rates, which made it possible to replace maturing liabilities at relatively high rates of interest by new, lower-interest debt instruments. The fact that in 1987 the central, regional and local authorities incurred more new debt than in 1986 will be reflected for the first time in the interest expenditure account for 1988.

Little further rise in interest expenditure

The rather vigorous growth of the central, regional and local authorities' current expenditure adversely affected their financial scope for capital spending. However, this was not yet reflected as clearly in the relevant budget items as in the placing of new orders. While in 1987 the construction orders of the central, regional and local authorities (which had risen substantially in 1986) were 1½ % smaller than a year before in value terms, the production figures in public construction slightly exceeded the previous year's level, and capital spending increased by 2 % (after 7½ % in 1986). The main reason for this change in the trend of public sector capital formation was that the local authorities (the most significant public investors) responded to the deterioration in their financial position above all by cutting back their construction projects. Notably local authorities in structurally weak areas with high expenditure on social assistance on the one hand and low tax revenue on the other had very little scope for capital formation. In order to foster investment by the local authorities, the Federal

Smaller scope for capital formation by the public sector

### Finances of the public authorities\*



\* Central, regional and local authorities and social security funds.- pe Party estimated.

Cabinet decided at the beginning of December 1987 that in the years from 1988 to 1990 the Reconstruction Loan Corporation should provide them with low-interest loans to the total amount of DM 15 billion (with the Federal Government assuming the cost of the interest subsidies). This facility can only be taken advantage of, however, by local authorities which have not yet reached their borrowing ceiling; for the local authorities the budgetary provisions governing borrowing are much stricter than those for the Federal and Länder Governments. If public sector investment is to be put on a steadier basis, the question of the adequate provision of funds thus arises, not least in view of the financial needs of the local authorities, especially those in structurally weak areas. The overall significance of public sector capital spending is admittedly overestimated at times; at present it accounts for only around 13% of all fixed capital formation, or 2½% of GNP.

The spending of the social security funds (like the central, regional and local authorities' social expenditure) increased relatively sharply in 1987, i.e. by almost 5% (against 3½% a year earlier); its share in GNP thus rose slightly again (to 18.3%), after having declined by just over 1 percentage point between 1983 and 1986. Particularly substantial additional spending (+ 13%) was incurred by the Federal Labour Office, mainly as a result of the extension of the period of entitlement to unemployment benefits in mid-1987 and the increased use of the instruments of "active labour market policy". Spending by the pension insurance funds likewise grew more sharply than before, i.e. by 4%. The expansion of the statutory health insurance institutions' expenditure slowed down somewhat, by contrast; here the cost-cutting efforts of the contracting parties in the field of medical and dental care produced results. Even so, the statutory health insurance institutions' total expenditure still grew by 4½%, and hence more sharply than the wages and salaries subject to compulsory contributions, and the pressure towards raising the contribution rates therefore persisted.

Relatively sharp expansion of spending in the social security sector

On the receipts side of the public budgets, tax revenue in 1987 fell approximately DM 10 billion short of the amount which had been expected according to the official tax estimate of November 1986. Compared with the preceding year, the central, regional and local authorities' tax receipts rose in 1987 by 3½%, i.e. slightly less than nominal GNP. This result, which is unusual in a year without tax cuts, can primarily be put down to the fact that the tax receipts of 1986 included substantial payments deriving from the sale of a major industrial holding, and that some of these taxes had to be refunded in 1987. These refunds especially affected corporation tax, whose yield decreased by 15½% against 1986. Another cause underlying this decline was, however, that a number of enterprises had requested their tax offices to reduce their advance payments, referring primarily to the lowering of their profits owing to the Deutsche Mark appreciation. Similar circumstances presumably also played a part in the case of trade tax, the yield of which fell by almost 2% in 1987. The yield of assessed income tax rose by not quite 3%; after adjustment for non-recurring additional receipts in 1986, it actually grew more than twice as fast. Receipts of wage tax deducted at source increased by almost 8% in 1987; in view of the upturn in wages and salaries, the progressive nature of the tax scale again took effect in the year between the tax reductions (the extent of the excess payments, which are offset only during the income tax assessment procedure, is however not known). Turnover tax yields likewise developed rather favourably (+ 7%), not least on account of the vigorous growth of private consumption. By contrast, the central, regional and local authorities' non-tax receipts declined, mainly owing to the smaller profit transfer by the Bundesbank (DM 7.3 billion after DM 12.7 billion in 1986).

Only moderate growth of tax revenue

24 Decision on additional tax cuts in 1988 and paving the way for the 1990 tax reform

With special reference to the further outlook in Germany, it was important that the basic decisions on further tax relief through a tax reform were taken in the course of 1987. Most of the amendments planned to tax legislation are to enter into force in 1990. Some of them were brought forward to 1988; as a result, the second stage of the income tax reductions approved already in 1985 was increased by just over DM 5 billion to almost DM 14 billion. The tax reform will lead to further relief totalling over DM 20 billion net in 1990; part of the substantially higher revenue shortfalls due to the new tax scale will be offset by higher receipts deriving from the dismantling of tax concessions and the broadening of the tax assessment basis. In the longer term, however, the tax reductions call for strict restraint in the growth of public sector spending, in order to curb the temporary rise in the deficits (and the associated calls on the credit markets by the public sector) and to run down the deficits again thereafter; otherwise, the growth-promoting effects which the tax reform is designed to achieve would be called in question.

Considerable expansion of the budget deficits in 1988

According to the budgets for 1988, the expenditure of the Federal and Länder Governments and local authorities taken as a whole is to grow by just over 2%. On the other hand, the amounts required for the purposes of the European Communities are rising sharply. In conformity with the agreements reached at the EEC summit meeting in February 1988 the Federal Government will make available to the European Communities in the current year about DM 4 billion more than had been envisaged on the basis of the financial framework which had previously applied. In view of these prospective additional burdens, and as the Bundesbank will transfer only a little profit in 1988 (in the Federal budget for 1988, a sum of DM 6 billion was entered under this head), the Federal Cabinet stated at the beginning of January 1988 that it was now expecting the deficit in the 1988 Federal budget to come to approximately DM 40 billion; this would be roughly DM 10 billion more than in the budget which the Bundestag approved at the end of November 1987. Some budgetary risks also exist with respect to tax revenue (this likewise applies to the respective receipts of the Länder Governments and local authorities). The Federal Cabinet decided to tolerate an increase in the deficit in 1988 caused by shortfalls in receipts in order to avoid any dampening of economic activity. In 1989, however, it intends to lower the Federal Government deficit by at least DM 10 billion. This is to be accomplished by means of consistent expenditure restraint, the dismantling of subsidies and the raising of certain excise taxes. By its decision to reduce the deficit considerably again in 1989, the Federal Cabinet has proclaimed its determination to adhere to the medium-term orientation of its financial policy. It is planned that, after the renewed expansion of the deficits in the year of the tax reform (i.e. in 1990), the deficits will decline progressively again from 1991 onwards.

## **2. Progress in the external adjustment process**

Growth losses owing to external adjustment

In 1987 Germany's external adjustment continued, with an inevitable dampening effect on economic growth. The surpluses on current account decreased strongly in volume; exports failed to keep pace with the rapid advance of products from abroad in the German market. As outlined above, increasing competitive pressure from abroad and uncertainty as to future trends in this field, which was widespread at times, prevented even more vigorous investment activity in Germany. Finally, this also impaired the expansion of domestic demand as a whole, which at the same time largely precluded an acceleration of overall economic growth.

Exporting more difficult after exchange rate shifts

Early in 1987 the trend in German exports was decidedly weak, but it picked up again later in the year. Exports were as high as in the previous year in value, in volume they were just under 3% up on the year. Hence in 1987 German exports again grew more slowly than the total imports of Germany's major trading



## Major items of the balance of payments

DM billion

Item	1980	1981	1982	1983	1984	1985	1986	1987
<b>A. Current account</b>								
1. Foreign trade								
Exports (f.o.b.) <sup>1</sup>	350.3	396.9	427.7	432.3	488.2	537.2	526.4	527.0
Imports (f.o.b.) <sup>1</sup>	331.4	357.3	365.2	378.5	421.4	451.1	403.0	399.4
Balance	+ 18.9	+ 39.6	+ 62.6	+ 53.8	+ 66.8	+ 86.0	+ 123.4	+ 127.6
2. Supplementary trade items and merchanting trade <sup>2</sup>	- 0.5	- 0.2	+ 0.8	+ 3.3	- 1.1	- 1.3	- 1.5	- 0.9
Balance of trade	+ 18.4	+ 39.4	+ 63.3	+ 57.0	+ 65.8	+ 84.7	+ 121.9	+ 126.7
3. Services								
Receipts	88.5	106.0	116.6	118.8	133.5	142.4	141.0	142.4
Expenditure	108.6	128.6	141.6	137.1	141.6	149.8	150.9	160.2
Balance	- 20.1	- 22.6	- 25.0	- 18.3	- 8.1	- 7.4	- 9.9	- 17.8
4. Transfer payments	- 23.5	- 24.8	- 25.9	- 25.2	- 29.7	- 28.9	- 27.0	- 28.4
of which								
Remittances of foreign workers	- 8.1	- 8.3	- 8.3	- 8.3	- 9.0	- 7.8	- 7.3	- 6.6
Transfers to the European Communities	- 4.4	- 6.5	- 7.5	- 6.1	- 7.5	- 8.2	- 7.9	- 9.9
Balance on current account	- 25.2	- 8.0	+ 12.4	+ 13.5	+ 27.9	+ 48.4	+ 85.0	+ 80.5
<b>B. Capital account</b>								
1. Long-term capital transactions								
(a) German investment abroad (increase: -)	- 28.1	- 26.9	- 28.3	- 36.5	- 45.0	- 61.7	- 55.2	- 62.4
Direct investment	- 7.3	- 8.7	- 6.0	- 8.1	- 12.5	- 14.1	- 20.3	- 16.3
Foreign securities	- 7.7	- 6.0	- 11.4	- 10.4	- 15.7	- 31.5	- 21.6	- 24.9
Advances to non-residents	- 11.1	- 9.6	- 8.7	- 14.7	- 14.2	- 13.1	- 10.3	- 18.4
Other investment abroad	- 2.0	- 2.5	- 2.3	- 3.3	- 2.6	- 3.0	- 3.0	- 2.8
(b) Foreign investment in Germany (increase: +)	+ 33.9	+ 35.3	+ 14.2	+ 29.5	+ 25.2	+ 48.3	+ 88.5	+ 39.1
Direct investment	+ 0.8	+ 0.8	+ 2.0	+ 4.5	+ 1.6	+ 1.8	+ 2.2	+ 3.6
Domestic securities and official domestic borrowers' notes	+ 23.4	+ 23.3	+ 12.2	+ 25.5	+ 21.7	+ 36.3	+ 69.0	+ 20.9
Securities	+ 0.9	+ 1.0	+ 2.8	+ 13.6	+ 17.4	+ 38.3	+ 74.1	+ 33.2
Borrowers' notes	+ 22.6	+ 22.3	+ 9.4	+ 11.9	+ 4.3	- 2.0	- 5.1	- 12.3
Advances to residents <sup>3</sup>	+ 9.9	+ 11.2	+ 0.1	- 0.3	+ 1.9	+ 10.3	+ 17.3	+ 14.7
Other investment in Germany	- 0.2	- 0.0	- 0.1	- 0.2	- 0.0	- 0.1	- 0.1	- 0.1
Balance of long-term capital transactions	+ 5.8	+ 8.4	- 14.2	- 7.0	- 19.8	- 13.4	+ 33.3	- 23.3
2. Short-term capital transactions (net capital exports: -)								
(a) Banks	- 8.9	- 10.3	+ 8.1	+ 1.8	+ 0.1	- 27.7	- 59.0	- 6.2
Assets	- 7.1	- 11.2	+ 4.3	+ 5.3	- 17.8	- 33.4	- 65.8	- 15.4
Liabilities	- 1.8	+ 0.9	+ 3.8	- 3.6	+ 17.8	+ 5.7	+ 6.8	+ 9.3
(b) Enterprises and individuals	+ 2.2	+ 5.8	+ 3.2	- 8.9	- 16.1	- 14.1	- 53.4	- 11.6
Financial relations with foreign banks	+ 6.5	+ 8.3	+ 7.1	- 2.5	- 3.3	- 13.5	- 45.4	- 11.6
Financial relations with foreign non-banks	+ 1.4	+ 0.7	- 2.0	- 0.6	- 4.0	+ 2.8	- 2.8	- 1.9
Trade credits	- 5.7	- 3.2	- 1.9	- 5.9	- 8.7	- 3.5	- 5.2	+ 1.9
(c) Official	+ 0.4	+ 1.8	- 0.3	- 4.3	- 1.6	+ 0.1	- 1.0	- 2.7
Balance of short-term capital transactions	- 6.2	- 2.6	+ 11.0	- 11.5	- 17.7	- 41.7	- 113.4	- 20.5
Balance on capital account	- 0.4	+ 5.8	- 3.2	- 18.4	- 37.5	- 55.1	- 80.1	- 43.7
<b>C. Balance of unclassifiable transactions (balancing item)</b>	- 2.3	- 0.0	- 6.2	+ 0.8	+ 6.5	+ 8.6	+ 1.1	+ 4.4
<b>D. Balancing item in respect of the Bundesbank's external position <sup>4</sup></b>	+ 2.2	+ 3.6	- 0.4	+ 2.4	+ 2.1	- 3.1	- 3.2	- 9.3
<b>E. Change in the net external assets of the Bundesbank <sup>5</sup> (increase: +)</b> (A plus B plus C plus D)	- 25.7	+ 1.3	+ 2.7	- 1.6	- 1.0	- 1.3	+ 2.8	+ 31.9

<sup>1</sup> Special trade. — <sup>2</sup> Mainly warehouse transactions for account of residents and deduction of goods returned and of commission processing. — <sup>3</sup> Excluding official domestic borrowers' notes. — <sup>4</sup> Counterpart of changes in the Bundesbank's

external position which are not caused by external current and capital transactions: allocations of IMF special drawing rights and differences between the transaction values of the Bundesbank's foreign exchange business and the

changes in the external position shown at balance sheet rates. — <sup>5</sup> Valued at balance sheet rates.

Discrepancies in the totals are due to rounding. BBk

partners, which expanded by 4% to 5% in real terms (rather like world trade). In 1986, too, the growth of German exports had been perceptibly slower than that of world trade. The price and exchange rate shifts in those two years obviously had adverse effects on the situation of German suppliers. However, the losses in market shares do not imply any serious impairment of international competitiveness. The recent losses must be seen against the background of earlier gains in market shares, which had accompanied the dollar appreciation until spring 1985 and could not necessarily be regarded as permanent. Moreover, German exporters are still benefiting from a number of non-price competitive factors, such as the quality of the products, the careful regulation of the markets, reliability in delivery and not least the high technological standard of the goods.

Sharp expansion of exports to the EEC countries

Exports of goods to the EEC countries were the mainstay of exports in 1987, moving up by 6% in real terms. This was due to the cyclical increase in demand in this region, and especially to the fact that the Deutsche Mark exchange rate remained relatively stable vis-à-vis the currencies of the EEC countries despite the realignment in the European Monetary System early in 1987. Furthermore, the high degree of interdependence within the EEC is becoming increasingly noticeable. Non-EEC competitors only play a minor role here, since volumes are higher in intra-Community trade than in trade between the EEC countries and non-EEC countries.

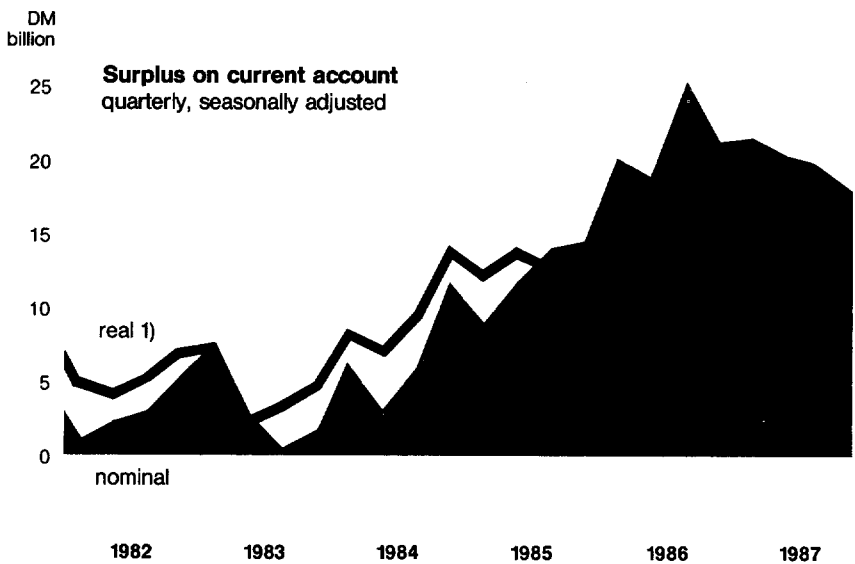
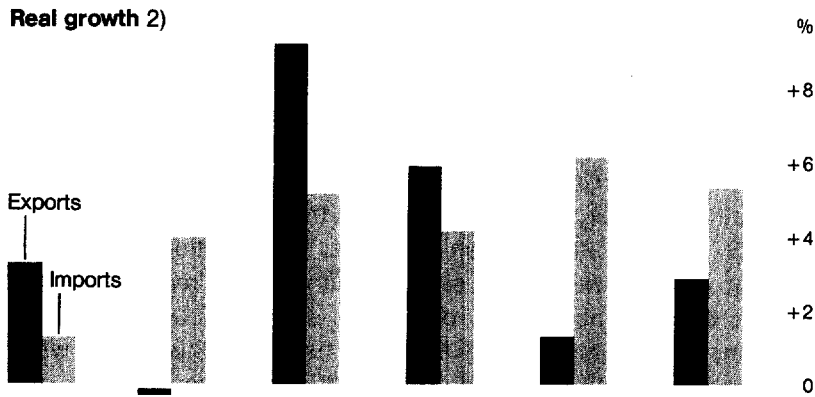
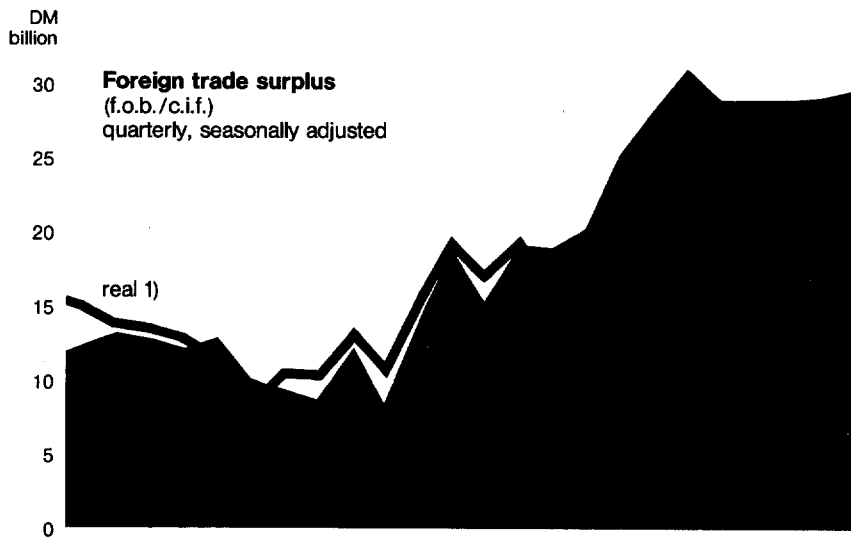
Export losses in the dollar area

In direct trade with the United States and other countries which are oriented mainly towards the US dollar in their external trade, German exporters incurred substantial losses in some fields in 1987. Some exporters seem to have tried at first to leave their selling prices in US dollars more or less unchanged, so that their proceeds fell dramatically in the wake of the dollar depreciation. However, in view of the large scale of the dollar decline, they could not avoid passing on at least part of the change in exchange rates to the purchasers, i.e. they had to increase the dollar prices of German products in the dollar area. Calculated in Deutsche Mark terms, exports to the United States went down in value by nearly 10% last year; in volume the decline was probably lower. Car exports, for which data on numbers are available, fell by 16%, however. Exports to the OPEC countries and the centrally planned economies also decreased in 1987 (more or less independently of exchange rate movements), primarily because both regions had to keep down their imports of industrial products, owing to their acute shortage of foreign exchange.

Strong growth of imports

Although in 1987 German imports of goods decreased slightly in value (– 1%), this was wholly due to the sharp fall in import prices. In volume, imports increased by 5½% and hence nearly twice as fast as exports. The heavy demand for imports was due to the relatively high level of domestic demand and the low prices of products from abroad. It is true that there is a permanent tendency towards an increasing interdependence of markets anyway. In 1987, however, the absorptive capacity of the German market, and hence import growth, was particularly high, just as it had been a year earlier. While imports of raw materials, semi-finished goods and primary products increased only moderately – more or less in line with domestic production – and imports of energy actually declined in real terms, there was a particular rise in the demand for imports of end-products. In this field there was an increase of 10% in real terms, which even exceeded the growth rate of 1986 (+ 8%). Imports of EDP products and consumer goods expanded especially fast (+ 18% and + 12%, respectively). Even in the case of motor vehicle imports, the record level of 1986 was surpassed once more. On balance, the share of products from abroad in the domestic market thus rose to just over 27% in 1987, compared with only 20% ten years earlier.

**Foreign trade and current account**



1) At 1980 prices.- 2) Based on the foreign trade statistics.

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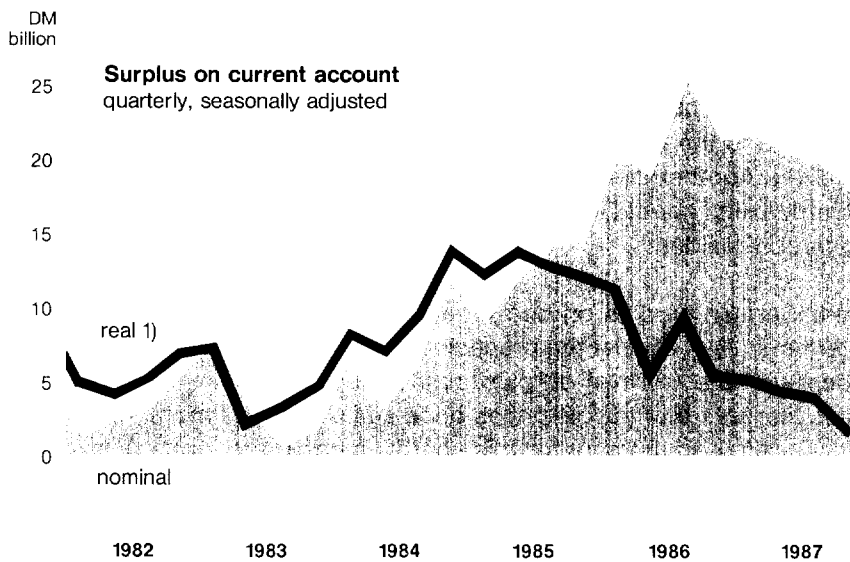
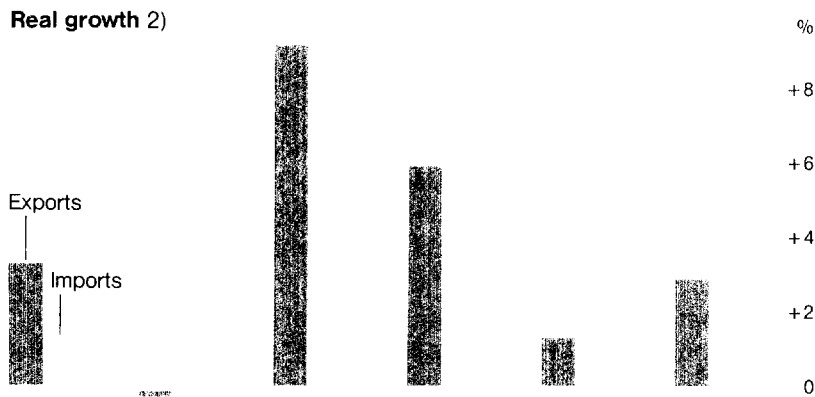
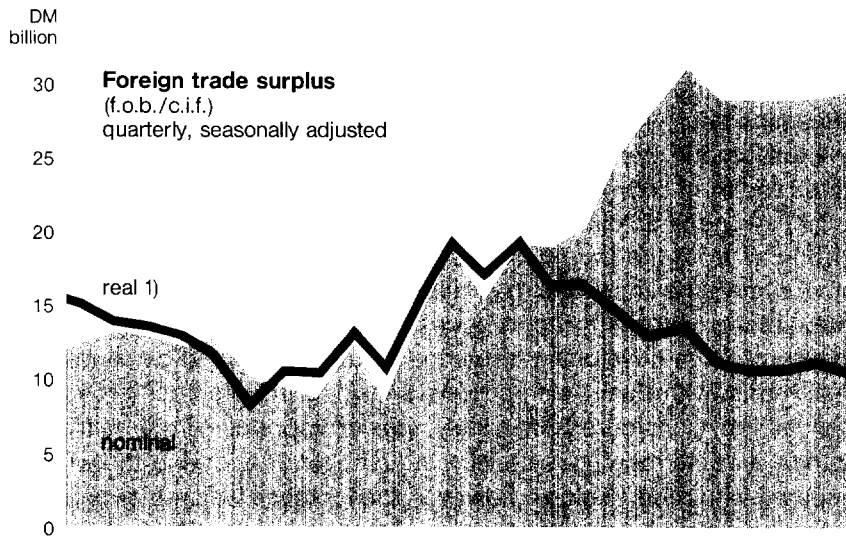
In 1987 imports of finished products expanded roughly four times as much as domestic demand, reflecting the undiminished attractiveness of goods from abroad in Germany. This structural advance of foreign finished products in the German market was also fostered by exchange rate movements. Since the beginning of the dollar depreciation in 1985, goods from abroad (excluding

Finished products make further inroads into the German market

# **BERICHTIGUNG**

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In 1987 imports of finished products expanded roughly four times as much as domestic demand, reflecting the undiminished attractiveness of goods from abroad in Germany. This structural advance of foreign finished products in the German market was also fostered by exchange rate movements. Since the beginning of the dollar depreciation in 1985, goods from abroad (excluding

Finished products make further inroads into the German market

sources of energy) have cheapened by about 9% in Germany, while producer prices of domestic products have remained more or less constant. Imported capital goods and imported consumer goods, for example, have cheapened by about 7% relative to domestic products. While the price advantage of goods from abroad hardly increased any further during the year, the full magnitude of the preceding exchange rate adjustments has now taken effect, in accordance with the time-lags usual in foreign trade. The influence of the exchange rates is also clearly reflected in the breakdown of imports by region. Imports from the United States and from countries whose foreign trade is oriented mainly towards the US dollar have gone up distinctly more than imports from Europe. Imports of finished products from the United States have decreased by 5% in value; but since at the same time the dollar has depreciated by 17% this fall probably masks strong real growth, with import prices having declined sharply. Imports of finished products from developing countries actually expanded by as much as 29% in real terms, with East Asian suppliers making the greatest inroads into the German market. Considered separately, the corresponding imports from the EEC countries likewise rose substantially, at just over 6%, during the whole of 1987; compared with other regions, however, the increase was rather below the average, mainly no doubt because exchange rates within the EMS were largely stable, so that there were hardly any exchange-rate-induced competitive advantages.

Increasing deficits  
on services and  
transfer payments  
accounts

Another factor which contributed to the reduction of the external surpluses in 1987 was the strong increase in the deficits on invisible current transactions. The deficit on services account (including the freight and insurance costs of imports) positively shot up, increasing from DM 10 billion to DM 18 billion. This was mainly due to the high net expenditure on foreign travel, which reached a new record level in 1987, at over DM 28 billion. Moreover, the traditional German surplus on investment income decreased slightly. With the current account surpluses, Germany's net external assets rose by an estimated DM 80 billion, owing to transactions, to roughly DM 270 billion in 1987. But this effect, which in itself boosts earnings, was eclipsed by other influences. Income from dollar assets fell, if only because of the declining market rates; furthermore, the dollar depreciation lessened all income denominated in US dollars – including that from shares and other participations – upon its conversion into Deutsche Mark. The deficit on transfer payments account increased from DM 27 billion to more than DM 28 billion in 1987. As much as DM 10 billion flowed out as the German net contribution to the EEC budget (compared with DM 8 billion a year in 1985 and 1986 alike). Another DM 6.5 billion was remitted by foreign workers to their home countries, and about DM 8 billion in pensions and maintenance payments was paid to non-residents.

Strong decline in the  
real surplus on  
current account

Overall, the German surplus on current account declined by DM 4.5 billion in nominal terms in 1987 against the preceding year to just over DM 80 billion. The only reason why the German surplus position could not be run down more quickly last year was that import prices once again declined more steeply than export prices. After adjustment for this improvement in the terms of trade, the current account surplus – at constant prices – can be estimated to have declined by a further one-fifth. In 1986, too, the surplus on current account went down to about the same extent in real terms. To be sure, this is a hypothetical calculation, but it does highlight the strength of the real external adjustment process and indicate both its implications for growth in Germany and its expansionary effect on the rest of the world.

<b>Changes in the net external position of the Bundesbank due to operations in the foreign exchange market and other foreign exchange movements*</b>							
DM billion; increase in foreign exchange: +							
Period	Net external position, total	Operations in the foreign exchange market 1				Other foreign exchange movements	
		Deutsche Mark/ dollar market	EMS				
			Total	Inter- ventions	Debt settle- ment 2		
1986	January	+ 2.1	—	—	—	—	+ 2.1
	February	+ 1.4	—	—	—	—	+ 1.4
	March	— 1.3	—	—	—	—	— 1.3
	April	— 10.2	+ 0.2	— 10.2	— 10.2	—	— 0.2
	May	+ 0.9	—	—	—	—	+ 0.9
	June	+ 1.2	—	— 0.1	— 0.1	—	+ 1.3
	July	+ 2.2	—	—	—	—	+ 2.2
	August	+ 2.4	—	—	—	—	+ 2.4
	September	+ 4.3	— 0.1	+ 2.4	+ 2.4	—	+ 1.9
	October	+ 5.2	+ 2.4	—	—	—	+ 2.8
	November	— 0.8	—	— 1.8	—	— 1.8	+ 1.1
	December	— 1.4	—	+ 1.0	+ 1.0	—	— 2.4
	<b>Total</b>	<b>+ 6.0</b>	<b>+ 2.5</b>	<b>— 8.8</b>	<b>— 7.0</b>	<b>— 1.8</b>	<b>+ 12.2</b>
1987	January	+ 18.3	+ 1.1	+ 15.8	+ 15.8	—	+ 1.4
	February	+ 0.4	—	— 0.9	—	— 0.9	+ 1.3
	March	— 4.5	— 0.1	— 5.7	—	— 5.7	+ 1.3
	April	+ 3.4	+ 0.7	—	—	—	+ 2.7
	May	+ 2.7	+ 0.5	— 0.7	—	— 0.7	+ 2.8
	June	— 0.3	+ 0.7	—	—	—	— 1.0
	July	— 2.4	—	—	—	—	— 2.4
	August	— 0.7	— 1.7	—	—	—	+ 1.0
	September	+ 1.6	+ 0.6	—	—	—	+ 1.0
	October	+ 2.7	+ 1.0	—	—	—	+ 1.7
	November	+ 16.0	+ 3.4	+ 10.0	+ 10.0	—	+ 2.6
	December	+ 4.0	+ 2.9	—	—	—	+ 1.0
	<b>Total</b>	<b>+ 41.2</b>	<b>+ 9.2</b>	<b>+ 18.5</b>	<b>+ 25.8</b>	<b>— 7.3</b>	<b>+ 13.5</b>
1988	January	+ 4.0	+ 2.2	—	—	—	+ 1.8
	February	— 5.3	—	— 6.1	—	— 6.1	+ 0.8
	March p	— 1.6	—	—	—	—	— 1.6
	<b>1st quarter p</b>	<b>— 2.9</b>	<b>+ 2.2</b>	<b>— 6.1</b>	<b>—</b>	<b>— 6.1</b>	<b>+ 1.0</b>

\* Excluding liquidity swaps. Transactions recorded according to the date of entry. — 1 Including operations by other central banks, where they affect the external position of the Bundesbank. — 2 Deutsche Mark repayments to the Bundesbank by EMS partners. — p Provisional.  
Discrepancies in the totals are due to rounding.

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As far as the countermovements to the current account surpluses on the financing side of the balance of payments are concerned, the picture presented by the balance of payments in 1987 differs considerably from that of the previous year, when the surpluses on current account had likewise been very high; in particular, the influx of reserves to the Bundesbank played a much more important role in the year under review than in 1986. It is true that the diminishing interest of international investors in domestic Deutsche Mark securities resulted in the long-term capital account showing net capital exports (totalling about DM 23 billion) in 1987 and therefore — unlike the situation in the previous year — contributing to the financing of the massive current account surplus. However, as a consequence of the advanced depreciation of the US dollar — not only against the Deutsche Mark but also against the currencies of other industrial countries — the major countries had reached the February 1987 agreements, which also included central banks' willingness to undertake US dollar interventions; moreover, additional financing facilities were agreed for "intramarginal" interventions in the EMS (for details of the agreements see the section starting on page 56). This resulted in large-scale foreign exchange purchases by the Bundesbank, whose net external assets increased by the record amount of DM 41 billion owing to transactions last year. Hence in 1987 about one-half of the current account surplus was reflected in the Bundesbank's external position on balance, and only the other half was financed "through the market".

One-half of the current account surplus "financed" on balance by the Bundesbank

Foreign demand for German securities perceptibly weaker	<p>In 1987 foreign investment in German securities was again the decisive factor in the outflow of long-term capital. As detailed on page 47 ff., the inflows of foreign funds to the German capital market, which were very sizeable at first, slackened during the early summer, since Deutsche Mark bonds were rated less attractive at a time when the dollar was relatively stable or even appreciating temporarily and interest rates were rising world-wide. In the wake of the later turmoil in the financial markets and investors' unsettled state, non-residents divested themselves of German shares, in particular. In addition, more funds flowed abroad in 1987 because borrowers' notes issued by German debtors were returned. In total, non-residents' net investment in German securities and official borrowers' notes in 1987, at DM 21 billion, reached barely one-third of the previous year's figure. Moreover, owing to the deterioration in conditions in the international bond market, German banks imported fewer long-term funds through their foreign financing companies. Altogether, foreign investment in Germany increased by only DM 39 billion in 1987, compared with DM 89 billion in the previous year.</p>
Increasing long-term capital exports, focusing on foreign currency bonds	<p>German long-term capital exports, which are probably determined more strongly by autonomous transactions and longer-term investment motives than are capital imports, developed relatively steadily in 1987. As in the preceding years, purchases of "securitised" external assets predominated. Last year, German investors bought especially large quantities of high-yielding foreign currency bonds; at DM 21.5 billion, their net purchases of such securities reached a record level. Moreover, against the background of a general recovery in international lending, which had previously stagnated for quite some time, the amount of long-term credit extended by domestic banks to non-residents in 1987, at DM 14 billion, was over twice as large as in the previous year, the vast bulk of it going to industrial countries and Euro-market centres. German enterprises were once again very willing to engage in direct investment abroad in 1987; these capital exports made a major contribution to squaring the balance of payments. Hence, including other private and public capital exports, residents invested a total of DM 62 billion abroad last year.</p>
Drastic reduction in the outflow of short-term funds	<p>In 1987 the outflow of short-term funds from Germany decreased dramatically, viz. to only DM 16 billion (including the balancing item of the balance of payments), after funds amounting to DM 112 billion had been exported in the preceding year. This reflects, firstly, the above-described rather substantial offsetting of the inflow of funds from abroad by long-term capital exports. Secondly, the foreign exchange purchases by the Bundesbank must be seen as a substitute for the exports of funds by German banks and non-banks which would otherwise have been necessary.</p>
Strong increase in the monetary reserves	<p>As mentioned before, the net foreign exchange purchases by the Bundesbank amounted to about DM 41 billion in 1987. Obligatory support purchases of partner currencies in the European Monetary System before the realignment of January 12, 1987 had led to an inflow of foreign exchange to the Bundesbank amounting to nearly DM 16 billion, which was partly neutralised later by the settlement of balances. Then, at the end of October, some EMS partner central banks for the first time took advantage of the new regulations agreed in September whereby partner currencies sold intramarginally can be procured within the framework of the so-called very short-term financing mechanism (see page 66f.). As a consequence of transactions in the EMS, at the end of December 1987 external assets were DM 18.5 billion higher than a year earlier. At times, particularly towards the end of the year, the pressure on the dollar in the DM/US\$ market gave rise to major supporting dollar purchases by the Bundesbank and the US monetary authorities, which drew on their Deutsche Mark deposits at the Bundesbank for the purpose. There were also the usual dollar inflows to the Bundesbank from dollar conversions by US military</p>



agencies and from interest income, which could not be channelled into the market on account of exchange rate movements; altogether, the dollar holdings increased by the equivalent of DM 22.7 billion in 1987 owing to transactions.<sup>1</sup>

After the preceding strong appreciation of the Deutsche Mark, this tendency faded in 1987; at the same time exchange rate movements were more diverse than in 1986. Although the Deutsche Mark appreciated by another 17% against the US dollar between the beginning of 1987 and the end of March 1988, the external value of the Deutsche Mark against some other major currencies outside the exchange rate mechanism of the EMS – the Japanese yen, the pound sterling and the Swiss franc – declined in the same period. Within the EMS, after central rates had been realigned on January 12, 1987, there were only slight exchange rate movements during the rest of the year. After temporary signs of weakness in the late autumn, the EMS currencies strengthened again early in 1988. Overall, the Deutsche Mark appreciation has remained very limited since the beginning of 1987, with an increase of 1½% in its external value against the average of the currencies of 14 industrial countries. Since at the same time the growth rate of prices and costs in Germany has been an estimated 1% lower than that abroad, the real external value of the Deutsche Mark hardly changed at all over the year. In view of the strong exchange rate shifts of the years 1985-86 this stabilisation of the external value of the Deutsche Mark in the course of last year was imperative in order to facilitate the adjustment of the economy to the changed price and cost conditions. As described above, the adjustment of the real trade flows is in full swing; but this will emerge only over time in the trade balance and current account figures, which are presented at current prices.

Further appreciation of the Deutsche Mark against the US dollar, but only a moderate overall rise in the external value of the Deutsche Mark

### 3. Monetary policy against the background of unsettled financial markets

#### (a) Flexible money market management

The Bundesbank's interest rate and liquidity policy was faced with unusual challenges last year. For one thing, it had to take account of temporary turbulence in the international financial and foreign exchange markets. For another, it continued its efforts to prevent monetary expansion from getting completely out of hand in the longer run, even though 1987 saw another overshooting of the target corridor set for the growth of the central bank money stock. As will be discussed in more detail below, the Bundesbank cut its key short-term interest rates several times last year, above all in the light of the unsettled exchange market conditions. Moreover, it provided about DM 30 billion of extra central bank balances on a permanent basis by enlarging its foreign exchange reserves. This was much more than was needed to accommodate the demand for cash and the growth of minimum-reserve-carrying bank deposits. Only part of this oversupply of liquidity was offset by measures to absorb liquidity on a lasting basis; the remaining excess liquidity was used by the banks to sharply reduce their shorter-term central bank borrowing outstanding – primarily securities repurchase agreements. The strong impact of external constraints on the stance of monetary policy, however, stood in the way of a domestic orientation.

Monetary policy of the Bundesbank faced with unusual challenges

<sup>1</sup> The above-mentioned increase in reserves owing to transactions was accompanied by reductions in the net external assets caused by valuation adjustments on account of the usual revaluation of the foreign currency positions, which reductions are reflected in the balance of payments together with other valuation differences in the "Balancing item in respect of the Bundesbank's external position" (- DM 9.3 billion). Especially the US dollar slump – to a new low of DM 1.5815 per dollar at the end of 1987 – made a corresponding adjustment of the balance sheet rate necessary (see the notes on the annual accounts).

## Record of economic policy measures

	<p><b>I. Domestic and external monetary policy</b></p>
<b>1987</b>	
January 12	In the 11th exchange rate realignment within the EMS the Deutsche Mark and the Dutch guilder are revalued by 3% and the Belgian and Luxembourg francs by 2%.
January 22	The Bundesbank decides to lower the rediscount quotas granted to banks (including a number of minor special credit lines) by almost DM 8 billion and to raise the minimum reserve ratios across the board by 10% with effect from February 1. These measures in effect siphon off some DM 12 billion from the banking system, thus neutralising part of the very large influx of foreign exchange registered ahead of the EMS realignment of January 12. By deciding at the same time to lower the discount and lombard rates by 1/2 percentage point each to 3% and 5% respectively (as from January 23), the Bundesbank takes account of the changed domestic and external environment after the turn of the year.
February 22	The finance ministers and central bank governors of the major western industrial countries agree in Paris on an enhanced coordination of economic policies, among other things in order to reduce the imbalances in the world economy; furthermore, they intend to cooperate with the aim of stabilising exchange rates "around current levels" ("Louvre accord").
April 16	The Bundesbank approves its annual accounts for 1986; DM 7.3 billion of its net profit is to be transferred to the Federal Government in a single sum.
June 10	The heads of state and government of the seven major western industrial countries reaffirm in Venice the economic policy agreements reached under the Louvre accord.
June 16	The Bundesbank decides to change its authorisation practice under monetary law to permit the private use of ECUs among residents to the same extent as the private use of foreign currencies. In doing so the Bundesbank takes account of the fact that progress has been made in the EEC in removing controls on capital movements and that the ECU has assumed increasing significance in the monetary, capital and external transactions of some partner countries.
July 2	In its regular review of the monetary target for 1987, the Bundesbank comes to the conclusion that the target range of 3% to 6% envisaged for the expansion of the central bank money stock (from the fourth quarter of 1986 to the fourth quarter of 1987) should be retained.
September 8	The Committee of EEC Central Bank Governors, meeting in Basle, adopts a report on the strengthening of the EMS. It agrees on changes in some of the intervention and financing rules, including the financing of intramarginal intervention – i.e. intervention undertaken within the margins of fluctuation – through the European Monetary Cooperation Fund (EMCF).
September 26	Ahead of the annual meeting of the IMF and the World Bank in Washington, D.C., the finance ministers and central bank governors of the Group of Seven reaffirm the Paris agreements on coordinating economic policies and stabilising exchange rates.
October 19	Unrest in the global financial markets culminates in a world-wide slump in stock market prices ("Black Monday"). Shortly afterwards the dollar begins to slide. To counteract temporary tensions in the EMS, Community financing of intramarginal intervention is undertaken for the first time from October 29, with the consent of the Bundesbank, in the context of Deutsche Mark sales by EMS partner central banks.
November 5	The Bundesbank lowers the lombard rate from 5.0% to 4.5% with effect from November 6. By this measure the Bundesbank hopes to help stabilise the exchange rate of the Deutsche Mark both against the US dollar and against the EMS currencies. A simultaneous raising of money market rates in France and interest rate changes in other EEC countries underline the intention to continue to act in line with the Louvre accord.
December 3	Parallel to key interest rate cuts by other European central banks, the Bundesbank decides to lower the discount rate from 3.0% to 2.5% with effect from December 4.
December 23	The Louvre accord is reaffirmed by a joint declaration on the part of the seven major western industrial countries. After the US dollar has fallen to a new low, at DM 1.5815, on December 31, joint intervention by the major central banks and improved US trade figures contribute to its rise in the ensuing period.
<b>1988</b>	
January 7	To neutralise on a lasting basis some of the increase in the liquidity of the banking system resulting from exchange market intervention, the Bundesbank cuts the banks' rediscount quotas by some DM 6 billion as from February 1. This measure is designed to ensure that money market management through securities repurchase agreements remains possible in the future.
January 21	The Bundesbank announces the 1988 monetary target. According to the decision taken by the Central Bank Council, the Bundesbank will conduct its monetary policy in 1988 in such a way as to maintain monetary stability and promote the growth of domestic demand. It considers an increase of 3% to 6% in the money stock between the fourth quarter of 1987 and the fourth quarter of 1988 to be consistent with this objective. On this occasion, in contrast to previous years, the target is expressed in terms of the money stock M3.
	<p><b>II. Economic and financial policy</b></p>
<b>1987</b>	
January 1	The contribution rate to the pension insurance funds is lowered from 19.2% to 18.7% of eligible income; the contribution rate to the Federal Labour Office is raised from 4.0% to 4.3%. The reorganisation of the tax promotion of owner-occupied dwellings comes into effect.

January 15	In its 1987 Annual Economic Report the Federal Cabinet notes that the salient feature of economic conditions is the shift in the expansionary forces from foreign demand to domestic demand. It expects a real growth in GNP of around 2½% or more, accompanied by an increase of 1% in employment; the unemployment rate will most likely decline to about 7½% of the total labour force. The rise in consumer prices can probably be kept distinctly below 1%.
February 10	The Federal Cabinet approves bills concerning the extension of the period of entitlement to unemployment benefit as from mid-1987 and the granting of a financial benefit for child-rearing to mothers born before 1921.
February 24	The coalition parties agree on the basic features of the tax reform which is to come into force in 1990. The tax relief will have a volume of just over DM 44 billion gross. The amendments include: <ul style="list-style-type: none"> <li>- the raising of the basic tax allowance, the lowering of the lowest and highest marginal rates of income tax to 19% and 53%, respectively, with a linear progressive tax scale between these two rates, and the raising of the children's allowance;</li> <li>- the lowering from 56% to 50% of the rate of corporation tax payable on retained earnings;</li> <li>- the extension of special depreciation allowances for small and medium-sized enterprises.</li> </ul> Some DM 19 billion of the tax relief is to be financed by running down tax concessions and subsidies and/or by raising indirect taxes.
April 1	The Federal Cabinet approves the draft of the 1988 Act on the Extension of Tax Reductions. Some of the tax relief envisaged for 1990 is to be brought forward and the second stage of the 1986-88 Tax Reduction Act is thereby to be increased by DM 5.2 billion to DM 13.7 billion. In accordance with the Louvre accord reached in Paris on February 22, 1987, the Federal Republic of Germany is thus contributing to balanced international economic growth.
June 1	The so-called "coal penny" is raised from 4.5% to 7.5%, taking the average of the whole of Germany.
June 3	The Financial Planning Council discusses the economic and financial policy assumptions underlying the 1988 draft budgets and the financial plans until 1991. It agrees that a policy of strict spending restraint continues to be needed, and that the overall growth rate of the central, regional and local authorities' expenditure must be limited to a maximum of 3% a year.
July 1	The Federal Cabinet approves the draft Federal budget for 1988 and the financial plan for the period from 1987 to 1991. The budget volume in 1988 amounts to DM 275.0 billion (2.4% more than the estimate for 1987) and the deficit to DM 29.9 billion. In the medium term expenditure is to rise by 2½% a year. The Federal deficit is expected to reach DM 31.5 billion in 1990 owing to the revenue shortfalls caused by the tax reform, but it is likely to decline again to just over DM 26.5 billion in 1991.
October 11	The coalition parties agree on a series of measures to "dismantle tax subsidies and other special regulations so as to bring about a more equitable and simpler tax system". This gives concrete shape to the partial offsetting of revenue losses deriving from the 1990 tax reductions. These measures include extended taxation of investment income.
November 24	In its Report for 1987-88 the German Council of Economic Experts thinks there is a good prospect of the German economy moving along an expansionary path again for the sixth successive year. The Council recognises that enterprises were unsettled by the downturn in the dollar and the slump in the stock markets in the last few months of 1987, but sees no convincing reasons why a recession should be looming. At the consumer level the rate of price rises in the course of 1988 is estimated at 1½%. The Federal Republic of Germany is again making a contribution to the reduction of external disequilibria in the world. Altogether, the Council expects real GNP to grow by 1½% in 1988. Such an expansion will not, however, bring any relief to the labour market.
November 27	The Bundestag approves the 1988 Federal budget, with an expenditure volume of DM 275.1 billion (+ 2.4%) and a financial deficit of DM 30.0 billion.
December 2	The Federal Cabinet approves measures to foster growth: <ul style="list-style-type: none"> <li>- Shortfalls on the receipts side of the 1988 Federal budget will not be offset.</li> <li>- With a view to strengthening and steadying capital formation, the Reconstruction Loan Corporation will provide additional loans totalling DM 21 billion from 1988 to 1990. Under this scheme DM 15 billion will be made available, and subsidised by up to 2 percentage points for ten years, for local authority capital formation. The Federal Government will provide for this purpose an annual average of DM 200 million, i.e. a total amount of DM 2.6 billion. The Reconstruction Loan Corporation will increase its low-interest loan programme for small and medium-sized enterprises by DM 2 billion per year out of its own resources.</li> <li>- In addition, the Federal Post Office will step up its capital formation in 1988. The Federal Cabinet will take initiatives relating to the opening-up of markets and deregulation.</li> </ul>
<b>1988</b>	
January 7	The Federal Cabinet discusses questions of financial and budgetary policy. As there will be hardly any profit transfer by the Bundesbank, and more funds will probably have to be transferred to the European Communities, new debt amounting to around DM 40 billion instead of DM 29.5 billion, as originally envisaged, is in prospect for the 1988 Federal budget. This will be accepted in the current year. In the financial year 1989 net borrowing by the Federal Government is to be reduced by at least DM 10 billion.
January 29	In its 1988 Annual Economic Report the Federal Cabinet sees a good chance of real GNP being 1½% to 2% higher than a year before. While this will result in a further rise in employment, the unemployment rate will nevertheless go up slightly because of the persistently large number of persons looking for work. Consumer prices should increase by no more than 1%. A renewed sharp lowering of the real foreign balance would contribute to reducing the international balance of payments disequilibria.
March 22	The Federal Cabinet approves the draft of the 1990 Tax Reform Act. Gross tax relief of approximately DM 40 billion is accompanied by some DM 19 billion of additional tax receipts deriving from the dismantling of tax concessions and the broadening of the tax determination bases (net saving in the first year of operation: almost DM 21 billion).

Interest rate and liquidity policy adjustments at the beginning of the year

As early as the turn of 1986-87 the Bundesbank's policy in the money market was subject to considerable constraints. Strong upward pressure on the Deutsche Mark – as mentioned above – put the exchange rate pattern in the European Monetary System (EMS) under marked strain, causing some partner currencies to fall to their lower intervention points. In the course of its own obligatory interventions and those of EMS partner central banks, the Bundesbank channelled approximately DM 17 billion of liquidity into the domestic market up to the realignment on January 12, 1987. Because of the relatively moderate EMS exchange rate realignment there were subsequently – in contrast to previous experience – no immediate major foreign exchange outflows. To neutralise in the short run the emerging excess supply of liquidity in the banking system, the Bundesbank had to forgo planned securities repurchase agreements in January. This seemed to jeopardise a continuation of efficient money market management through this open market policy instrument. Some DM 12 billion was therefore permanently siphoned off from the banks with effect from the beginning of February by a cut in the refinancing facilities and an increase in the minimum reserve ratios. Moreover, the Bundesbank decided with effect from January 23, 1987 to lower the discount and lombard rates by ½ percentage point each to 3% and 5% respectively and to conclude new securities repurchase agreements in February at a far lower interest rate of 3.80% (after 4.60% at the beginning of January). By means of these interest rate reductions the Bundesbank also hoped to reduce tensions in the EMS and ease the upward pressure on the Deutsche Mark.

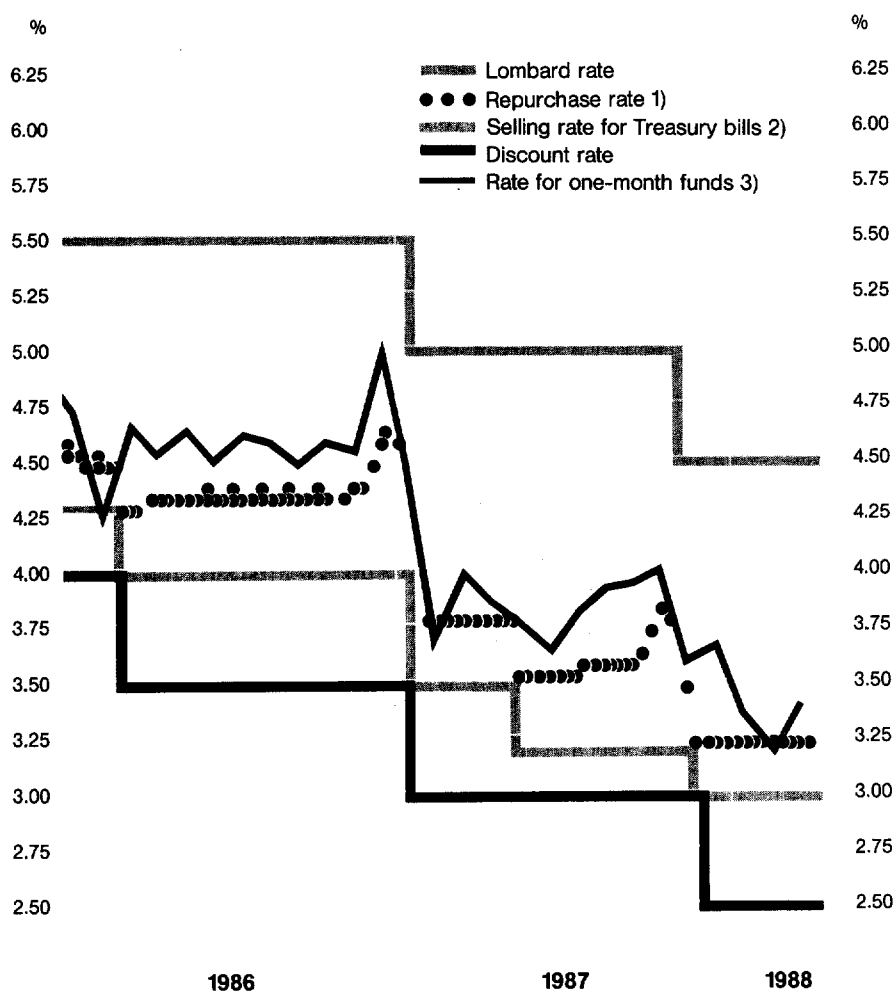
Easy conditions in the money market

Throughout the ensuing months the Bundesbank ensured a fairly ample supply of liquidity to the domestic money market. This was reflected in particular in the fact that in the spring months the banks rather consistently invested excess liquidity at short term in Treasury bills (mobilisation and liquidity paper pursuant to sections 42 and 42a of the Bundesbank Act) with the Bundesbank. Temporary tensions which arose when large EMS redemption payments by partner central banks drained funds from the domestic money market were counteracted flexibly by the Bundesbank, which provided additional funds through shifts of Federal balances into the banking system (pursuant to section 17 of the Bundesbank Act). In May the Bundesbank moreover allowed the effective rate applied to securities repurchase agreements by interest rate tender to fall by a further ¼ percentage point to 3.55%. By keeping the money market highly liquid, the Bundesbank sought to promote exchange market stabilisation; from April 1987 this objective was fostered by a rise in interest rates in the United States. The Deutsche Mark/US dollar exchange rate stabilised during this period, in line with the stated aims of the "Louvre accord" signed by the major western industrial countries in February 1987.

Rise in the money and capital market rates after mid-year

In the wake of the rise in interest rates in the US financial markets and the lowering of interest rates in Germany, the interest rate gap between the United States and Germany began to widen from the spring of last year. After mid-year Germany, like other hard currency countries, was increasingly affected by the rise in US interest rates. Expectations of an appreciation of the Deutsche Mark obviously evaporated with the sustained stability of exchange rate patterns, increasing the immediate impact of the link with interest rates abroad on domestic financial markets. Starting with the capital market, which registered outflows of funds abroad during this period, the uptrend in interest rates was also reflected increasingly in the domestic money market. Between the beginning of July and mid-October last year some domestic time deposit rates went up by over 1 percentage point. At first, the Bundesbank mostly confined itself to preventing an overly generous supply of liquidity to the banking system in the context of its ongoing money market management. When interest rates in the domestic money market, including those for very short-term funds, had diverged considerably from its own interest rates, notably the money-market-

### Interest rates of the Bundesbank and rate for one-month funds



1) Fixed rate (volume tender) or allotment rate (interest rate tender) for securities repurchase agreements on the date the transaction is credited.- 2) Normally for 3 days.- 3) Monthly averages.

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related repurchase rates, the Bundesbank tried to realign itself more closely with the trend in market rates. At that time, developments in the international markets were dominated by inflationary fears; these were reflected in particular in a rise in interest rates at the long end of the market, and were the main reason for the tightening of liquidity, which aroused considerable public attention in the international markets, and the raising of the discount rate in the United States at the beginning of September 1987. With a minimum bidding rate which was raised only slightly against mid-year (from 3.50% to 3.60%) for the securities repurchase agreements offered by interest rate tender again since the end of September, the allotment rate ultimately worked out at 3.85% in mid-October because of the banks' comparatively high bidding rates. This rather moderate increase in the repurchase rate in effect restored the rates applying to securities repurchase agreements immediately after the Louvre accord.

- Rapid fall in interest rates in the wake of the stock market crisis
- The global slump in stock market prices on October 19, 1987<sup>1</sup> abruptly reversed the interest rate trend. The switching out of shares into interest-bearing assets, notably in the United States, and the uncertainty about the dollar exchange rate brought downward pressure to bear on interest rates. As early as the beginning of November, key interest rates in the German money market had largely returned to their mid-year level. In the wake of a weakening of the US dollar rate, new pressure was also building up in the European Monetary System.
- Intervention and coordinated interest rate reductions to stabilise the foreign exchange markets
- In response, European central banks intervened in the exchange markets in support of the US dollar at the end of October-beginning of November last year. Sizeable intramarginal purchases of partner currencies against Deutsche Mark were financed primarily by the Bundesbank under the new Basle EMS arrangements of the EEC central banks of September last year, thus increasing liquidity. In order to back up the stabilisation of exchange markets hoped to be achieved by the support operations and to promote stability in the financial markets further, the Bundesbank, in combination with interest rate adjustments by a number of other European central banks, initially lowered the lombard rate by ½ percentage point to 4½ % with effect from November 6, 1987. In addition, it signalled its intention of encouraging the fall in interest rates that had got under way in the market by lowering its repurchase rate in several steps to 3.25 % in the course of the month. Finally, effective December 4, 1987, the discount rate was reduced from 3 % to a historical low of 2½ %, which restored an appropriate differential between it and the repurchase rate. Several interest rate reductions, as well as heavy intervention by the central banks primarily involved, helped stabilise the exchange rate pattern in the European Monetary System. This stabilisation also continued when in December last year the US dollar suffered a severe relapse, falling to an all-time low against the Deutsche Mark of DM 1.58 on December 31. The Bundesbank slowed down the slide in the dollar, particularly around the turn of 1987-88, by substantial dollar buying in the exchange market, closely coordinating its purchases with corresponding intervention by other central banks, in compliance with the agreements reached by the G-7 on December 23, 1987.
- Liquidity policy adjustment of the currency inflows at the beginning of 1988
- Between the end of October 1987 (when intramarginal intervention in the EMS, which increased liquidity, started) and the beginning of January 1988 (when the major support operations in favour of the US dollar ended), the liquidity-boosting increase in the Bundesbank's net monetary reserves came to over DM 22 billion. To neutralise this strong expansion of bank liquidity, in the short run the Bundesbank had little choice but to reduce the basic amount of outstanding securities repurchase agreements substantially. This was reflected not least in the fact that during this period the Bundesbank had to shorten the maturity of several new transactions of this type to two weeks or altogether dispense with the usual renewal of maturing securities repurchase agreements. By January 1988, the average volume of these transactions had dropped to a mere DM 16.4 billion; this marked the lowest level in any month since money market management was first geared to securities repurchase agreements three years ago. Continuation of the flexible open market policy approach thus seemed to be in grave jeopardy — just as it had done a year earlier. The Bundesbank therefore decided to permanently offset some of the foreign exchange inflows which chiefly derived from interventions. With effect from February 1, 1988, the banks' refinancing facilities were reduced by some DM 6 billion. This enabled the Bundesbank to induce the banks to enter into securities repurchase agreements on a sufficiently large scale and prevent an undesirable decline of the

<sup>1</sup> The Report of the Council of Economic Advisers to the President of the United States of February 1988 points out a number of fundamental factors which played a part in the stock market crash, such as rising interest rates (in the United States), overvaluation of the (share) market, the large trade and budget deficits, and then elaborates: "Rising interest rates were certainly a factor in the stock market's decline . . . , one major bank announced another half percentage point hike in its prime rate on the Thursday before the plunge, and the outlook for even higher interest rates had been bolstered by the lack of improvement in the monthly U.S. trade figures" (p. 41).

Monetary developments							
Change during year 1							
Item	1981	1982	1983	1984	1985	1986	1987
	DM billion						
<b>A. Central bank money requirements of banks and liquidity policy measures of the Bundesbank 2</b>							
1. Provision (+) or absorption (-) of central bank balances by							
Rise in central bank money 3 (increase: -)	- 2.7	- 7.5	- 10.1	- 7.1	- 6.6	- 13.1	- 15.5
Foreign exchange movements (excluding foreign exchange swaps and repurchase agreements)	- 3.1	+ 1.7	- 2.0	- 3.9	- 0.7	+ 8.7	+ 38.7
Cash transactions of the central and regional authorities (including shifts of Federal balances under section 17 of the Bundesbank Act)	+ 1.1	- 4.1	+ 1.7	+ 1.3	- 4.2	- 0.2	+ 1.8
Transfer of the Bundesbank's profit to the Federal Government	+ 2.3	+ 10.5	+ 11.0	+ 11.4	+ 12.9	+ 12.7	+ 7.3
Other factors	- 9.3	- 12.1	- 9.7	- 12.1	- 14.0	- 8.0	- 8.9
Total 1	- 11.8	- 11.4	- 9.0	- 10.6	- 12.5	+ 0.0	+ 23.3
2. Liquidity policy measures							
Change in minimum reserves 4	+ 4.1	+ 5.4	- 0.2	- 0.4	+ 0.1	+ 7.4	- 6.1
Change in refinancing facilities	+ 5.1	+ 7.7	- 0.7	+ 7.8	+ 3.3	- 5.6	- 7.6
Open market operations (with non-banks, in "N paper" — excluding short-term sales of Treasury bills — and in long-term securities)	- 0.1	+ 1.5	+ 2.4	- 3.9	+ 0.1	+ 1.4	- 1.0
Securities repurchase agreements	+ 4.4	- 1.4	+ 6.6	+ 7.7	+ 16.5	- 9.5	- 5.5
Other assistance measures in the money market 5	- 0.5	+ 1.6	- 3.4	+ 0.0	+ 0.6	+ 1.5	- 2.3
Total 2	+ 13.0	+ 14.8	+ 4.7	+ 11.3	+ 20.6	- 4.8	- 22.5
3. Remaining deficit (-) or surplus (+) (1 plus 2) covered or absorbed by	+ 1.2	+ 3.4	- 4.3	+ 0.7	+ 8.1	- 4.8	+ 0.8
Recourse to unused refinancing facilities (reduction: +)	+ 1.3	- 3.5	+ 3.3	- 1.0	- 3.1	+ 4.2	+ 0.1
Raising (+) or repayment (-) of lombard or special lombard loans	- 2.5	+ 0.1	+ 1.0	+ 0.3	- 5.0	+ 0.6	- 0.9
	‰						
<b>B. Key monetary indicators</b>							
Central bank money stock 2, 6	+ 3.2	+ 6.0	+ 6.9	+ 4.6	+ 4.5	+ 8.2	+ 8.3
Memorandum item: As an annual average	+ 4.4	+ 4.9	+ 7.3	+ 4.8	+ 4.6	+ 6.4	+ 8.1
Money stock M3 7	+ 4.9	+ 7.2	+ 5.7	+ 4.6	+ 5.1	+ 6.9	+ 6.1
Money stock M2 (= M3 excluding savings deposits)	+ 8.8	+ 5.2	+ 2.4	+ 5.0	+ 4.7	+ 6.2	+ 5.9
Money stock M1 (= currency in circulation and sight deposits)	- 0.8	+ 6.8	+ 7.8	+ 5.5	+ 5.3	+ 7.6	+ 7.8
Lending by banks and the Bundesbank to domestic non-banks	+ 9.0	+ 6.5	+ 6.7	+ 6.0	+ 5.0	+ 4.0	+ 4.2
	DM billion						
<b>C. Money stock and its counterparts</b>							
Money stock M3 (= 1 plus 2 less 3 less 4 less 5)	+ 36.1	+ 54.8	+ 45.3	+ 41.3	+ 45.4	+ 65.7	+ 62.6
Counterparts in the balance sheet							
1. Volume of credit 8	+ 132.0	+ 104.4	+ 113.2	+ 108.1	+ 98.1	+ 81.7	+ 87.0
of which							
Bank lending to domestic non-banks	+ 129.9	+ 106.1	+ 111.3	+ 110.0	+ 100.6	+ 77.8	+ 89.8
— to enterprises and individuals 9	+ 41.7	+ 30.0	+ 44.0	+ 47.4	+ 48.5	+ 39.9	+ 38.8
— to the housing sector 10	+ 40.7	+ 36.1	+ 48.1	+ 43.5	+ 33.2	+ 33.7	+ 22.4
— to public authorities	+ 47.5	+ 40.0	+ 19.3	+ 19.1	+ 18.9	+ 4.2	+ 28.6
2. Net external assets 11	+ 11.9	+ 4.5	+ 1.2	+ 0.8	+ 30.0	+ 55.9	+ 53.2
3. Monetary capital	+ 86.0	+ 46.5	+ 67.1	+ 69.7	+ 75.0	+ 69.8	+ 70.7
of which							
Savings deposits at agreed notice	- 2.1	+ 4.3	- 2.0	+ 6.0	+ 11.2	+ 15.3	+ 9.7
Bank savings bonds	+ 14.0	+ 11.9	+ 13.0	+ 16.3	+ 10.4	+ 9.9	+ 9.8
Time deposits and funds borrowed for 4 years and over	+ 13.8	+ 7.2	+ 27.2	+ 26.3	+ 34.5	+ 37.6	+ 43.1
Bank bonds outstanding 12	+ 53.6	+ 14.1	+ 22.6	+ 13.2	+ 9.3	- 4.7	- 2.0
4. Central bank deposits of domestic public authorities	- 0.2	+ 0.5	+ 0.9	- 1.2	+ 1.3	- 1.1	+ 3.5
5. Other factors	+ 22.0	+ 7.2	+ 1.0	- 1.0	+ 6.5	+ 3.2	+ 3.4

1 Unless otherwise indicated, based on end-of-month figures. — 2 Based on daily averages of the last month of the period and the last month of the previous period, respectively. — 3 Currency in circulation (excluding the banks' holdings of domestic notes and coins, which are deductible from the required minimum reserves) and required reserves on the banks' domestic liabilities at current reserve ratios; changes in the required reserves resulting from changes in

the reserve ratios are shown in item A.2. — 4 Including changes in minimum reserves due to growth in reserve-carrying foreign liabilities. — 5 Open market operations under repurchase agreements in trade bills, foreign exchange swaps and repurchase agreements, shifts of Federal balances under section 17 of the Bundesbank Act and short-term sales of Treasury bills. — 6 Reserve component calculated at constant reserve ratios (base: January 1974); excluding

reserve-carrying bank bonds. — 7 Currency in circulation and sight deposits, time deposits for less than 4 years and savings deposits at statutory notice held by domestic non-banks at domestic banks. — 8 Banks and the Bundesbank; including lending against securities. — 9 Excluding housing. — 10 Excluding lending against securities. — 11 Banks and the Bundesbank. — 12 Excluding banks' portfolios. Discrepancies in the totals are due to rounding.

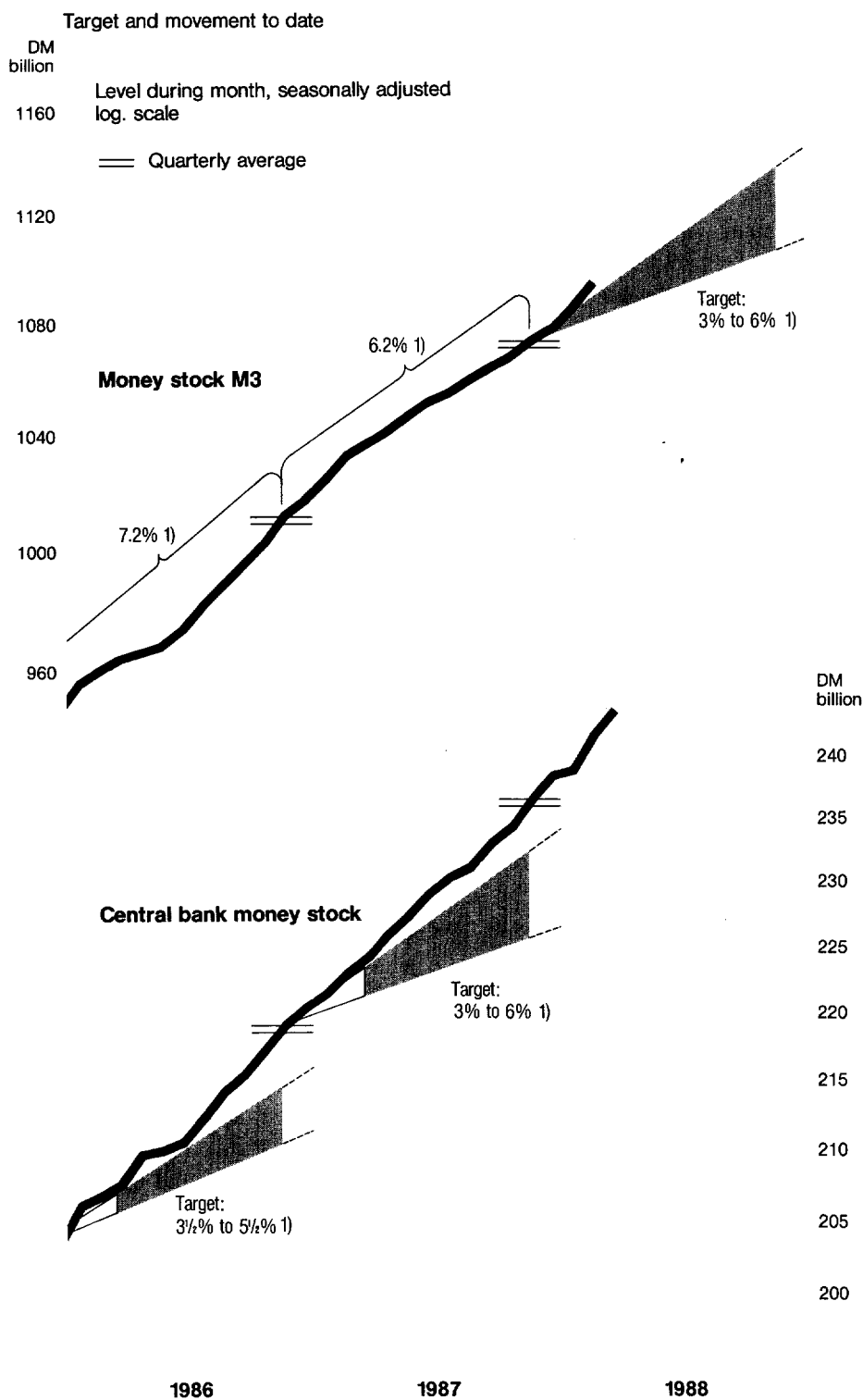
day-to-day money rate. The virtual absorption of the excess liquidity in the banking system associated with the exchange market intervention did not, however, alter the fact that in the wake of the capital inflows since the autumn of last year domestic non-banks' money balances, too, were expanding even more than before. The external situation prompted the Bundesbank to refrain from measures which – though they could not have guaranteed meeting the 1987 monetary target – might at least have better contained the overshooting.

(b) Monetary growth outside the target corridor

Central bank money stock target for 1987	When setting the 1987 monetary target, the Bundesbank had to take into account at the end of 1986 that the rise in money balances during the previous year had been considerably faster than would have been consistent with the target; the growth of the central bank money stock in particular had quickened in the second half of 1986. The Bundesbank therefore concluded that the ongoing expansion of the central bank money stock in 1987 should gradually be restored to a path that was acceptable in the medium term. The monetary target was accordingly derived on the basis of the expected average annual rise (of about 4½%) in nominal production potential, which was taken as the average rate of growth of the central bank money stock in 1987. The new corridor provided for an increase of 3% to 6% in the central bank money stock between the fourth quarter of 1986 and the fourth quarter of 1987. By widening the target corridor for 1987 by ½ percentage point each at the top and bottom of the target range, the Bundesbank took account of the special situation at the beginning of the new target period, which was characterised from the outset by uncertainty about the future outlook in the financial markets, primarily on external grounds.
Rapid four-quarter growth of the central bank money stock	In the first few months of 1987 the expansion of the central bank money stock initially appeared to slacken. Subsequently, however, growth picked up strongly again. Up to mid-year the rise in money balances was stimulated by the continued fairly large inflows of funds from abroad, while domestic monetary capital formation remained comparatively weak. The further reduction in money market rates, taken by itself, accelerated the pace of monetary expansion over the first half of 1987. This effect, which – normally – is associated with a lowering of central bank interest rates, might have been counterbalanced to the extent that – as was the intention – foreign capital inflows were reduced. However, the growth of the central bank money stock remained buoyant even when, in connection with the upturn in interest rates abroad, inflows of funds from abroad tailed off after mid-year and at times gave way to outflows. Towards the end of the year, when central bank rates had been cut again, monetary growth – as indicated – was given additional momentum by renewed massive inflows of foreign funds. Overall, between the fourth quarter of 1986 and the fourth quarter of 1987, the central bank money stock increased by 8.1%, and thus much more than would have been consistent with the 1987 monetary target.
Macroeconomic reasons for tolerating the overshooting of the target	There were a number of reasons which in the Bundesbank's eyes made it seem advisable to tolerate the overshooting of the 1987 central bank money stock target, which emerged increasingly clearly as the year progressed. Given the combination of external factors, in periods of upward pressure on the Deutsche Mark – which, as mentioned, were frequent, though not continuous – any attempt to stem monetary expansion by means of interest rate and liquidity policy measures would have increased the tendency towards foreign exchange inflows. Such a monetary policy stance would hardly have been consistent with paying regard to exchange rate policy, which was imperative last year. In addition, the course of economic activity in Germany in 1987 suggested a need for some monetary policy support; the Bundesbank's primary aim was to contain the uncertainty felt by some industrial investors because of developments in the



### Growth of the money stock M3 and the central bank money stock\*



\* Money stock M3: mean of the levels at the end of the current and the preceding month. Central bank money stock: currency in circulation (excluding the banks' holdings of domestic notes and coins) plus the required reserves on domestic liabilities other than reserve-carrying bank bonds (calculated at constant reserve ratios, base: January 1974). - 1) Between the 4th quarter of the preceding year and the 4th quarter of the current year.

exchange markets. In the final analysis, however, tolerating the sharp monetary growth appeared acceptable to the Bundesbank only because the low prices of energy and agricultural products and the cost-curbing and price-restraining effect of the sustained appreciation of the Deutsche Mark initially counteracted the emergence of inflationary pressures.

“Currency bias” of  
the central bank  
money stock

In assessing the overshooting of the target for the growth of the central bank money stock, it should incidentally be borne in mind that the rate of monetary expansion in 1987 increasingly tended to be exaggerated by the central bank money stock owing to its particular composition. The main reason for this was that the rise in currency in circulation accelerated sharply during the year, owing presumably to both the low level of short-term interest rates and the sustained strength of the Deutsche Mark. Currency in circulation is included in the central bank money stock with its full weight, while reserve-carrying bank deposits are represented only by the amount of minimum reserves they attract, specifically at the ratios that were in effect in January 1974.<sup>1</sup> Accordingly, currency in circulation – without doubt a particularly liquid form of holding money – has a much heavier weight in the central bank money stock than sight deposits, which are similarly liquid, and hence also a greater weight than the other, less liquid deposits (which seems reasonable enough in the case of time and savings deposits). With an expansion of 10.3% in currency in circulation and of 5.8% in the minimum reserve component between the fourth quarter of 1986 and the fourth quarter of 1987, there was an exceptionally wide gap between the growth rates of the various central bank money stock components last year, even though in the longer term they tend to move parallel to each other. The “unweighted” money stock M3,<sup>2</sup> which comprises roughly the same money components as the central bank money stock, and which in the somewhat longer run shows a growth similar to that of the Bundesbank’s traditional target variable, went up by 6.2% in the same period. The trend of the money stock M3 in 1987 thus also implies that monetary expansion once again markedly exceeded the medium-term increase in the production potential at current prices in Germany, though not by as much as suggested by the central bank money stock because of the heavier weight of currency in circulation.

Target for 1988

Similarly wide divergences in the trends of the currency and reserve components had occasionally prompted the Bundesbank in earlier years to proffer its interpretation of the money stock data, so as to preclude public misconceptions.<sup>3</sup> In the past, however, adjustment of such distortions used to be quicker than is to be expected now, given present interest rate and exchange rate conditions, which have persisted for quite some while. The Bundesbank therefore decided to express the 1988 monetary target in terms of the money stock M3, which normally does not react as much as the central bank money stock to interest and exchange rate movements and expectations. Because of the roughly parallel movement of the two monetary aggregates over the somewhat longer run, the previous method of deriving the target could largely be retained.<sup>4</sup> An average annual increase of about 2% in the real production potential and an average annual price rise of not more than 2% were assumed. The latter rate is likely at present to be consistent with the underlying trend of prices in Germany, after elimination of the estimated restraining effect on domestic prices of the temporary fall in import prices. In addition, in deriving the monetary target the Bundesbank included an increment of about ½ percentage

<sup>1</sup> 16.6% for sight deposits, 12.4% for time deposits and 8.1% for savings deposits.

<sup>2</sup> The money stock M3 comprises currency and sight deposits, time deposits for less than four years and savings deposits at statutory notice held by residents with domestic banks.

<sup>3</sup> See Reports of the Deutsche Bundesbank for the Year 1978 (p. 26) and 1981 (p. 10).

<sup>4</sup> For the technical background to the change in the monetary policy target indicator see Monthly Report of the Deutsche Bundesbank, Vol. 40, No. 3, March 1988, p. 18.

point to allow for the fact that, according to calculations by the Bundesbank, the money stock M3 tends to expand slightly more rapidly in the long run than production potential at current prices. Providing for a target range of 3 percentage points, which is primarily designed to allow for the continued external uncertainties involved in the money creation process, a four-quarter target for the expansion of overall money balances was derived for 1988 from the above-mentioned macroeconomic benchmark figures. It provides for an increase of 3% to 6% in the money stock M3 between the fourth quarter of 1987 and the fourth quarter of 1988. Given this monetary target, the Bundesbank will conduct its monetary policy in the current year in such a way as to maintain monetary stability and promote the growth of domestic demand.

(c) The money creation process in 1987

The money balances in the hands of domestic non-banks — as mentioned — grew vigorously again last year; as in 1986, their rate of expansion considerably exceeded that of real production potential in the economy. In the fourth quarter of 1987 the money stock in the traditional broad definition M3, in terms of which the 1988 monetary target is expressed, was 6.2% up on the last quarter of 1986. The narrower monetary aggregates likewise signal a very ample supply of money. In particular, highly liquid cash in the definition M1 (currency and sight deposits) grew very sharply in the course of 1987 (at a rate of almost 8%), while the money stock M2 (M1 and shorter-term time deposits and borrowed funds) increased at virtually the same pace as the money stock M3. In terms of demand for money, these trends mirror a very pronounced liquidity preference on the part of households and enterprises. The opportunity cost of holding traditionally non-interest-bearing or low-interest-bearing money balances rather than interest-bearing assets was insignificant in 1987. Non-banks in particular showed an exceptionally strong demand for currency, the rise in which — in part of course probably owing to external factors — was steepest last year. The general public also had a strong predilection for sight deposits and savings deposits at statutory notice, the assets which many households choose for holding liquidity. Short-term time deposits, by contrast, tended to be considered unattractive. The fall in deposit rates to an all-time low — at the beginning of 1988 the “basic savings rate” stood at 2% and the three-month rate for time deposits of DM 100,000 and over but less than DM 1 million at 2¾% — in the wake of the lowering of interest rates by the Bundesbank towards the end of last year further promoted the expansion of liquid money holdings at the beginning of 1988.

Vigorous growth of all monetary aggregates

The statement that the money supply in Germany increased rapidly in 1987 also holds good if the Euro-deposits maintained by German residents are included. Such deposits held with German banks' offices abroad alone grew by DM 8 billion last year. This rise was not nearly as rapid as in 1986, however (DM 29 billion). It should be borne in mind, though, that non-banks' short-term bank bond portfolios — which had previously served as a high-yielding substitute for time deposits — and thus the potential for switching to the Euro-market had dropped to a very low level as early as 1986. But over the last year, too, Euro-deposits proved to be a particularly “interest-sensitive” component of the money holdings of major corporations in particular. If the traditional money stock definition M3 is extended to include domestic non-banks' deposits in the Euro-market and their portfolios of short-term bank bonds, “extended M3” grew at virtually the same pace in 1987 as the traditional domestic aggregate M3.<sup>1</sup>

Further rise in Euro-deposits, too

<sup>1</sup> This is one of the reasons why the Bundesbank is retaining the traditional money stock definitions; it will, however, closely monitor the significance of residents' money balances abroad and review it with the aid of additional calculations.

Monetary growth  
again strongly deter-  
mined by external  
influences

The money creation process in 1987, with major fluctuations from quarter to quarter, was once again strongly determined by external influences. The net external assets of the banks and the Bundesbank, the increase in which mirrors a corresponding inflow of liquidity from non-banks' external payments, went up by DM 53 billion, and thus almost as sharply as in 1986. Given the prevailing interest rates and exchange rates, Germany's large current account surplus — unlike that of other surplus countries — was not accompanied by a corresponding outflow of capital. On the contrary, in the first half of 1987 the surpluses on current account were joined by inflows of capital in the long-term field. At the same time, monetary capital formation was rather sluggish since the average German bond yield had plunged to an all-time low which seemed unattractive to domestic investors. After mid-year there were some months of massive capital outflows against the backdrop of rising interest rates in the United States and temporarily fairly stable exchange rates between the US dollar and other major currencies. But this period, when non-banks' external payments tended to curb monetary expansion, ended after the stock market crash on October 19, 1987. There was then another upsurge in foreign exchange inflows, and in the light of the situation in the exchange market the Bundesbank felt obliged to lower its short-term interest rates once again. In the circumstances, monetary growth was given additional momentum in the late autumn of last year.

Credit expansion  
moderate on the  
whole

Against the background of the heavy influx of funds from abroad, the overall contribution of domestic credit expansion to the current money supply tended to be small in 1987. As external factors added to liquidity, non-banks' need to borrow from domestic banks seemingly declined. If the rise in net external assets and that in domestic bank lending are combined, however, it is evident that the overall available domestic capital and credit sources (at DM 140 billion) were fairly large. To that extent, the sluggish trend of lending should not be interpreted as an indication of a low borrowing requirement, but as a reflection of inflows of funds from abroad replacing bank lending. Over 1987 as a whole, lending by the banking system (including the Bundesbank) to domestic non-banks increased by a good 4% and thus at much the same pace as a year before. In terms of the absolute amount, it rose by DM 87 billion. In the course of the year the fact that the movement of external payments invariably runs counter to domestic credit expansion was indicated by alternating shifts from one component of the money creation process to the other. Overall, the domestic supply of money remained large and highly elastic, so that monetary expansion was restrained only moderately even in the period when there were outflows of funds abroad, quite apart from the fact that this period was fairly short.

Increased public  
sector borrowing  
amid slackening  
foreign bond  
purchases

While the inflows of foreign funds to the private sector last year outstripped those of 1986, lending from foreign sources to German public authorities declined. As a result, the public sector had to meet an increasing part of its borrowing requirements from domestic sources. Since at the same time the budget deficits were rising and domestic non-banks were reducing their securities purchases, bank lending to the public sector picked up markedly. Lending by the banking system to public authorities increased by DM 26 billion or 5½% in 1987, compared with a mere 1½% a year before. A considerable part of the rise was accounted for by the banks' purchases of public bonds.

Enterprises' needs  
of working funds  
small in the light of  
the easy liquidity  
position

Bank lending to the private sector rose by DM 61 billion or 3¾% last year against 4¾% in 1986. Enterprises' working fund needs in particular declined in 1987 because of the inflows of foreign capital and the rather subdued level of economic activity at times. Borrowing for housebuilding purposes likewise decreased in view of the sustained structural weakness in this sector, which the current fairly low level of interest rates is unable to outweigh. In contrast to this, households drew heavily on consumer credit once more last year against the background of the strong upturn in private consumption, and notably the

## The money stock and its principal counterparts

Change during year in DM billion or in %

### Money stock

Rise in the money stock M3 1)	1986	+ 6.9%
	1987	+ 6.1%

### Principal counterparts 2)

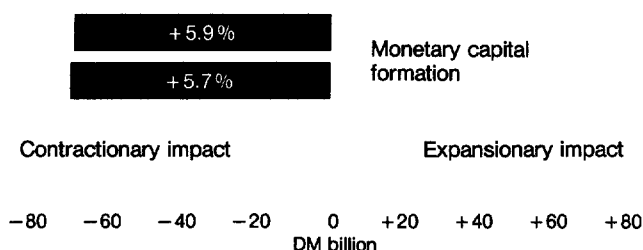
Lending by the banking system 3) to domestic enterprises and individuals



Net external assets of the banking system 3)



Public sector cash transactions 4)



1) Currency and sight deposits, time deposits for less than four years and savings deposits at statutory notice held by domestic non-banks at domestic banks.- 2) The change in the counterparts as shown reflects their expansionary (+) or contractionary (-) impact on the money stock.- 3) Banks and the Bundesbank.- 4) Lending by the banking system to public authorities less public sector deposits at the Bundesbank.

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buoyant demand for passenger cars. Hence, for the third consecutive year, the growth of consumer credit outpaced lending to enterprises and the housing sector. At the end of 1987, consumer credit was 6½%, lending to the housing sector 3½% and lending to enterprises 2½% up on the year.

Given the low level of interest rates, private borrowers definitely favoured long-term fixed rate loans in 1987. Longer-term direct bank lending to enterprises and individuals expanded by 5½%, while short-term lending fell by some 4%. The financing pattern in the economy thus improved further. Short-term debt was reduced sharply, especially in periods of heavy inflows of funds from abroad. In the summer months the temporary firming of interest rates in the capital market gave some borrowers an additional incentive to engage in consolidatory borrowing they had put off before. In view of investors' marked preference for liquidity, some banks which mainly fund their lending by means of variable-rate deposits apparently had some difficulty, given the strong demand for long-term fixed rate loans, in avoiding major mismatching between lending and deposit business.

Long-term fixed rate loans well to the fore

Further interest rate cuts in the short-term field

At the same time, borrowers' and lenders' preferences, as described above, helped to forestall a major fall in long-term interest rates. At all events, long-term lending rates declined only a little ( $\frac{1}{4}$  percentage point) in 1987 despite the Bundesbank's easy money market policy and massive inflows of funds to the bond market from abroad at times, while short-term bank lending rates decreased markedly again in line with the easy stance of the Bundesbank's policy in the money market. After the Bundesbank's interest rate cuts in December 1987, the rates charged for bills discounted fell below, and the rates for "major" credit in current account (DM 1 million and over but less than DM 5 million) almost reached, their 1978 all-time low. Only "minor" current account credits (under DM 1 million) still cost more than at that time.

Monetary capital formation moderate again under the influence of the low interest rate level

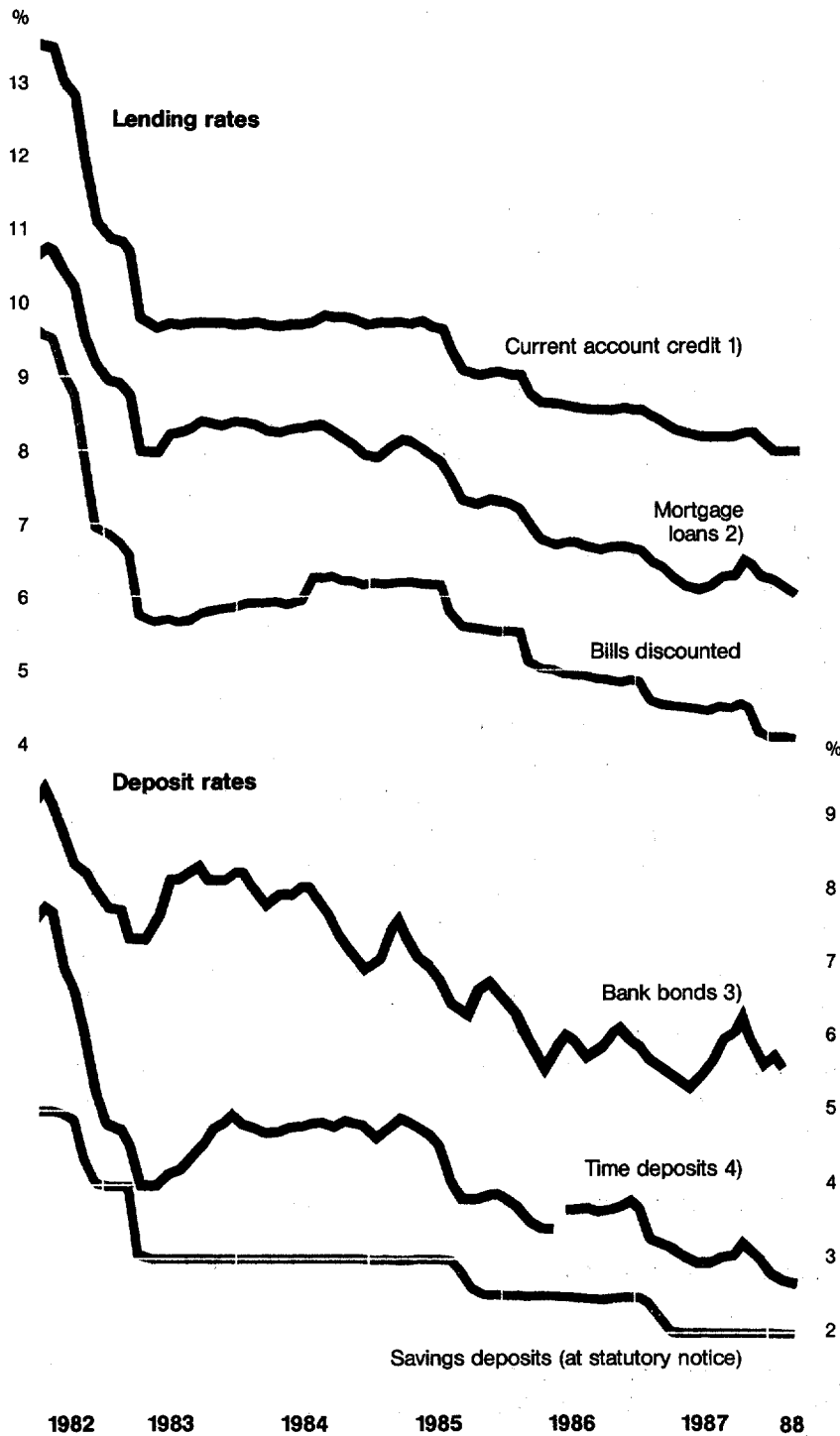
Even though long-term financial assets yielded distinctly more than short-term ones in 1987, investors were reluctant to enter into long-term commitments. Domestic non-banks' monetary capital formation at banks therefore had only a comparatively minor contractionary impact on monetary growth last year. At DM 71 billion, it was about as moderate as in 1986, when it had slackened for interest rate reasons. Domestic non-banks' (primarily households') investment behaviour was obviously motivated by the fact that long-term interest rates were considered comparatively low in historical terms; at all events, they had little confidence in the viability of the prevailing interest rate and price levels in the bond market (see also page 48f.). Only in the third quarter of 1987, when the average bond yield began to rise rapidly, did the amount of long-term funds accruing go up markedly for a time. Investors showed particular reluctance to buy bank bonds, which are subject to price risks. Domestic non-banks' holdings of such paper declined again in 1987 (by DM 2 billion) although a much smaller amount of bank bonds — particularly short-dated ones — was up for redemption than a year before. But savings deposits at agreed notice also met with relatively little interest; at DM 10 billion, the amount raised was one-third down on 1986. The rise in traditional savings accounts in particular was negligible, while the growth of higher-yielding special savings schemes was fairly strong. Sales of bank savings bonds (DM 10 billion) held up rather better. The interest paid on them was reduced less during the year than that paid on savings deposits; moreover, they often had attractive short or medium-term maturities. Long-term time deposits (with maturities of four years and more) were built up by the record amount of DM 43 billion in 1987. The rise was primarily accounted for by purchases of price-risk-free registered bank bonds and borrowers' notes by institutional investors, such as insurance enterprises. Such assets have been growing markedly faster than overall monetary capital formation at banks for the last five years. The main reason for this is probably that in periods of relatively low interest rates insurance enterprises in particular prefer such investment facilities to securities, because they do not have to be written down in the balance sheet if interest rates are rising, while a fall in fixed rate securities prices normally requires value adjustments to be made. Major fluctuations from year to year in the insurance industry's investment income and in the surplus-sharing by insured persons can be avoided in this way.

(d) The business and profit situation of the individual categories of banks

Gains in the commercial banks' and savings banks' market shares in domestic lending business

While the overall demand for loans remained moderate, the commercial banks again captured new market shares in their lending business with domestic non-banks in 1987. At 5.4%, their lending to domestic customers expanded more rapidly than that of all banks taken together (4.2%). Within this category of banks, however, there were fairly large differences in the pace of expansion. Thus the lending volume of private bankers (6.4%) and of regional banks and other commercial banks (6.2%) increased faster, and that of the big banks (4.9%) much more slowly, than a year before. The commercial banks stepped up, above all, their longer-term loan business with the private sector, while the

**Movement of selected bank interest rates**



1) Under DM 1 million.- 2) Effective average rate for variable-rate mortgage loans secured by residential real estate.- 3) Yield on bonds outstanding.- 4) With agreed maturities of 1 month to 3 months inclusive and DM 100,000 and over but less than DM 1 million; up to and including May 1986 under DM 1 million and 3 months.

BBk

regional banks in addition registered a steep rise in their public sector lending. The savings banks, which had slightly fallen behind in the preceding years in bidding for borrowing customers, made up some lost ground in 1987, their lending growing by 4.9%. They benefited from the larger public sector borrowing requirement. Moreover, their share in corporate finance picked up again. Lending by the private mortgage banks continued to expand at an above-average rate (4.5%). They profited from borrowers' persistent prefer-

ence for long-term fixed rate loans. For them, adverse factors were the weakness of housing construction and to a smaller extent probably also the fact that in their debt management the public authorities tended to prefer securities issues to bank loans. On the other hand, the exceptionally rapid increase in lending by the regional institutions of credit cooperatives (10.1%) was largely attributable to direct lending to the public sector. In 1987 the credit cooperatives and the regional giro institutions (at 3.4% and 3.5%, respectively) again recorded below-average growth of their domestic loan portfolios, though faster than a year before. In both cases, the main factor was the moderate pace of lending to enterprises and individuals. The volume of lending of the banks with special functions and the postal savings bank sector went up but little last year, while that of the branches of foreign banks and public mortgage banks actually declined.

Profitability of the  
banking industry  
declines

The banks' overall operating results in 1987 are unlikely to have matched those of 1986. In interest business the margins between lending and deposit rates narrowed slightly. Net interest received tended to be depressed because less profitable longer-term lending continued to grow vigorously while short-term lending decreased. Most banks obviously sought to limit their interest rate exposure and, in contrast to earlier periods of low interest rates, preferred not to go for possible profitability gains, taking less advantage of the maturity transformation opportunities provided by the steeply upward-sloping yield structure curve. In 1987, net commissions received apparently failed to increase at the double-digit rates recorded in 1985 and 1986. By contrast, the item "Other operating and administrative expenses" seems to have risen — as in the preceding years — roughly as fast as the volume of business. The banks' overall operating results, which include the expenditure and receipts items mentioned, therefore presumably deteriorated in 1987. At any rate, they are likely to have fallen in relative terms, i.e. as a percentage of the banks' volume of business. This would appear to be equally true of the annual profits, which reflect overall earnings in the industry. The fall in prices in the capital markets, notably the slump in share prices last autumn, sharply eroded own account trading profits; moreover, a relatively large amount had to be written off securities at the end of 1987. Loan loss provisions, by contrast, probably impaired the banks' profit and loss accounts less in 1987 than in 1986, given the high level of existing reserves, quite apart from the fact that the number of insolvencies in Germany has fallen considerably.

#### **4. The capital market faced with unexpected challenges**

(a) Unchanged significance of the securities markets in the overall financing cycle

Securities markets  
under changing  
conditions

Last year the securities markets in Germany were exposed to considerable changes in sentiment. The world-wide trend towards securitised financial assets and liabilities, the deregulation of the markets and the increasing internationalisation of securities transactions enabled the share and bond markets in the industrial countries to expand relatively strongly for a long period during the eighties. In the course of 1987, however, the global financial markets moved into more troubled waters. After the stock market crisis in October 1987 prices and turnover in the share markets suffered setbacks whose after-effects were felt beyond the turn of 1987-88. These developments constituted a particular test for the German capital market, which has become a preferred field of operations for foreign investors in recent years. Nevertheless, in 1987 the securities markets, viewed as a whole, managed to maintain their much more important position in Germany's overall financing cycle.



In 1987 new investment capital totalling DM 130 billion was raised in the German securities markets. This corresponds (rather as in 1986) to approximately one-quarter of the overall volume of financing. There were no major changes in 1987, as against the previous year, in the pattern of acquisition of financial assets or in borrowing by the domestic non-financial sectors, either. As already indicated, households' and enterprises' investment and financing decisions were largely determined by the view that domestic capital market rates were running at historically low levels; borrowers concentrated on the longer maturities, while investors mostly preferred liquid investments not subject to price risks. In contrast to 1986, the investments of the domestic non-financial sectors in bonds and shares picked up again somewhat last year. Especially high-yielding foreign currency bonds were a focus of interest. For the rest, domestic investors' heavy buying in the share market (which, however, was concentrated in the final months of last year) is also remarkable. In 1987 the domestic non-financial sectors purchased long-term bonds and shares totalling DM 38 billion compared with DM 25.5 billion a year previously; in contrast to 1986, they only slightly reduced their holdings of short-dated bonds.

Securities markets' large share in the overall volume of financing

#### (b) The bond market under speculative influences

At the beginning of 1987 the German bond market was rather buoyant at first, but this mood later gave way to a fairly long period of uncertainty regarding interest rates. This is why the reduction in interest rates in the capital market which was initiated in the eighties hardly made any further progress in 1987. With some major swings, capital market rates in Germany, as measured by the yield on domestic bonds outstanding, fluctuated around an average of just under 6%.

Sharp swings in interest rates without progress in the interest rate reduction process

At the beginning of the year a "buying spree", fuelled by non-residents, led to a decline of more than ½ percentage point in Deutsche Mark bond rates in the German bond market; in mid-May 1987 the yield reached its lowest level yet, at 5½%. In the international financial markets substantial rises in interest rates originating in the dollar area had already emerged by then. At its peak the Deutsche Mark/US dollar interest rate differential in the ten-year field was more than 3 percentage points, compared with less than 1 percentage point at the beginning of the year. In the further course of the year, however, non-residents' interest in purchasing Deutsche Mark bonds declined noticeably, especially when the dollar began to strengthen around mid-year. Subsequently, German bond yields went up markedly and in the course of July they regained the level of the beginning of the year (at just under 6%). Under the impact of growing fears of inflation abroad, and of faster interest rate rises world-wide as a consequence, the firming of interest rates continued until well into the late summer. The reversal of the interest rate trend was accompanied at first by a decrease in foreign investors' propensity to invest; subsequently, the increase in interest rates was intensified by non-residents' sales.

Marked fluctuations in non-residents' interest

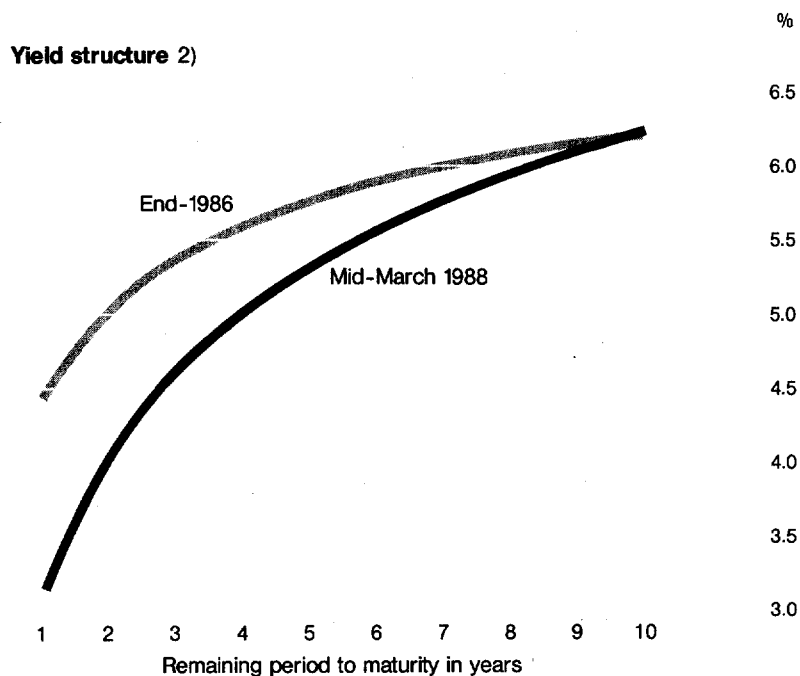
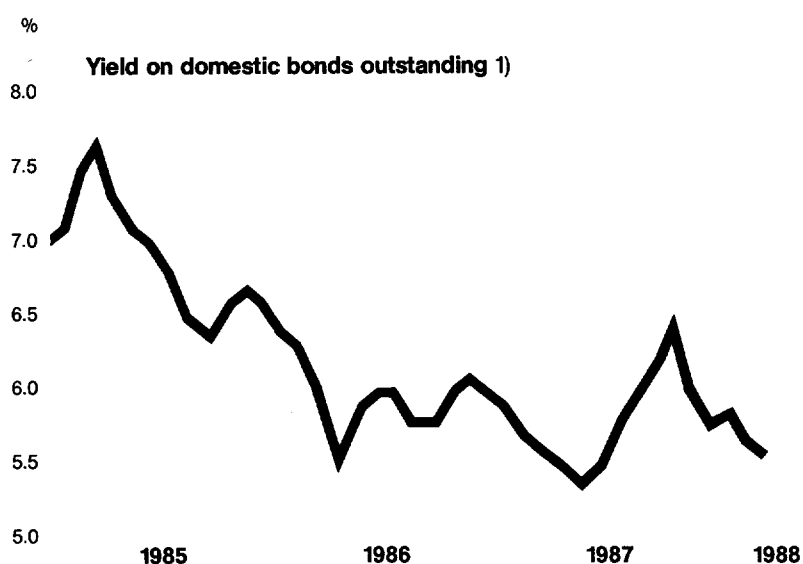
In this rather unstable market situation, the news of the planned withholding tax on the interest income of domestic and foreign owners of German assets led to a further depression of sentiment in the market at the beginning of October 1987. Foreign investors in particular divested themselves of German bonds on a substantial scale. Federal bonds, which had previously been the preferred investment paper of this group of buyers, suffered above-average price losses. The interest cost advantage which the Federal Government, as the issuer, had enjoyed until then over other domestic bond debtors abroad evaporated almost entirely and at times turned into its opposite. Parallel to the spectacular plunge in prices in the stock markets of the major industrial countries on October 19, 1987 ("Black Monday") the average yield on all domestic bonds outstanding finally

Depressed market tone in the autumn

reached 6¾%; this was the highest rate quoted in the German market since end-1985.

- New nosedive in interest rates after the stock market crash
- In the ensuing period the bond market quickly recovered from its depressed state. Under the influence of massive world-wide portfolio switching out of shares into bonds and new speculation on a Deutsche Mark appreciation, a longer-term nosedive in interest rates began, and came to only a temporary halt towards the end of 1987, at an average yield of barely 6%. Since that time German capital market rates have declined further, with slight fluctuations, in line with the international interest rate trend; at the end of March 1988 they averaged just over 5½%.
- Unusual fanning-out of interest rate pattern
- The upward trend of interest rates in the capital market which lasted until autumn last year was in conspicuous contrast to the Bundesbank's interest rate and liquidity policy stance in the money market (page 31 f.), which, taken as a whole, fostered a further decline in short-term interest rates. Since central bank measures normally affect the interest rate in the capital market only to a small extent or not at all (especially in the case of long maturities), the interest rate pattern between the short and long end of the market fanned out widely. As measured by the yield differential between ten-year and one-year Federal bonds, the fanning-out of the interest rate pattern increased in the course of 1987 from barely 2 to over 3 percentage points, which is a peak level by German standards. This reflects not least the pronounced "maturity mismatching" in domestic market participants' investment and financing behaviour, which depends in turn on long-term interest rate and inflation expectations. The accruing domestic savings flowed, as already indicated, primarily into liquid, short-term forms of investment, while domestic borrowers' financing wishes, which were concentrated in the long-term sector of the market, tended to push up longer-term capital market rates. In their behaviour in the financial markets investors and borrowers alike seemed to assume that the scope for further interest rate reductions is virtually exhausted. This assessment is backed by the historical experience that market interest rates below 6% have never lasted long in Germany. This experience is based in turn on the fact that such a far-reaching reduction in the inflation rate as at present has never continued for an extended period in recent decades. A renewed increase in prices has been followed sooner or later by the interest rate level. In other words, only when market participants regard the degree of price stability now reached as being fairly durable is this likely to be reflected more strongly in the interest rate level at the long end of the market. In Germany, with its close integration in the international financial markets, this relationship may however be greatly obscured by international interest rate movements; 1987, in particular, provided some examples of this.
- Sustained wait-and-see attitude of domestic non-banks
- In 1987, much as in the previous year, domestic non-banks showed great restraint in purchasing domestic bonds. They only invested DM 11.5 billion in such paper; this corresponds to about one-tenth of total sales. In contrast to this, they increased their purchases in foreign bond markets to a considerable extent. They were especially interested in high-yielding foreign currency bonds. Until autumn last year Australian dollar paper, a substantial proportion of which was issued or guaranteed by German banks, was in the forefront. Since then these securities have been replaced by sterling issues, the pound sterling having held up relatively well in the foreign exchange markets against the Deutsche Mark.

## Interest rate movements in the bond market



1) Monthly averages.- 2) Regression lines for bonds of the Federal Government, adjusted for coupon effects.

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By contrast, non-residents' propensity to buy was strong until the early summer of 1987. Mainly long-term paper was purchased, although decisions to buy were in many cases dictated by rather short-term interest rate and speculative investment motives. In the first few months of last year foreign buyers provided far more than one-half of the total amount raised in the domestic bond market. Because of their withdrawal from the market in the second half of the year, however, aggregate foreign purchases in 1987, at DM 35 billion (net), were smaller than in 1986 (DM 59 billion). Domestic banks now increasingly featured as buyers. They took advantage of the more and more attractive gap between long-term capital market yields and the low short-term cost of raising funds to step up their purchases in the bond market. In this way they performed the "traditional" function of overall maturity transformation. Last year banks (including the Bundesbank) added more bonds to their portfolios (DM 43.5 billion) than in 1986 (DM 32.5 billion).

Bridging of the "maturity gap" by non-residents' and banks' investment purchases

Sales and purchases of bonds in the Federal Republic of Germany						
DM billion						
Period	Sales, total	Sales of domestic bonds 1			Sales of foreign bonds 2	Memo Item Balance of transactions with non-residents 3
		Total	of which: Issues			
			by banks	by public authorities		
1	2	3	4	5	6	
1980	52.6	45.2	41.5	4.9	7.3	- 7.0
1981	73.1	66.9	70.5	- 2.6	6.2	- 7.7
1982	83.7	72.7	44.8	28.6	11.0	- 8.7
1983	91.3	85.5	51.7	34.4	5.7	+ 5.1
1984	86.8	71.1	34.6	36.7	15.7	- 1.9
1985	103.5	76.1	33.0	42.7	27.5	+ 4.0
1986	103.8	87.5	29.5	57.8	16.3	+42.7
1987	113.0	88.2	28.4	59.8	24.8	+10.1
1st qtr	49.7	42.5	15.3	27.2	7.2	+15.9
2nd qtr	22.1	13.9	5.3	8.7	8.1	+ 3.9
3rd qtr	28.6	19.9	6.5	13.3	8.7	- 9.2
4th qtr	12.7	11.9	1.3	10.6	0.8	- 0.5
Period	Purchases, total	Purchases by				non-residents 6
		banks 4	domestic non-banks 5			
			Total	Domestic bonds	Foreign bonds	
7	8	9	10	11	12	
1980	52.6	19.1	33.2	29.1	4.1	0.3
1981	73.1	17.4	57.1	51.5	5.7	- 1.5
1982	83.7	44.8	36.7	24.5	12.2	2.3
1983	91.3	37.6	42.9	36.4	6.5	10.8
1984	86.8	23.0	50.0	34.2	15.8	13.8
1985	103.5	32.5	39.5	15.9	23.7	31.5
1986	103.8	32.4	12.4	- 0.3	12.7	59.1
1987	113.0	43.6	34.4	11.3	23.1	35.0
1st qtr	49.7	12.3	14.2	8.7	5.6	23.2
2nd qtr	22.1	7.2	2.9	- 4.3	7.2	12.0
3rd qtr	28.6	12.6	16.5	7.7	8.8	- 0.5
4th qtr	12.7	11.6	0.8	- 0.7	1.6	0.3

1 Net sales at market values plus/less changes in issuers' holdings of their own bonds. — 2 Transaction values. — 3 Purchases of domestic bonds by non-residents less sales of foreign bonds to residents (col. 12 less col. 5); — = capital exports, + = capital imports. — 4 Including the Bundesbank; book values. — 5 Residual. — 6 Net purchases (+) or net sales (-) of domestic bonds by non-residents; transaction values.

Discrepancies in the totals are due to rounding. BBK

### Large supply of public bonds

At the beginning of 1987 issuers again exploited the buoyant market conditions to raise considerable amounts of funds. Sales slackened perceptibly, however, when foreign demand declined and market conditions became more unsettled in the further course of the year. More than one-half of the total amount raised from sales of domestic and foreign bonds (DM 113 billion) was accounted for in 1987 by sales of public bonds (DM 60 billion). By far the greatest part of this sum was accounted for by Federal Government paper. In 1987 — much as in the previous years — its direct recourse to the bond market was greatly in excess of the current budget financing, thus causing a further change in its debt pattern in favour of "securitised" debt. The net sales of Federal bonds totalled about DM 47 billion. The bulk of its issues consisted of traditional bonds, which are preferred by non-residents. By contrast, sales of five-year special Federal bonds and Federal savings bonds, which the Federal Government offers solely to domestic private investors, decreased further in importance. Last year only DM 7.5 billion was raised by these tap issues. In 1987 the special funds of the Federal Government — the Federal Railways and the Federal Post Office — likewise increased their sales activity in the bond market; together, they raised DM 10 billion net in the market (compared with DM 6.5 billion a year before). A marked upturn in issuing activity was recorded until the summer of 1987 at the Länder Government level, too. In the second half of the year, however, the Länder

Governments met their capital needs on balance exclusively through borrowers' note loans, and ran down their bond market indebtedness.

In 1987 banks' issuing activity in the bond market showed rather divergent trends. In all, banks raised a total amount of DM 28.5 billion from sales of their own bonds last year; that was almost as much as in 1986. "Traditional" bank bonds, mortgage bonds and communal bonds, which were used by issuing institutions to fund their mortgage lending and their loans to the public authorities, receded further into the background. Thus, sales of communal bonds halved in 1987 to less than DM 6 billion. This is in a sense the mirror image of the shifts of emphasis in the government's debt policy; in recent years the government has steadily enlarged the share of its direct borrowing in the market from sales of its own bonds. The weakening in the mortgage bond sector was even more pronounced; because of the low demand for the financing of housebuilding, the second traditional "pillar" of issuing institutions' lending and investment business, a decrease of DM 2 billion in the amount outstanding was recorded in this area.

Issuing institutions' "traditional" bank bonds on the retreat

In conspicuous contrast to this, sales activity was particularly buoyant in 1987 in the field of other ("uncovered") bank bonds, for which no special cover fund has to be formed from lending business. In recent years banks which do not specialise in traditional mortgage and communal lending have made increasing use of this flexible refinancing instrument. At almost DM 10 billion, these institutions, which include inter alia commercial banks, accounted last year for no less than two-thirds of the total amount raised from sales of "uncovered" securities (DM 15.5 billion). In 1986, by contrast, the total sum raised from sales of "other" bank bonds had come to no more than DM 1.5 billion.

Increasing weight of issues of other bank bonds

As a source of funding, the German bond market remains unattractive to large industrial firms. This owes something to securities transfer tax, which is levied on this paper at the maximum rate of 2.5%. The abolition of securities transfer tax has repeatedly been called for, to make the German capital market generally more competitive. The disadvantage is particularly marked in the case of corporate financing. Hence enterprises felt obliged in 1987 to make greater use of the international Deutsche Mark bond market by raising Deutsche Mark through issues floated by their own financing companies abroad. Altogether, these indirect financing activities by German enterprises in the Deutsche Mark bond market ran at the level of more than DM 2 billion. At the end of 1987 the total amount of these issues outstanding was about DM 8.5 billion. It thus distinctly exceeded the volume of industrial bonds outstanding in the domestic market (DM 2.5 billion). Regardless of this, issuing activity in the field of foreign Deutsche Mark bonds decreased markedly in the course of last year; net sales came to barely DM 9 billion, compared with close on DM 24 billion in 1986. Recently, foreign Deutsche Mark bonds have increased in attractiveness again for issuers and investors, as these securities, unlike domestic bonds, will not be affected by the planned withholding tax.

German enterprises in the foreign Deutsche Mark bond market

### (c) The share market between crisis and success

1987 was a turbulent year for the German share market. The massive downturn in share prices in the wake of the international stock market crash of October 19, 1987 highlighted the drawbacks and risks of the German share market's great dependence on non-residents. Yet the German share market, where the slump in prices was more pronounced than in the world's leading stock markets, did not lose its capacity to function, neither on "Black Monday" nor in the following critical weeks. Seen from today's point of view, 1987 marked the end of a period of price increases lasting several years in the German share market. With hindsight, it can be said that the zenith of this trend was passed as early as

Turbulent year in the German share market

spring 1986. Under the influence of the accelerating appreciation of the Deutsche Mark in the international foreign exchange markets at that time and the associated impairment of the price competitiveness of many German enterprises faced with foreign competition, German share prices came under pressure as early as 1986 and declined at the beginning of 1987, too, along a broad front, in contrast to those in the major global stock markets. After the stabilisation of the principal dollar exchange rates in the wake of the Louvre accord of February 1987, there was a temporary rise in prices in the further course of the year, but the German share market tended to weaken again when the Deutsche Mark came under upward pressure in the late summer. In connection with the international stock market crash, a slump of unprecedented scale in share prices then occurred. Within a few weeks listed German shares lost one-third of their market value. At the end of 1987 share prices were on an average more than 35% down on the year. After the turn of 1987-88, too, share prices remained under pressure for a while; since February, however, there has been something of a recovery.

#### Causes of the stock market crash

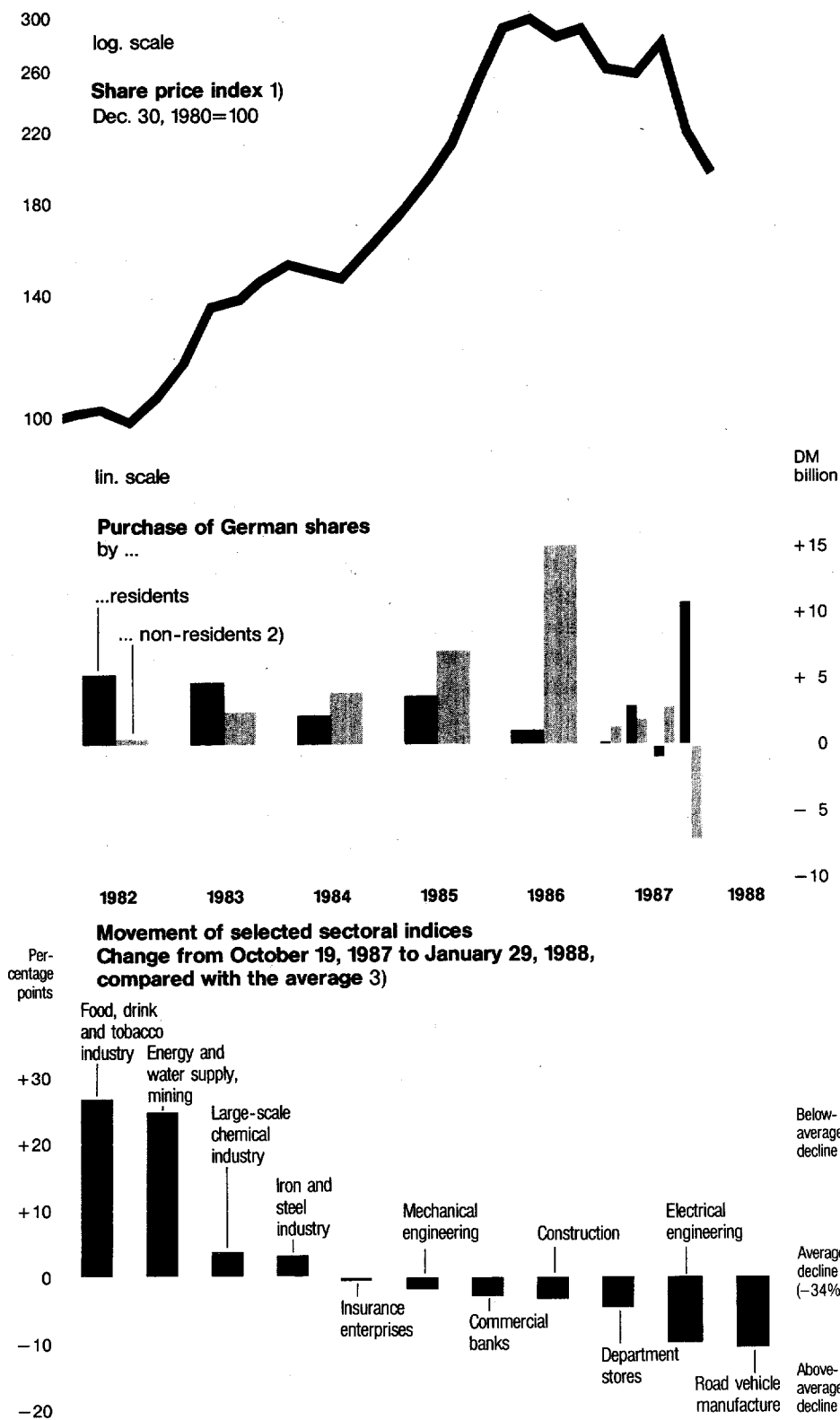
The causes of the stock market crash of October 1987, its extent and global dimensions are to be sought both in the economic environment of the stock markets and in the structural and organisational peculiarities of the individual stock market centres. In recent years prices in all international share markets have risen disproportionately sharply, stimulated by the success of the world-wide stabilisation efforts towards the end of the seventies and at the beginning of the eighties (as reflected in falling interest rates), supported by an ample provision of liquidity by the monetary authorities of the major industrial countries, and partly fostered by large savings surpluses (especially in Japan, which reached a peak position in this respect). The risk of a price setback grew with the increasing duration of the international boom in the share markets and of important markets' growing tendency towards speculative exaggerations, which were also reflected in the fact that the prices differed more and more widely from the share earnings. In addition, the markets became more conscious of the external economic disequilibria which had meanwhile arisen among the industrial countries. The instability of the international financial situation was mirrored in increasing interest rates in the United States and world-wide, especially in the autumn of last year. Moreover, disappointing figures on the US trade deficit, and a public remark which seemed to point to a depreciation of the dollar, which had been kept rather stable up till then, resulted in a world-wide slump in stock market prices, proceeding from the United States. The markets' extreme nervousness may have additionally intensified the initial scale of the price adjustments. Furthermore, institutional and organisational peculiarities, such as the newly introduced trade and portfolio management techniques in the US stock markets, seem to have played a destabilising role.<sup>1</sup> The force with which the German share market was hit by the international stock market slump is mainly ascribable to its close ties with markets abroad. At the same time the relative narrowness of the German market and its comparatively heavy dependence on groups of institutional investors from abroad, operating in large sums of money, also became apparent.

#### Consequences of the stock market crisis less serious than feared

The contractionary effects of the stock market crash on overall economic activity, which were feared in some quarters, remained on a limited scale. Private shareholders and institutional investors are naturally both affected by the price losses – at least as far as shares are concerned which have not been in their possession for a long time and whose prices are determined by external developments. But adverse repercussions on the real economy, such as a world-wide dampening of economic growth, have not been apparent as yet. Among the positive side-effects have been the allaying of the previously

<sup>1</sup> See also the Report of the Presidential Task Force on Market Mechanisms, Washington, D.C., January 1988.

### Trends in the share market



1) Quarterly averages; source: Federal Statistical Office.- 2) Net purchases (+) or net sales (-) of domestic shares (including investment fund units) by non-residents; transaction values.- 3) Percentage decline in the respective sectoral index in the corresponding period less the percentage decline in the total index.

burgeoning fears of inflation and the correction of the rise in interest rates of autumn 1987. Judging by very recent experience, a reappraisal of developments which have left a pronounced mark on the international financial markets in the last few years under such designations as "innovation", "securitisation" and "deregulation", seems to have started without this necessarily entailing, from the German point of view, any new regulations for the financial and especially for the share markets.

Structural shifts in share purchases

In the share market itself the slump in stock market prices of October 1987 resulted in a marked shift of emphasis in the importance of individual groups of investors. Until then, by far the most important group of investors on the buyers' side of the German market had been foreign investors, and price trends had often been crucially influenced by them. In 1986 alone non-residents bought German shares to the market value of DM 15 billion – more than in the four preceding years taken together. In the first three quarters of 1987 they built up their portfolios of German equities by a further DM 6 billion. In striking contrast to this, however, in the fourth quarter of 1987 non-residents divested themselves of German shares to the market value of over DM 7 billion. On the other hand, domestic non-banks took advantage of the severely depressed price level towards the end of the year to acquire considerable amounts of German equities. In the fourth quarter of 1987 their additional purchases seem to have amounted to about DM 10 billion at a rough estimate. Such a steep increase in domestic shareholdings was not even achieved in the successful privatisation operations of the early sixties. It would undoubtedly be advantageous to the German share market's further development if, given this shift in emphasis in favour of domestic purchasers, long-term investment objectives were to move more into the forefront, relative to short-term buying by foreigners motivated more by speculative considerations.

Consolidation of issuing activity at a high level

In the course of the last few years the significance of the share as a financing instrument for domestic enterprises has increased gratifyingly even though its contribution to German enterprises' aggregate fund-raising has remained relatively limited. Enterprises' basically improved earning prospects and the favourable issuing climate in the wake of the sustained bull market for shares decisively helped fund-raising by the issue of shares to gain ground. In contrast to this, the more recent bear market for shares inevitably involved a certain setback. In all, the amount raised in the German share market in 1987, at close on DM 12 billion (market value), was quite considerably below the record level of 1986 (DM 16.5 billion). This weakening of issuing activity was certainly influenced by the price slump in October, although (of course) this only affects the last two months of 1987. Recent developments definitely give grounds for expecting that issuing activity in the share market will by no means come to a halt.

Regulated market off to a successful start

The future development potential of the German share market as a source of funding for a substantial number of enterprises was fostered over the long term by the new Stock Exchange Admission Act, which came into force on May 1, 1987 and which introduced the regulated market. This market constitutes a further refinement of existing semi-official stock exchange dealing, and grants easier access to the stock exchange, at lower cost, than is possible by means of official dealing. For fairly new enterprises, in particular, this might enhance the attractiveness of share funding and at the same time, from the investor's point of view, extend the range of investment outlets in an interesting way. In 1987 ten of the 19 public limited companies newly listed on the stock exchange approached the regulated market. In addition, by the end of March 1988 a fairly large number of enterprises had exploited the option of transferring shares and participation certificates from semi-official dealing to the new market segment. The attractiveness of the German share market would probably increase further if more enterprises could bring themselves to take such a step in future.



In spite of a number of favourable trends, the reform of the stock exchange system made little headway last year in the organisational, legislative and tax fields. At the same time, the need to take action with a view to promoting the international competitiveness of German stock market centres seems to have increased if anything. Of late there have repeatedly been calls for the creation in Germany of a viable financial futures and option exchange modelled on exchanges of this kind abroad. In its Annual Economic Report for 1988, the Federal Cabinet declared itself willing to establish the legislative framework necessary for this. Over and above this long-term objective, the consistent and resolute pursuit of the reform policy adopted on the German stock exchanges – including the closer cooperation already initiated between the individual exchanges – remains a pressing necessity. In this connection, all participants are called upon to play their part in ensuring that the German share market can perform its macroeconomically important dual function of being a turntable for long-term savings and an abundant source of liable capital even more effectively in future, and that Germany remains an internationally attractive financial centre.

Reform of the stock  
exchange system  
remains pressing

### III. International monetary developments and policy

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#### 1. Exchange rates and global monetary reserves dominated by the weakness of the US dollar

Cooperation in monetary and economic policies confirmed through the Louvre accord in February 1987

After the external value of the US dollar had fallen sharply against the major currencies of Europe and the yen in 1985-86, a stage appeared to have been reached in the monetary relationships between the countries concerned where adjustment policy was bound to shift more strongly away from exchange rates towards economic policy in general. This was suggested by the fact that the inappropriate development of major exchange rates from the beginning of the eighties to early 1985 had meanwhile been neutralised or even more than offset. Any further rapid depreciation of the dollar therefore threatened to hit exporters in major partner countries of the United States harder than could be desirable in the light of the envisaged external adjustment and an improvement in overall economic equilibrium among all the countries concerned. At the same time, the inflationary risks facing the United States owing to the depreciation of the US dollar, in the form of faster rises in import prices as well as growing capacity utilisation in its exporting industries, could no longer be overlooked. In February 1987 the finance ministers and central bank governors of the United States, Japan, the Federal Republic of Germany, France, the United Kingdom and Canada therefore agreed, under the Louvre accord, to adopt new measures designed to help reduce the disequilibria existing in the world economy. Moreover, they announced their intention of cooperating with the objective of stabilising the exchange rates of their currencies "around current levels".

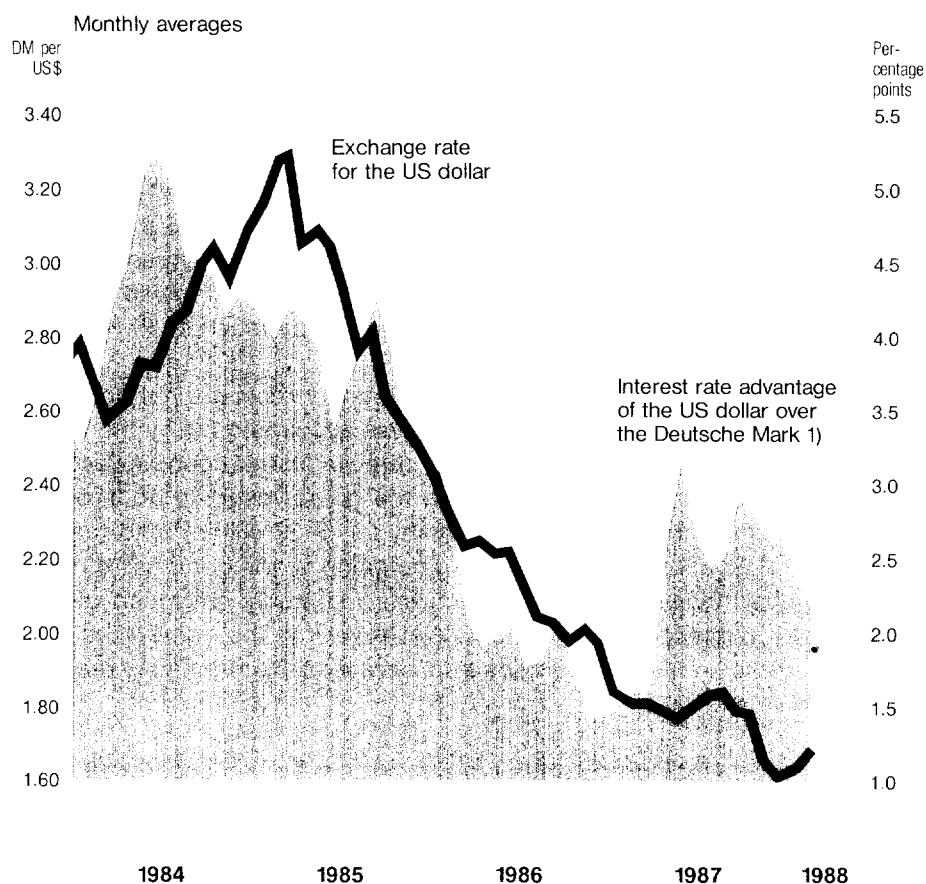
US dollar once again under considerable downward pressure in 1987

In the months following the Louvre accord the US dollar did indeed stabilise temporarily against the other major currencies; this phase did not come to a stop until the October crash in the stock markets. However, the stabilisation of the dollar rates initially required purchases of dollars on a considerable scale by the central banks participating in the Louvre accord, joined by a number of other central banks, partly with the intention of increasing their dollar reserves. The reason behind the persistent selling pressure in the dollar market, which only eased as the year progressed through the stabilising effect of wider interest rate differentials, was above all the fact that the US trade balance continued to develop unsatisfactorily. As described in the first section of this Report, US exports began to grow strongly last year, while the volume of imports into the United States likewise rose considerably, albeit distinctly less than exports. Thus, the difference between the real rates of increase of exports and imports was large enough to reduce the volume of the US trade deficit, but in value terms – and this is what the markets watch primarily – the US trade balance continued to deteriorate into the autumn of last year. For 1987 as a whole this led to a renewed rise in the US trade deficit. In addition, the markets registered the fact that, with the surge in the net foreign debt of the United States, the traditional surplus on the US investment income account continued to decline, thus further burdening the current account position of the United States. In actual fact, the current account deficit of the United States rose again last year by about \$ 20 billion to \$ 161 billion. Moreover, the markets remained unsettled because basic adjustment measures in the United States were slow to get under way. This explains the reluctance of foreign investors to purchase dollar assets and the sharp decline in the influx of private capital to the United States in the course of last year. It is probable that at times there were even net outflows of private capital from the United States.

Stabilisation of the dollar rate up to mid-October 1987 owing to counteracting intervention policy

Owing to the effects on the dollar rate associated with these developments, the monetary authorities of the major countries repeatedly felt disposed in this situation to undertake interventions on a considerable scale, in harmony with the agreement on cooperation that had been made. With the participation of the United States, this resulted in coordinated dollar purchases on an unprecedented scale. However, these dollar purchases are reflected in the balance of

## Deutsche Mark/dollar exchange rate and international interest rate differential



1) As measured by the yields on long-term public bonds outstanding.

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payments of the United States only to the extent that they led to a rise in the dollar assets held in the United States by foreign monetary authorities. Official dollar investments in the Euro-markets are reflected in the US balance of payments only indirectly as part of US capital imports.

Despite the fact that the monetary authorities intervened once again, especially towards the end of the year, by purchasing a considerable volume of dollars, the external value of the US dollar, which had come under renewed pressure after the decline in prices in the stock markets, finally suffered a sharp fall, with the announcement of the further rise in the monthly trade deficit of the United States playing a major part; even the wide-ranging cooperation among the major industrial countries, as confirmed in a press communiqué on December 23, 1987, did little to change this initially. According to the method of calculation used by the Bundesbank, the weighted external value of the US dollar fell by 14% against the currencies of the other industrial countries in terms of the dollar rate before the Louvre accord came into effect. It was not until the beginning of 1988, when the far lower US trade deficits for November and December 1987 became known and the Federal Reserve System had taken part more openly and to a greater extent than in the past in continued concerted foreign exchange market operations, that the US dollar recovered. However, at the end of March 1988 the external value of the US currency, on a weighted average, was again about 13% lower than it was at the time when the Louvre accord was announced. As most partner countries of the United States invoice a considerable part of their imports in dollars, the further decline in the US currency benefited their stabilisation efforts through a decrease in import prices.

Renewed persistent decline in the US dollar since the stock market crash

- Record increase in global monetary reserves
- The large-scale support operations for the US dollar, together with the willingness of a number of countries to considerably increase their monetary reserves, led to a far stronger rise in official global gross monetary reserves in 1987 than ever before in a single year. According to IMF statistics, they went up by over \$ 200 billion. However, this calculation in terms of the US dollar overstates the increase in global monetary reserves in that there was a strong rise over the course of the year in the countervalue in terms of the US dollar of reserve holdings denominated in other currencies, special drawing rights and ECUs owing to shifts in exchange rates. If these exchange rate effects are more or less eliminated by only converting transaction-related changes in non-dollar reserve holdings into dollars and merging them with the changes in reserves denominated in dollars, then global monetary reserves increased in 1987 by \$ 149 billion. Even so, global reserves still grew by as much as 27 %.
- Most of the increase concentrated in a few industrial countries
- Of the rise of over \$ 200 billion in global monetary reserves not adjusted for changes in exchange rates, three-quarters was accounted for by the industrial countries (\$ 148 billion). Of this sum in turn, three industrial countries accounted for a share of just under two-thirds, with the gross reserves of Japan rising fastest, at \$ 39 billion, followed by Germany (+ \$ 27 billion)<sup>1</sup> and the United Kingdom (+ \$ 23 billion). Already in the preceding year a good half of the total growth in global monetary reserves, which was admittedly very much lower, was concentrated in these three countries. However, at the same time a large number of smaller industrial countries also increased their monetary reserves to a considerable extent.
- Continuing strong rise in Taiwan's monetary reserves
- As far as the developing countries are concerned, Taiwan accounted for over half of the growth in their reserves in 1987, at \$ 28 billion, after having already increased its monetary reserves strongly in the preceding year. As a result, Taiwan has the third highest level of official monetary reserves in the world after Japan and Germany, if holdings of gold are valued at a relatively low level or left completely out of account. In addition, there was a more or less strong rise in the monetary reserves of all the regional groups of developing countries, including those of 15 major debtor countries.
- Growth in global monetary reserves caused by unsolved adjustment problems
- To a much greater extent than before, the increase in global monetary reserves in 1987 reflects the great unsolved problems posed by external disequilibria. Like the fall in the dollar rate, this indicates that balancing large current account deficits through private capital movements does not work over the longer term by any means as smoothly as appeared to be the case for a certain period of time. As long as the dollar was rising, the attitude of the United States, in particular, was strongly influenced by the notion that the levels of current account deficits and surpluses are mainly determined by capital flows and that therefore no serious financing problems are to be feared. Now, by contrast, the greater willingness of the United States to participate in stabilising the dollar rate implies that there, too, the financing of persistently large current account deficits is no longer considered to be readily assured, at all events not at exchange rates and interest rates that appear acceptable in view of the objective of continuing to have non-inflationary economic growth. However, if only because of their expansionary monetary effects, foreign exchange policy measures by central banks can only provide bridging assistance until basic adjustment measures begin to take effect.

<sup>1</sup> Of this increase in the gross monetary reserves of the Bundesbank, the countervalue of \$ 10 billion is due to interventions within the EMS. Just over one-third of this rise was offset by repayments in Deutsche Mark by our partners at the beginning of 1988.

<b>Regional distribution of global monetary reserves*</b>				
<b>US\$ billion</b>				
Country/Group of countries	Level at end of year		Change	
	1985	1987 p	1986	1987 p
<b>A. Industrial countries 1</b>				
United States	43.2	45.8	+ 5.3	- 2.7
Japan	27.7	82.0	+15.5	+ 38.7
Canada	3.4	8.1	+ 0.7	+ 4.0
Germany	48.4	82.8	+ 7.4	+ 27.0
France	30.0	36.5	+ 4.9	+ 1.6
United Kingdom	13.7	42.5	+ 5.6	+ 23.3
Italy	18.4	33.0	+ 4.4	+ 10.2
Other industrial countries	98.2	154.9	+10.8	+ 45.9
Total	283.0	485.6	+54.6	+148.0
<b>B. Developing countries</b>				
Africa	9.6	10.3	- 0.5	+ 1.3
Europe	11.8	16.6	+ 1.9	+ 3.0
Latin America	41.8	39.0	- 8.0	+ 5.2
Middle East 2	64.5	64.6	- 6.0	+ 6.1
Rest of Asia	74.6	137.0	+24.9	+ 37.5
of which				
Taiwan	22.8	74.3	+23.8	+ 27.7
<b>Memorandum item</b>				
15 major debtor countries 3	41.0	38.4	- 6.5	+ 3.9
Total	202.3	267.6	+12.3	+ 53.0
<b>C. All countries (A plus B)</b>				
<b>Memorandum items</b>				
Total reserves, excluding ECU balances created against the contribution of gold 4	458.7	710.5	+63.2	+188.6
of which				
All industrial countries	256.5	442.9	+50.8	+135.6
Germany	41.0	71.4	+ 6.4	+ 24.0
France	23.7	26.7	+ 4.0	- 1.0
United Kingdom	12.2	40.3	+ 5.4	+ 22.7
Italy	13.2	25.0	+ 3.8	+ 8.0

\* Gross monetary reserves of all IMF member countries plus Switzerland and Taiwan. The gold was valued at US\$ 42.22 per ounce. — 1 OECD countries excluding Greece, Portugal and Turkey. — 2 Bahrain, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syria, United Arab Emirates, Yemen, People's Republic of Yemen. — 3 Countries to which the "Baker initiative" primarily refers (Argentina, Bolivia, Brazil, Chile, Colombia, Côte d'Ivoire, Ecuador, Mexico, Morocco, Nigeria, Peru, Philippines, Uruguay, Venezuela, Yugoslavia). — 4 The gold underlying the ECU balances has been included in the other gold holdings again. — p Provisional.  
Discrepancies in the totals are due to rounding.  
Sources: IMF and EMCF. BBk

Global official reserves denominated in dollars, including the amounts contributed to the European Monetary Cooperation Fund, rose by an estimated \$ 138 billion from the end of 1986 to the end of 1987. This gives an indication of the great extent to which the US current account deficit of \$ 161 billion was financed by foreign monetary authorities last year. The growth in reserve assets resulting from transactions over and above the rise in reserves in dollars and totalling \$ 11 billion primarily reflects an increase in global holdings of Deutsche Mark (+ \$ 10 billion). In calculating these rises, reserve holdings in individual currencies were increased by amounts conjectured on the basis of assumptions in the light of certain information and criteria with respect to foreign exchange reserves that cannot be broken down by the IMF. Expressed in Deutsche Mark, the official assets held in German currency rose by DM 17 billion to DM 129 billion, after having declined by a similar amount in 1986. As a result, the total amount of Deutsche Mark reserves almost regained its previous record level of DM 133 billion reached in mid-1985; at the end of 1987 their share in total global foreign exchange reserves (including the dollars contributed to the EMCF), at 14%, was actually somewhat higher than two and a half years ago, because the countervalue in terms of the US dollar of the Deutsche Mark reserves has

Besides reserve holdings in US dollars, only Deutsche Mark reserves go up substantially

Components of global monetary reserves*								
US\$ billion								
Type of reserves	Level at end of year		Change					
			due to trans- actions 1		due to value adjustments 2		Total	
	1985	1987 p	1986	1987 p	1986	1987 p	1986	1987 p
Gold 3	40.1	39.9	- 0.0	- 0.2	-	-	- 0.0	- 0.2
Special drawing rights	20.0	28.7	+ 1.5	+ 0.9	+ 2.4	+ 3.9	+ 3.8	+ 4.8
Reserve positions in the IMF	42.5	44.6	- 3.9	- 5.1	+ 4.6	+ 6.5	+ 0.7	+ 1.4
Official ECU balances	40.7	72.7	+ 4.6	+ 12.4	+ 3.5	+ 11.6	+ 8.0	+ 24.0
- against gold	30.2	46.4	+ 0.3	+ 1.3	+ 3.5	+ 11.2	+ 3.8	+ 12.5
- against US dollars	10.5	21.9	+ 3.8	+ 7.6	-	-	+ 3.8	+ 7.6
- arising from very short-term financing	-	4.4	+ 0.5	+ 3.5	+ 0.0	+ 0.4	+ 0.5	+ 3.9
Foreign exchange	341.9	567.2	+ 30.6	+ 140.8	+ 23.8	+ 30.1	+ 54.4	+ 171.0
US dollars	234.0	411.1	+ 46.6	+ 130.5	-	-	+ 46.6	+ 130.5
Deutsche Mark	53.2	81.7	- 8.6	+ 9.8	+ 13.1	+ 14.3	+ 4.5	+ 24.0
Yen	27.4	38.2	- 4.3	- 0.0	+ 6.3	+ 8.9	+ 1.9	+ 8.9
Pounds sterling	11.0	14.8	- 0.4	+ 1.0	+ 0.3	+ 2.9	- 0.1	+ 3.9
Swiss francs	8.2	9.4	- 2.0	- 0.9	+ 2.0	+ 2.0	+ 0.0	+ 1.2
French francs	4.5	5.8	- 0.5	+ 0.1	+ 0.7	+ 1.0	+ 0.2	+ 1.1
Dutch guilders	3.6	6.2	- 0.2	+ 0.3	+ 1.4	+ 1.1	+ 1.2	+ 1.4
Total reserves	485.2	753.1	+ 32.8	+ 148.8	+ 34.2	+ 52.1	+ 66.9	+ 201.0

\* Gross monetary reserves of all IMF member countries plus Switzerland and Taiwan. — 1 Where the monetary reserves are not denominated in gold and dollars, the changes in units of the reserve asset concerned have been converted into dollars at average rates based on the rates on the relevant reference dates. Where the ECU balances are based on the contribution of gold and dollars to the EMCF, the changes in these gold and dollar contributions are shown. — 2 Difference between the change in levels on a dollar basis and the change due to transactions; also including the change caused by variations in the gold price in the ECU balances based on the contribution of gold to the EMCF. — 3 Valued at US\$ 42.22 per ounce of fine gold. — p Provisional. Discrepancies in the totals are due to rounding.

Sources: IMF, EMCF and Committee of EEC Central Bank Governors. BBk

increased considerably since then owing to changes in exchange rates. According to IMF statistics, only the industrialised countries as a group increased their holdings of Deutsche Mark, whereas the Deutsche Mark reserves of the other groups of countries (the oil-producing countries and the other developing countries) registered a slight decline. In this context, only a minor role was played by the net purchases of Deutsche Mark by the countries participating in the exchange rate mechanism of the EMS. The increase in Deutsche Mark reserves was probably mainly due to reserve diversification operations by other industrial countries and this or that developing country. By contrast, there was no change in 1987 in the level of statistically recorded official reserve holdings of yen in terms of the Japanese currency, which ranked third after the dollar and the Deutsche Mark.

Question of new SDR allocations now recedes far into the background

In the light of the high level and further growth of global monetary reserves, as well as for other reasons, the conditions are still not right for a new allocation of special drawing rights by the IMF to satisfy the global need for international liquidity. The frequently heard argument in favour of an allocation of SDRs to the effect that reserves are distributed unevenly has not become more persuasive in the light of recent developments; in any case, this argument cannot substantiate any global need for the creation of additional reserves, such as is necessary according to the IMF's Articles of Agreement to justify the allocation of new special drawing rights. Instead, concern has grown that, owing to the associated rise in domestic liquidity and the easing of external constraints when reserves are high, an increase in reserves on the scale registered in 1987 might give a stronger boost to inflationary forces again.

Despite the world-wide turmoil in the financial markets, international lending activity continued to expand in 1987. Nevertheless, the sobering impact of the temporary rise in dollar interest rates and the subsequent stock market crash was not without its effects on the financial markets generally. This is reflected in the fact that, expressed in US dollars and in gross terms, the volume of new longer-term loans and financing facilities newly arranged in the international financial markets was not higher in 1987 than in the preceding year; adjusted for movements in exchange rates, there was even a decline in the gross volume of business. The collapse in prices on the stock exchanges as well as in the Euro-dollar bond markets has evidently brought home to market participants more clearly than before the dimensions of the risks they face. Whether or not the supervisory and monetary authorities at both national and international level will have reason to re-examine the existing risk provisioning arrangements over and above the present efforts to establish internationally harmonised capital ratios must be reviewed in the light of this experience; the outcome will depend not least on the behaviour of market participants. Since the causes underlying the turmoil are only partly to be found in the financial markets themselves, but are basically associated with persistent domestic and external disequilibria among major countries, it will above all be important that the financial and monetary policies of the major countries are geared strictly to the need to reduce the existing imbalances. The adjustment process that is evidently proceeding in this direction gives grounds for confidence. A positive assessment of the viability of the financial markets can also be justified by the fact that the turmoil which occurred and the losses associated with it had no serious after-effects. Moreover, with the prompt intervention particularly of the US central bank in the market, it became evident that liquidity squeezes induced by market crises and the concomitant dangers can be successfully countered.

Growth of international lending business not unaffected by the turmoil in the financial markets

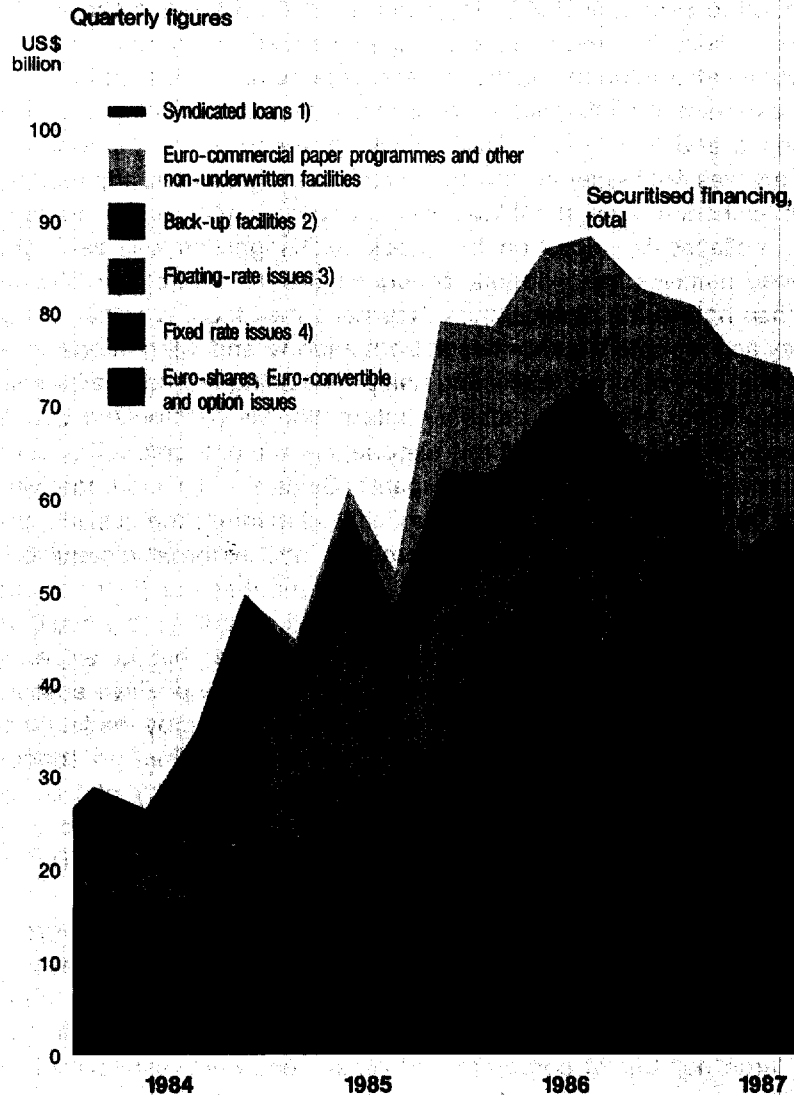
According to OECD data, the volume of new medium and long-term gross borrowing in international markets in 1987, at about \$ 380 billion, was similar to that recorded in the preceding year. Including short-term bank loans and in net terms, new lending actually increased more than in the previous year. In this connection a large number of corporate and other borrowers, especially less well-known ones not categorised as first class, tended to return to relationship banking. Thus, newly granted international syndicated credits shot up by one-half last year to \$ 93 billion. The greater part of these credits went to borrowers in industrial countries, the financing of large-scale projects and corporate takeovers being a particularly significant factor; some of the loans were also only in the form of credit lines to meet an unforeseen need for finance. The volume of new loans granted to the developing countries of Asia and to the countries of Eastern Europe also increased, albeit to a lesser extent. By contrast, new lending to the heavily-indebted countries of Latin America in connection with rescheduling arrangements (Mexico and Argentina together received about \$ 10 billion) as well as refinancing operations through the market contributed only a little to the growth of aggregate international bank lending.

Return to syndicated loans

As is shown by the international banking statistics of the BIS, interbank lending within the reporting area, for all maturities taken together, continued to grow at a considerably faster rate than lending to final borrowers. The high rates of growth reflect the rapidly increasing lending and deposit-taking business of Japanese institutions in various financial centres, especially in Asia. Adjusted for movements in exchange rates, their share in the growth of the cross-border interbank business of the banks reporting to the BIS rose from about 40% in 1985 to an estimated 70% last year.

Above-average growth in interbank lending

### Syndicated loans, securities issues and other financing facilities in the international financial markets



1) Publicised loans with maturities of more than one year granted mostly by bank syndicates, which have not necessarily been drawn down yet; excluding standby credits to finance enterprise take-overs and excluding reschedulings.- 2) Facilities to back up the revolving placement of money market paper by international bank syndicates.- 3) Including medium and long-term floating-rate certificates of deposit.- 4) Including zero bonds, currency bonds and special placements.- Source: OECD.

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Sharp decline in new business in the markets for longer-term bonds ...

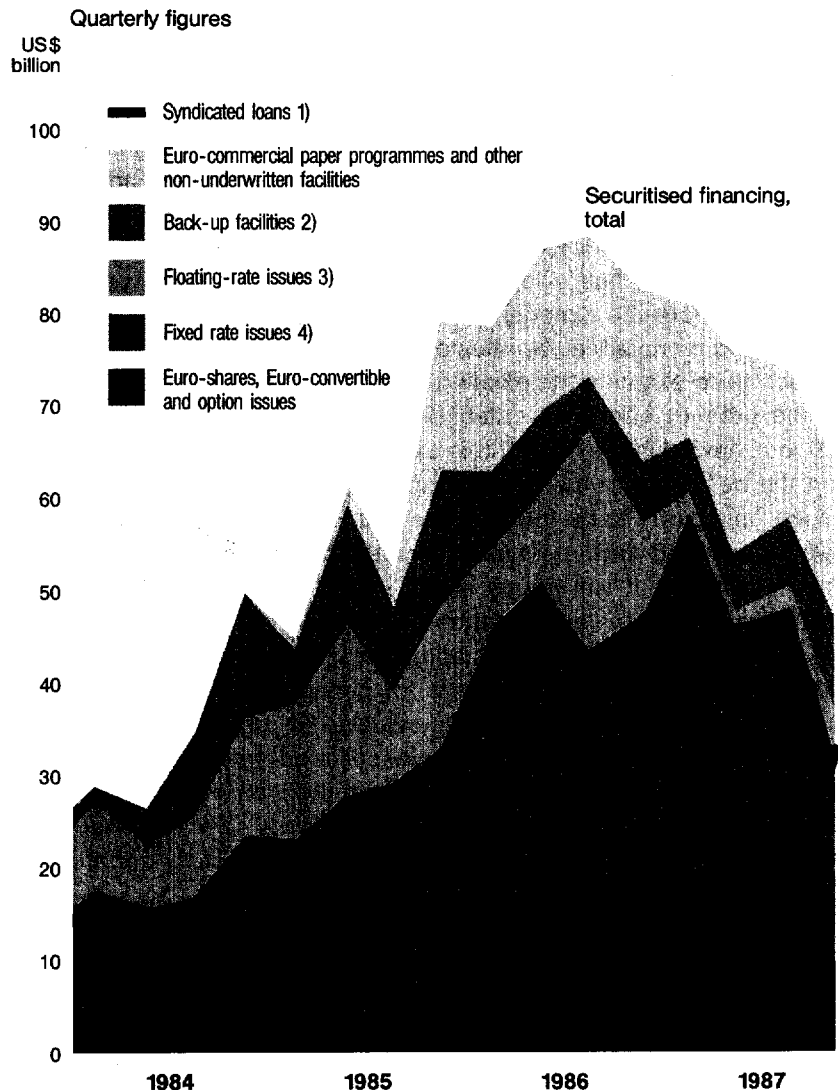
Owing to uncertain interest rate and exchange rate expectations, there were signs of structural shifts in the international credit markets early in 1987. The international bond markets were particularly affected by this. Last year the volume of longer-term bonds issued declined by \$ 50 billion to \$ 177 billion in gross terms, and in net terms by as much as one-third to \$ 103 billion. Issues of fixed rate dollar bonds decreased even more strongly in relative terms. In fact, owing to insufficiently large interest rate spreads and a lack of confidence in its functioning, the primary market for dollar-denominated bonds carrying a floating rate of interest largely collapsed. The market for fixed rate dollar bonds did not recover until after interest rates had declined in the wake of the turmoil of October 1987. Previously, new issuing business in the international markets was fuelled almost entirely by convertible and option bonds put on to the market mostly by Japanese corporations, but this practically ceased to be the case after the slump in share prices. Owing to the heavy issuing activity of Japanese corporations at times, the yen, with a share of 15%, moved up into second place as a currency of issue in the international bond markets, behind the US dollar



# **BERICHTIGUNG**

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

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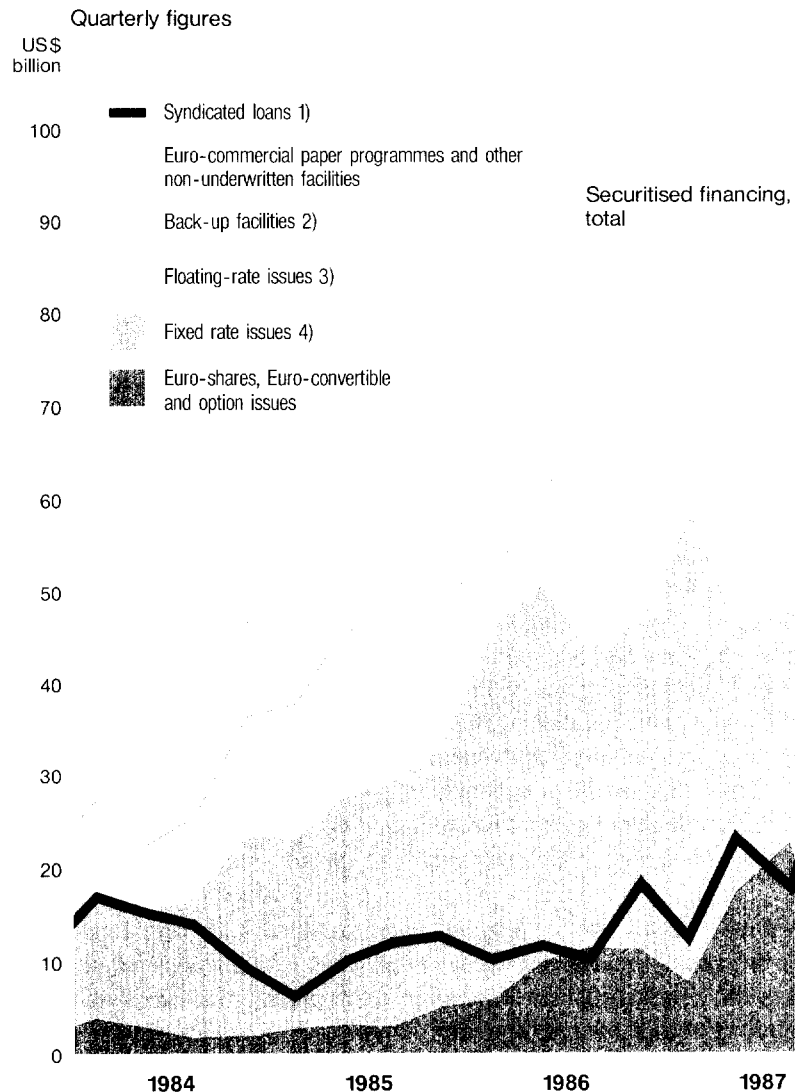
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(35%) and ahead of the Swiss franc (14%); the Deutsche Mark was able to maintain its fourth place (9%). The declining trend in issuing activity in the international markets is, however, partly due to the fact that national bond markets – Germany's in particular – have become more attractive to foreign investors in the last few years. For example, in 1987 foreign investors purchased only DM 5 billion of foreign Deutsche Mark bonds but bought domestic German bonds, by contrast, to the amount of DM 35 billion, although this was much less than in 1986.

In view of the difficulties in the international bond markets, a considerable number of first-class corporate borrowers as well as a fair number of banks switched over to the market for short-term Euro-notes. Incidentally, in some cases the financing costs in this market were lower than the normal cost of funds in the international interbank market. As a result, the outstanding volume of such paper doubled in 1987 to almost \$ 60 billion.

Developments in the international financial markets in 1987 continued to be marked by the difficult situation of the heavily-indebted countries. In view of this, banks that operate internationally were able to increase their provisions for loans to problem countries last year. Triggered by Brazil's temporary moratorium on its interest payments, the step in this direction by the largest US creditor bank acted as a signal both to many other banks in the United States and to some banks in other countries. Provisioning by US banks is still considerably below the level reached quite some time ago in Germany and a number of other countries in Europe. But, all in all, the banks have safeguarded themselves better against the risk of default on problem loans and therefore have strengthened their position. The international banking system has become less prone to disturbances as a result. If the willingness to participate in the granting of fresh loans in the context of rescheduling operations has also diminished as a consequence, this may well make it more difficult in individual cases to solve the acute financing problems facing certain countries. But if these countries subsequently initiate more efficient adjustment measures and carry them out resolutely – and this alone will ensure over the longer run that the problems caused by excessive borrowing can be overcome – then a positive effect will have been achieved. Over the longer term, a greater willingness to extend credit could then more readily be expected of those banks which see international business as an important field of activity in the future too. However, given the level of outstanding foreign debt of many developing countries, unduly high hopes should not be entertained in this respect.

Furthermore, the banks also played an active role last year in further refining the details of the case-by-case approach in the debt strategy, in order not least to safeguard the functioning of the international financial system. Thus, the "menu" of financing facilities – which has hitherto included, in addition to fresh loans in the context of rescheduling arrangements, above all various techniques to reduce the interest burden and debt/equity swaps – was enriched by an interesting variant when in January 1988 Mexico offered the banks an opportunity to swap an amount of up to \$ 20 billion for collateralised bonds by way of an auction. Although the result of this auction (the conversion of bank claims totalling \$ 3.7 billion at a discount of about 30% into "Mexico bonds" with a period to maturity of 20 years, carrying interest at 1<sup>5</sup>/<sub>8</sub>% above LIBOR and collateralised by zero bonds issued by the US Treasury and purchased by Mexico) did not come up to Mexico's high expectations, it can be regarded as a sign that both debtors and creditors are willing to adopt new approaches in their search for suitable solutions. In doing so, the guideline must continue to be participation in market-related solutions on a voluntary basis.

... accompanied by a rise in issues of Euro-notes

Pressure to grant fresh loans to problem countries eased through increased provisioning

New steps by the banks to ease the debt problems

External debt of the developing countries *							
US\$ billion							
Item/Group of countries 1	1982	1983	1984	1985	1986	1987 p	Change in 1987 from 1986 p
<b>A. Long-term</b>	658	722	764	857	937	1,013	+ 76
Public creditors	245	272	297	340	392	449	+ 57
Banks	212	257	274	318	343	367	+ 24
Other creditors 2	201	193	193	199	202	197	- 5
<b>B. Short-term</b>	189	175	178	160	162	182	+ 20
<b>C. Total (A plus B)</b>	847	897	942	1,017	1,099	1,195	+ 96
<b>D. Group of countries</b>							
Africa	124	132	135	147	166	186	+ 21
Europe	107	107	111	126	143	158	+ 15
Latin America	330	342	357	368	381	400	+ 19
Middle East	103	113	122	128	137	144	+ 6
Rest of Asia	184	203	217	247	272	307	+ 34
15 major debtor countries (already included above)	380	394	407	420	442	466	+ 24
<b>Memorandum items</b>							
Debt service payments	134	120	136	138	144	146	+ 2
Interest	77	73	82	81	76	71	- 5
Repayment of long-term loans	56	47	55	57	67	75	+ 8
Debt service as a percentage of receipts from exports of goods and services							
Total	18.9	17.8	19.2	20.3	21.9	19.1	3 - 2.8
15 major debtor countries	48.9	39.3	39.5	39.2	43.2	35.9	3 - 7.3

\* Excluding debt to the IMF. — 1 For the definition of the groups of countries see the table on page 59. — 2 Including those liabilities of public and private entities which are not guaranteed by the debtor country in question. — 3 In percentage points. — p Provisional.  
Discrepancies in the totals are due to rounding.  
Source: IMF.

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### 3. Agreements among the central banks to strengthen the EMS

Closer cooperation among the central banks in response to external and domestic influences

On September 8, 1987 the Committee of EEC Central Bank Governors decided to change a number of rules relating to interventions and financing within the EMS and to further strengthen cooperation among the central banks involved.<sup>1</sup> The decisions were preceded by discussions provoked by the realignment of January 1987, which was triggered by the decline in the dollar. Despite considerable progress in reducing inflation rates and other divergences that may jeopardise their cohesion, the currencies participating in the exchange rate mechanism of the EMS still react in different ways to a general decline in the dollar. The decisions were therefore primarily directed at making the system less vulnerable to external influences. This requires agreement on intervention policies and interest rate policies with the aim of minimising the incentives for short-term capital movements, but to an even greater extent it requires economic and financial policies in all the member countries which are geared to safeguarding the progress towards convergence that has already been made within the EMS. In particular, the greater mobility of capital — itself a consequence of the increasing internationalisation of the financial markets as well as of the dismantling of capital controls that has begun again within the EEC — has heightened awareness of the fact that it is becoming less and less possible to pursue monetary and economic policies that are geared to different objectives if the exchange rate mechanism of the EMS is not to be endangered, and that this in turn calls for particularly close cooperation among the central banks participating in the system.

<sup>1</sup> The individual items of this package of measures relate to questions regulated in the EMS Agreement concluded between the central banks involved. The new arrangements required changes to this Agreement only in part; in part it was possible to take them into account by modifying the way in which existing rules are applied. The Bundesbank discussed the contractual bases of the EMS in effect up to now in its Monthly Report of March 1979 and its Report for the Year 1984.

In the past the Committee of EEC Central Bank Governors has regularly discussed the economic performance and economic policies of the member countries, and above all their monetary policies, as being the particular area of responsibility of the central banks, with special reference to the requirements of the exchange rate mechanism. Over time it has become increasingly clear that, owing to their effects on interest rates and exchange rates, money and capital transactions in the rapidly developing international financial markets entail an increasingly strong degree of willingness to cooperate among central banks in general, and the central banks of the EMS in particular. This is why the EMS central banks agreed in September 1987 to combat possible tensions within the EMS exchange rate mechanism by making greater use of the margins of fluctuation for exchange rates, adjusting interest rates more rapidly and also cooperating more closely when intervening in the foreign exchange market. These measures are intended to counter disturbances in the exchange rate mechanism that are not due to undesirable developments in the fundamentals. However, they must not lead to necessary adjustment measures — either in economic and monetary policy or in the exchange rates themselves — being unduly delayed. In order to detect tensions between the currencies in the EMS and to counter them as early as possible, the central bank governors intend to monitor economic performance and economic policy in the Community more closely through a regular exchange of views. This monitoring is designed to help the measures adopted by individual countries to be shaped as far as possible in such a way as to avoid undesirable repercussions on other partner countries and thus to strengthen the cohesion of the system as well. However, decisions on economic and monetary policy are not being shifted from the sphere of national responsibility to Community level as a result of these decisions. Thus they do not imply any encroachment upon the autonomy of the Bundesbank in applying its instruments of monetary policy; nor do they lead to any obligation that could give rise to a conflict with its stability-oriented monetary policy.

Closer monitoring of economic performance and policy

For foreign exchange market interventions at the limit rates (obligatory interventions), the EMS Agreement provides for unlimited central bank financing via the European Monetary Cooperation Fund (EMCF). Under the old rules, liabilities arising from interventions of this kind fell due for settlement for the first time 45 days after the end of the month in which the interventions took place, i.e. intervention balances fell due for settlement not later than 2½ months after they had come into being. Under the new agreement, this period for settlement has been extended to 3½ months. In addition, the prolongation of the initial settlement date, which was already possible under the old rules, has been extended in scope. In the past, a central bank was able to renew its intervention liabilities once for a period of three months, up to an amount corresponding to the size of its debtor quota in the short-term monetary support mechanism.<sup>1</sup> Under the new agreement, this “automatic” right of renewal applies up to double the amount of a country’s debtor quota. The agreement of the creditor central bank continues to be necessary for the renewal of any liabilities arising from interventions in excess of this amount.

Easier settlement terms for liabilities arising from interventions ...

Both these new arrangements not only imply an easing of the settlement terms for the intervention liabilities of debtor central banks; they are also beneficial to creditor central banks. In the event of a reversal in the trend of rates in the foreign exchange market, they enable the debtor to acquire the currency of the creditor in the market over a longer period of time than formerly until its intervention liabilities fall due, allowing it to settle its liabilities arising from interventions in the currency of the creditor instead of assigning ECUs or other

... also advantageous for the monetary policy of the creditor country

<sup>1</sup> Since January 1, 1986 the following debtor quotas in the short-term monetary support mechanism have applied to EEC central banks (in ECU million): Deutsche Bundesbank: 1,740; Bank of England: 1,740; Banque de France: 1,740; Banca d'Italia: 1,160; Banco de España: 725; Banque Nationale de Belgique: 580; Nederlandsche Bank: 580; Danmarks Nationalbank: 260; Bank of Greece: 150; Banco de Portugal: 145; Central Bank of Ireland: 100.

**Press communiqué of the EEC Central Bank Governors and the EMCF of September 18, 1987 on arrangements to strengthen the EMS**

At their monthly meeting on 8th September 1987, the Governors of the Central Banks of the Member States of the European Economic Community agreed on measures to strengthen the operating mechanisms of the European Monetary System, which are as follows:

1. The duration of the very short-term financing on which central banks can draw through the European Monetary Co-operation Fund (EMCF) to finance interventions in EMS currencies will be extended by one month, taking the maximum duration from two and a half to three and a half months. The ceiling applied to the automatic renewal for three months of these financing operations will be doubled, i.e. it will amount to 200 per cent. of the central bank's debtor quota in the short-term monetary support mechanism instead of 100 per cent. as at present.

2. The Governors point out that very short-term financing through the EMCF of intramarginal interventions in EMS currencies is already possible if the central banks directly involved concur. While there will be no automatic access to such financing, a presumption that intramarginal interventions in EMS currencies agreed to by the central bank issuing the intervention currency will qualify for very short-term financing via the EMCF will be established under certain conditions; the cumulative amount of such financing made available to the debtor central bank shall not exceed 200 per cent. of its debtor quota in the short-term monetary support mechanism, the debtor central bank is also prepared to use its holdings of the currency to be sold in amounts to be agreed and the creditor central bank may request repayment in its own currency taking into account the reserve position of the debtor central bank.

3. The usability of the official ECU will be further enhanced. The central banks will accept settlements in ECUs of outstanding claims in the very short-term financing in excess of their obligation (50 per cent.) and up to 100 per cent. as long as this does not result in an unbalanced composition of reserves and no excessive debtor and creditor positions in ECUs arise. After two years of experience, the formal rules relating to the official ECU will be subject to review.

These measures form part of a comprehensive strategy to foster exchange rate cohesion within the EMS. The Governors are convinced that greater exchange rate stability depends on all Member States achieving, through their economic and monetary policies, sufficient convergence towards internal stability. In the light of this basic understanding they have agreed in particular to exploit the scope for a more active, flexible and concerted use of the instruments available, namely exchange rate movements within the fluctuation band, interest rates and interventions. To promote this more effective use of the instruments, the Committee of Governors will strengthen the procedure for joint monitoring of economic and monetary developments and policies with the aim of arriving at common assessments of both the prevailing conjuncture and appropriate policy responses.

This strategy and these measures were presented by the Governors to the EEC Ministers of Finance at the informal meeting in Nyborg on 12th September 1987. The changes to the operating mechanisms of the EMS will come into effect following the formal amendment of certain provisions of the central bank Agreement of 13th March 1979 which lays down the operating procedures for the EMS and consequential changes to the rules governing the operations of the European Monetary Co-operation Fund which will take place in the coming weeks.

reserve assets, as provided for in the rules for the settlement of residual balances. This arrangement is helpful because the domestic expansion of liquidity brought about by jointly financed support operations in the country that had provided its currency in the form of credit is reduced again through the settlement of intervention liabilities in the currency of the creditor. By contrast, the expansionary monetary effects of interventions would be perpetuated if the debtor central bank were to settle its liabilities by transferring other reserve assets rather than the currency of the creditor central bank.

Intramarginal interventions partially included in Community financing arrangements for the first time

Unlike interventions at the limit rates, intramarginal foreign exchange market operations — i.e. interventions within the margins of fluctuation — are undertaken at the discretion of the central bank concerned. However, in line with agreements reached many years ago, intramarginal purchases or sales of the currency of a partner country are permissible only with the explicit consent of the central bank that issues it. In past years the Bundesbank has as a rule agreed to intramarginal interventions in Deutsche Mark by its partners provided that these operations did not run counter to developments in the dollar market, but without intending to express its agreement with the associated foreign

exchange policy intentions of its partners in doing so. In fact, the Bundesbank has tended to take a critical view of the strategy pursued by its partner central banks within the EMS of stabilising exchange rates within the margins through large-scale interventions; for inadequate mobility of exchange rates within the margins may increase the incentive to switch out of the weak currency into the strong one as long as exchange rates still appear to be favourable and without incurring any serious exchange rate risk. Even so, owing to the international role played by the Deutsche Mark and its significance in the EMS, intramarginal interventions in Deutsche Mark have steadily increased in importance in recent years. But recourse has only very rarely been had to financing these transactions via the EMCF in agreement with the central banks concerned — an option which is not excluded by the EMS Agreement. However, in the course of liberalising their capital movements, a number of partner countries have been insisting for quite some time that the very short-term financing mechanism within the system should be used more readily to finance intramarginal interventions, thus placing them at least partially on an equal footing with obligatory interventions. This appeared to be justified in the eyes of some partner countries, inter alia because intramarginal interventions can help to avoid the necessity for obligatory interventions in certain situations. To this extent they would replace obligatory interventions which might otherwise become necessary, with the result that their inclusion in the very short-term financing mechanism would not be associated with any additional Community financing. The wishes of our partners in this respect are covered by the new arrangements under certain conditions. During the temporary tensions within the EMS that arose from mid-October 1987 onwards the Bundesbank provided financing assistance on a considerable scale in line with the new arrangements.

From the point of view of a creditor central bank, great material importance attaches to this innovation because of its possible implications for monetary policy. In the past intramarginal foreign exchange market operations were primarily reflected in changes in the reserves of the intervening central bank that were held in the market; this had no direct impact on domestic liquidity in the country whose currency was used for intervention purposes. By contrast, the current development of liquidity is directly affected if intramarginal interventions exercise an immediate influence on bank liquidity through being financed via the EMCF. This is why the main aim in the negotiations on the financing of intramarginal interventions was to limit the risks to monetary policy posed by the new arrangements.

These new arrangements envisage the possibility of a central bank financing intramarginal sales of a partner currency via the EMCF only if the central bank which issues the currency concerned does not, in agreeing to the intervention operations in question, explicitly object to their being financed under Community arrangements. The central bank that issues the intervention currency can also restrict recourse to the very short-term financing mechanism by demanding that the partner central bank finances part of its currency sales from its existing holdings of foreign exchange. It can in addition insist on its claims being repaid in the currency of the creditor central bank to the extent that the debtor central bank's reserves allow this. Above all, however (and in contrast to the financing of obligatory interventions), the credit granted via the EMCF for intramarginal interventions is limited in amount, namely to double the debtor quota the intervening central bank has in the short-term monetary support mechanism. As mentioned before, the "automatic" renewal of liabilities when they first fall due — obligatory and intramarginal interventions taken together — is also limited to twice the debtor quota. This means that it is possible that renewal cannot be expected automatically, or to the full extent, for intramarginal interventions financed via the EMCF. All this makes it clear that automatic or large-scale recourse to Community financing is not envisaged. For these reasons, the risks

Easier financing of intramarginal interventions not without risks to monetary policy

Arrangements to limit the risks to monetary policy posed by intramarginal interventions



<b>Deutsche Mark interventions in the EMS*</b>				
<b>DM billion</b>				
<b>+ = Deutsche Mark sales or expansionary impact on liquidity in Germany</b>				
<b>- = Deutsche Mark purchases or contractionary impact on liquidity in Germany</b>				
Period	Obligatory	Intra-marginal	Total	Memo Item Affecting liquidity in Germany 1
<b>A. By calendar years</b>				
1986 Purchases	-19.0	-33.6	-52.6	-12.1
Sales	+ 4.1	+76.0	+80.1	+ 3.8
Balance	-14.8	+42.4	+27.6	- 8.4
1987 Purchases	-	-48.1	-48.1	- 7.3
Sales	+15.0	+62.7	+77.7	+25.4
Balance	+15.0	+14.6	+29.7	+18.1
<b>B. By selected periods, net</b>				
July 8, 1986 to January 9, 1987				
Dollar weak; Deutsche Mark increasingly strong in the EMS, too	+18.9	+44.1	+63.0	+17.4
January 12, 1987 to March 18, 1987				
Gradual reversal in foreign exchange movements in the EMS after the realignment of January 12, 1987	-	-24.6	-24.6	- 6.6
March 19, 1987 to September 11, 1987				
Dollar initially weak; renewed strengthening of the Deutsche Mark in the EMS	-	+22.6	+22.6	- 0.7
September 14, 1987 to October 14, 1987				
Easing of tensions in the EMS after the Conference of EEC Ministers of Finance in Nyborg, Denmark	-	-14.5	-14.5	-
October 15, 1987 to January 14, 1988				
Dollar under strong downward pressure; Deutsche Mark in firm position in the EMS	-	+21.5	+21.5	+10.0
January 15, 1988 to end-March 1988				
Recovery of the dollar; easing of tensions in the EMS	-	- 8.2	- 8.2	- 6.1
* Deutsche Mark interventions by other central banks participating in the EMS exchange rate mechanism and EMS interventions by the Bundesbank; classified by date of transaction. — 1 Indicates the extent to which Deutsche Mark interventions in the EMS and the settlement of creditor and debtor positions in the EMCF affected the net external position of the Bundesbank and thus the banks' provision with central bank money. Discrepancies in the totals are due to rounding. BBk				

to monetary policy posed by the new intervention policy arrangements will probably be limited. A factor of decisive importance for the agreement of the Bundesbank to this easier access to financing was that the central banks involved agreed to utilise all available exchange rate policy instruments more actively and more flexibly and to leave exchange rates as much scope as possible to move within the margins. This closer cooperation proved highly successful the first time it was activated in the period of tensions in the autumn of last year.

Limit to the obligation to accept "official" ECUs tentatively relaxed for two years

A fourth and final point relating to the new arrangements concerns the acceptance limit for "official" ECUs in the EMS settlement system. According to the rules of the EMS Agreement, liabilities arising from interventions have to be settled primarily by using the currency of the creditor central bank. If none is available, the Agreement provides for the debtor central bank settling part of its liabilities with "official" ECUs and the rest in accordance with the composition of its monetary reserves by transferring dollar reserves and other assets held with the IMF. In the past creditor central banks had to accept a maximum of only one-half of their claim in ECUs. From now on it is envisaged that creditor central banks should accept up to 100% of repayments in ECUs, so long as this does not lead to an unbalanced composition of their reserves or the building-up of excessive debtor and creditor positions in ECUs. As a result, holdings of "official" ECUs, which have previously been utilised to only a limited extent, were made more fungible. However, the new rule only applies for two years to start

with. Whether it becomes a permanent rule depends, *inter alia*, on the extent to which the inclusion of intramarginal interventions in the Community financing arrangements engenders relatively large and persistent imbalances in the distribution of ECUs among the EMS central banks. However, such imbalances are hardly to be expected, if only because interest has to be paid on debtor positions in ECUs at a weighted market rate which is normally higher than the level of interest rates in the country of the creditor currency. This means that there is an inducement for interest rate reasons to settle debtor positions in ECUs by raising the currency of the creditor, which, moreover, helps to mop up liquidity in the creditor country.

The Bundesbank agreed to the new easing of the financing arrangements primarily in the light of the fact that the EMS has proved to be a stabilising element in the economic and monetary policies pursued by member countries and that particularly in recent years all the countries belonging to the EMS have stepped up their efforts as regards stability policy. Moreover, in assessing the new arrangements special significance attaches to the circumstance that the ministers approved the statement contained in the report by the central bank governors to the effect that the central banks of all members of the Community should be required to give priority to the objective of price stability in their monetary policy. A basic orientation of policy in this direction in itself prohibits any attempt to achieve short-term stability of exchange rates to the detriment of the purchasing power of one's own currency or of a partner currency.

The new regulations largely comply with the wishes of those countries whose currencies have repeatedly tended to be weak within the EMS. Nevertheless, some of them still feel that the obligation to react with interventions and monetary policy measures implies a one-sided burden (asymmetry), because in their view countries with strong currencies are not required to take such measures. However, the notion that in the exchange rate mechanism of the EMS adjustment burdens have to be shouldered primarily only by countries with weak currencies is not in line with reality. Because of the central role of the Deutsche Mark in the EMS, Germany in particular has time and again been affected by inflows of funds from the partner countries which have led to an unwanted expansion of the money stock and, if the limit rates are reached, to interventions. Such developments, which may clash with national objectives, can only be prevented or reduced to a tolerable measure if economic developments in all partner countries are geared to monetary stability and run largely parallel. This naturally requires special efforts on the part of countries which have not yet achieved price stability. It is therefore the asymmetry of the starting position and not the distribution of burdens in the system which forces individual countries to make special efforts.

The inclusion of the currencies of partner countries in the foreign exchange reserves of every member country — and of late it has been suggested that the Bundesbank, in particular, should do this — would not eliminate the existing divergences and contribute to the stability of the EMS. The contrary would be more likely if a country with a depreciation-prone currency could count on its stronger partners assuming a major part of the adjustment and financing burdens associated with the stabilisation of exchange rates. Owing to its significance in the EMS and its role as an international transaction and investment currency, the use of the Deutsche Mark as an intervention currency (alongside the US dollar) and the accumulation of some Deutsche Mark holdings are apparently of advantage to our partners. The Bundesbank has accepted this, *inter alia* because the monetary effects of intramarginal interventions remain fairly limited to the extent that interventions are financed with our partner central banks' Deutsche Mark holdings invested in the market. For the Bundesbank the use of partner currencies, if it included them in its holdings, would not offer any

New arrangements also a result of progress in stability policy

The system not asymmetrical

Mutual reserve holding in partner currencies inappropriate

comparable advantages. Experience has shown that exchange rate problems of the Deutsche Mark are usually not confined to the EMS, but arise at the same time vis-à-vis the US dollar too; tensions in the EMS are not infrequently triggered by developments which primarily affect the exchange rate relationship between the Deutsche Mark and the US dollar. They can be countered only by selling or buying US dollars, provided that, in the given situation, interventions promise any effect at all. Holding and using EMS partner currencies would be no substitute for this. It is in line with this perception that the Bundesbank has confined itself to dollar assets in its reserve holding, particularly as their liquidity is assured at all times and on virtually any scale because the market for dollar assets is sufficiently large.

#### **4. The proposals of the EEC Commission on creating a single European financial area**

Proposed new EEC Directive on the complete liberalisation of capital movements

With the "Single European Act" adopted at the beginning of 1986, the member countries of the European Community undertook to complete the common internal market by the end of 1992. The EEC Treaty, as amended by these arrangements, defines the internal market as an area without intra-Community borders in which the free movement of goods, persons, services and capital is guaranteed. The EEC Commission, acting on this basis, submitted proposals on the creation of a single European financial area to the Council in November 1987. They centre on the adoption of a new Directive on liberalising capital transactions within the Community. Through this initiative the second, final stage of the liberalisation programme submitted by the Commission in May 1986 would become reality and, as a result, the complete freedom of capital movements within the Community as well as vis-à-vis third countries would be achieved in principle. The first stage of this liberalisation programme has meanwhile been put into effect by a Directive of November 1986. As mentioned in the Report of the Deutsche Bundesbank for the Year 1986, this Directive imposed an obligation to liberalise a number of remaining types of capital transactions, the freedom of which is of particular importance for the functioning of the Common Market as well as for the integration of national capital markets. These measures comprised the dismantling of controls on the granting of long-term trade credits, trading in unlisted securities and the admission of securities to trading in the capital market. The proposed new Directive is now essentially directed at liberalising cross-border financial credits and money market transactions, at the complete decontrol of exports and imports of assets and at permission to open accounts with non-resident credit institutions. Moreover, in this context the Commission urges the member countries not only to close any gaps in the liberalisation of exchange controls but also to abolish any discriminatory legal provisions that in practice may likewise obstruct cross-border capital movements in general. Under the Commission's proposal, the two-tier foreign exchange market still in force in Belgium-Luxembourg would incidentally also have to be abolished.

Endeavours to introduce special protective and support arrangements

There are, however, endeavours to combine the creation of complete freedom of capital movements with the introduction of special protective and support arrangements. These moves are intended to make it easier for member countries to counter disturbing capital movements, as and when necessary. To this end, the Commission has envisaged special protective measures in its liberalisation Directive for the event that short-term capital movements on an exceptionally large scale seriously disrupt the foreign exchange and monetary policies of a member country. In addition, member countries should equip themselves with certain monetary and foreign exchange policy instruments in order to be able to influence capital movements — particularly those vis-à-vis third countries — in critical situations of their own accord or upon the recommendation of the Commission. As a basis for this, thought is being given

to supplementing a Directive from the year 1972, which in the special circumstances ruling at that time brought about a harmonisation of administrative tools for warding off disturbing inflows of capital, with respect to such instruments, and to envisaging their utilisation especially with regard to capital outflows as well. In addition to this, according to the Commission's proposals the scope for receiving Community standby loans in the event of balance of payments difficulties should be widened.

However, the special arrangements described above involve the danger of complete freedom of capital movements within the Community not being achieved in the first place or of it being sacrificed again all too easily to other objectives. Besides, they may impair the confidence needed for close financial integration in the freedom of capital movements being defended in the event of difficulties arising. Moreover, the pressure towards the pursuit of stability-oriented policies in all countries also being aimed at through the freedom of capital transactions would be undermined if the reintroduction of capital controls were made unduly easy. The same would have to be feared in the event of Community credit facilities being made even more generous. Easier access to escape clauses would, incidentally, be a still more critical matter if it were to result primarily or exclusively in capital controls vis-à-vis third countries in difficult situations. Such a procedure would require the introduction of controls in equal measure by all members of the Community, which would not be acceptable to Germany because the global freedom of capital movements is a necessary concomitant of Germany's very close trading ties with the rest of the world. All these factors go to show that the establishment of complete freedom of capital movements within the Community should do without additional regulations and balance of payments assistance, particularly since the EEC Treaty already contains protective clauses which enable the envisaged complete freedom of capital movements to be temporarily restricted in exceptional circumstances. Dispensing with special regulations and additional balance of payments assistance would be all the easier, the more all the member countries perceive the decisions to complete the internal market as an inducement to orient their monetary and economic policies even more closely to stability. In the final analysis, it is only in this way that the even more far-reaching goal of European monetary union can be approached. Moreover, following the recent decisions to strengthen the EMS, monetary policy cooperation has intensified among the members of the Community, and this in turn should help to overcome certain difficulties that complete freedom of capital movements might perhaps involve for a transitional period.

Above and beyond the proposals submitted by the Commission up to the present, the creation of a single European financial area requires a certain degree of harmonisation of those national regulations that are of great significance for international competitiveness in the field of financial services. This relates in particular to tax regulations as well as to questions of bank supervision and the protection of savers and creditors. Although as regards the establishment of the internal market the Commission, in the case of normative regulations, has recently been applying the approach of trying to bring about harmonisation only in absolutely essential instances, but otherwise only demanding mutual recognition of the relevant national regulations, with respect to bank supervision and the protection of savers it appears necessary to require a far-reaching harmonisation of national regulations at a high level. This is suggested by the great significance of a healthy financial system for the existence of the entire common internal market. It would be desirable for satisfactory solutions to all the points mentioned above to be found as soon as possible. However, achievements in this field must not be made a prerequisite of progress in liberalising capital movements, since the advantages of free capital transactions should be felt very soon.

Stability-oriented policy best suited to obviating difficulties arising from capital movements

Harmonisation of conditions for competition in financial services necessary as a complementary step

## 5. Recent developments in the IMF and among the international development banks

### (a) Financial assistance provided by the IMF

Continued net reflows to the IMF

In 1987 the IMF once again supported the stabilisation efforts of its members through new lending. At SDR 3.7 billion (\$ 4.8 billion), new lending almost regained the level of the preceding year (SDR 3.9 billion). In the process, there were substantial shifts in the structure of its lending activities: whereas drawings in the credit tranches, which are obtainable only with economic policy conditions attached to them, declined, lending under the Compensatory Financing Facility and the Structural Adjustment Facility newly set up in 1986 increased. However, the volume of aggregate new lending by the Fund contrasted with loan repayments totalling SDR 7.9 billion. As a result, the Fund's total loans outstanding declined on balance by SDR 4.2 billion to SDR 29.2 billion. However, the net reflows to the IMF that began in 1986 must be seen in the context of the very large volume of lending by the Fund in the years from 1982 to 1984. Since, in accordance with its monetary functions, the IMF can grant only short to medium-term balance of payments assistance and its limited resources must in principle be available to all members, periods of heavy drawings are automatically associated with a similar bunching of repayments in subsequent periods. The present repayments, for instance, were accounted for in large measure by countries that have meanwhile made progress in adjustment with the assistance of stabilisation programmes supported by the Fund. Incidentally, the financial resources provided by the IMF almost always constitute only part of the funds that are made available to borrowing countries as a whole to support their adjustment measures. Particularly in cases where adjustment difficulties are due to deep-seated structural problems, the Fund primarily plays the role of a catalyst in that, by fostering appropriate adjustment policies, it helps to mobilise additional funds from other sources. Moreover, not all members are dependent on financial support from the Fund: last year again a number of members availed themselves of the option of Enhanced Surveillance, where the assistance of the Fund is restricted to giving a kind of "seal of approval" to adjustment programmes devised by the countries themselves, which in most cases clears the way for these countries to obtain new credit from, and undertake rescheduling operations with, private commercial banks and public lending agencies.

Strengthened risk provisions owing to rise in payment arrears

The lending activities of the Fund were also partly slowed down by the fact that a number of member countries were unable to meet their existing debt service obligations vis-à-vis the Fund. In order to protect its resources, the Fund is forbidden under its current operational principles to grant fresh loans to such debtors who are in default. Instead, the Fund must see to it in the event of such developments that its internal risk provisions are enhanced. For this reason, as early as July 1986 the IMF decided, in response to the strong rise in payment arrears of some countries, to strengthen the Fund's risk provisions over the following two years by adding larger amounts to its reserves, the financial burdens involved being borne jointly by the Fund's creditors and debtors. In the summer of last year the Fund in addition placed part of its profit for the financial year ended April 30, 1987 in a newly created Special Contingent Account.

Continuation of "Enlarged Access to the Fund's Resources"

In the light of the persistently large balance of payments disequilibria of many countries, the IMF has decided to continue its "Policy on Enlarged Access to the Fund's Resources" again in 1988. These temporarily extended drawing facilities, which were originally intended to expire at the end of 1983, were thus renewed for the fifth time. As was the case last year, the ceilings on drawings under this facility were left unchanged.

<b>Purchases and repurchases under IMF credit facilities</b>					
<b>SDR billion</b>					
Item	1983	1984	1985	1986	1987
Credit tranches	4.9	3.1	2.6	3.0	1.9
Extended Fund Facility	4.6	3.3	0.4	0.3	0.2
Compensatory Financing Facility	2.8	0.8	0.9	0.6	1.2
Buffer Stock Facility	0.3	0.0	—	—	—
Structural Adjustment Facility 1	—	—	—	0.1	0.4
Total purchases	12.6	7.3	4.0	3.9	3.7
Total repurchases	2.0	2.3	3.6	5.7	7.9
Net purchases (net repurchases: —)	10.6	5.0	0.4	— 1.8	— 4.2

1 Financed out of a Special Disbursement Account of the Fund and available only to countries whose per capita income is particularly low.  
Discrepancies in the totals are due to rounding.  
Source: IMF.

BBk

With the decision of December 1987 to set up an Enlarged Structural Adjustment Facility the Fund's scope for contributing to the solution of the chronic structural balance of payments problems of the poorest developing countries was greatly improved. This new facility totalling about SDR 6 billion is virtually an addition to the Structural Adjustment Facility with which since March 1986 the IMF has been supporting structural adjustment processes in countries with particularly low per capita income on concessionary terms from special resources totalling SDR 2.7 billion that are kept strictly separate from its resources of a monetary character. In doing so, however, the Fund is entering territory that is more in the area of development financing and hence is compatible to only a limited extent with its specific monetary functions. In comparison with normal IMF loans, this applies both to the relatively long duration of the lending and to the distinctly weaker form of conditionality. This special nature of the Enlarged Structural Adjustment Facility, strongly geared as it is to development policy, made it seem logical to supply the resources for loans and interest rate subsidies primarily provided by the industrial countries through a special Trust Account administered by the IMF and kept separate from the general resources of the Fund. This also makes it clear in institutional terms that this facility is designed for a task that is not comparable with the normal lending operations of the Fund.

Increase in the Fund's assistance for the poorest developing countries

The Compensatory Financing Facility has been undergoing a thorough re-examination since 1987. The object is to eliminate a number of constructional shortcomings in the way it operates and, above all, to tie the utilisation of this facility more closely to certain adjustment requirements in future. In connection with the re-examination, the proposal of the United States is also being discussed to replace this facility, designed as it is to meet needs arising from temporary shortfalls in export earnings, by a general "External Contingency Facility", or to include such precautions for the event of unforeseeable external disturbances in the Compensatory Financing Facility. Even though adjustment requirements would likewise have to be met under such a facility, this proposal is nevertheless of a very far-reaching nature in that it could amount in practice to an automatic financing guarantee by the Fund, which might just possibly be available for all conceivable kinds of balance of payments disturbance brought about by external factors. A particularly problematic feature here would be any automatic offsetting of increases in interest costs, since in the final analysis this would render the control function of interest rates ineffective.

Review of the Compensatory Financing Facility

In order to provide broad support for the Fund's financial basis it was decided as early as November 1987 to extend the General Arrangements to Borrow (GAB), which give the IMF a credit line totalling SDR 17 billion with its members in a

Extension of the GAB

strong financial position, by a further five years as from December 1988. Moreover, in 1987 the Fund began to examine the adequacy of its own resources, in the context of the 9th General Review of Quotas. The need to bridge temporary balance of payments deficits also with official funds — which need increases in line with the growth of world trade, even under normal global economic conditions — argues in favour of substantially enlarging quotas in the IMF, which determine both the financial contributions and the drawing facilities of the individual members. Apart from this, the persistent balance of payments difficulties of a large number of heavily-indebted countries make it appear sensible for the IMF to equip itself with a financial cushion in the form of own resources. At all events, on grounds of principle, additional borrowing by the Fund must be restricted to exceptional cases only.

(b) Multilateral surveillance of economic and monetary policies

Further progress in developing indicator-based multilateral surveillance

Against the background of the recent problems in the world economy and the greater willingness on the part of the major industrial countries to cooperate more closely in the field of monetary and economic policy, the endeavours to improve economic policy coordination among the member countries were also continued in the context of multilateral surveillance, anchored as it is in the Fund. As early as 1986 agreement was reached on a set of objective indicators with the help of which the Fund was regularly to examine economic performance in the major countries in order to gain evidence of any need to adjust economic policy. In this way, it is hoped to foster the compatibility of the economic policies of the leading countries more effectively, both in domestic terms and in the context of the world economy. Last year the discussions within the Fund were directed at giving this system of multilateral surveillance based on indicators a more concrete shape. It was made clear in this context that this plan is not an international scheme for fine-tuning economic policies (which hardly works even at the national level) but is only intended to shed more light on medium-term prospects. Moreover, it was recognised that no automatic obligation for national monetary or economic policy-makers to take action can be derived in this way either, but rather that a comprehensive, carefully balanced analysis must always remain of key importance. In technical terms, it is true, a number of questions are still open. They include the proposal subsequently submitted to extend the list of indicators, which is in principle to be kept small, to include the movement of commodity prices, as a kind of leading indicator of probable trends in inflation. In addition, the discussion of the criteria according to which the outcome and prospects of the economic performance of the major countries are to be assessed has not yet been concluded. But it is becoming evident that the important thing in this respect will be to examine the policies of the individual countries using different scenarios for the world economy and their implications.

No realistic alternative to closer cooperation

However, the limits to the system of surveillance based on indicators should not be overlooked. They reside not only in “technical” problems but above all in the fact that those participating in the process of cooperation are sovereign states that will probably not be willing to unreservedly accept serious encroachments on their national economic policy autonomy. On the other hand, given the growing interdependence even of the largest countries in the world economy, the lack of any realistic alternatives warrants the hope that, despite the difficulties and setbacks that are constantly to be expected, the enlightened self-interest of the countries concerned will promote the political will to cooperate.

In the 1987 financial year of the international development banks there was a substantial improvement in lending capacity in favour of the countries in Africa. The negotiations on the eighth replenishment of resources of the International Development Association (IDA-8) were concluded as early as December 1986, with the donor countries providing a total of \$ 12.4 billion for the financial years 1988 to 1990, after IDA-7 had yielded only \$ 9 billion. Approximately one-half of these funds is intended to benefit the poorest countries in Africa. These countries will also benefit from the fact that it was decided in the summer of last year to triple the capital of the African Development Bank to SDR 16.2 billion. In addition to this, the negotiations on replenishing the African Development Fund were concluded in November 1987; with a total volume of some SDR 2 billion for the three-year period from 1988 to 1990, this fund was also equipped with more resources than in the three-year period that ended in 1987. Furthermore, at a meeting of donor countries, including Germany, in December last year, the World Bank was able to put together a cofinancing programme totalling \$ 6.4 billion for heavily-indebted countries in Africa for the three years from 1988 to 1990. According to World Bank estimates, this programme, which is intended to safeguard adjustment measures, will provide the sub-Saharan countries with additional financial assistance totalling about \$ 3 billion.

Improved provision of funds for African countries

A considerable increase in the capital of the World Bank, which will probably be decided upon in the course of 1988 after the United States expressed its support for this measure in autumn 1987, will benefit the world's major debtor countries in particular. Almost one-half of the World Bank's loan commitments was accounted for by the 15 most heavily indebted countries already in the financial year 1987. An above-average proportion of the funds it provided was in the form of sectoral and structural adjustment loans, which, in contrast to traditional project loans, are disbursed quickly. Whereas the World Bank increased its loan commitments and disbursements to the major debtor countries, especially those in Latin America, once again in 1987, the Inter-American Development Bank (IDB) registered a decline in its loan commitments. This is probably partly due to the fact that the discussions held last year about a general increase in the IDB's capital foundered not least on the United States' demand to be given virtually a veto in voting on loan commitments through radical procedural changes.

Considerable increase in the World Bank's capital in preparation



**Part B: Notes on the  
Deutsche Bundesbank's  
annual accounts for 1987**

## 1. Legal basis

The legal basis for the annual accounts of the Bank is provided by section 26 of the Deutsche Bundesbank Act (Gesetz über die Deutsche Bundesbank). Section 26 (2) of that Act, as amended by the Act Concerning the EEC Annual Accounts Directive (Bilanzrichtlinien-Gesetz) of December 19, 1985, is to be applied for the first time to the annual accounts for 1987. As a whole, however, this has not altered the provisions governing the accounting system and the annual accounts of the Deutsche Bundesbank. Section 26 (2) now reads as follows:

Legal basis

“The accounting system of the Deutsche Bundesbank shall comply with the principles of orderly bookkeeping. The layout of and the notes on the annual accounts (balance sheet, profit and loss account) shall take the functions of the Deutsche Bundesbank into account; the liability structure need not be disclosed. Regarding valuation, the provisions of the Commercial Code relating to corporations shall apply as appropriate; section 280 (1) of the Commercial Code need not be applied. The creation of liability items, in the context of establishing the profit or loss, for general risks inherent in domestic and foreign business, as considered warranted in the light of reasonable commercial judgement and with due regard to the functions of the Deutsche Bundesbank, shall not be affected.”

## 2. Annual accounts

The annual accounts for 1987 are attached to this Report as an Appendix; as usual, the notes on them are presented in the same order as the items appear in the balance sheet and profit and loss account. At the same time a report is rendered on the Bank's activities during 1987.

The layout of the balance sheet has been changed against the previous year in the item “Lending to domestic banks”, with the order of the sub-items being rearranged to conform to the presentation in the Weekly Return.

### Balance sheet

The balance sheet total at December 31, 1987 was DM 230,474.6 million, against DM 220,851.2 million at end-1986.

Comparison of balance sheet figures

#### *Assets*

The gold holding at December 31, 1987, amounting to 95 million ounces of fine gold (excluding the gold reserves provisionally contributed to the European Monetary Cooperation Fund), is shown at the same figure as at end-1986, viz. DM 13,687.5 million.

Gold

At December 31, 1987 the level of drawing rights within the reserve tranche in the International Monetary Fund (IMF) amounted to DM 5,778.8 million (= SDR 2,575.7 million), against DM 6,462.0 million (= SDR 2,722.0 million) at end-1986. It represents the difference between the German quota of SDR 5,403.7 million and the Deutsche Mark balances equivalent to SDR 2,828.0 million at the disposal of the IMF at the end of the year. Increases equivalent to SDR 488.5 million due to a member's Deutsche Mark drawings in connection with the settlement of balances in the European Monetary System (EMS) and other Deutsche Mark payments of similar effect to other members were accompanied by decreases equivalent to SDR 634.8 million due to other members' Deutsche Mark repayments and other transactions of similar effect.

Reserve position in the International Monetary Fund and special drawing rights

<b>Comparison of balance sheet figures</b>					
<b>DM million</b>					
Assets	December 31		Liabilities	December 31	
	1986	1987		1986	1987
Gold	13,687.5	13,687.5	Banknotes in circulation	113,983.0	125,608.0
Reserve position in the International Monetary Fund and special drawing rights			Deposits of banks	55,869.5	60,490.7
Drawing rights within the reserve tranche	6,462.0	5,778.8	Deposits of public authorities		
Loans under special borrowing arrangements	1,006.7	388.4	Federal Government	404.2	3,877.1
Special drawing rights	3,919.8	3,105.6	Equalisation of Burdens Fund and ERP Special Fund	4.9	8.6
Claims on the European Monetary Cooperation Fund in connection with the European Monetary System			Länder Governments	689.0	753.4
ECU balances <sup>1</sup>	15,364.2	21,947.5	Other public depositors	45.7	25.1
Other claims	956.7	7,005.0	Deposits of other domestic depositors		
Balances with foreign banks and money market investments abroad	50,172.6	68,253.9	Federal Railways	11.7	14.4
Foreign notes and coins	22.4	25.6	Federal Post Office	2,388.2	2,474.9
External loans and other external assets			Other depositors	876.6	773.2
Loans to the World Bank	2,444.1	2,437.4	Liabilities arising from mobilisation and liquidity paper sold	4,808.2	5,233.4
Lending to domestic banks			Liabilities arising from external transactions	19,915.2	17,078.2
Securities bought in open market transactions under repurchase agreements	33,190.7	27,639.7	Counterpart of special drawing rights allocated	2,874.3	2,716.5
Domestic bills of exchange	40,496.4	33,744.2	Provisions	4,743.2	4,287.1
Foreign bills of exchange	20,363.2	20,206.5	Other liabilities	308.0	332.5
Lombard loans	2,368.0	765.8	Deferred expenses and accrued income	282.9	184.9
Cash advances	2,950.4	808.4	Capital	290.0	290.0
Equalisation claims on the Federal Government and non-interest-bearing debt certificate in respect of Berlin	8,683.6	8,683.6	Reserves	5,560.8	5,989.1
Securities	5,209.1	4,500.0	Unappropriated profit	7,795.8	337.5
German coins	856.1	737.4			
Balances on postal giro accounts	178.1	168.9			
Land and buildings	2,144.6	2,425.8			
Furniture and equipment	173.8	185.7			
Items in course of settlement	7,556.6	5,065.4			
Other assets	2,606.2	2,873.9			
Prepaid expenses and deferred income	38.4	39.6			
<b>Balance sheet total</b>	<b>220,851.2</b>	<b>230,474.6</b>	<b>Balance sheet total</b>	<b>220,851.2</b>	<b>230,474.6</b>

<sup>1</sup> After deduction of the difference between the ECU value and the book value of the gold and dollar reserves contributed.

The loans under special borrowing arrangements amounted to DM 388.4 million at December 31, 1987 against DM 1,006.7 million at end-1986. The loans outstanding at the end of 1987 consisted entirely of claims on the IMF totalling SDR 173.1 million and arising from the financing of other members' drawings under the Supplementary Financing Facility.

The amount of special drawing rights (SDRs) held at December 31, 1987 was DM 3,105.6 million (= SDR 1,384.2 million) against DM 3,919.8 million (= SDR 1,651.2 million) at end-1986. It was composed of SDR 1,210.8 million of SDRs allocated, the counterpart of which is shown on the liabilities side, and SDR 173.4 million of SDRs purchased. Increases of SDR 752.6 million were accompanied by decreases of SDR 1,019.6 million. Of the increases, SDR 218.4 million was accounted for by a payment in connection with the settlement of balances in the EMS, SDR 129.9 million by purchases through designations, SDR 47.1 million by freely agreed purchases, SDR 178.6 million by loan repayments and SDR 178.6 million by interest payments and remunerations on the part of the IMF. The decreases were all accounted for by sales in the context of freely agreed SDR transactions.

This item comprises the Bank's ECU balances and the claims arising from recourse by other central banks to the very short-term financing mechanism.

Claims on the  
European Monetary  
Cooperation Fund

The ECU balances, amounting to DM 39,974.6 million, arise mainly from the provisional contribution of 20% of the Bank's gold and dollar reserves to the European Monetary Cooperation Fund (EMCF) in the form of three-month swaps. In addition, these balances include the reserve ECUs transferred to the Bank by other central banks participating in the European Monetary System (EMS). The gold and dollar reserves provisionally contributed to the European Monetary Cooperation Fund in connection with the EMS against the crediting of ECUs were transferred at market prices and therefore at values higher than those shown in the balance sheet. The resulting difference of DM 18,027.1 million is deducted from the ECU balances. At the end of 1987 other ECU claims arising from loans under the very short-term financing mechanism amounted to DM 7,005.0 million.

The balances with foreign banks and money market investments abroad, the great majority of which are denominated in US dollars and bear interest, amounted to DM 68,253.9 million at the end of 1987 against DM 50,172.6 million at December 31, 1986. The assets and liabilities expressed in US dollars have been valued at the middle rate of December 31, 1987 (US\$ 1 = DM 1.5815).

Balances with  
foreign banks and  
money market  
investments abroad

**Foreign exchange dealing** Mainly owing to US dollar purchases on the foreign exchange market, the Bank's turnover in spot foreign exchange deals (foreign currency against Deutsche Mark) increased in the year under review to DM 39,093.5 million against DM 32,835.0 million in 1986. The number of deals rose from 5,710 in the previous year to 6,001. Specifically, the deals consisted of

	1986		1987	
	Number	DM million	Number	DM million
Purchases	3,194	16,446.4	3,347	22,861.7
Sales	2,516	16,388.6	2,654	16,231.8
	5,710	32,835.0	6,001	39,093.5

The volume of cross deals (foreign currency against another foreign currency) went up from DM 3,343.5 million in the preceding year to DM 4,592.3 million. At the same time the number of deals rose slightly to 225. The volume of SDR-US dollar and SDR-Deutsche Mark deals (there were 77 such transactions) was equivalent to DM 1,654.4 million (1986: 43 transactions equivalent to DM 1,196.8 million). In addition, 201 US dollar inter-centre switch transactions totalling US\$ 42.0 million were entered into (1986: 189 transactions amounting to US\$ 35.9 million).

To fine-tune the money market, the Bank concluded 66 US dollar swaps equivalent to DM 10,928.0 million with domestic banks during the year under review in order to increase liquidity (against 162 transactions equivalent to DM 24,000.2 million in 1986).

**External payments** The Bank executed the following payment orders in the context of external payments:

<b>External payments</b>					
<b>Number of orders</b>					
Year	Outgoing external payment orders			of which	
	in foreign currencies	in Deutsche Mark	Total	Processed by automated standing order procedure	Processed automatically via SWIFT <sup>1</sup>
1986	403,194	2,278,298	2,681,492	2,427,767	179,442
1987	392,450	2,391,280	2,783,730	2,533,987	175,231
Year	Incoming external payment orders			of which	
				Payments received via SWIFT	
1986	16,300	225,877	242,177	209,441	
1987	16,350	225,604	241,954	216,305	

<sup>1</sup> SWIFT (= Society for Worldwide Interbank Financial Telecommunication) is a Belgian society which transmits external payments messages by means of data telecommunication. The Bank is a member of the society and has been using the services provided by SWIFT since 1978.

**Sales of foreign cheques** During 1987 20,082 (1986: 18,781) foreign cheques payable to order totalling DM 238.5 million (1986: DM 381.9 million) were sold. In addition, the Bank sold 41,086 traveller's cheques amounting to DM 4.9 million (against 34,856 traveller's cheques totalling DM 4.4 million in 1986).

In 1987 the number of cheques presented under the simplified collection procedure for foreign cheques was again lower than in the preceding year. Details are given in Appendix 3 of the German original of this Report.

Simplified collection procedure for foreign cheques

The Bank took in the following for realisation on a commission basis:

Foreign commission business

	1986	1987 Number
Bills, cheques, etc.	33,996	27,718
Foreign notes and coins	7,081	7,468
	<u>41,077</u>	<u>35,186.</u>

The amount of foreign notes and coins held at end-1987, at DM 25.6 million, was DM 3.2 million higher than at end-1986. During the year under review the Bank effected 19,370 purchases (1986: 19,200) and 45,829 sales (1986: 44,210) of foreign notes and coins.

Foreign notes and coins

As in the preceding year, only loans to the World Bank are included in this item. Loans under the EEC medium-term monetary assistance mechanism and other loans to foreign monetary authorities were not granted in the year under review.

External loans and other external assets

As in previous years, the loans to the World Bank are mostly granted against borrowers' notes denominated in Deutsche Mark.

This item reflects domestic banks' recourse to the Bank's refinancing facilities.

Lending to domestic banks

During the year under review the Bank again regularly offered the banks, by tender, open market transactions under repurchase agreements in securities on a considerable scale in order to provide liquidity for a limited period. In these transactions the Bank bought securities eligible as collateral for lombard loans subject to the condition that the sellers repurchased them forward. The repurchase periods varied between 13 and 35 days and the interest rates ranged between 3.25% and 4.60%. At the end of the year the claims deriving from these transactions amounted to DM 27,639.7 million (end-1986: DM 33,190.7 million).

Securities repurchase agreements

At the end of 1987 the Bank's portfolio of domestic bills amounted to DM 33,744.2 million against DM 40,496.4 million at the end of 1986. The Bank's average holding of domestic bills on all return days, at DM 35,367 million, was likewise lower than in the preceding year (DM 42,109 million). The domestic bill portfolio comprised:

Domestic bills of exchange

	Dec. 31, 1986	Dec. 31, 1987 DM million
Domestic bills discounted	36,985.8	30,365.4
Prime bankers' acceptances acquired in the course of open market operations	3,510.6	3,378.8
	<u>40,496.4</u>	<u>33,744.2.</u>

Purchases of domestic bills of exchange in the Land Central Bank areas				
Land Central Bank	1986		1987	
	Thousands	DM million	Thousands	DM million
Baden-Württemberg	594	29,153.2	523	25,852.2
Bavaria	377	26,714.4	348	22,947.8
Berlin	22	4,193.4	19	3,876.4
Bremen	37	2,967.8	36	3,135.7
Hamburg	113	12,501.7	99	10,038.0
Hesse	334	32,882.4	299	26,145.3
Lower Saxony	166	14,235.0	141	11,579.0
North Rhine-Westphalia	612	44,119.3	528	37,430.2
Rhineland-Palatinate	96	5,680.7	89	5,109.4
Saarland	23	2,062.6	21	1,902.7
Schleswig-Holstein	34	3,068.6	29	2,360.3
Total	2,408	177,579.1	2,132	150,377.0

The average value of the bills purchased in the year under review was DM 70,500 compared with DM 73,700 in the previous year.

Of the bills purchased, the following were returned and charged, in the absence of payment, to the parties presenting them for rediscounting:

	1986		1987	
	Number	DM million	Number	DM million
	13,191	186.4	10,163	172.7
as % of the total purchased	0.55	0.11	0.48	0.11.

**Discount rate** During the year under review the Bank's discount rate for domestic and foreign bills was 3½ % until January 22, 3 % as from January 23 and 2½ % as from December 4.

**Prime bankers' acceptances** The total amount of prime bankers' acceptances which the Bank is prepared to purchase in the course of its open market operations was lowered by DM 500 million to DM 3.5 billion with effect from May 4, 1987. Throughout the year the Bank's buying rate for prime bankers' acceptances was 0.5 percentage point below the discount rate, and thus remained substantially under the money market rates; hence recourse to prime bankers' acceptances as a source of funding continued to be heavy. During the year under review the Bank's purchases through Privatdiskont-Aktiengesellschaft totalled DM 15,821.5 million (1986: DM 17,034.7 million). There were, however, no repurchases.

DM 15,953.3 million remained in the Bank's portfolio until payment on maturity (DM 16,978.9 million in 1986). At December 31, 1987 the Bank held prime bankers' acceptances deriving from open market operations totalling DM 3,378.8 million (end-1986: DM 3,510.6 million).

**Foreign bills of exchange** At the end of 1987 the portfolio of foreign bills accumulated through purchases in Germany amounted to DM 20,206.5 million (end-1986: DM 20,363.2 million). The share of Deutsche Mark bills in the total value of the foreign bills purchased averaged 97.3 % in 1987 (1986: about 97 %).

<b>Purchases of foreign bills of exchange in the Land Central Bank areas</b>				
Land Central Bank	1986		1987	
	Number	DM million	Number	DM million
Baden-Württemberg	53,222	10,205.0	48,384	10,440.3
Bavaria	31,818	10,275.5	30,967	11,158.2
Berlin	2,779	5,289.0	3,317	5,204.8
Bremen	2,438	1,195.8	2,310	1,060.1
Hamburg	16,167	10,946.2	14,978	10,236.8
Hesse	33,054	26,159.3	31,258	24,447.5
Lower Saxony	8,778	3,397.5	7,884	3,257.5
North Rhine-Westphalia	48,251	21,431.8	44,879	20,775.9
Rhineland-Palatinate	9,113	2,183.5	9,399	1,955.3
Saarland	3,758	1,282.9	3,673	1,360.3
Schleswig-Holstein	2,942	1,333.2	2,868	1,354.0
<b>Total</b>	<b>212,320</b>	<b>93,699.7</b>	<b>199,917</b>	<b>91,250.7</b>

At the end of 1987 the outstanding amount of lombard loans granted by the Bank to banks was DM 765.8 million against DM 2,368.0 million at end-1986. The average level of such loans on all return days was DM 626 million compared with DM 932 million in the previous year. The outstanding amount of such loans was subject to marked fluctuations, as in earlier years; it was highest on March 31, 1987, at DM 5,339 million.

Lombard loans

In the year under review the lombard rate was 5½ % until January 22, 5 % as from January 23 and 4½ % as from November 6.

Lombard rate

Section 20 (1) 1 of the Deutsche Bundesbank Act lays down the following credit ceilings:

Cash advances

	DM million
for the Federal Government	6,000
for the Federal Railways	600
for the Federal Post Office	400
for the Equalisation of Burdens Fund	200
for the ERP Special Fund	50

for the Länder Governments DM 40 per inhabitant; for Berlin, Bremen and Hamburg DM 80 per inhabitant.

Not only cash advances but also Treasury bills which the Bank holds in its portfolio or has undertaken to purchase are to be counted towards these credit ceilings.

Federal and Länder Governments

<b>Cash advances outstanding</b>		
<b>DM million</b>		
Borrower	December 31, 1986	December 31, 1987
Federal Government	2,014.9	—
Länder Governments		
Baden-Württemberg	—	117.0
Bavaria	—	239.0
Bremen	48.3	—
Hamburg	—	144.0
Lower Saxony	72.1	186.0
North Rhine-Westphalia	553.0	—
Rhineland-Palatinate	134.9	—
Saarland	40.0	41.1
Schleswig-Holstein	87.2	81.3
<b>Total</b>	<b>2,950.4</b>	<b>808.4</b>



The Equalisation of Burdens Fund and the ERP Special Fund took up no cash advances during the year under review.

Federal Railways and Federal Post Office No cash advances to the Federal Railways or Federal Post Office were outstanding at December 31, 1987; such advances, together with claims arising from the purchase of Treasury bills and Treasury discount paper, are to be shown in the item "Lending to the Federal Railways and Federal Post Office" on the assets side of the Bank's balance sheet.

Throughout the year under review the interest rate charged for cash advances was identical with the Bank's discount rate.

Treasury bills and Treasury discount paper For issues of Treasury discount paper in 1987 the Bank again acted as selling agent for the Federal Government. This paper, which serves financing purposes, is distinct from the mobilisation and liquidity paper issued pursuant to sections 42 and 42a of the Deutsche Bundesbank Act, which is reported on below. No Treasury bills serving financing purposes were issued during the year under review.

Federal Government The issuing of Treasury discount paper to meet the Federal Government's borrowing requirements declined perceptibly in the year under review. In 1987 Treasury discount paper type "BN", which is not returnable before maturity, was placed with domestic banks to the amount of only DM 582.5 million (1986: DM 1,793.8 million). DM 1,016.2 million of "Treasury financing paper" was sold (1986: DM 1,192.1 million). A further DM 616.0 million of paper returnable before maturity (type "B") was purchased by two institutional investors.

After the redemption of DM 5,508.5 million (1986: DM 5,191.8 million) of matured Treasury discount paper (including "Treasury financing paper"), the total amount of Treasury discount paper of the Federal Government (types "B" and "BN") outstanding at December 31, 1987 was DM 5,732.1 million (end-1986: DM 9,025.9 million). Of this total, DM 1,456.0 million was repurchasable by the Bank (Treasury discount paper type "B").

Federal Railways Turnover in Treasury discount paper of the Federal Railways in the year under review was confined to the redemption and reissue of DM 131.0 million (type "Ba"); hence at December 31, 1987 the outstanding amount of returnable Treasury discount paper of the Federal Railways (type "Ba") was still DM 131.0 million.

Federal Post Office No Treasury discount paper of the Federal Post Office was outstanding during the year under review.

The total amount of money market paper issued for the account of the Federal Government and its Special Funds outstanding at the end of 1987 was DM 5,863.1 million (end-1986: DM 9,156.9 million).

<b>Money market paper issued for the account of the Federal Government and its Special Funds</b>				
<b>DM million</b>				
Type of paper	1986	1987		
	Outstanding at Dec. 31	Issued	Redeemed	Outstanding at Dec. 31
Treasury discount paper of the Federal Republic of Germany types "B" 1 and "BN" 2 of which "Treasury financing paper"	9,025.9 (2,946.1)	2,214.7 (1,016.2)	5,508.5 (2,062.5)	5,732.1 (1,899.8)
Treasury discount paper of the Federal Railways types "Ba" and "BaN" 2	131.0	131.0	131.0	131.0
Treasury discount paper of the Federal Post Office type "PN" 2	—	—	—	—
<b>Total</b>	<b>9,156.9</b>	<b>2,345.7</b>	<b>5,639.5</b>	<b>5,863.1</b>

1 The letter "B" serves to distinguish these bonds from the mobilisation and liquidity paper dealt with below. —  
2 The letters "BN", "BaN" and "PN" denote securities which may not be returned before maturity.

At end-1987, as in the preceding year, the Bank had no money market paper of the Länder Governments in its portfolio.

Länder  
Governments

The Bank's equalisation claims on the Federal Government and the non-interest-bearing debt certificate in respect of Berlin remained unchanged during the year under review.

Equalisation claims

No loans to the Federal Railways or Federal Post Office were outstanding at December 31, 1987, as in the previous year. See also the notes on the items "Cash advances" and "Treasury bills and Treasury discount paper".

Lending to the Fed-  
eral Railways and  
Federal Post Office

During the year under review the Bank's portfolio of securities — chiefly bonds of the Federal Republic of Germany, the Federal Railways and the Federal Post Office — decreased by DM 709.1 million net to DM 4,500.0 million (end-1986: DM 5,209.1 million) owing to redemptions on maturity and transactions in the open market.

Securities

In 1987 sixteen bond issues totalling DM 43,300 million (1986: fifteen issues amounting to DM 36,250 million) were placed through the Federal Bond Consortium, which is under the direction of the Bank. Of these bonds, an amount of DM 8,650 million was reserved for the issuers' own institutions and for market regulation purposes.

Issue of bonds

At the end of 1987 the outstanding amount of bonds of the Federal Republic of Germany was DM 143,069.7 million (end-1986: DM 118,132.0 million), that of the Federal Railways was DM 23,451.0 million (end-1986: DM 19,855.3 million) and that of the Federal Post Office DM 28,223.2 million (end-1986: DM 20,644.2 million).

Bond issues of the Federal Republic of Germany, the Federal Railways and the Federal Post Office in 1987							
Issuer	Amount issued (DM million)		Terms				Start of sales
	Total	of which Sold through Federal Bond Consortium	Nominal interest rate (%)	Maturity (years)	Issue price (%)	Yield (%)	
Federal Republic of Germany	4,000	3,200	6.125	10	100.25	6.09	Jan. 2
Federal Railways	1,100	900	6.125	10	100	6.13	Jan. 20
Federal Republic of Germany	4,000	3,200	5.75	10	99.75	5.78	Feb. 6
Federal Post Office	2,000	1,600	6.25	10	100	6.25	Feb. 25
Federal Republic of Germany	4,000	3,200	6	10	100.25	5.97	Mar. 10
Federal Railways	900	750	6.25	10	100	6.25	Mar. 17
Federal Republic of Germany	4,000	3,200	5.50	10	100	5.50	May 27
Federal Post Office	2,000	1,600	6	10	99.50	6.07	June 15
Federal Republic of Germany	4,000	3,200	6.125	10	100	6.13	July 14
Federal Railways	2,000	1,700	6.625	10	100	6.63	Aug. 19
Federal Republic of Germany	4,000	3,200	6.375	10	100.25	6.34	Aug. 27
Federal Post Office	2,000	1,600	6.75	10	99.50	6.82	Sep. 21
Federal Republic of Germany	4,000	3,200	6.75	10	99.75	6.79	Oct. 7
Federal Republic of Germany	2,000	1,500	6.375	10	100.50	6.31	Nov. 11
Federal Railways	1,300	1,000	6.625	10	100.25	6.59	Nov. 19
Federal Post Office	2,000	1,600	6.50	10	100.50	6.43	Dec. 3

Issue of Federal savings bonds With the assistance of the Bank (selling operations through banks and sales of its own), Federal savings bonds to the value of DM 6,441.5 million (gross) were placed with private purchasers in 1987 (1986: DM 4,131.6 million).

During the year under review the rate of interest paid on Federal savings bonds was raised three times and lowered three times to bring it into line with market conditions.

During the year under review DM 92.7 million (1986: DM 77.7 million) of Federal savings bonds from earlier tranches were returned to the issuer before maturity, and a further DM 3,331.6 million were redeemed on maturity. The amount of Federal savings bonds outstanding accordingly rose from DM 28,135.9 million to DM 31,153.1 million at December 31, 1987.

Gross sales, interest rates and yields of Federal savings bonds in 1987												
Issue	Sales period 1987	Gross sales (DM million)			Interest rate (I) in, and yield (Y) after, the respective year after issue in % p. a.							
		Total	Federal savings bonds type A 1	Federal savings bonds type B 2		1st	2nd	3rd	4th	5th	6th	7th
1986/9+10	Jan. 2–Feb. 3 3	4 1,413.3	661.0	752.3	I	3.50	5.00	5.50	6.00	7.00	8.00	
					Y	3.50	4.23	4.64	4.95	5.32	5.70	
					I	3.50	5.00	5.50	6.00	7.00	8.00	8.00
					Y	3.50	4.25	4.66	5.00	5.39	5.82	6.13
1987/1+2	Feb. 4–May 11	1,470.6	611.2	859.4	I	3.00	4.50	5.00	5.50	6.50	8.00	
					Y	3.00	3.74	4.14	4.46	4.82	5.28	
					I	3.00	4.50	5.00	5.50	6.50	8.00	8.00
					Y	3.00	3.75	4.16	4.50	4.89	5.41	5.77
1987/3+4	May 12–July 6	527.0	220.4	306.6	I	3.00	4.00	4.50	5.00	6.00	7.50	
					Y	3.00	3.49	3.81	4.09	4.44	4.89	
					I	3.00	4.00	4.50	5.00	6.00	7.50	7.50
					Y	3.00	3.50	3.83	4.12	4.50	4.99	5.35
1987/5+6	July 7–Aug. 6	402.4	175.9	226.5	I	3.00	4.00	5.00	5.50	6.50	8.00	
					Y	3.00	3.49	3.97	4.33	4.72	5.19	
					I	3.00	4.00	5.00	5.50	6.50	8.00	8.00
					Y	3.00	3.50	4.00	4.37	4.79	5.32	5.70
1987/7+8	Aug. 7–Oct. 14	833.9	344.4	489.5	I	3.00	5.00	5.50	6.00	7.00	8.00	
					Y	3.00	3.98	4.46	4.82	5.21	5.61	
					I	3.00	5.00	5.50	6.00	7.00	8.00	8.00
					Y	3.00	4.00	4.49	4.87	5.29	5.74	6.06
1987/9+10	Oct. 15–Nov. 5 5	609.5	292.8	316.7	I	4.00	5.50	6.00	6.50	7.50	8.00	
					Y	4.00	4.73	5.13	5.45	5.81	6.12	
					I	4.00	5.00	6.00	6.50	7.50	8.00	8.00
					Y	4.00	4.75	5.16	5.50	5.89	6.24	6.49
1987/11+12	Nov. 12–6	1,184.8	544.7	640.1	I	3.50	5.00	5.50	6.00	7.00	7.50	
					Y	3.50	4.23	4.64	4.95	5.32	5.63	
					I	3.50	5.00	5.50	6.00	7.00	7.50	7.50
					Y	3.50	4.25	4.66	5.00	5.39	5.74	5.99
Total	Jan. 2–Dec. 31 6	6,441.5	2,850.4	3,591.1								

1 With annual payment of interest. — 2 With accrual of interest. — 3 Start of sales on October 27, 1986. — 4 Sales from October 27 to December 31, 1986: FSB/A, DM 246.1 million; FSB/B, DM 367.9 million = total DM 614.0 million. — 5 Sales temporarily suspended from November 6 to 11, 1987. — 6 Sales not completed on December 31, 1987.

With the assistance of the Bank, newly-issued five-year special Federal bonds to the value of DM 16,787.0 million were sold in the year under review (1986: DM 16,575.9 million). In addition, an amount of DM 3,454.5 million was reserved for market regulation purposes. During the year the terms of these special Federal bonds were brought into line with market conditions on twenty-one occasions. Series 24 to 35 of these special Federal bonds to the amount of DM 16,100.0 million were redeemed on maturity in the year under review. The outstanding amount of five-year special Federal bonds at the end of the year was DM 85,692.4 million (end-1986: DM 81,216.5 million).

Issue of five-year special Federal bonds

### Sales and terms of issue of five-year special Federal bonds in 1987

Designation of series	Start of sales	Terms (%)			Amount issued (DM million)				Date of admission to stock exchange dealing
		Nominal interest rate	Issue price	Yield	Sales		Price regulation share	Total	
					Per issue price	Total			
S. 67 of 1986 (1991)	Jan. 21	5.50	100.00	5.50	1,559.0	2 4,084.5	864.1	5,200	Feb. 16
	Jan. 19		100.40	5.41	2,525.5				
S. 68 of 1987 (1992)	Feb. 4	5.25	99.70	5.32	1,401.2	3,779.7	720.3	4,500	May 13
	Mar. 3		100.00	5.25	884.8				
	Mar. 17		100.30	5.18	149.5				
	Mar. 20		100.60	5.11	1,124.3				
S. 69 of 1987 (1992)	Apr. 7	5.00	101.00	5.02	219.9	1,280.5	246.4	1,800	July 22
	Apr. 30		100.00	5.00	40.4				
	May 11		100.50	4.88	102.4				
	May 12		100.80	4.82	130.3				
S. 70 of 1987 (1992)	June 18		100.00	5.00	130.3	1,553.6	246.4	1,800	July 22
S. 71 of 1987 (1992)	July 7	5.25	100.60	5.11	181.4	181.4	318.6	500	Aug. 19
S. 72 of 1987 (1992)	Aug. 7	5.50	100.00	5.50	2,698.7	2,925.9	574.1	3,500	Oct. 5
	Aug. 20		100.60	5.36	54.6				
	Sep. 2		99.80	5.55	172.6				
S. 73 of 1987 (1992)	Sep. 23	5.75	100.20	5.70	266.5	266.5	333.5	600	Oct. 26
S. 74 of 1987 (1992)	Oct. 15	6.00	100.00	6.00	2,321.0	3,202.5	397.5	3,600	Nov. 27
	Nov. 23		100.60	5.86	881.5				
S. 74 of 1987 (1992)	Nov. 12	5.50	100.00	5.50	201.2	792.9	4 ...	4 ...	17.2.88
	Nov. 23		100.40	5.41	150.7				
	Nov. 25		100.60	5.36	243.4				
	Dec. 1		101.00	5.27	197.6				

1 Start of sales on December 4, 1986. — 2 Sales from December 4 to 31, 1986 = DM 251.4 million. — 3 Sales temporarily suspended from November 6 to 11, 1987. — 4 Sales of series not completed on December 31, 1987.

Issue of medium-term notes

With the assistance of the Bank, DM 12,103.2 million Treasury bonds (medium-term notes) of the Federal Republic of Germany and the Federal Railways were sold in eight issues by five tenders in 1987 (in the preceding year, DM 6,075.0 million by four tenders).

At the end of 1987 the outstanding amount of medium-term notes of the Federal Republic of Germany was DM 38,458.3 million (end-1986: DM 23,220.0 million), that of the Federal Railways DM 2,452.1 million (end-1986: DM 2,141.8 million) and that of the Federal Post Office DM 589.0 million (end-1986: DM 946.5 million).

### Treasury bonds (medium-term notes) of the Federal Republic of Germany and the Federal Railways sold by tender in 1987

Issuer	Amount sold (DM million)	Nominal interest rate (%)	Maturity (years/months)	Selling price (%)	Yield on issue (%)	Value date
Federal Republic of Germany	1,304.1	5.00	3/1	99.80	5.07	January 16
	710.0	5.25	4/1	100.00	5.25	
	1,758.5	5.75	5/11	100.00	5.75	
Federal Republic of Germany	2,659.8	5.25	5/0	99.90	5.27	March 3
Federal Republic of Germany	1,662.2	5.00	5/11	98.90	5.22	May 6
Federal Republic of Germany	2,679.0	4,875	3/11	99.70	4.96	July 3
	769.3	5,375	5/10	99.10	5.55	
Federal Railways	560.3	5,375	5/0	98.80	5.66	July 27

In 1987 the Bank introduced the new bond issues of the Federal Republic of Germany, the Federal Railways, the Federal Post Office and the Reconstruction Loan Corporation, as well as the five-year special Federal bond series 67 to 73, to official dealing on all German stock exchanges.

Admission to stock exchange dealing

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The Bank likewise introduced the new issues of medium-term notes of the Federal Republic of Germany and the Federal Railways to semi-official dealing until the end of April and to the regulated market as from May 1, 1987 on Frankfurt stock exchange. Since May 1987 the medium-term notes of Federal issuers and the Reconstruction Loan Corporation, which were previously traded in semi-official dealing, have also been listed in the regulated market.

Furthermore, the Bank introduced the new issues of bearer bonds and medium-term notes of the Reconstruction Loan Corporation to official dealing or the regulated market on Frankfurt stock exchange.

In the year under review, as in preceding years, the Bank conducted price regulation operations for the account of the issuers on the eight German stock exchanges in respect of bonds issued by the Federal Government and its Special Funds, five-year special Federal bonds and bonds issued by the Reconstruction Loan Corporation and the Deutsche Ausgleichsbank, and also in respect of bearer bonds of the Deutsche Ausgleichsbank introduced to official dealing on individual German stock exchanges.

Price regulation operations

As paying and collecting agent for, in particular, bonds (including external bonds) of the Federal Government and its Special Funds, the Bank paid 315,999 interest coupons and matured bonds in the year under review (1986: 327,539).

The Bank as paying and collecting agent for bonds

The amount of German coins held by the Bank at the end of 1987 was DM 737.4 million (end-1986: DM 856.1 million). In 1987 DM 450.7 million was credited to the Federal Government in respect of coins taken over from the mints and DM 26.5 million was debited to it in respect of coins no longer fit for circulation. Between 1948 and 1987 the Bank — acting for the account of the Federal Government — took over coins amounting to DM 12,773.9 million and redeemed coins which were no longer fit for circulation or had been called in to the value of DM 1,743.8 million.

German coins

The total amount of coins in circulation at the end of 1987 (DM 10,292.7 million) divided by the number of inhabitants of the Federal Republic of Germany including Berlin (West) on March 31, 1987 (61.1 million) yields a coin circulation per head of population of DM 168 (end-1986: DM 160).

During the year under review the DM 10 commemorative coins "750-Jahr-Feier Berlins" (750th Anniversary of Berlin) and "30 Jahre Römische Verträge" (30 Years Treaties of Rome) were put into circulation.

At December 31, 1987 the balances on postal giro accounts, including the branch offices' transfers in transit to the postal giro account of the Bank (Central Office) in Frankfurt, amounted to DM 168.9 million (1986: DM 178.1 million). The Bank's credit balances on the latter account and on the postal giro account of the Land Central Bank in Berlin, other than those required for current payments, are offset daily against the giro account balances of the Central Cash Office of the Federal Post Office and the Berlin (West) Postal Giro Office.

Balances on postal giro accounts

Postal giro transactions with third parties								
Area	1986				1987			
	Transfers received from third parties		Transfers made to third parties		Transfers received from third parties		Transfers made to third parties	
	Number	DM million	Number	DM million	Number	DM million	Number	DM million
Land Central Bank								
Baden-Württemberg	44,896	21,378.6	5,339	3,496.9	45,700	22,074.1	5,181	4,554.8
Bavaria	40,214	14,499.6	9,596	9,597.6	37,964	13,492.1	9,012	10,167.0
Berlin	5,711	3,132.7	1,828	1,959.1	6,533	3,536.7	1,049	2,326.6
Bremen	5,404	346.6	107	0.0	4,857	356.6	107	0.1
Hamburg	26,818	20,214.9	1,809	403.5	23,358	20,602.0	1,727	664.3
Hesse	39,991	6,907.6	4,438	9,357.2	44,720	7,290.6	4,149	10,065.7
Lower Saxony	35,241	8,676.4	4,475	3,847.5	35,149	8,633.7	4,270	4,870.7
North Rhine-Westphalia	97,845	19,376.9	8,922	5,268.9	110,411	19,782.2	7,422	5,094.8
Rhineland-Palatinate	28,602	1,043.2	4,608	953.4	47,140	988.2	4,429	1,154.0
Saarland	2,666	2,060.1	169	0.1	2,883	1,487.6	118	0.1
Schleswig-Holstein	8,871	115.1	482	2.5	15,651	115.7	354	0.3
Total	336,259	97,751.7	41,773	34,886.7	374,366	98,359.5	37,818	38,898.4
Bundesbank — Central Office —	5,571	2,306.8	1,621	3.3	6,231	2,375.4	1,916	3.2
Grand total	341,830	100,058.5	43,394	34,890.0	380,597	100,734.9	39,734	38,901.6

**Land and buildings** After additions amounting to DM 433.4 million and depreciation totalling DM 152.2 million, land and buildings are shown at DM 2,425.8 million (1986: DM 2,144.6 million).

**Furniture and equipment** The balance sheet value of furniture and equipment, after additions totalling DM 90.1 million and depreciation amounting to DM 78.2 million, is DM 185.7 million (1986: DM 173.8 million).

**Items in course of settlement** The "Items in course of settlement" mainly consist of the intercity credit and debit transfers in transit within the Bank at the end of the year and the cheques and direct debits being cleared. At December 31, 1987 the balance of items in course of settlement stood at DM 5,065.4 million against DM 7,556.6 million at end-1986.

**Other assets** At the end of 1987 other assets amounted to DM 2,873.9 million (end-1986: DM 2,606.2 million). They primarily consist of the interest due in 1988 but assignable to the profit and loss account for the year under review on funds invested abroad and securities (DM 2,095.6 million against DM 2,091.2 million at end-1986) and the balance resulting from intra-German settlements (commercial payments under the "Berlin Agreement"), which came to DM 233.4 million (1986: DM 194.1 million). The regulations governing intra-German payments are outlined in Part A IV of the German original of this Report.

This item also contains the Bank's 30% share (DM 93 million in nominal terms) in the capital of the Liquidity Consortium Bank of Frankfurt am Main (set up as a private limited company). The provision included in the articles of association of that bank that, if necessary, further capital is to be paid up in proportion to the existing share entails for the Bank a maximum commitment of DM 279 million.

**Prepaid expenses and deferred income** The prepaid expenses and deferred income almost entirely comprise salary and pension payments made in the year under review but relating to 1988.

The amount of banknotes in circulation at December 31, 1987, at DM 125,608.0 million, was DM 11,625.0 million larger than at end-1986.

Banknotes in circulation

<b>Currency in circulation</b>				
<b>DM million</b>				
End of	Currency in circulation, total	Banknotes	Coins	
1982	96,694.9	88,574.7	8,120.2	
1983	104,692.3	96,073.0	8,619.3	
1984	109,592.1	100,636.0	8,956.1	
1985	114,718.6	105,416.0	9,302.6	
1986	123,732.8	113,983.0	9,749.8	
1987	135,900.7	125,608.0	10,292.7	

The denominations of the banknotes and coins in circulation are shown in Appendix 3 to the German original of this Report.

In the year under review the Bank again took over new banknotes from the printing works and put them into circulation or made them ready for that purpose.

The following banknotes (including monetary tokens) were destroyed as being no longer fit for circulation or after having been called in:

	1982	1983	1984	1985	1986	1987
Number (millions)	834.5	582.9	569.0	575.4	595.7	578.0
Value (DM million)	39,604.0	24,938.5	25,098.5	26,046.7	27,035.3	25,895.5

In the year under review the number and value of the counterfeit banknotes and coins detained in payments in the Federal Republic of Germany and Berlin (West) declined perceptibly. The counterfeit banknotes consisted almost entirely of DM 100 notes, while the counterfeit coins were mostly DM 5 and DM 2 pieces.

<b>Counterfeits detained in payments</b>				
Year	Banknotes		Coins	
	Number	DM thousand	Number	DM thousand
1978	6,341	586.4	9,835	35.5
1979	3,388	296.6	7,405	24.3
1980	2,421	183.4	9,428	25.1
1981	2,896	219.1	17,172	34.3
1982	3,317	250.7	19,975	43.3
1983	2,156	181.7	26,607	56.1
1984	7,318	710.3	21,365	49.3
1985	7,585	712.2	24,617	57.7
1986	8,257	807.4	17,111	46.6
1987	6,010	598.4	11,758	38.0



Deposits of banks The banks' deposits on giro accounts are mainly composed of the minimum reserves to be held at the Bank. The sub-item "Other" contains the deposits of domestic banks on US dollar accounts. At the end of the year the deposits were made up as follows:

	Dec. 31, 1986	Dec. 31, 1987 DM million
Deposits on giro accounts	55,849.0	60,461.1
Other	20.5	29.6
	55,869.5	60,490.7.

Deposits of public authorities The current balances of public authorities are shown as "Deposits of public authorities"; they break down as follows:

	Dec. 31, 1986	Dec. 31, 1987 DM million
Federal Government	404.2	3,877.1
Equalisation of Burdens Fund and ERP Special Fund	4.9	8.6
Länder Governments	689.0	753.4
Other public depositors	45.7	25.1
	1,143.8	4,664.2.

Deposits of other domestic depositors The deposits of other domestic depositors are composed as follows:

	Dec. 31, 1986	Dec. 31, 1987 DM million
Federal Railways	11.7	14.4
Federal Post Office (including postal giro and postal savings bank offices)	2,388.2	2,474.9
Other depositors	876.6	773.2
	3,276.5	3,262.5.

The entries on giro accounts increased by 6.4% in 1987 against 1986; the total turnover went up by 3.4%. As in the preceding years, almost 100% of the turnover was processed on a cashless basis.

Giro transactions, simplified cheque and direct debit collections

<b>Annual turnover on the giro accounts of the Bank</b>						
Type of turnover	1986			1987		
	Number of trans- actions	Total amount	Average amount	Number of trans- actions	Total amount	Average amount
	Thousands	DM million	DM thousand	Thousands	DM million	DM thousand
(a) Credits						
Cash payments	1,062	251,275	236.6	1,068	263,783	247.0
Clearings with account-holders	3,798	6,323,714	1,665.0	3,756	6,660,664	1,773.8
Local transfers	75,753	6,315,587	83.4	66,439	6,306,472	94.9
Intercity transfers	370,949	6,785,934	18.3	414,275	7,085,292	17.1
Cheque and direct debit collections (total presented)	1,405,382	2,571,907	1.8	1,489,272	2,685,911	1.8
Total	1,856,944	22,248,417	—	1,974,810	23,002,202	—
(b) Debits						
Cash payments	1,546	261,072	168.9	1,560	276,756	177.4
Clearings with account-holders	2,866	6,484,411	2,262.5	2,750	6,884,308	2,503.4
Local transfers	75,753	6,315,587	83.4	66,439	6,306,472	94.9
Intercity transfers	372,708	6,610,469	17.7	415,009	6,840,706	16.5
Cheque and direct debit collections (total paid)	1,398,472	2,571,105	1.8	1,483,520	2,691,380	1.8
Total	1,851,345	22,242,644	—	1,969,278	22,999,622	—
(c) Percentage of total turnover (credits and debits)						
Cash payments	0.07	1.15	—	0.07	1.18	—
Clearings with account-holders	0.18	28.79	—	0.16	29.44	—
Local transfers	4.09	28.39	—	3.37	27.42	—
Intercity transfers	20.05	30.11	—	21.03	30.27	—
Cheque and direct debit collections (total presented and paid)	75.61	11.56	—	75.37	11.69	—
Total	100.00	100.00	—	100.00	100.00	—

In the year under review virtually all of the collection and credit transfer orders presented were processed on an automated basis at the Bank's computer centres. The volume of payments executed through the paperless exchange of data media (EDM) was 14% higher than in the preceding year. Such payments now account for more than 67% of the payment items presented under the automated procedure. The renewed strong increase in paperless payments is due to the fact that the banks are converting cheques up to DM 1,000 into data records (cheque truncation) on an even larger scale than ever, and channelling them into the EDM procedure. In addition, credit transfer orders so far presented in paper-based form are increasingly being issued to the banks in paperless form by the originators or converted into data records by the banks. By contrast, the conversion of cheques eligible for the truncation procedure, but still presented in paper form, at the Bank's computer centres is on the decline; altogether, only 103 million cheques (1986: 107 million) to the value of DM 29 billion were so converted.

Automation of intercity transfers														
Year	Collection orders presented							Intercity credit transfers presented						
	Total	processed						Total	processed					
		in paper-based operations			through the paperless exchange of data media				in paper-based operations			through the paperless exchange of data media		
		conventional	auto-mated						conventional	auto-mated				
		mil-lions	mil-lions	%	mil-lions	%	mil-lions		%	mil-lions	mil-lions	%	mil-lions	%
1978	694	31	5	412	59	251	36	183	26	14	89	49	68	37
1979	775	15	2	441	57	319	41	192	13	7	95	49	84	44
1980	873	11	1	473	54	389	45	230	7	3	125	54	98	43
1981	1,023	8	1	490	48	525	51	271	7	2	162	60	102	38
1982	1,098	7	1	512	46	579	53	291	6	2	180	62	105	36
1983	1,159	6	1	524	45	629	54	319	5	2	202	63	112	35
1984	1,226	6	1	533	43	687	56	335	4	1	216	65	115	34
1985	1,316	6	1	511	39	799	60	350	4	1	224	64	122	35
1986	1,405	5	0	412	29	988	71	372	3	1	238	64	131	35
1987	1,489	5	0	364	25	1,120	75	415	3	1	254	61	158	38

If, besides intercity transfers, local payments and clearing transactions — which, apart from local credit transfers in Hamburg, are not yet processed automatically — are also taken into account, then about 85% of cashless payments at the Bank are automated. It should be borne in mind in this connection that, as part of the conventional clearing procedure, magnetic tapes containing payments are exchanged locally between banks on a considerable scale; however, only the total amounts of the magnetic tape data files are cleared in this way.

Liabilities arising from mobilisation and liquidity paper sold

To control liquidity, mobilisation and liquidity paper pursuant to sections 42 and 42a of the Deutsche Bundesbank Act in the form of short-term Treasury bills (running as a rule for three days) were again sold to domestic banks in the year under review. These transactions totalled DM 46,890.0 million (1986: DM 39,167.0 million).

In addition, just as in the preceding years, Treasury bills were issued to permit the revolving investment of funds by foreign institutions and the investment of funds by domestic public authorities. Altogether, sales amounting to DM 71,979.0 million (1986: DM 64,924.8 million) were accompanied by redemptions totalling DM 71,564.3 million (1986: DM 68,889.3 million), so that the amount outstanding increased to DM 4,955.9 million (1986: DM 4,541.2 million).

Mobilisation and liquidity Treasury discount paper to the amount of DM 200.5 million (1986: DM 187.4 million) was issued in the year under review; after redemptions totalling DM 190.0 million (1986: DM 182.5 million), the amount of such paper outstanding at the end of 1987 was DM 277.5 million (end-1986: DM 267.0 million).

At December 31, 1987 the total amount of liabilities arising from mobilisation and liquidity paper outstanding was DM 5,233.4 million (end-1986: DM 4,808.2 million).

Mobilisation and liquidity paper sold and redeemed				
DM million				
Type of paper	1986	1987		
	Outstanding at December 31	Sold	Redeemed	Outstanding at December 31
Treasury bills (running for up to 90 days)	4,541.2	71,979.0	71,564.3	4,955.9
Treasury discount paper (running for 6 to 24 months)	267.0	200.5	190.0	277.5
Total	4,808.2	72,179.5	71,754.3	5,233.4

The liabilities arising from external transactions declined to DM 17,078.2 million at end-1987 (1986: DM 19,915.2 million). The liabilities to foreign monetary authorities decreased most. Specifically, the liabilities arising from external transactions were made up as follows:

Liabilities arising from external transactions

	Dec. 31, 1986		Dec. 31, 1987	
	DM million			
Deposits of foreign depositors				
Banks	19,632.2		16,962.6	
Other depositors	<u>266.2</u>	19,898.4	<u>103.5</u>	17,066.1
Other				
Provision of cover for letters of credit, etc.	4.3		4.7	
Miscellaneous liabilities	<u>12.5</u>	<u>16.8</u>	<u>7.4</u>	<u>12.1</u>
		19,915.2		17,078.2.

The counterpart of the special drawing rights allocated by the IMF and shown on the assets side of the balance sheet in sub-item 2.3 corresponds to the allocations of SDRs to the Federal Republic of Germany from 1970 to 1972 and from 1979 to 1981, which totalled SDR 1,210.8 million.

Counterpart of special drawing rights allocated

After the withdrawal of DM 142.6 million for the payment of pensions and an increase of DM 222.6 million, the provisions for pensions amount to DM 2,171.0 million (end-1986: DM 2,091.0 million); they correspond to the actuarially calculated requirements.

Provisions for pensions

To offset losses arising from the valuation of the monetary reserves and other foreign currency positions, DM 536.1 million net was withdrawn from the provisions for other purposes, which serve primarily to cover general risks inherent in domestic and external transactions (see also the notes below on the expenditure item "Write-downs of monetary reserves and other foreign currency positions"). As a consequence, at December 31, 1987 the provisions for other purposes amounted to DM 2,116.1 million against DM 2,652.2 million at end-1986.

Provisions for other purposes

Other liabilities	The other liabilities increased by DM 24.5 million to DM 332.5 million.
Deferred expenses and accrued income	Deferred expenses and accrued income amounted to DM 184.9 million at December 31, 1987 (end-1986: DM 282.9 million). This item mainly comprises interest received in the year under review, but relating to the following year, on domestic and foreign bills of exchange and US Treasury notes.
Capital	The capital of the Bank amounts to DM 290 million; it is held by the Federal Government (section 2 of the Deutsche Bundesbank Act).
Reserves	In accordance with the decision taken by the Central Bank Council on April 16, 1987, the legal reserves were increased by DM 428.3 million out of the profit for 1986. After this increase, the legal reserves totalled DM 5,699.1 million; they thus reached the maximum level permissible by law of 5% of the amount of banknotes in circulation, which was DM 113,983.0 million at the end of 1986. The other reserves reached the statutory ceiling of DM 290 million as long ago as end-1980.
Unappropriated profit	See the notes on page 98 of this Report.

### Profit and loss account

Comparison of expenditure and receipts					
DM million					
Expenditure	1986	1987	Receipts	1986	1987
Interest paid on foreign exchange swap and repurchase transactions with domestic banks	6.9	2.2	Interest received		
Interest paid on mobilisation and liquidity paper	203.3	164.2	Funds invested abroad	6,905.5	7,442.2
Other interest paid	10.7	9.6	Lending to domestic banks	3,668.6	2,742.4
	220.9	176.0	Equalisation claims	81.4	81.4
Administrative expenditure			Securities	387.8	352.8
Staff costs	786.5	820.3	Cash advances	64.2	57.9
Other	202.7	213.4	Other interest received	2.8	2.8
Note printing	142.0	142.4		11,105.3	10,679.5
Depreciation	197.9	230.4	Fees received	24.2	25.0
Increases in provisions			Other receipts	141.9	98.8
for pensions	218.2	222.6			
for other purposes	—	—			
Pension payments in respect of the Reichsbank	22.6	21.0			
Write-downs of monetary reserves and other foreign currency positions	1,636.3	8,594.8			
Other expenditure	48.5	44.9			
Profit for the year (= unappropriated profit)	7,795.8	337.5			
Total	11,271.4	10,803.3	Total	11,271.4	10,803.3

### Receipts

Interest	1986	1987
		DM million
Interest received amounted to	11,105.3	10,679.5;
after deduction of interest paid, namely	220.9	176.0,
interest is shown in the profit and loss account at	10,884.4	10,503.5.

Total interest received declined on balance against the previous year by DM 380.9 million to DM 10,503.5 million. Specifically, the amounts received through external transactions increased by DM 536.7 million, largely because of higher

ECU holdings owing to heavier interventions within the EMS. The further rise in US dollar assets resulted in only slightly higher interest receipts, the decline in the US dollar and the lower interest rate level in the United States being significant factors. Interest receipts from domestic business, by contrast, fell by DM 962.5 million. Especially where lending to domestic banks was concerned, both the declining interest rates and the lower levels had a marked impact.

The interest paid, at DM 176.0 million, was DM 44.9 million lower than in the previous year. DM 164.2 million (1986: DM 203.3 million) was disbursed on Treasury bills and Treasury discount paper of the Federal Government (mobilisation and liquidity paper pursuant to sections 42 and 42a of the Deutsche Bundesbank Act); DM 2.2 million (1986: DM 6,9 million) was spent on foreign exchange repurchase agreements and swaps with domestic banks.

Fees, which accrue mainly in payments and in securities transactions, totalled DM 25.0 million (1986: DM 24.2 million). Fees

The other receipts amounted to DM 98.8 million (1986: DM 141.9 million). Other receipts

### Expenditure

Staff costs went up against the previous year by DM 33.8 million to DM 820.3 million. This owed something, firstly, to pay rises for the Bank's staff; secondly, in 1987 — as in the two preceding years — there was a slight increase in the number of employees. After having grown by 182 in 1986, the number of staff members rose by 267 (+ 1.7%) in 1987, to a total of 15,526. About one-fifth of this increase was accounted for by civil servants undergoing preparatory training and other trainees. Staff costs

Staff of the Bank										
Staff	Beginning of 1987					Beginning of 1988				
	Central Office	Land Central Banks	Total 1	of whom		Central Office	Land Central Banks	Total 1	of whom	
				male	female				male	female
Civil servants	946	5,565	6,511	5,884	627	960	5,623	6,583	5,903	680
Other salaried staff	1,639	6,026	7,665	3,529	4,136	1,664	6,187	7,851	3,606	4,245
Wage earners	236	847	1,083	203	880	236	856	1,092	208	884
<b>Total</b>	<b>2,821</b>	<b>12,438</b>	<b>15,259</b>	<b>9,616</b>	<b>5,643</b>	<b>2,860</b>	<b>12,666</b>	<b>15,526</b>	<b>9,717</b>	<b>5,809</b>

1 Including 135 (1987: 107) salaried staff working outside the Bank or released to work for international institutions, 849 (1987: 797) trainees, 653 (1987: 595) part-time salaried staff and 737 (1987: 738) part-time wage earners.

Payments to serving members of the Central Bank Council and the Directorate of the Bank amounted to DM 8,923,220.27 in the year under review. Former members of these bodies and of the Board of Directors and Board of Managers of the Bank deutscher Länder and the Managing Boards of the Land Central Banks, including their surviving dependants, received payments totalling DM 8,400,434.68.

In 1987 the Bank again entered into a number of pay agreements, thereby bringing the legal status of its wage and salary earners into line with the regulations applying to the wage and salary earners of the Federal Government, while paying due regard to the special conditions prevailing at the Bank. Changes in staff regulations

Other (non-staff) administrative expenditure increased by DM 10.7 million (+ 5.3%) to DM 213.4 million during the financial year 1987. Other

Note printing	Expenditure on note printing amounted to DM 142.4 million, i.e. it remained almost unchanged against the previous year.
Depreciation and increases in provisions	Depreciation of land and buildings and of furniture and equipment is discussed in connection with the respective balance sheet items, as are increases in provisions.
Pension payments in respect of the Reichsbank	Payments to members of the former Deutsche Reichsbank and other persons to whom the Act concerning Article 131 of the Basic Law applies, for whom the Bank is required to provide in accordance with section 41 of the Deutsche Bundesbank Act, at DM 21.0 million, continued to decline in the year under review.
Write-downs of monetary reserves	This item contains the result of the valuation of the monetary reserves and other foreign currency positions. Valuation losses owing to the appreciation of the Deutsche Mark in part had no impact on the result, as provisions formed for this purpose in earlier years could be released. Valuation losses in excess of that amount — after offsetting against the receipts accruing in the year under review from purchases and sales of foreign currencies — entailed write-downs totalling DM 8,594.8 million (1986: DM 1,636.3 million).
Other expenditure	Other expenditure is shown at DM 44.9 million (1986: DM 48.5 million).

*Profit for the year*

Unappropriated profit	The profit and loss account for 1987 shows a profit for the year of which is entered in the balance sheet as unappropriated profit (net profit).	DM 337,544,967.82,
Proposed distribution of profit	In accordance with section 27 of the Deutsche Bundesbank Act, the Directorate proposes to the Central Bank Council that the following appropriations should be made:	
	to the legal reserves	67,500,000.00
	to the Fund for the Purchase of Equalisation Claims	30,000,000.00
		<u>97,500,000.00.</u>
	The balance of	240,044,967.82
	will be transferred to the Federal Government.	<u><u>240,044,967.82</u></u>

The appropriation to the legal reserves represents 20% of the net profit. After it, the legal reserves will amount to DM 5,766,600,000.00; they will thus remain below the statutory ceiling of 5% of the amount of banknotes in circulation, which came to DM 125,607,993,860.00 at the end of 1987. The other reserves reached the statutory ceiling of DM 290,000,000.00 at the end of 1980.

Frankfurt am Main, April 1988

Deutsche Bundesbank  
The Directorate

Pöhl Prof. Dr. Schlesinger  
Gaddum Prof. Dr. Gleske Prof. Dr. Köhler Dr. Storch Werthmüller

# Part D: Report of the Central Bank Council



The annual accounts of the Deutsche Bundesbank for 1987 and the Report on the Fund for the Purchase of Equalisation Claims as at December 31, 1987 have been audited by Treuarbeit Aktiengesellschaft Wirtschaftsprüfungsgesellschaft Steuerberatungsgesellschaft of Frankfurt am Main and Dr. Wollert — Dr. Elmendorff KG Wirtschaftsprüfungsgesellschaft of Düsseldorf, whom the Central Bank Council appointed to be auditors in accordance with section 26 of the Deutsche Bundesbank Act.

In their certificates of audit the auditors confirm without qualifications that the annual accounts for 1987 and the bookkeeping comply with German law and present an accurate picture of the assets, liabilities, financial position and profit or loss, and that the Fund for the Purchase of Equalisation Claims has been properly administered.

The Central Bank Council approved the annual accounts for 1987 on April 7, 1988 and accepted the Directorate's proposal in respect of the profit distribution. At the same time it approved the Report on the Fund for the Purchase of Equalisation Claims as at December 31, 1987.

Since the publication of the Report for the Year 1986 the following changes have taken place in the Central Bank Council and the Directorate of the Deutsche Bundesbank:

Retired

as at the close of July 31, 1987

Dr. Hans Georg Emde

Member of the Directorate of the Deutsche Bundesbank.

Reappointed

with effect from May 16, 1987

Lothar Müller

President of the Land Central Bank in Bavaria,

with effect from January 1, 1988

Karl Otto Pöhl,

President of the Deutsche Bundesbank,

Professor Dr. Drs. h. c. Helmut Schlesinger,

Deputy President of the Deutsche Bundesbank.

Appointed

with effect from December 1, 1987

Dr. Günter Storch,

to be a member of the Directorate of the Deutsche Bundesbank.

The Central Bank Council, acting also on behalf of the Directorate and the Managing Boards of the Land Central Banks, expresses its thanks to the entire staff of the Deutsche Bundesbank — civil servants, other salaried employees and wage earners alike — for their loyal and understanding work during 1987. The Council likewise wishes to record its appreciation of the continued excellent collaboration with the staff representative bodies.

Frankfurt am Main, April 1988

Karl Otto Pöhl

President of the Deutsche Bundesbank

# Appendix to Part B

Balance sheet of the Deutsche Bundesbank as at December 31, 1987

102 **Assets**

			DM
1	Gold		13,687,518,821.70
2	Reserve position in the International Monetary Fund and special drawing rights		
2.1	Drawing rights within the reserve tranche	5,778,837,155.80	
2.2	Loans under special borrowing arrangements	388,412,078.24	
2.3	Special drawing rights	<u>3,105,564,823.81</u>	9,272,814,057.85
3	Claims on the European Monetary Cooperation Fund in connection with the European Monetary System		
3.1	ECU balances	39,974,666,103.90	
	less		
	Difference between the ECU value and the book value of the gold and dollar reserves contributed	<u>18,027,137,277.90</u>	21,947,528,826.—
3.2	Other claims	<u>7,005,046,636.84</u>	28,952,575,462.84
4	Balances with foreign banks and money market investments abroad		68,253,878,615.36
5	Foreign notes and coins		25,654,742.73
6	External loans and other external assets		
6.1	Loans in connection with EEC medium-term monetary assistance	—	
6.2	Other loans to foreign monetary authorities	—	
6.3	Loans to the World Bank	<u>2,437,383,750.—</u>	2,437,383,750.—
7	Lending to domestic banks		
7.1	Securities bought in open market transactions under repurchase agreements	27,639,722,000.—	
7.2	Domestic bills of exchange	33,744,225,261.04	
7.3	Foreign bills of exchange	20,206,491,844.30	
7.4	Lombard loans	<u>765,754,600.—</u>	82,356,193,705.34
8	Cash advances		
8.1	Federal Government	—	
8.2	Equalisation of Burdens Fund	—	
8.3	Länder Governments	<u>808,415,805.—</u>	808,415,805.—
9	Equalisation claims on the Federal Government and non-interest-bearing debt certificate in respect of Berlin		8,683,585,988.93
10	Lending to the Federal Railways and Federal Post Office		
10.1	Cash advances	—	
10.2	Treasury bills and Treasury discount paper	<u>—</u>	—
11	Securities		4,499,995,138.76
12	German coins		737,431,755.27
13	Balances on postal giro accounts		168,892,895.04
14	Land and buildings		2,425,794,084.93
15	Furniture and equipment		185,676,766.85
16	Items in course of settlement		5,065,380,450.24
17	Other assets		2,873,870,224.78
18	Prepaid expenses and deferred income		39,573,618.34
			<u>230,474,635,883.96</u>

		DM
1 Banknotes in circulation		125,607,993,860. —
2 Deposits of banks		
2.1 Deposits on giro accounts	60,461,158,267.75	
2.2 Other	29,570,762.44	60,490,729,030.19
3 Deposits of public authorities		
3.1 Federal Government	3,877,087,007.19	
3.2 Equalisation of Burdens Fund and ERP Special Fund	8,634,947.76	
3.3 Länder Governments	753,389,302.45	
3.4 Other public depositors	25,100,285.65	4,664,211,543.05
4 Deposits of other domestic depositors		
4.1 Federal Railways	14,402,241.21	
4.2 Federal Post Office (including postal giro and postal savings bank offices)	2,474,955,150.93	
4.3 Other depositors	773,180,446.14	3,262,537,838.28
5 Liabilities arising from mobilisation and liquidity paper sold		5,233,400,000. —
6 Liabilities arising from external transactions		
6.1 Deposits of foreign depositors	17,066,158,355.16	
6.2 Other	12,090,467.79	17,078,248,822.95
7 Counterpart of special drawing rights allocated		2,716,473,243.60
8 Provisions		
8.1 For pensions	2,171,000,000. —	
8.2 For other purposes	2,116,050,000. —	4,287,050,000. —
9 Other liabilities		332,459,887.34
10 Deferred expenses and accrued income		184,886,690.73
11 Capital		290,000,000. —
12 Reserves		
12.1 Legal reserves	5,699,100,000. —	
12.2 Other reserves	290,000,000. —	5,989,100,000. —
13 Unappropriated profit		337,544,967.82
		<u>230,474,635,883.96</u>

# Profit and loss account of the Deutsche Bundesbank for the year 1987

## 104 Expenditure

		DM
1 Administrative expenditure		
1.1 Staff costs	820,264,803.32	
1.2 Other	213,368,128.48	1,033,632,931.80
2 Note printing		142,374,150.91
3 Depreciation		
3.1 of land and buildings	152,248,953.27	
3.2 of furniture and equipment	78,181,983.64	230,430,936.91
4 Increase in provisions		
4.1 for pensions	222,623,461.60	
4.2 for other purposes	—	222,623,461.60
5 Pension payments in respect of the Reichsbank		21,014,403.92
6 Write-downs of monetary reserves and other foreign currency positions		8,594,815,206.07
7 Other expenditure		44,833,079.85
8 Profit for the year (= unappropriated profit)		337,544,967.82
		<u>10,627,269,138.88</u>
		<u><u>10,627,269,138.88</u></u>

## Receipts

		DM
1 Interest		10,503,477,494.34
2 Fees		24,958,604.93
3 Other receipts		98,833,039.61
		<u>10,627,269,138.88</u>
		<u><u>10,627,269,138.88</u></u>

Frankfurt am Main, February 3, 1988

**Deutsche Bundesbank**  
**The Directorate**  
 Pöhl Prof. Dr. Schlesinger  
 Gaddum Prof. Dr. Gleske Prof. Dr. Köhler Dr. Storch Werthmüller

According to the audit which we have carried out in accordance with our mandate, the bookkeeping and the annual accounts comply with German law. While paying due regard to the principles of orderly bookkeeping, the annual accounts present a picture of the assets, liabilities, financial position and profit or loss which is in line with the actual situation.

Frankfurt am Main, March 4, 1988

Treuarbeit Aktiengesellschaft  
 Wirtschaftsprüfungsgesellschaft  
 Steuerberatungsgesellschaft

Dr. Wollert — Dr. Elmendorff KG  
 Wirtschaftsprüfungsgesellschaft

Prof. Dr. Forster  
Certified Auditor

Kern  
Certified Auditor

Thoennes Brückner  
 Certified Auditor Certified Auditor