Report of the Deutsche Bundesbank

for the Year 1977

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Members of the Directorate of the Deutsche Bundesbank and the Managing Boards of the Land Central Banks

Members on April 1, 1978

of the Directorate of the Deutsche Bundesbank

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Karl Otto Pöhl, Deputy Governor of the Deutsche Bundesbank

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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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Contents

The German original went to press on April 6, 1978

Part A: General part

The currency and the economy in 1977

I. Economic developments and central bank policy

The policy of the Bundesbank in 1977, as in the two preceding years, was directed towards giving the economic recovery monetary support and further reducing the pace of price rises at the same time. With regard to price stability — the economic policy objective that falls within the field of responsibility of the Bundesbank to a particular extent — more progress was made last year, although, considering how far price increases had already been curbed in 1976, the additional headway could not be as great as it had been before. As measured by the cost of living index, the price level in the Federal Republic of Germany rose by an average of 3.9 % in 1977, compared with 4.5 % and 6.0 % in 1976 and 1975 respectively. During 1977 and at the beginning of 1978 the growth rate of prices was further contained, so that consumer prices have recently been only 3 % higher than they were a year ago. However, the movement of prices in 1977 was not matched by the movement of domestic production costs; while interest rates declined, labour costs, which matter far more, increased, even after allowing for the greater productivity. The moderation of price rises in Germany in 1977 and at the beginning of 1978 was primarily due to external factors, since the steep appreciation of the Deutsche Mark lowered the prices of imports and enhanced competition on domestic markets. This contributed to a rapid expansion of the imports of goods and services, so that the surplus on the current account of the German balance of payments decreased slightly in 1977. Since, moreover, the outflow of long-term capital was larger than consistent with the current account surplus, Germany came fairly close to external equilibrium. Taken as a whole it did not impede, but rather facilitated, the balancing of the external payments of other countries.

On the other hand, the non-monetary objectives of domestic economic policy — strong growth and a lower level of unemployment — were not achieved in 1977 to the extent envisaged and desired. The real gross national product went up by only 2½ % in 1977; its growth rate thus remained slightly below that of the production potential. Better utilisation of production capacity was not attained; in particular, unemployment declined only a little in these circumstances. At times, in fact, economic activity was more vigorous than suggested by the annual figures, since production rose strongly in both the first and the fourth quarters of 1977. But the overall result was depressed by the stagnation of the national product in the spring and summer due partly to a downturn in business activity in Germany's main customer countries and partly to domestic factors which will be considered in detail in the following analysis.

The monetary policy of the Bundesbank constantly supported the economic expansion. This is indicated not only by the movement of all major monetary aggregates, such as the money stock, the volume of credit and security sales, but also by the trend of interest rates. The interest rate level declined more or less continuously. The interest rate policy of the Bundesbank fostered this process. The lombard rate, which forms the upper limit of the day-to-day money rate among banks in the money market, has been standing at the historical low of 3½ % since December; the discount rate (3 %) has only once been lower than it is now, namely for a few months in 1959. The decrease in interest rates was particularly pronounced in the capital market. At the beginning of 1978 the yield on bonds outstanding equalled the lowest level reached since the war, and in real terms — i.e. after adjustment for the decline in the value of money — it was well below that level.

The low interest rates were not without an impact on the domestic economy. Assisted by special government measures, capital investment picked up strongly in sectors sensitive to interest rates, particularly housing. At the same time, and partly for the same reason, the demand for credit expanded as well. On the other hand, the propensity of the general public to form long-term monetary capital diminished, also owing in part to interest rate considerations. This combination of circumstances inevitably resulted in a steep increase in money balances. During 1977 the central bank money stock went up at an average rate of about 9 %, whereas in December 1976 the Bundesbank had set itself a target of 8 %. The target was overshot mostly in the second half of the year, partly because of massive inflows of funds to domestic non-banks from abroad, particularly from the autumn onwards; on past experience nothing can be done in the short run to counteract this process, although certain automatic adjustments may take place in the somewhat longer term. Another significant factor in this connection was that, given the present low level of interest rates, enterprises and individuals are inclined to remain more liquid than usual.

Even though the strong expansion of the money stock presents distinct problems in the longer run, the Bundesbank tolerated it when, towards the end of 1977 and in the first few months of 1978, it found itself confronted with the much more serious difficulty of an overly rapid appreciation of the Deutsche Mark. Within six months the rate of the Deutsche Mark went up so fast that the present difference — and that to be expected in the near future — between price rises in Germany and those abroad was far more than offset. A continuation of this "real" appreciation of the Deutsche Mark might develop into a severe obstacle to further economic recovery in Germany. Hence it appeared appropriate to strengthen domestic demand — also by monetary measures — to a greater extent than would otherwise have been justifiable. It also had to be borne in mind that the steep appreciation of the Deutsche Mark is restraining the upward movement of prices, at least in the case of goods exposed to foreign competition, so that repercussions of a comparatively strong monetary expansion on the price level are hardly to be feared in the short run. In the longer term, however, as indicated by the quantitative monetary target for 1978, it is essential to prevent additional scope for price increases from emerging on the monetary side.

The threat posed to domestic economic developments by an excessively high exchange rate of the Deutsche Mark cannot, however, be countered by measures of national monetary policy alone. The steps taken at an international level with a view to achieving more balanced exchange rate trends will be described in Part A II of this Report. Nevertheless, considerable domestic adjustment problems still remain, and in the end they will be soluble only if they are duly taken into account in the decisions of all those involved in economic activity.

1. Sluggish economic recovery

Relatively moderate increase in production . . .

Economic developments in the Federal Republic of Germany in 1977 were mainly determined by the fact that the economic upswing which had persisted in the first few months of the year increasingly lost momentum in the second quarter. It was not until the autumn that the expansionary forces regained the upper hand after a stagnation of about six months. As far as can be judged at the moment, these forces also determined the underlying trend in the first two months of 1978. In 1977 as a whole, however, the increase in output was relatively moderate; as measured by the growth of the real gross national product, it came to only 2½ % compared with 5½ % in 1976. The growth target originally envisaged for 1977 (about 5 %) was thus not reached by a substantial margin.

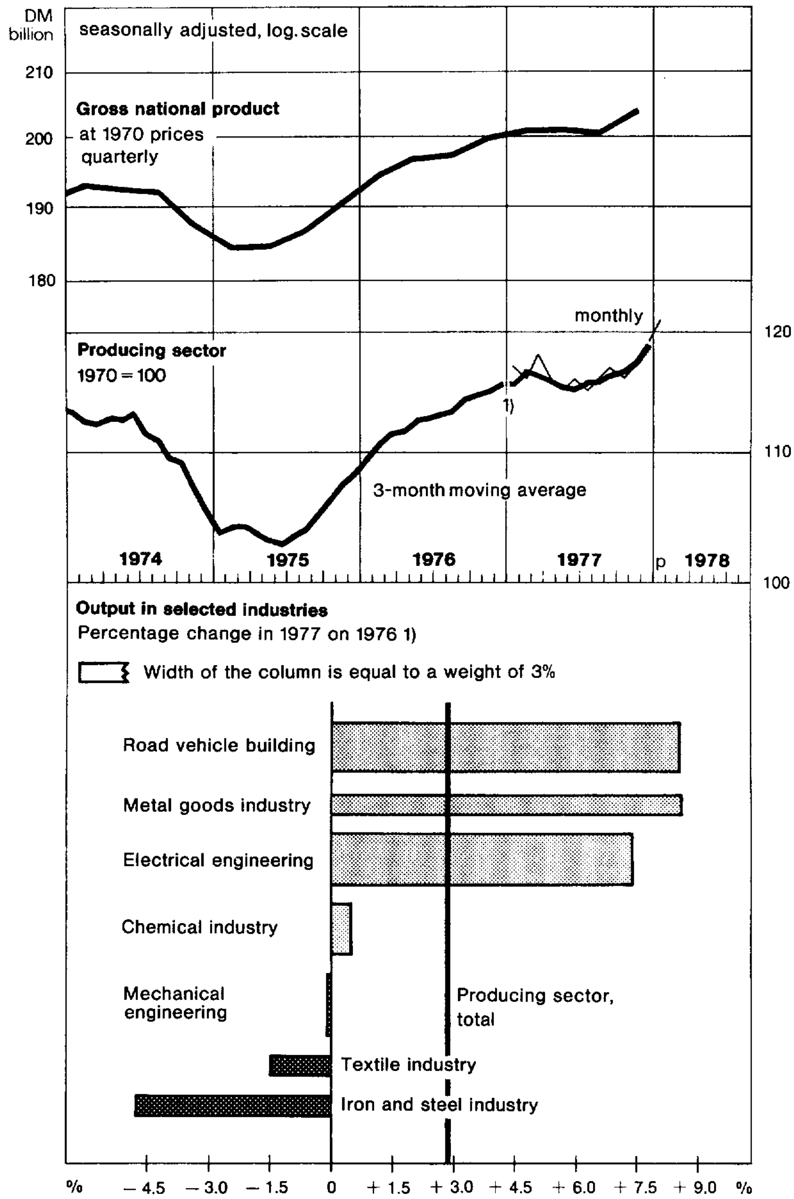
. . . with considerable differences from sector to sector

The overall growth rate (of 2½ %) masks considerable differences between developments in the individual sectors. Road vehicle building continued to experience a boom; once again it raised its output sharply last year. In electrical engineering and other branches of metal-working, production likewise increased quite substantially. By contrast, in some areas of the basic goods sector that have to contend with structural adjustment problems (iron and steel, man-made fibres) and in parts of the capital and consumer goods sectors, output was smaller in 1977 than a year earlier. Construction output temporarily declined as well, but on the whole it was somewhat larger than in 1976. As a consequence of the generally rather weak growth of production, the net value added in the energy industry and the transportation sector was also little higher than in 1976.

Slow growth of production potential

Nevertheless, the increase in the production of goods in 1977 was hardly below the expansion of production potential. According to our calculations the production potential, which reflects potential output if the utilisation of all the factors of production is running at a "normal" level, rose by not quite 3 % in 1977. For the fourth consecutive year its growth thus remained below 3 %, i.e. was about one third smaller than in the sixties and early seventies. Taken as a whole, the utilisation of the potential did not change in 1977; according to our calculations it stood at 97 % of normal utilisation and was thus distinctly higher than during the recession year 1975. The degree of capacity utilisation varied greatly from industry to industry, depending on the trend in production in 1977. Some sectors in which activity was particularly buoyant, such as vehicle building and certain of its suppliers, very nearly reached the limits of their capacity. In some other sectors, e.g. in certain branches of the consumer goods industry, the average degree of plant utilisation improved slightly during 1977 (especially towards the end of the year) and approached the multi-year average that is to be regarded as "normal". At the bottom of the

Output



1) Owing to the adoption of a new collection technique, the continuity of the series is not assured.- p Provisional.

scale came the steel industry, which utilised its production plant even less in 1977 than it had done during the recession year 1975.

Hardly any improvement on the labour market

In view of the rather sluggish overall growth of production at times, conditions on the labour market improved relatively little in 1977, for in general enterprises were able to expand their production to the moderate extent described without engaging additional labour. The total number of wage and salary earners therefore hardly rose in 1977 compared with the preceding year. As in 1976, however, the number of persons employed in certain service industries and in craft enterprises (some of which produce services as well) was distinctly higher than a year before; in particular, more young persons were recruited in these fields. By contrast, the number of wage and salary earners working in the manufacturing sector and the construction industry declined again, although not as much as in 1976. In principle this development is part of a shift in the employment structure that is unavoidable in the long run; especially since the adoption of more realistic floating exchange rates in 1973 the process of a relative decline of the secondary sector in favour of the tertiary (service-rendering) sector — a process which has already made

Structure of unemployment

Item	Unemployed persons in thousands			Unemployment ratio in % 1		
	1975	1976	1977	1975	1976	1977
	Annual average					
Unemployed persons, total	1,074.2	1,060.3	1,030.0	4.7	4.6	4.5
by labour exchange districts:						
Schleswig-Holstein, Hamburg	72.9	73.9	75.6	4.6	4.6	4.8
Lower Saxony, Bremen	152.6	153.7	154.8	5.4	5.4	5.5
North Rhine-Westphalia	299.9	303.9	309.9	4.8	4.9	5.0
Berlin	31.2	31.3	35.1	3.7	3.9	4.5
Hesse	94.5	90.6	82.2	4.5	4.4	4.0
Rhineland-Palatinate, Saarland	89.6	87.9	86.1	5.3	5.2	5.2
Baden-Württemberg	128.1	119.3	101.4	3.5	3.4	2.9
North Bavaria	97.6	97.6	91.5	5.6	5.7	5.2
South Bavaria	107.8	102.3	93.5	4.8	4.5	4.1
	Level at end-September					
	Unemployed persons in thousands			Percentage of total		
Unemployed persons, total	1,006.6	898.3	911.3	100	100	100
of which Problem groups:						
Young persons under 20 years of age	115.8	102.6	105.9	11.5	11.4	11.6
Unemployed persons who are not completely fit (20 to 55 years of age) 2	142.4	135.2	151.5	14.1	15.1	16.6
Women looking for a part-time job (20 to 55 years of age)	134.9	140.1	155.7	13.4	15.6	17.1
Older employees (55 years of age and over)	102.9	106.0	107.6	10.2	11.8	11.8
Problem groups, total	496.0	483.9	520.7	49.3	53.9	57.1

1 Unemployed persons as a percentage of the dependent labour force. — **2** Only 50% of the unemployed women who are not completely fit are included.

considerable headway in other industrial countries — has been gradually gaining ground in Germany.

The supply of available jobs in the economy appears to have increased only a little. The average number of vacancies registered at the labour exchanges in 1977 was no larger than a year earlier. Not until the autumn was there a slight rise, seasonally adjusted. However, this indicator provides an incomplete picture of the actual number of jobs on offer. In 1977 there was a very pronounced tendency among many firms to recruit new staff by means of newspaper advertisements, which shows that, besides the official placing of employees by labour exchanges (which naturally continue to account for the majority of placements), activity on the free employment market was brisk.

Only towards the end of the year a gradual reduction in unemployment

The number of persons registered as unemployed decreased only slowly in 1977 compared with the preceding year. On an average 1.03 million persons were listed at labour exchanges as being in search of a job in 1977; this was only 30,000 fewer than in 1976. Expressed as a proportion of the dependent labour force (the usual practice in German statistics), the unemployment ratio stood at 4.5% in 1977; expressed as a percentage of the total working population (as often in international statistics), it amounted to 3.9%. The gradual improvement in the economic climate led to a slight change in trend on the labour market as from the middle of the year. Seasonally adjusted, the number of unemployed persons decreased from August 1977 onwards, albeit only slowly and with fluctuations. Between that date and the end of March 1978 it fell by 24,000 to 1.02 million. However, the structural obstacles to the reduction of unemployment grew if anything in 1977. On the one hand, there was a shortage of qualified labour, which varied according to the region and sector concerned. On the other, among the unemployed there was an increase in the number of less qualified persons or persons whose occupational and regional mobility was restricted for personal reasons. The normal turnover of jobs undoubtedly involves a selection process which, the longer the unemployment persists, the more seriously impairs the chances of persons who for one reason or another have a weaker position on the labour market. The proportion of persons who can be assigned to the various "problem groups" — inter alia, women interested in part-time jobs only, persons who are not completely fit, older employees — continued to rise last year (see the adjacent table). As may be gathered from a structural study by the Federal Labour Office, about 520,000 persons were assignable to such problem groups at the end of September 1977, or about 57 % of all unemployed, against 54 % a year before and 49 % in September 1975. The situation on the labour market is complicated by the fact that more than half of the unemployed persons have not completed a course of vocational training. In addition, over four fifths of the unemployed have classified themselves as "regionally immobile", which is particularly significant in view of the uneven geographical distribution of unemployment: at the end of September 1977 the unemployment ratios in the Länder labour exchange districts varied between 2.6 % in Baden-Württemberg and 7.5 % in Saarland. The structure and regional distribution of unemployment show clearly that major reductions cannot be achieved in the short term by general measures of economic policy alone, although a stronger economic upswing would admittedly facilitate such reductions. Selective measures of labour market policy are required as well. The increased spending planned by the Federal Labour Office on moves to create jobs and to promote the commencement of work, and also the special labour market programmes of the Federal Government, must be regarded as measures of this kind, as must the business community's efforts to provide additional trainee positions. Labour market policy must also be supported by wage policy, however. In particular, it should be taken into account in this field that the practice of raising the wages for less qualified work to a more than proportional extent on social grounds may have undesirable consequences for labour market policy.

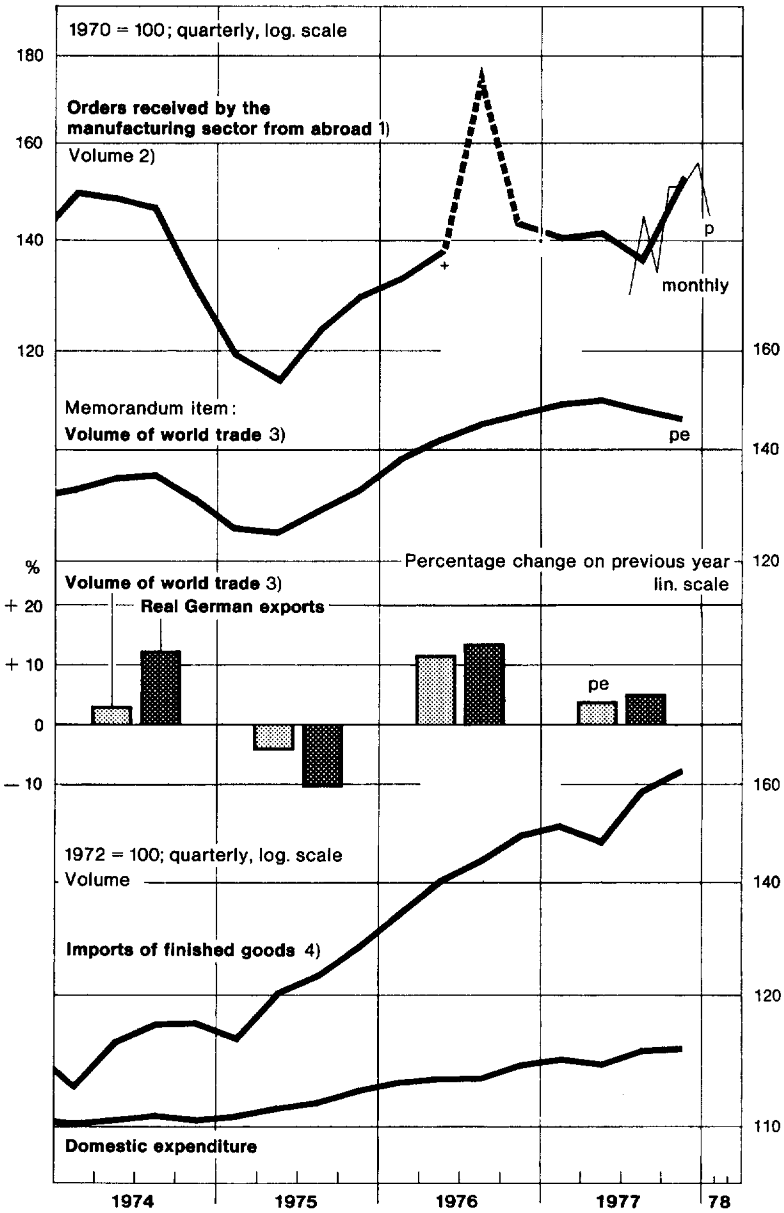
Low level of economic activity abroad dampens growth in Germany

There are both external and domestic reasons for last year's rather unsatisfactory economic performance, relative to the original expectations. A particularly important factor was that initial expectations about the further course of international economic activity and the associated expansion of world trade were far from being fulfilled. In its projection for 1977 the Federal Government had assumed that world trade would rise by 7 to 8 % in real terms in that year; in fact, it grew by about 4 % only. This was mainly because of the slackening of economic activity in many countries, as reflected in the fact that the gross national product in the entire OECD area went up by only 3½ % and that in the European countries (excluding Germany) by only 2 % in 1977. For a country like Germany, which exports more than one quarter of the goods and services it produces, the slowdown in the growth of world trade — which was tantamount to a stagnation at times in 1977 — was bound to have adverse effects. The development of domestic production in Germany has always been rather closely bound up with exports (just as conversely imports depend heavily on domestic production), so that a decrease in foreign sales cannot be offset in a short period by an increase in domestic sales.

Increased competition on German and foreign markets

For German exporters the situation was complicated by the fact that their competitiveness on foreign markets declined owing to the steep appreciation of the Deutsche Mark in real terms that had started in 1976. Not infrequently, German suppliers managed to retain their customers only by making considerable price concessions, which necessarily lessened their earnings. Exports therefore normally provided no compensation for the unsatisfactory earnings position on the domestic market — where, incidentally, competition likewise became keener. As the steady appreciation of the Deutsche Mark made the products of other countries relatively cheaper in Germany, some foreign suppliers were able to enlarge their share of the German market considerably. This is particularly true of the finished goods sector. Imports of finished end-products in 1977, calculated at constant prices, amounted to about 9½ % of domestic expenditure on goods. At the beginning of the seventies this proportion had been only 6 %. The foreign share in domestic sales of goods as a result of supplies of semi-finished and primary products is not included in this calculation; it, too, has probably risen. The increase in total imports of goods and services in 1977, at over 4 % in real terms, was much greater than that in the real gross national product (2½ %). In part such a disproportionately steep rise in real imports no doubt mirrors the trend towards growing interdependence in the world economy. On the whole, however, the increase in imports relative to economic growth has been distinctly greater in Germany than in other countries in the last few years. The high level of imports has stimulated growth particularly in economies with close foreign trade links with Germany, even though expansion in Germany has been comparatively moderate.

External influences on the domestic economy



1) Excluding food, drink and tobacco.- 2) Orders received at 1970 prices.- 3) Exports plus imports at 1970 unit values.- 4) Imports of end-products at 1970 unit values.- + In the specially marked part, the curve is influenced by large-scale orders in July 1976.- * Owing to the adoption of a new collection technique, the continuity of the series is not assured.- pe Partly estimated.- p Provisional.

Steep rise in wage costs

However, business earnings were squeezed again last year not only by the fiercer foreign competition but also by developments on the wage front. In 1977 negotiated wage and salary rates, calculated on a monthly basis, rose by an average of nearly 7% and thus more than a year earlier, whereas the predominant conviction had been that the increase in wages should be smaller in 1977. That this would not be the case became apparent after the first major wage settlements at the beginning of 1977; hence hopes that the improvement in the earnings position recorded in 1976 might continue soon evaporated. In 1977 as a whole actual earnings rose by about 7%. Since productivity, as measured by the real gross national product per employed person, increased by only 3% at the same time, labour costs per unit of output went up by 4% in 1977, while they had risen by no more than 1% in 1976. In view of the keen competition on both domestic and foreign markets, it was not possible to pass on all these higher costs in prices. The distribution of income therefore again shifted to the disadvantage of entrepreneurial income in 1977, although at the beginning of the year there had been unanimous agreement that the earnings position of enterprises ought to improve; such an improvement had been envisaged both in the projections of official bodies and the Council of Economic Experts and in those of management and labour. In 1977 gross entrepreneurial and property income increased by only 3%. Even if those components which are not entrepreneurial income in the stricter sense[1] are eliminated from this complex aggregate, the rise in the income of private enterprises (4 1/2 %) was distinctly smaller than that in gross income from wages and salaries (7 %). The overall wage ratio (i.e. the ratio of wage and salary income to national income) thus went up again in 1977; it amounted to 72 % last year, compared with 71 1/2 % in 1976 and an average of 69 % in the business cycle from 1968 to 1972.[2]

Increasing capital investment . . .

It is obvious that the non-fulfilment of their earnings and sales expectations, particularly in foreign business, made many firms hesitate to start capital projects that were due, especially as the further contraction in the last few years of German enterprises' capital base (which has always been narrow) and the consistently large number of insolvencies have undoubtedly made firms much more risk-conscious. It is true that the gross fixed investment of enterprises (excluding housing) rose by as much as about 8 % last year and by nearly 5 % in real terms, i.e. appreciably more than the gross national product. Even so, capital investment was unable to develop into a really strong force, such as it had been in earlier upswing phases; moreover, it must be borne in mind that the investment ratio has been declining for years and accordingly determines aggregate demand to a smaller extent than in previous cycles.

. . . but relatively little investment for extension purposes

In particular, given the generally unfavourable earnings position, the uncertain earnings prospects and the very unsatisfactory degree of capacity utilisation in some cases, there was no incentive to embark on extension projects. In their investments in Germany enterprises mostly confined themselves to replacing older plant and exploiting new technical possibilities in order to rationalise operations — a matter which became ever more urgent as competition on sales markets increased. The extension of capacities was of no great significance, although the situation naturally differed considerably from sector to sector. Enterprises in buoyant areas of economic activity have in fact already implemented sizable extension projects, and they have announced major investment plans for the next few years as well. This goes for the motor industry, for instance, even though some enterprises in this field are at the same time investing on a major scale abroad; however, the one does not necessarily exclude the other, although cases in which investments are not made in Germany because of investments abroad do no doubt occur.

Obstacles to capital investment

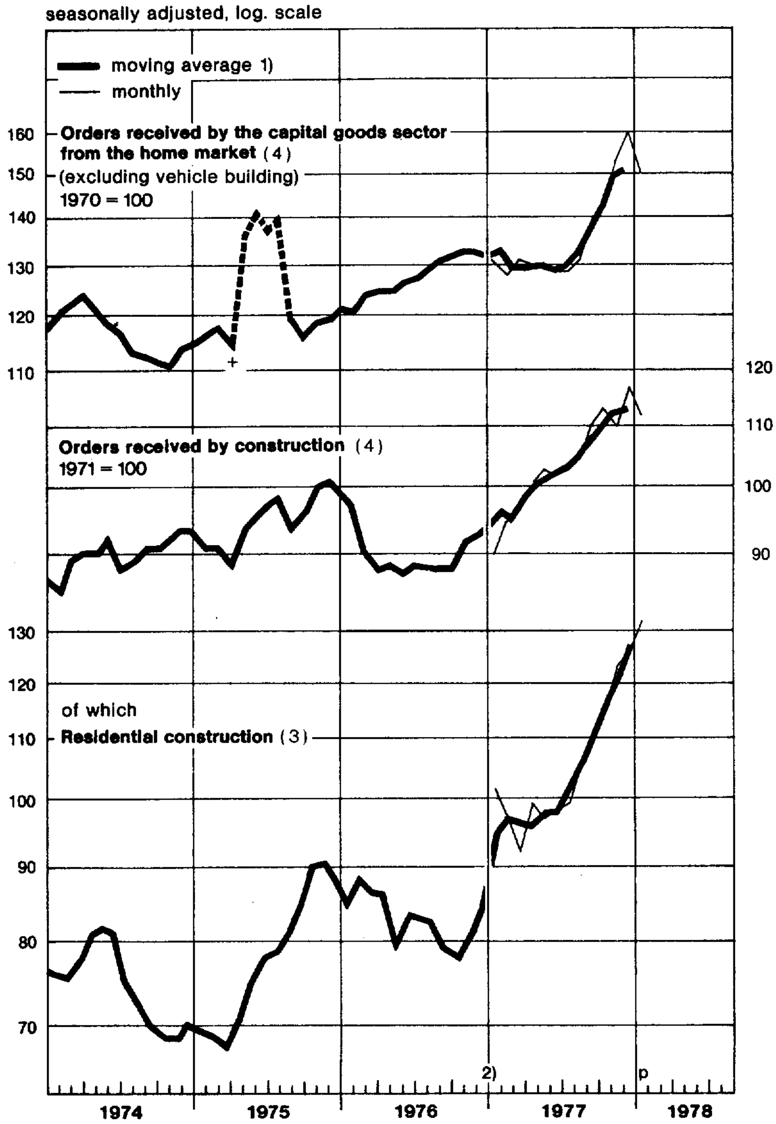
In addition, enterprises' investments were hampered to a relatively great extent in 1977 by a number of administrative obstacles. Delays in planning and authorisation procedures for individual construction projects due in part to very far-reaching statutory provisions, legal proceedings and protests by citizens' action groups, ambiguities in the legislation on environmental protection and similar hurdles held up a substantial volume of capital projects, at least some of which could certainly have been started or continued more briskly in 1977 if circumstances had been more favourable. The volume of blocked conventional and thermonuclear power station construction projects alone has been estimated at about DM 12 billion by the Federal Government, and the industries involved have put the figure even higher. Private investment decisions are also likely to have been delayed by the prolonged discussion of the new measures to stimulate economic activity and in particular to boost capital spending, which at times enhanced the tendency of investors to "wait and see". For several reasons government investment, too, was initially slow to come under way.

Rise in the demand for capital goods in the autumn in response to fiscal stimuli

The situation improved in the autumn of 1977, after the supporting programmes and tax measures adopted in the spring and summer had been supplemented by a package of new budgetary and tax regulations (see the record of economic policy measures on pages 16—17). The business community responded to these measures relatively quickly: the domestic orders received by the capital goods sector rose by 16 1/2 %, seasonally adjusted, in the fourth quarter of 1977, although this movement was slightly exaggerated by some large-scale government orders (e.g. to shipbuilding) and by the special boom in vehicle building. But even if these two sectors are disregarded, the improvement in

1 Government entrepreneurial and property income, income of the financial institutions, the Federal Railways and the Federal Post Office, and property income of households. See Monthly Report of the Deutsche Bundesbank, Vol. 30, No. 3, March 1978, p. 14.
2 Adjusted for changes in the structure of employed persons on the basis of 1977.

Demand for capital goods



1) The length of the moving average (in months) is indicated in brackets beside each curve.- 2) Owing to the adoption of a new collection technique, the continuity of the series is not assured.- + In the specially marked part of the curve the moving average is influenced by special factors in June 1975.- p Provisional.

the order situation was considerable; moreover, it persisted in the first few months of 1978. Industrial demand for construction work also increased somewhat in that period.

No stimuli imparted by stockbuilding

The business community's stockbuilding did not stimulate economic activity last year. In the first few months of 1977 the increase in stocks was relatively large, it is true, but processors and distributors showed more restraint in the later part of the year after some of their sales expectations had been disappointed. In particular, in view of the temporarily weak trend in production they had no reason to build up their stocks of raw materials, especially as the price decline that started in the spring of 1977 on several international commodity markets, together with the progressive appreciation of the Deutsche Mark, gave grounds for caution. Towards the end of last year some stocks of finished goods which had been accumulated involuntarily even appear to have been run down as demand recovered. Over the whole of 1977 expenditure on stocks was slightly lower than a year earlier.

Fiscal policy adopts an expansionary stance

In 1977 fiscal policy was obliged to adopt a new stance for cyclical reasons. The government budgets for 1977, the basic features of which had necessarily been worked out a year before, still mirrored the previous year's efforts to lower the deficits, which had been exceedingly high in the recession year 1975. This tendency towards cutting down the deficits largely determined budgetary behaviour in the first half of the year, in which on the one hand receipts rose unexpectedly fast while on the other cash expenditure grew only moderately. But when it became evident that the expansionary forces in Germany were threatening to flag, the policy of consolidating the budget was discontinued and a more expansionary stance was adopted. This stance supported economic activity in the second half of the year even though it was not fully reflected in the cash balance of the public authorities because the growth of expenditure can hardly be accelerated at short notice and most of the tax cuts did not become effective until 1978; besides, the various levels of the central, regional and local authorities cannot respond to the same extent to cyclical changes.

Measures to strengthen capital investment

As early as the turn of 1976/77 the Federal Government was planning measures designed to slow down the unexpectedly rapid reduction until then in the deficits of the central, regional and local authorities. These measures were prompted in part by the sluggish course of public capital investment, because the efforts of most public authorities to cut costs had concentrated on such expenditure, which is the easiest to influence. The government policy statement of December 1976 announced a "programme of future investments" intended to stop the decline in public capital spending and, in particular, to improve the employment situation in the construction industry. This programme was planned to extend over several years and to be financed jointly by the Federal Government, the Länder Governments and the local authorities; its volume was fixed in March 1977 at DM 16 billion. Demand for construction work was also boosted by the measures to support housing construction and to create jobs adopted in May, and by the extension in June (with retroactive effect from the beginning of 1977) of the depreciation allowance under section 7b of the Income Tax Act to include old buildings and the extension of the exemption from tax on the acquisition of land and buildings.

Plan to reduce the deficits by increasing tax revenue dropped

The reorientation of fiscal policy also meant that, in view of the surprisingly vigorous inflow of tax receipts, the intention of using the whole of the two (or one) percentage point increase in value-added tax planned from the beginning of 1978 to lower the deficits in the public budgets was relinquished. In the Bill which it submitted in March, the Federal Government proposed to employ part of the expected additional revenue to reduce income tax (in the field of special expenditure), property tax and trade tax and to improve children's allowances. On balance this package of measures would still have resulted in a rise of some DM 5 billion in receipts. However, this plan could not be realised either; in the course of the parliamentary discussion of the Bill it was decided at the end of May to limit the increase in value-added tax to one (or one half of one) percentage point, so that the additional tax revenue deriving from the raising of the tax rates in 1978 will be more or less offset by tax cuts of roughly equal size elsewhere.

Substantial tax relief approved in the autumn

Further measures to stimulate domestic demand were prepared in the summer, when the renewed weakness of economic activity became apparent. By the "Act to Reduce Taxes and Promote Capital Investment", which was passed at the end of October after prolonged discussion, diminishing balance depreciation allowances were extended and considerable wage tax and income tax relief was granted in the form of larger allowances.

Revival of public construction orders

By means of these measures fiscal policy mobilised substantial expansionary forces in the course of 1977. The construction orders placed by public authorities began to climb sharply in the second quarter of the year; between April and December they were 19 % higher than a year previously. This was largely due to the programme of future investments, under which orders totalling DM 4.5 billion (DM 1 billion more than initially envisaged) had been placed by the end of December. How far this boosted production in 1977 cannot be assessed precisely, but these orders undoubtedly exerted a beneficial influence on the economic climate, which is more than can be said of actual expenditure on fixed assets, which virtually stagnated in 1977.

Further sharp increase in spending on personnel

The rise in the total expenditure of all central, regional and local authorities (by 5 % to an estimated DM 394 billion) was mainly caused by spending on personnel, which went up by some 6 % (after adjustment for statistical changes, i.e. the elimination of some municipal hospitals from the financial statistics). This increase was largely attributable to the fact that the negotiated pay settlement for the public service was higher than in 1976; the number of persons employed by the central, regional and local authorities hardly changed in 1977. Expenditure on pensions and assistance grants (exclusive of

Finances of the public authorities *

Item	1974	1975 **p**	1976 **p**	1977 **pe**	1974 **7**	1975 **p**	1976 **p**	1977 **pe**
	DM billion				Percentage change on previous year			
Central, regional and local authorities								
Expenditure								
Personnel expenditure	108.4	117.4	123.7	130.5	+ 15.3	+ 8.3	+ 5.4	+ 5.5
Current expenditure on materials	48.9	53.1	56.3	60	+ 11.8	+ 8.5	+ 6.1	+ 6
Expenditure on transfers **1**	79.2	103.2	108.9	113.5	+ 23.7	+ 30.2	+ 5.6	+ 4
Interest expenditure	12.7	14.9	18.2	21.5	+ 17.4	+ 17.7	+ 22.2	+ 18
Fixed investments **2**	47.3	47.3	45.1	45.5	+ 11.4	+ 0.0	− 4.7	+ 0.5
Indirect investments **3**	21.2	22.7	23.5	22.5	+ 7.8	+ 7.0	+ 3.5	− 4
Total	317.7	358.5	375.8	393.5	+ 14.4	+ 12.9	+ 4.8	+ 5
of which:								
Federal Government	138.2	164.2	171.7	179	+ 11.8	+ 18.8	+ 4.6	+ 4.5
Länder Governments	132.4	145.1	153.0	160.5	+ 15.3	+ 9.6	+ 5.4	+ 5
Receipts								
Tax receipts	**4** 242.3	242.1	268.1	299.5	+ 6.8	− 0.1	+ 10.7	+ 11.5
Other receipts	49.7	52.9	57.9	62.5	+ 17.0	+ 6.5	+ 9.5	+ 7.5
Total	291.9	295.0	326.0	362	+ 8.4	+ 1.0	+ 10.5	+ 11
of which:								
Federal Government	128.1	130.1	141.5	157	+ 5.9	+ 1.6	+ 8.7	+ 11
Länder Governments	124.9	125.0	137.6	152.5	+ 9.9	+ 0.0	+ 10.1	+ 11
Cash deficit (−) **5**	− 26.4	− 64.7	− 49.6	− 32	.	.	.	.
of which:								
Federal Government	− 10.1	− 34.0	− 30.1	− 22	.	.	.	.
Länder Governments	− 8.0	− 21.2	− 15.1	− 8.5	.	.	.	.
Social security funds								
Expenditure	150.7	177.5	193.7	208.5	+ 18.3	+ 17.8	+ 9.1	+ 8
Receipts	153.9	174.0	193.6	203	+ 12.7	+ 13.1	+ 11.2	+ 5
Cash surplus (+) or deficit (−) **6**	+ 3.5	− 3.4	− 1.0	− 6	.	.	.	.
Public authorities, total								
Expenditure	448.7	508.8	541.4	575	+ 15.2	+ 13.4	+ 6.4	+ 6
Receipts	426.1	441.8	491.6	537.5	+ 9.2	+ 3.7	+ 11.3	+ 9.5
Cash deficit (−)	− 22.9	− 68.0	− 50.6	− 38	.	.	.	.

* For the first time including special-purpose municipal associations (among the central, regional and local authorities) and supplementary pension funds for government employees (among the social security funds). — **1** Including transfer of the EEC share in taxes. — **2** Cash expenditure is recorded here, whereas the production of public capital goods is shown in the government account of the national accounts. — **3** Expenditure on investment grants and loans to third parties, and the acquisition of participations. — **4** Including stability surcharge and investment tax. — **5** The differences between the balance of receipts and expenditure and the cash deficit are due to special transactions. — **6** Based on the change in financial assets, which differs slightly from the balance of booked receipts and expenditure. — **7** Calculation of growth rates based on the earlier definition (i.e. excluding special-purpose municipal associations and supplementary pension funds). — **p** Provisional. — **pe** Partly estimated. Discrepancies in the totals are due to rounding.

the social security funds) and the spending of the central, regional and local authorities on materials are estimated to have risen by 4½ % and 6½ % respectively.

Unexpectedly steep growth of tax revenue

While total expenditure went up almost one percentage point less than was to be expected according to the budgets, the deviations (in the opposite direction) on the receipts side were rather greater. Last year the receipts of the central, regional and local authorities grew by 11 % (to some DM 362 billion), whereas the budgets and tax estimates had anticipated an increase of 9½ % (on the assumption, moreover, of a rise in taxable income that was much steeper than it turned out to be). Taxes yielded 11½ % more than in 1976 and thus almost 2 %, or over DM 5 billion, more than envisaged in December 1976 (when it was not yet possible to take account of the tax reductions approved in 1977). The surprisingly high level of tax receipts was mainly due to the revenue from assessed income tax, corporation tax and trade tax. Massive final payments had to be made in 1977 as a result of assessments for earlier years, notably for 1975, when advance payments had been reduced drastically. Mainly no doubt in connection with this, advance payments were raised sharply; given the favourable liquidity situation, taxpayers are also less likely than usual to have requested deferment of payment. Corporation tax yielded particularly large amounts; here the reform which entered into force at the beginning of 1977 made itself felt for the first time. Enterprises had to make larger quarterly advance payments in 1977 as the tax rates for them had risen, while the corporation tax paid by companies on their dividends will not be deducted from the income tax liability of shareholders until 1978 at the earliest; in the long run, however, the abolition of the double burden on distributed profits under this reform will lead to a tax cut.

Deficit of the central, regional and local authorities declines, but that of the social security funds increases

As expenditure rose slightly less than planned while receipts increased appreciably more strongly, the decline in the deficit of the central, regional and local authorities turned out to be much greater than had been intended at the end of 1976 and the beginning of 1977. In 1977 as a whole the deficit of all central, regional and local authorities seems to have amounted to DM 32 billion, which is almost DM 18 billion less than in 1976; at the time the last Annual Report of the Bundesbank was written a deficit of about DM 40 billion was still expected on the basis of the budgets (and certain adjustments that were obviously required). On the other hand, the deficit of the social security funds[1] grew by DM 5 billion (to DM 6 billion) in 1977. This was mainly because, in accordance with the old adjustment procedure, pensions were raised at mid-year by 10 % — a rate that was largely determined by the steep pay increases in 1973/74. Receipts, by contrast, went up by only about 5 %. The overall public sector deficit in 1977, at an estimated DM 38 billion, was therefore just over DM 12 billion smaller than a year before; this decline, too, was sharper than had been assumed at the beginning of 1977.

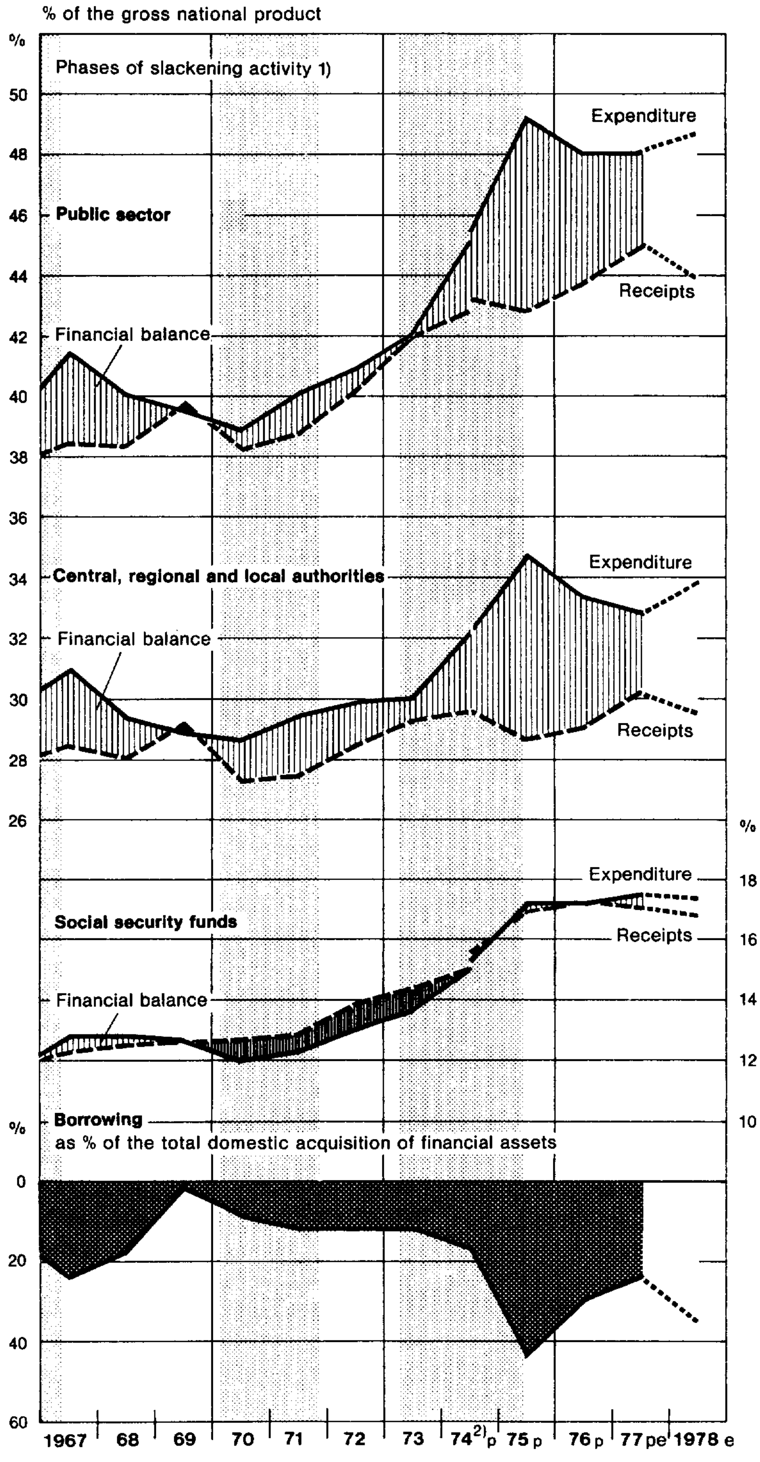
Stimulatory policy not fully reflected in the cash position until 1978

As stated before, however, the decline in the cash deficit in 1977 does not present an accurate picture of the influence of the public authorities on economic activity last year. The contraction of the deficit suggests that to this extent the public authorities created less income than in the preceding year, but in general this is true only of the first half of 1977. It applies even less if account is also taken of the measures which were initiated in 1977 but mostly will not be reflected in the cash position until 1978; these measures already had a significant impact on the course of economic activity last year. From the present perspective the deficits of the public sector (including the social security funds) might reach DM 60 to 65 billion in 1978; compared with 1977 this would imply an expansionary "swing" of between DM 20 and 25 billion. Expressed as a proportion of the gross national product and defined in accordance with the national accounts,[2] the public sector financial deficit would thus amount to some 4½ % (against 2¾ % in 1977) and hence be very large, also by international standards. In the United States (where Federal deficits are usually accompanied by surpluses at state and local government level) the public sector deficit is expected to come to only 1 % of the national product in 1978. In the United Kingdom and France the 1978 public sector deficits have been estimated at 3½ % and not quite 1 % of the national product, respectively, although in these countries unemployment presents an even more serious problem than in Germany. The public sector deficit in prospect in Germany in 1978 thus turns out to be very large in every

1 Including the supplementary pension funds for government employees.

2 Internationally comparable figures are available only in this definition; the main difference between these figures and the cash data is that transactions relating to public lending are not entered as expenditure or receipts in the national accounts.

Public finance against the background of economic activity



1) As measured by the decline in the trend-adjusted industrial production figures (excluding construction and energy).- 2) From 1974 including special-purpose associations and supplementary pension funds for government employees.- p Provisional.- pe Partly estimated.- e Estimated.

respect; the Federal Government has repeatedly asserted that the limits to the acceptable expansion of the deficit have been reached.

Consumer demand a mainstay of economic activity

The demand of households for consumer goods was a mainstay of domestic economic activity in 1977. In all, individuals spent about 7% (1976: 8%) more than a year earlier on consumption; calculated at constant prices private consumption rose by 3%. In particular, purchases of durable consumer goods increased. Above all, car purchases continued at an undiminished pace in 1977; the very high passenger car registration figures

Basic economic data in the Federal Republic of Germany

Item	Unit	1974	1975	1976	1977	1974	1975	1976	1977
						Percentage change on previous year			
Aggregate demand									
Private consumption	DM billion	527.6	574.6	621.9	665.1	+ 7.3	+ 8.9	+ 8.2	+ 6.9
Public consumption	DM billion	194.0	215.2	227.5	240.2	+ 16.4	+ 10.9	+ 5.7	+ 5.6
Fixed capital formation	DM billion	216.4	214.5	232.9	247.8	− 4.0	− 0.9	+ 8.5	+ 6.4
Machinery and equipment	DM billion	76.5	82.3	91.4	98.4	− 4.1	+ 7.7	+ 11.1	+ 7.7
Buildings	DM billion	139.9	132.2	141.5	149.4	− 4.0	− 5.5	+ 7.0	+ 5.6
Expenditure on stocks	DM billion	+ 5.5	− 3.4	+ 13.4	+ 12.7	·	·	·	·
Domestic expenditure	DM billion	943.5	1000.9	1095.7	1165.8	+ 5.9	+ 6.1	+ 9.5	+ 6.4
Net exports of goods and services **1**	DM billion	43.4	29.4	28.1	27.5	·	·	·	·
Exports	DM billion	276.2	272.1	310.4	328.0	+ 28.6	− 1.5	+ 14.1	+ 5.7
Imports	DM billion	232.8	242.7	282.3	300.5	+ 25.4	+ 4.3	+ 16.3	+ 6.5
Gross national product at current prices	DM billion	986.9	1030.3	1123.8	1193.3	+ 7.3	+ 4.4	+ 9.1	+ 6.2
Memorandum item:									
Orders received by manufacturing	1970 = 100	138.9	135.9	154.7	**x** 156.5	+ 8.4	− 2.2	+ 13.8	**x** + 1.2
Domestic orders	1970 = 100	124.6	127.9	139.5	**x** 142.9	+ 3.6	+ 2.6	+ 9.1	**x** + 2.4
Foreign orders	1970 = 100	184.7	162.2	204.5	**x** 200.1	+ 20.1	− 12.2	+ 26.1	**x** − 2.2
Income									
Gross wage and salary income	DM billion	560.6	583.8	624.7	668.3	+ 10.0	+ 4.1	+ 7.0	+ 7.0
Memorandum item:									
Gross wages and salaries per employee	DM thousand	20.9	22.4	24.0	25.6	+ 11.4	+ 7.2	+ 7.0	+ 6.9
Gross entrepreneurial and property income	DM billion	211.8	218.1	252.2	260.0	+ 0.1	+ 3.0	+ 15.6	+ 3.1
National income	DM billion	772.4	801.9	876.9	928.2	+ 7.1	+ 3.8	+ 9.3	+ 5.9
Wage ratio **2**	%	72.6	72.8	71.2	72.0	·	·	·	·
Production									
Gross national product at 1970 prices	DM billion	765.7	746.8	789.1	808.0	+ 0.4	− 2.5	+ 5.7	+ 2.4
do. per man-hour worked (productivity)	1970 = 100	118.4	121.4	128.0	132.5	+ 3.4	+ 2.5	+ 5.5	+ 3.5
Overall production potential at 1970 prices **3**	DM billion	775	790	810	835	+ 2.5	+ 2	+ 2.5	+ 3
Utilisation of production potential **3**	%	99	94.5	97	97	·	·	·	·
Output in the producing sector (excluding construction)	1970 = 100	111.3	105.0	112.7	**x** 116.1	− 1.4	− 5.7	+ 7.3	**x** + 3.0
Employment									
Employed persons	Millions	26.2	25.3	25.1	25.0	− 1.9	− 3.4	− 0.9	− 0.5
Wage and salary earners	Millions	22.2	21.4	21.3	21.3	− 1.8	− 3.5	− 0.5	+ 0.0
Foreign workers	Millions	**e** 2.3	2.1	1.9	...	**e** − 5.3	**e** − 11.5	− 6.6	...
Memorandum item:									
Total number of man-hours worked	1970 = 100	95.2	90.6	90.8	89.8	− 2.9	− 4.9	+ 0.2	− 1.1
Unemployed persons	Thousands	582	1074	1060	1030	+ 113.2	+ 84.5	− 1.3	− 2.8
Unemployment ratio **4**	%	2.6	4.7	4.6	4.5	·	·	·	·
Prices									
GNP deflator	1970 = 100	128.9	138.0	142.4	147.7	+ 6.9	+ 7.0	+ 3.2	+ 3.7
Cost of living index for all households	1970 = 100	127.1	134.7	140.8	146.3	+ 7.0	+ 6.0	+ 4.5	+ 3.9
Producer prices of industrial products	1970 = 100	129.4	135.5	140.7	144.4	+ 13.4	+ 4.7	+ 3.9	+ 2.6
Memorandum item:									
Unit labour costs in the economy as a whole **5**	1970 = 100	135.9	145.2	146.3	152.1	+ 9.6	+ 6.8	+ 0.8	+ 4.0

1 Balance of merchandise and service transactions with the rest of the world (including GDR). — **2** Gross wage and salary income as a percentage of national income. — **3** Calculated by the Bundesbank, rounded figures. — **4** Unemployed persons as a percentage of the dependent labour force. — **5** Index of gross wages and salaries per employee divided by index of real GNP per employed person. — The data from the national accounts from 1975 onwards are provisional. — **x** Owing to the adoption of a new collection technique, the continuity of the series is not assured. — **e** Estimated.

for 1976 were exceeded considerably (by nearly 11 %) last year. The stock of passenger cars thus increased to over 20 million; at about 330 cars per 1,000 inhabitants the degree of motorisation is only a little lower than in countries which are not really comparable to Germany owing to their size or their less extensive public transport network (e.g. the United States, Canada, Australia). In addition, roughly 13 % more than a year earlier was spent on furniture. Expenditure on holidays and recreation also rose relatively sharply. On the other hand, the increase in expenditure on food, drink and tobacco was below the average, and households spent distinctly less than in 1976 on fuel, not least because of the mild winter. Taken as a whole, the development of and structural changes in private consumption expenditure show features typical of a flourishing economy.

Disposable income grows less than consumption expenditure

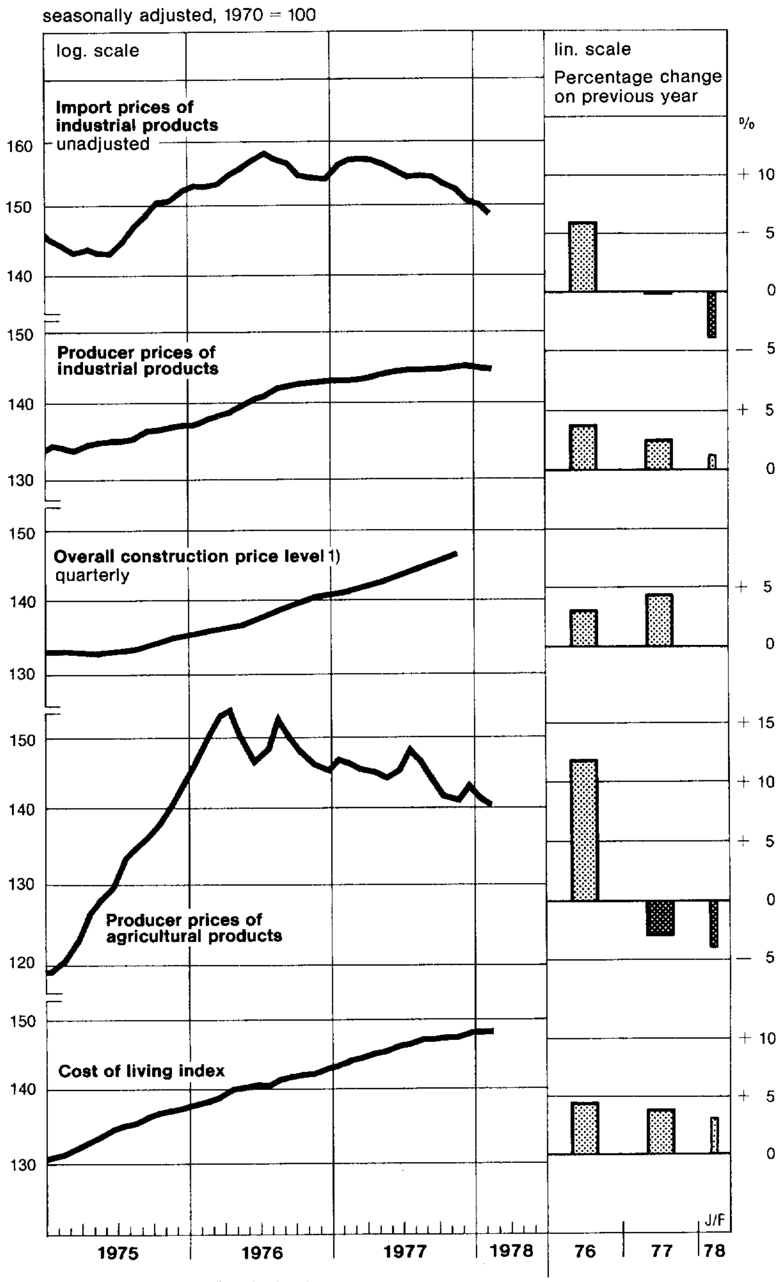
Last year, as in 1976, the disposable income of households grew more slowly than private consumption expenditure. After allowing for deductions, net income from wages and salaries increased by 6 % in 1977 and income from pensions and assistance grants by as much as 7 %. Against this, the rise in private withdrawals by self-employed persons (which are only a residual) and in income from financial assets was rather small, in the latter case owing to the steady fall in interest rates. All in all, the increase in households' income in 1977, at 6 %, was about one percentage point below that in consumption. Private consumption was thus partly funded by a lower propensity to save last year: the saving ratio, i.e. the ratio of current saving to disposable income, declined again in 1977 (to not quite 15 %); in 1976 it had stood at 15 1/2 % and in 1975 at no less than 17 %.[1] An important factor in this context was that in 1977 bonus-carrying savings deposits with banks (including interest and bonuses credited) amounting to nearly DM 30 billion were released; this was about DM 15 billion more than in 1976. The major part of the previously blocked funds was reinvested, but sizable amounts were used to buy additional goods. Some of the above-mentioned massive purchases of passenger cars and other durable consumer goods were presumably made with these funds. Moreover, private building owners appear to have used some of this money to carry out major repairs to houses, especially as they could draw on the financial assistance granted under the Act concerning the Modernisation of Housing passed in mid-1976. None of these developments, and particularly not the decrease in the saving ratio, implies that consumers and savers are viewing economic conditions with less optimism. The close-meshed social security network and the fact that the financial position of individuals is largely protected from the effects of cyclical changes thus constitute a stabilising element in the sphere of private consumption.

Sharp increase in the demand for housing

Relatively large amounts were spent on the acquisition of housing last year. In all, expenditure on the construction of housing was 7 % larger than in 1976; the number of dwellings completed, at an estimated 410,000, exceeded the 1976 figure by 4 1/2 %. The share of dwellings in new one and two-family houses, most of which are constructed for private clients, increased again; in 1977 it amounted to about 60 %, against 57 % in 1976 and 39 % in 1973. Of the housing construction permits granted in 1977, roughly 70 % were for dwellings in one and two-family houses. Furthermore, an increasing number of the dwellings which had to be taken over by property development companies and banks at the peak of the construction crisis (1973/74), when no purchasers could be found in the difficult circumstances prevailing at that time, passed into private hands last year. This "stockpile" of dwellings — particularly of ones intended for owner-occupation — seems to have been substantially run down in the meantime. This is suggested by the fact that the number of construction permits for apartment houses — both flats for letting and owner-occupied dwellings — has been tending to increase again since mid-1977. Altogether, the value of the house-building orders awarded to the construction industry in 1977 was over one quarter higher than a year before; in the second half of 1977 alone the growth amounted to as much as nearly 40 %. The mortgage loans on residential real estate promised by banks have been rising even more sharply for some time. Although the redemption of older high-interest-bearing loans certainly played a part in this, the heavy demand for mortgage loans shows that financing terms in the field of housing construction are now regarded as extremely favourable. The effective inter-

1 For methodological reasons the saving ratio of households as ascertained here is about one percentage point higher than that published by the Federal Statistical Office. This is because of the differing treatment of employees' claims on company pension funds. The Federal Statistical Office likewise regards the increase in such claims as part of the acquisition of financial assets, but it records this process not in the context of saving from disposable income but as a capital transfer by enterprises to households.

Prices



1) Calculated by the Bundesbank.

est rate for housing loans is in fact historically very low at present, at about 6%; only once since the war (at the end of the fifties) has it temporarily been lower.

Further progress in the stabilisation of prices

In 1977 further progress was made towards price stability. This owed much to the fact that German importers were able to buy relatively cheaply abroad because prices steadied on international commodity markets and also because the Deutsche Mark appreciated; in 1977 the average import prices of industrial products were no higher than in 1976. At the end of 1977 foreign industrial goods cost about 2% less than a year earlier, and in February 1978 they were 5½% cheaper than a year before. As competition in Germany was so keen, these cost reductions were often passed on to customers in sales prices, or at least they enabled domestic rises in the costs incurred by trade and industry to be partially offset. Not least for this reason, the increase in the producer prices of industrial products sold in Germany has slowed down distinctly of late; since the beginning of the autumn it has in fact virtually come to a halt, after seasonal adjustment. At

More moderate growth of industrial sales prices

Record of economic policy measures

1977 — **I. Domestic and external monetary policy**

February 3 — With effect from March 1 the Bundesbank changes its procedure for calculating minimum reserves. To avoid sudden jumps in required reserves, the old system of reserve classes for banks with different volumes of liabilities subject to reserve requirements is replaced by a progressive scale of reserve ratios, identical for all banks. This change is accompanied by a curtailment of the privileges granted to banks located in places without a Bundesbank office (reduction in the required reserves: some DM 1 billion).

March 3 — The banks' rediscount quotas are raised by DM 2.5 billion with effect from March 4.

March 9 — To support the money market, the Bundesbank buys trade bills in the open market on condition that they are repurchased by the banks after 20 days or — as from April 13 — after ten days (interest rate: 4%).

April 1 — The exchange rates of the Scandinavian currencies in the European narrower margins arrangement are realigned: the Swedish krona is devalued by 6% and the Danish and Norwegian kroner are devalued by 3% each with effect from April 4.

May 18 — The minimum reserve ratios are lowered by 5% with effect from June 1; this releases DM 2.3 billion of central bank money. As from the same date the banks' rediscount quotas are raised by DM 2.5 billion. Purchases of trade bills under repurchase agreement are discontinued as from May 31.

July 5 — The Bundesbank again buys trade bills on condition that the banks repurchase them after ten days (interest rate: 4%).

July 14 — The Bundesbank lowers the lombard rate by $\frac{1}{2}$ percentage point to 4% with effect from July 15. At the same time the interest rate on open market operations under repurchase agreement is reduced to $3\frac{3}{4}$% (as from July 27: $3\frac{1}{2}$%).

August 25 — The banks' rediscount quotas are raised by about DM 2 billion with immediate effect. At the same time the minimum reserve ratios are lowered by 10% of their previous level with effect from September 1 (liquidity released: about DM 4.5 billion).

August 28 — Sweden terminates its association with the European narrower margins arrangement with effect from August 29; at the same time the Danish and Norwegian kroner are devalued by 5% each.

September 5 — Purchases of trade bills under repurchase agreement are temporarily suspended.

September 22 — The Bundesbank renews its offer to the banks to buy trade bills on condition that they repurchase them after ten days (interest rate: $3\frac{1}{2}$%). These open market operations under repurchase agreement are discontinued again as from November 4.

December 15 — The Bundesbank announces its monetary growth target for 1978. The central bank money stock is to rise at an average annual rate of 8%. Given steady growth, this is equivalent to an increase of between 5 and 7% in central bank money between the fourth quarter of 1977 and the fourth quarter of 1978.

In addition, the discount rate is lowered from $3\frac{1}{2}$% to 3% and the lombard rate from 4% to $3\frac{1}{2}$% with effect from December 16. The reserve ratios on the banks' external liabilities are raised with effect from January 1, 1978 to 20% for sight liabilities (previously 12.75%), 15% for time liabilities (previously 8.95%) and 10% for savings deposits (previously 5.65%). Furthermore, the growth of external liabilities over their average level in the base period October/November/December 1977 is subjected to an additional minimum reserve ratio of 80%. The acquisition by non-residents of domestic securities with maturities of more than two but not more than four years will no longer be authorised in future.

1978

January 4 — The Bundesbank grants the U.S. Treasury a credit line which may be drawn on for the purpose of intervening in the dollar market. This credit line supplements the existing swap arrangement between the Bundesbank and the Federal Reserve System.

January 19 — As from March 1 the banks may include domestic legal tender in the required minimum reserves, while the privileges granted to banks located in places without a Bundesbank office are abolished. To compensate for the relief associated with this inclusion of cash balances, the minimum reserve ratios on liabilities to residents are raised by 8%.

February 10 — The Norwegian krone is devalued by 8% within the European narrower margins arrangement with effect from February 13.

March 10 — The Bundesbank again buys trade bills on condition that the banks repurchase them after ten days (interest rate: $3\frac{1}{4}$%).

March 13 — The Bundesbank and the Federal Reserve System agree to increase their existing reciprocal swap arrangement by $ 2 billion to a total of $ 4 billion. At the same time the U.S. Treasury arranges for the sale of SDR 600 million to the Bundesbank in order to purchase Deutsche Mark.

April 1	The amended Articles of Agreement of the International Monetary Fund (IMF) and the increase in quotas to SDR 39 billion approved in 1976 enter into force.
1977	**II. Economic and fiscal policy**
January 1	The corporation tax reform and the increase of about one fifth each in tobacco tax and in spirits tax enter into force.
January 27	The Federal Government presents the 1977 Annual Economic Report. It considers restoring and safeguarding a high level of employment to be the central problem of economic policy in the next few years. It points out that the structural causes of unemployment can be eliminated only in the longer run. To accomplish this, progress in the stabilisation of prices and a lasting increase in enterprises' propensity to invest are required. For 1977 the Federal Government aims at a development designed to achieve real economic growth averaging about 5% over the year.
February 16	The Federal Cabinet approves the 20th pension adjustment with effect from July 1, 1977 and legal changes to improve the financial basis of the pension and health insurance funds. The principal measures are the postponement of the 21st pension adjustment until January 1, 1979, a partial updating of the general assessment basis and the introduction of pension insurance contributions for unemployed persons to be paid by the Federal Labour Office. The Act to Curb the Expansion of the Cost of Health Insurance is mainly intended to limit the rise in expenditure on medical services and medicaments.
March 2	The Federal Government approves a bill on tax concessions for the construction or acquisition of certain residential buildings (extension of the depreciation allowance under section 7b of the Income Tax Act to include old buildings and extension of the exemption from tax on the acquisition of land and buildings), with retroactive effect from the beginning of 1977.
March 23	The Federal Government adopts a DM 16 billion "programme of future investments" extending over several years. At the same time it approves the 1977 Tax Amendment Bill providing on the one hand for an increase in value-added tax to 13% or 6.5% as from January 1, 1978 and on the other for cuts in income tax (in the field of special expenditure), property tax and trade tax, and for improvements in children's allowances. On balance the measures are expected to bring in DM 5.5 billion of extra revenue in 1978.
May 25	The Federal Government decides to expand and continue the regional housing construction programme and to provide additional funds for job creation measures.
June 16	The Bundestag adopts the 1977 Tax Amendment Act, which is passed by the Bundesrat on July 15; the rate of value-added tax is raised to only 12% or 6% as from January 1, 1978, so that the new burdens and reliefs resulting from this Act roughly offset each other.
June 24	The Bundestag approves the 1977 Federal budget, which totals over DM 171 billion and shows a financial deficit of DM 21 billion.
September 14	The Federal Government approves measures to foster growth and employment, most of which are included in a Bill to Reduce Taxes and Promote Capital Investment (raising of the Christmas allowance for wage and salary earners from DM 100 to DM 400, raising of the basic income tax allowance by DM 510 for single persons and DM 1,020 for married couples, extension of diminishing balance depreciation allowances); the loss of tax revenue is estimated at DM 1.5 billion in 1977 and DM 7 billion in 1978. Furthermore, a DM 4.5 billion energy conservation programme, to be financed half each by the Federal Government and the Länder Governments, is proposed for the period from 1978 to 1981.
October 27	The Bundestag approves a compromise worked out by the Mediation Committee regarding the Act to Reduce Taxes and Promote Capital Investment. This provides that, notwithstanding the Bill, the basic income tax allowance is raised by only DM 300 for single persons and DM 600 for married couples, but that a general allowance of DM 510 and DM 1,020 respectively is introduced as well. The prospective loss of tax revenue in 1978 as a result of the Act rises to over DM 10 billion.
November 21	In its Annual Report the Council of Experts for Assessing Overall Economic Trends welcomes the stimulatory measures of the public authorities in view of the fact that economic growth fell far short of expectations in 1977. It emphasises the role of wages as a major component of costs. The crucial requirement is restraint in wage policy, through which an expansion of production and employment is most likely to be attainable.
1978	
January 26	In its Annual Economic Report the Federal Government states that safeguarding a self-sustaining, durable economic upswing remains the central problem for 1978. This is an essential precondition for the creation of sufficient jobs and hence for a gradual reduction of unemployment. Capital investment plays a key role in this context; if it is to be strengthened, the increase in costs and prices must be curbed and the profitability of enterprises improved. Considering the position at the beginning of 1978, the Federal Government regards an average real economic growth rate of about 3½% over the year as being within reach.
January 27	The Bundestag approves the 1978 Federal Budget, which totals DM 188.5 billion and shows a financial deficit of DM 31 billion.
March 8	The Federal Government adopts measures to consolidate the finances of the pension insurance funds. The increase in pensions in 1979 is limited to 4½% and that in the next two years to 4%. The contribution rate will be raised by ½ percentage point in 1981.

the end of 1977 industrial producer prices were only about 1½% higher than a year previously and in the first few months of 1978 the year-on-year growth rate decreased even further. The decline in prices was most pronounced among products that were particularly exposed to foreign competition, notably products of the basic and producer goods industries, whose sales prices at the end of 1977 and in February 1978 were nearly 2% lower than a year earlier. By contrast, industrial end-products continued to increase in price. In February 1978 finished capital goods were 3% dearer than a year before, and finished consumer goods cost 2% more.

Faster increase in construction prices

On the other hand, the rise in construction prices accelerated in 1977. On an average these prices were 4½% up on the year, compared with 3% and 2½% in the two preceding years. This may reflect the fact that the distinct growth of demand in the course of 1977 was accompanied by a relatively inelastic supply, since construction capacities have been reduced considerably in the last few years; complaints about a shortage of skilled construction workers are increasing as well.

Slower rise in consumer prices

Consumers have benefited from the stable food prices since the middle of 1977; as a result of the ample harvest, producers' sales prices fell quite sharply in some cases. Furthermore, the pace of price increases in the energy sector decelerated; petroleum products even became cheaper. The sustained fierce competition in the distributive trades, aided by the opportunities to purchase inexpensively abroad, limited the growth of the prices of most other industrial goods. By contrast, the prices of services rose at an above-average rate. In 1977 the cost of living index was 3.9% higher than a year before on an average, but its growth slowed down significantly in the course of the year. At the end of 1977 consumer prices were 3.5% higher than a year earlier, and in March 1978, when they were affected by the raising of value-added tax (normally from 11% to 12%), they were only an estimated 3% up on the year.

Price differential vis-à-vis foreign countries widens again

In 1978 Germany again started the year with a much lower rate of price rises than most other countries in the western world. Compared with the increase in consumer prices in selected industrial countries accounting for over two thirds of German foreign trade, the average growth of prices in Germany in 1977 was 5% smaller; only towards the end of the year did the price differential narrow slightly on account of the progress made abroad during 1977 in the fight against inflation. At the end of 1977 the external value of the Deutsche Mark vis-à-vis the currencies of these countries was nearly 7% higher than a year before. The rate of appreciation thus distinctly exceeded the inflation differential between Germany and other countries. The problems this fact poses for Germany will be dealt with later on in this Report.

2. Monetary policy supports the economic recovery

(a) The monetary growth target and its attainment

Monetary growth target for 1977

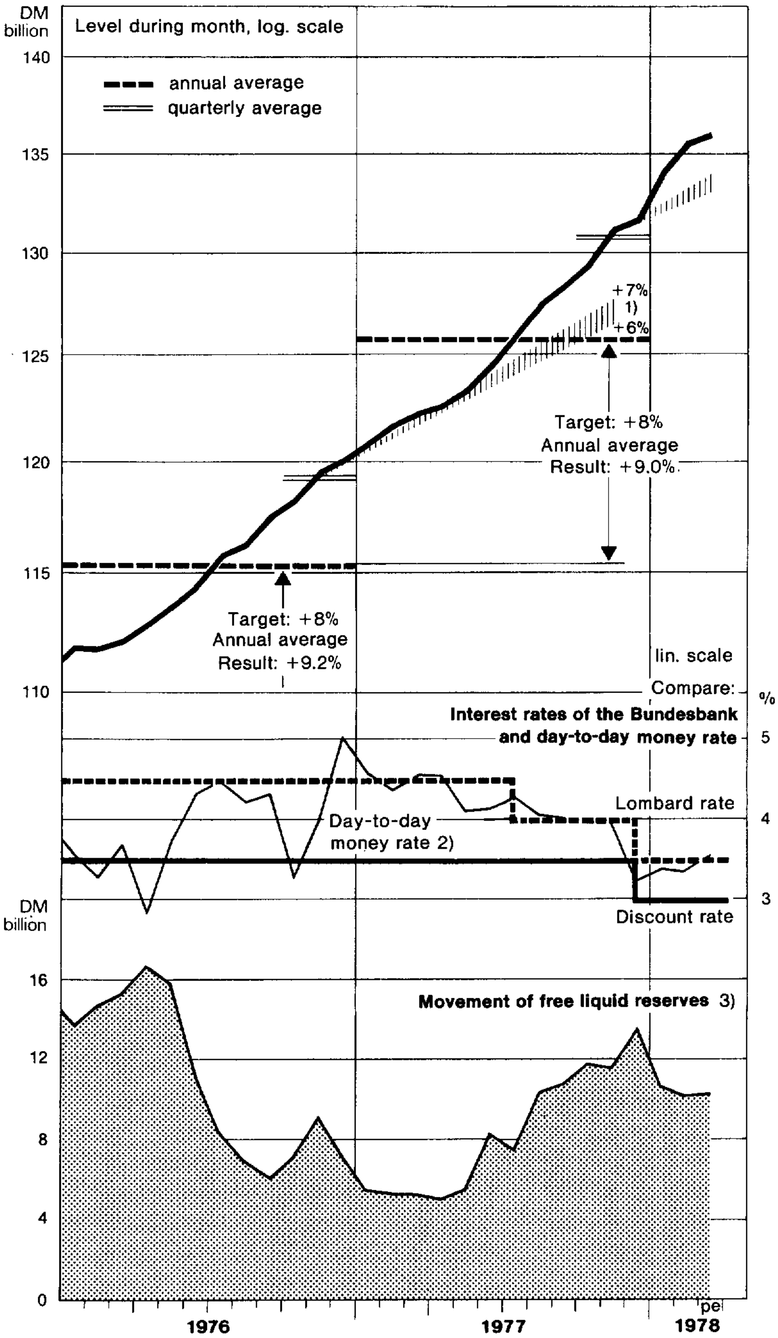
For 1977, as for the preceding year, the Bundesbank adopted and announced the target of an average annual growth of 8% in the central bank money stock as a guideline for monetary policy. It believed that it best served the twofold objective of economic policy — strong economic growth to bring about better utilisation of capacities plus a further reduction in the pace of price rises — in this way. At the beginning of last year the central bank money stock was already relatively far above its average level in the previous year because of its rapid growth in the second half of 1976, so that the 8% target corresponded to a steady growth of only 6 to 7% between the fourth quarter of 1976 and the fourth quarter of 1977.

Growth on target in the first few months ...

... but sharp acceleration later on

At the beginning of 1977 the increase in the central bank money stock was largely in line with the target. In subsequent months, too, central bank money rose comparatively little, and an initial quickening of the pace of monetary growth in May could be interpreted as a normalisation. In the first five months of 1977 the seasonally adjusted central bank money stock grew at an annual rate of just on 7%, with only minor fluctuations; it was thus "on target". In June 1977, however, monetary growth began to speed up sharply, and it continued to accelerate with hardly any interruptions of note until the beginning of 1978. In the seven remaining months of 1977 — i.e. between June and December — the central bank money stock rose at an annual rate of 12%; in the fourth quarter of 1977 the corresponding level of the previous year was exceeded by 9.6%. Initial differences

Growth of the central bank money stock
Targets and movement to date *



* Seasonally adjusted, calculated at constant reserve ratios (base: January 1974).-
1) Given steady growth, the average target would have been achieved at this rate of increase (between the fourth quarter of 1976 and the fourth quarter of 1977).-
2) Monthly averages.- 3) Excess balances, open market paper which the Bundesbank has undertaken to purchase and unused rediscount quotas.- pe Partly estimated.

in the growth rates of the currency and minimum reserve components were largely eliminated over the year; the year-on-year increase in currency in the fourth quarter was 10.0% and that in the minimum reserve component 9.2%. On an average the central bank money stock was 9.0% higher in 1977 than in 1976.

Monetary growth target for 1977 exceeded, particularly in the course of the year

The original target of 8% was thus overshot, but not by so very much more than the tolerance that must be allowed such targets even when they are formulated in terms of a single figure rather than a range. However, it has to be borne in mind that a target formulated in terms of an annual average already includes a greater margin for the growth of the money stock during this period than a target relating to a period of months or quarters. In fact, the acceleration of monetary growth from mid-1977 onwards resulted in a greater deviation from the target than is implied by the average annual figure.

Similar growth for all definitions of the money stock

The acceleration of monetary growth since May/June 1977 is reflected in other monetary aggregates, with minor time-lags, in much the same way as in the central bank money stock. This indicates that the strongest monetary expansion since 1972 has taken place without any substantial shifts between the various components of the money stock: currency in circulation, sight deposits, time deposits (for less than four years) and savings deposits at statutory notice all grew at virtually the same pace, namely by about 11 % each. The increase between the end of 1976 and the end of 1977 amounted to 11.2 % for the money stock in the narrowest definition (currency and sight deposits = M1), 11.1 % for M2 (M1 plus time deposits and borrowed funds) and 11.0 % for M3 (M2 plus savings deposits at statutory notice). Although this concurrence of the figures is partly due to chance, it does illustrate that the assessment of the vigorous monetary expansion is not dependent on the money stock definition chosen.

Fairly strong credit expansion on the whole

Among the various factors contributing to the growth of the money stock, credit expansion — i. e. lending by the banking system (including the Bundesbank) to domestic non-banks — was not unusually strong in 1977, at 9.6 %, but in view of the simultaneous reduction in monetary capital formation it was above the level that would have been compatible with the quantitative monetary target. The increase in lending to the private sector, at 8.9 %, was about as great as in 1976 and distinctly larger than in 1974 and 1975. Overall credit expansion owed much less than in preceding years to advances to public authorities, which went up by 11.5 % in 1977 compared with a peak of 35.6 % in 1975. Inflows of funds from abroad, by contrast, enhanced monetary expansion only a little in 1977 as a whole. The net external assets of the banks (including the Bundesbank) rose by DM 10.1 billion in 1977 compared with DM 8.3 billion in 1976, for example. This picture was greatly modified by the waves of speculation that began towards the end of the year, but this did not significantly affect the result for 1977.

Shifts between the money stock and monetary capital formation

A major factor in the strong expansion of the money stock was that monetary capital formation at banks was relatively sluggish in 1977, i. e. that the banks' longer-term liabilities to domestic customers (notably savings deposits at agreed notice, savings bonds, bank bonds and long-term time deposits and borrowed funds) went up comparatively little. The amount invested in these forms increased by 7.5 % in 1977; it thus grew more slowly than the money stock (as mentioned, 11 %) while normally the opposite applies. This was mainly because savings deposits at agreed notice hardly rose at all (by 0.5 %). Among such deposits, a special group is formed by bonus-carrying savings deposits, which in most cases cannot be withdrawn until about seven years after the conclusion of the savings contract without forfeiting the savings bonuses for the entire amount saved. In 1977 the blocking period of an unusually large amount of such investments expired. In all, deposits totalling DM 25.2 billion (or 51.6 % of the level at the beginning of the year) were released in 1977; this was substantially more in both absolute and relative terms than in any previous year. (Inclusive of bonuses and interest credited the amount available to savers came to no less than some DM 30 billion.) Furthermore, the increase in bonus-carrying savings deposits resulting from current inpayments was only a little higher than in preceding years, so that on balance such deposits declined for the first time (by DM 9 billion) in 1977. Savings deposits at agreed notice which are not eligible for bonuses also grew comparatively slowly (+7.6 %), and much the same goes for most of the other components of monetary capital formation, above all the bank bonds held by domestic non-banks, which went up by only 6.5 % in 1977. It would therefore be incorrect to attribute the comparatively low level of monetary capital formation in 1977 entirely to special factors such as the massive release of bonus-carrying savings deposits.

(b) The role of monetary policy

Monetary policy in a conflict between current problems . . .

Monetary policy did not counteract the accelerating monetary expansion in the course of 1977 even though it was obvious as early as the autumn that the monetary growth target would be overshot. Considering what would have been the most effective means of containing this expansion (namely raising interest rates or at least preventing them from falling, especially in the money market), it becomes clear that this would have brought monetary policy into conflict with the current objectives of economic policy in two re-

Monetary developments

Change during period 1

Item	1974	1975	1976 Total	1976 January to June	1976 July to December	1977 Total	1977 January to June	1977 July to December
	DM billion							
A. Creation of central bank money and free liquid reserves of the banks 2								
1. Net external position of the Bundesbank	− 2.8	− 2.1	+ 8.3	+ 5.4	+ 2.8	+ 8.4	− 0.3	+ 8.7
2. Net balances of central and regional authorities (increase: −)	− 3.0	+ 1.7	+ 3.7	− 0.4	+ 4.0	+ 5.0	+ 1.6	+ 3.4
3. Changes in compulsory special reserves and rediscount quotas	+ 16.7	+ 9.8	− 4.4	− 4.6	+ 0.2	+ 14.8	+ 8.1	+ 6.7
4. Open market operations	− 1.5	+ 11.6	− 8.6	− 1.6	− 7.0	− 0.7	− 0.4	− 0.3
5. Lombard loans	+ 2.0	− 2.0	+ 6.5	− 0.2	+ 6.6	− 6.5	− 5.7	− 0.8
6. Unspecified determinants	− 4.0	+ 0.8	− 5.1	− 3.3	− 1.9	− 3.7	− 2.3	− 1.4
Central bank money stock and free liquid reserves (1 to 6)	+ 7.4	+ 19.9	+ 0.3	− 4.6	+ 4.9	+ 17.3	+ 1.0	+ 16.3
Central bank money stock **3**	+ 5.8	+ 9.5	+ 7.9	− 0.9	+ 8.8	+ 10.9	+ 0.0	+ 10.9
Free liquid reserves of the banks **4**	+ 1.6	+ 10.4	− 7.6	− 3.7	− 3.9	+ 6.3	+ 1.0	+ 5.4
Memorandum items:								
Level of free liquid reserves in the last month of the period	4.5	14.9	7.3	11.2	7.3	13.6	8.3	13.6
Lombard loans outstanding in the last month of the period	2.8	0.8	7.3	0.6	7.3	0.8	1.6	0.8
	Seasonally adjusted, in % 5							
B. Key monetary indicators								
Central bank money stock **2, 6**	+ 6.4	+ 10.0	+ 8.3	+ 6.4	+ 10.1	+ 9.8	+ 7.7	+ 12.0
Memorandum item:								
As an average of the years or half-years	+ 6.1	+ 7.8	+ 9.2	+ 9.1	+ 9.3	+ 9.0	+ 8.7	+ 9.4
Lending by banks and the Bundesbank to domestic non-banks	+ 7.7	+ 10.4	+ 10.1	+ 11.2	+ 9.0	+ 9.6	+ 9.7	+ 9.4
M1 (= currency in circulation and sight deposits)	+ 11.1	+ 13.5	+ 3.9	+ 9.6	− 1.5	+ 11.2	+ 13.3	+ 9.2
M2 (= M1 plus time deposits for less than 4 years)	+ 5.0	− 0.4	+ 6.7	+ 8.2	+ 5.2	+ 11.1	+ 8.3	+ 14.1
M3 (= M2 plus savings deposits at statutory notice)	+ 8.4	+ 8.5	+ 8.4	+ 9.6	+ 7.1	+ 11.0	+ 8.4	+ 13.8
	DM billion							
C. Money stock and its counterparts								
Money stock M3 (= C 1 plus 2 less 3 less 4 less 5)	+ 35.2	+ 38.4	+ 41.0	+ 2.9	+ 38.1	+ 58.9	− 0.0	+ 59.0
Counterparts in the balance sheet:								
1. Bank lending **7**	+ 59.8	+ 85.5	+ 91.2	+ 34.9	+ 56.4	+ 94.2	+ 30.6	+ 63.6
2. Net external assets **7**	+ 13.2	+ 16.8	+ 8.3	+ 7.1	+ 1.2	+ 10.1	+ 4.9	+ 5.2
3. Monetary capital **8**	+ 34.5	+ 61.3	+ 59.1	+ 29.5	+ 29.6	+ 42.9	+ 22.5	+ 20.4
4. Central bank deposits of domestic public authorities	+ 0.4	+ 1.4	− 10.2	− 3.8	− 6.4	− 0.8	+ 3.1	− 4.0
5. Other influences	+ 2.9	+ 1.2	+ 9.6	+ 13.3	− 3.8	+ 3.3	+ 9.9	− 6.6

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 and required reserves on the banks' domestic liabilities at current reserve ratios. — **4** Excess balances, domestic money market paper which the Bundesbank has promised to purchase and unused rediscount quotas. — **5** Half-yearly changes expressed as an annual rate. — **6** Reserve component calculated at constant reserve ratios (base: January 1974). — **7** Banks and the Bundesbank. — **8** Excluding savings deposits at statutory notice.
Discrepancies in the totals are due to rounding.

spects. First, this applies to economic activity, which stagnated in the summer months as described above and which did not appear certain to turn upwards even in the subsequent period. A rapid expansion of the money stock undoubtedly assists an economic upswing, but a contraction, in conjunction with a reversal in the interest rate trend, might have increased the risk of a cyclical setback. Second, a restrictive monetary policy would have been at variance with external requirements. From the summer onwards the upward tendency of the Deutsche Mark accelerated, and the appreciation of the Deutsche Mark was soon noticeably greater than would have been consistent with the inflation and cost differentials between Germany and other countries. Seen from this point of view, indeed, further monetary relaxations were called for instead, and they were effected by various measures of the Bundesbank that will be discussed below. The Bundesbank was able to take such measures, notwithstanding the faster expansion of the money stock, because it was not to be expected that they would have an adverse impact on the price level in the shorter run. The "real" appreciation of the Deutsche Mark was and still is acting as a major curb on price rises in Germany.

. . . and longer-term requirements

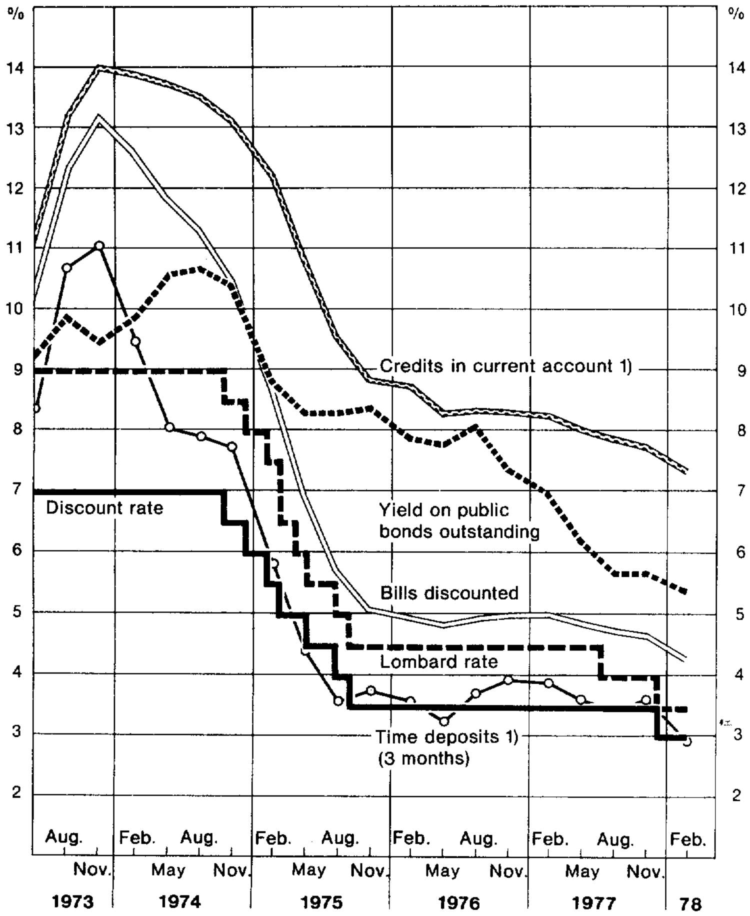
However, the fact that the Bundesbank deliberately accepted the risk of a major divergence from its quantitative monetary target does not imply that it abandoned the more medium-term orientation which has marked its policies since 1975, as shown among other things by the fact that it also announced a monetary growth target for 1978. The Bundesbank had to assume from the outset that there may be periods in which the pursuit of an "intermediate target variable", as reflected in the announced growth rate of the central bank money stock, cannot be given priority; it is then necessary to consider whether to tolerate the non-attainment of the original target or to revise the target. In 1977, as in 1976, the Bundesbank decided not to change the target but to explain the reasons for the divergence. Besides the economic reasons already mentioned — the temporary faltering of business activity and the strong appreciation of the Deutsche Mark — a significant factor was that the causes of the sharp expansion of the money stock could not be determined unequivocally. It is of course tempting to ascribe the steep increase in liquid funds in the economy and the comparatively low propensity to invest at longer term which caused this increase primarily to the movement of interest rates. If interest rates drop sharply (and the decline in rates on long-term assets was if anything more pronounced than that in rates on shorter-term investments), this reduces the loss of interest that arises if the funds are invested in liquid form rather than at longer term and thus at higher rates of interest. In the longer run it must be borne in mind, however, that large holdings of liquid funds press to be converted into purchases of goods. Precisely this is one of the mechanisms underlying the stimulatory effect of an expansionary monetary policy, which, while it may be desirable in the short run (as at present), in the long term may have adverse consequences on the value of money if it results in additional monetary scope for passing on cost increases in prices, the prevention of which is one of the main objectives of the more medium-term orientation of monetary policy.

The significance of the "velocity of circulation"

When the money stock is expanding rapidly and economic activity is at the same time comparatively sluggish, as was sometimes the case in 1977, the question of the significance of the "velocity of circulation of money" arises as well. This "velocity of circulation" is statistically defined as the relationship between the money stock and the gross national product in the same period; hence it changes whenever the growth rates of the two variables diverge. When the money stock grows faster than the nominal gross national product, the "velocity of circulation" falls, and when the nominal national product grows faster than the money stock, it rises. In the case of the central bank money stock the swings either way in the "velocity of circulation" used to cancel each other out over time, i. e. in trend the gross national product and the central bank money stock increased at the same rate. But for three years now the central bank money stock has been rising more steeply than the gross national product, particularly so in 1975 and 1977.

For monetary policy this raises the question of whether this development represents a permanent new relationship, a lasting change in the pattern of cash holding, or whether a counter-movement is inevitable sooner or later. For the relatively low "velocity of circulation" of recent years there are a number of explanations, some of which support the thesis of a temporary change while others rather suggest that the change will be permanent. To regard the fluctuations in the "velocity of circulation" as cyclical in origin and

Movement of selected bank interest rates since mid-1973



1) Of under DM 1 million.

hence the individual swings as temporary is in fact in line with past experience; hitherto, at least, the "velocity of circulation" has risen in upswings and fallen at times of slackening economic growth or in recessions. Such an explanation is plausible for 1975, but not for 1976, an upswing year, and it accounts at best for only part of the decline in the "velocity of circulation" in 1977. Changes in the "velocity of circulation" are also to be considered temporary when the money stock rises as a result of exogenous influences, such as large inflows of foreign exchange or the release of substantial amounts of previously blocked savings, since the general public is unable to withdraw its sharply increased liquid funds quickly. Such influences may have been operative in 1977; towards the end of 1977 and in January and February 1978 monetary expansion was given an extra boost from abroad. On the other hand, other factors may be contributing to a lasting decline in the "velocity of circulation", i. e. an increase in cash holding relative to income and turnover. This would be likely, for instance, if the decrease in inflationary expectations and the associated marked reduction in the interest rate level were prolonged, since comparatively low interest rates and a high degree of confidence about the purchasing power of money encourage the holding of liquid funds. Finally, it is also conceivable that shifts in the distribution and use of income may result in a permanently greater propensity to hold cash. The very high growth rate of currency in circulation, particularly in the recent past, is striking; between 1964 and 1974, with a single exception (1972), it rose slightly less than the gross national product, but at present rather the reverse is true. This may owe something to the fact that pensioners' incomes, which are drawn on in cash to a comparatively large extent, have gone up disproportionately fast in the last few years. Moreover, cash payment is unquestionably gaining ground again in some fields, notably in the "grey areas" of business activity where services are rendered without taxes and social security contributions and settled in cash. It is also possible that holdings of Deutsche Mark notes abroad have increased more strongly. Of course, these are largely conjectures which cannot be substantiated, particularly in the case of currency circulation, the distribution of which among the general public is not known.

In the last analysis, therefore, it is not possible to say whether a lasting change has taken place in the "velocity of circulation" and, if so, whether this adequately explains why the money stock has been rising much faster than the national product for the last three years. Nor, accordingly, can a clear answer be given to the question of whether this steep increase in liquidity involves the risk of providing scope for inflation in the longer run. The Bundesbank is aware that this possibility cannot be ruled out, and that it would have to take greater account of it if, in particular, a strong upswing occurred and led to the activation of the cash resources that are now lying idle.

(c) The measures of the Bundesbank in detail

Joint action by interest rate policy and liquidity policy

The monetary relaxations introduced in 1977 included both interest rate and liquidity policy measures. The Bundesbank lowered the lombard rate twice last year, from 4½% to 4% on July 15 and from 4% to 3½% on December 16. The discount rate, which had stood at 3½% since September 1975, was reduced to 3% on December 16. The lombard rate has thus come down to its lowest level, which it has reached only once before in the last 100 years (for a period of just under two years in the second half of the sixties). Only for a few months in 1959 has the discount rate ever been lower. In the course of last year the banks' free liquid reserves[1] rose from DM 7.3 billion (December 1976) to DM 13.6 billion (December 1977), the greater part of the increase occurring in the second half of the year. Since then they have fallen somewhat again, partly on seasonal grounds.

Significance of the free liquid reserves

The rise in the free liquid reserves indicates that, through its transactions with the banks, the Bundesbank on balance created more central bank balances than were needed for complying with minimum reserve requirements and expanding the currency circulation, so that the central bank finance available to the banks increased, as it also did through the raising of the rediscount quotas. However, under the conditions prevailing in the last few years the banks apparently do not attach as much importance to the growth of the free liquid reserves as they used to. To comply with its minimum reserve requirements the individual bank does not have to possess free liquid reserves, for it can obtain central bank money in the money market; any shortage of liquidity would be indicated to it only by the interest rates ruling there. Given the present stance of monetary policy, however, the lombard rate forms the upper limit of the rate for day-to-day money, and the additional cost of such funds is low. The banks therefore frequently raise lombard loans even when they could easily meet their needs of central bank money by taking up rediscount credit, the interest rate on which is lower. In these circumstances the banks are prepared to pay the slightly higher rate of interest on lombard loans in order to gain the extra flexibility permitted by this type of refinance, which can be used for precisely the number of days required. In the first half of the year relatively large amounts of lombard credit were taken up at the Bundesbank at times. Presumably even more would have been raised in the second half of the year, when the difference between the lombard and discount rates was reduced to ½ percentage point, if there had been any need. Owing to developments in the market, however, such credit was not required; moreover, comparatively large use was made of a facility the Bundesbank offered the banks on several occasions, namely that of buying trade bills in the open market on condition that the banks repurchased them, mostly after ten days. The interest rates implicitly charged were at first exactly half-way between the lombard and discount rates, but from the end of July to the beginning of November 1977 they were identical with the discount rate; since mid-March 1978 they have again been between the discount and lombard rates.

The central bank money stock (i.e. currency in circulation and the required minimum reserves on domestic liabilities, in this context calculated at current reserve ratios) grew

1 The free liquid reserves consist almost entirely of unused rediscount quotas (including commitments to buy prime bankers' acceptances and "Limit B" bills of the Export Credit Company and "Limit II" bills of the Industrial Plant Finance Company). The only other component is excess balances in accounts at the Bundesbank (essentially as a safety margin in the banks' minimum reserve account management). For some years there have been no "securities included in the Bundesbank's money market regulating arrangements", i.e. Treasury bills or discountable Treasury bonds held by the banks and returnable to the Bundesbank before maturity. The banks' short-term external assets have not been included in the free liquid reserves since 1973.

Lending by the monthly reporting banks to domestic non-banks

Change during year

Banking group	Year	Lending to domestic non-banks (including lending based on the purchase of securities): Total	Enterprises and individuals: Total	Enterprises and individuals, of which: Enterprises 1 (excluding housing)	Enterprises and individuals, of which: Employees (excluding housing)	Enterprises and individuals, of which: Housing	Public authorities: Total	Public authorities, of which: Federal Government 2	Public authorities, of which: Länder Governments	Public authorities, of which: Local authorities and local authority associations
		DM billion								
All banks	1976	+96.3	+65.8	+33.1	+ 13.1	+19.3	+ 30.6	+ 11.3	+12.1	+ 7.1
	1977	+95.8	+69.1	+28.1	+ 13.7	+26.8	+ 26.7	+ 14.5	+ 8.1	+ 4.1
Commercial banks	1976	+26.0	+18.0	+10.4	+ 4.1	+ 3.5	+ 8.0	+ 6.3	+ 1.3	+ 0.3
	1977	+23.6	+16.5	+ 7.3	+ 3.5	+ 5.8	+ 7.1	+ 5.3	+ 1.1	+ 0.6
Big banks	1976	+13.7	+ 9.7	+ 5.2	+ 2.3	+ 2.2	+ 4.0	+ 3.6	+ 0.4	− 0.0
	1977	+ 7.6	+ 6.8	+ 2.7	+ 1.5	+ 2.6	+ 0.8	+ 1.1	− 0.2	− 0.0
Regional banks and other commercial banks	1976	+10.5	+ 6.7	+ 3.6	+ 1.8	+ 1.3	+ 3.8	+ 2.5	+ 1.0	+ 0.4
	1977	+14.1	+ 8.4	+ 3.4	+ 1.9	+ 3.2	+ 5.7	+ 3.7	+ 1.2	+ 0.7
Branches of foreign banks	1976	+ 0.7	+ 0.6	+ 0.6	− 0.0	+ 0.0	+ 0.2	+ 0.2	− 0.0	+ 0.0
	1977	+ 0.6	+ 0.2	+ 0.2	+ 0.0	− 0.0	+ 0.4	+ 0.4	+ 0.0	+ 0.0
Private bankers	1976	+ 1.1	+ 1.1	+ 1.2	+ 0.0	− 0.1	+ 0.0	+ 0.0	− 0.0	− 0.0
	1977	+ 1.3	+ 1.1	+ 1.0	+ 0.1	+ 0.0	+ 0.2	+ 0.1	+ 0.1	− 0.0
Central giro institutions	1976	+ 7.1	+ 2.2	+ 1.7	+ 0.2	+ 0.3	+ 4.9	+ 0.9	+ 2.9	+ 1.2
	1977	+13.1	+ 6.1	+ 3.6	+ 0.4	+ 2.0	+ 7.0	+ 3.3	+ 2.0	+ 1.7
Savings banks	1976	+24.0	+19.1	+ 8.5	+ 4.9	+ 5.6	+ 4.9	+ 0.7	+ 1.3	+ 2.8
	1977	+22.1	+19.8	+ 6.8	+ 5.5	+ 7.3	+ 2.3	+ 1.3	+ 0.9	+ 0.1
Central institutions of credit cooperatives	1976	− 0.3	+ 1.2	+ 1.3	+ 0.0	− 0.1	− 1.4	− 1.5	+ 0.0	+ 0.0
	1977	+ 2.4	+ 0.9	+ 0.6	+ 0.0	+ 0.3	+ 1.5	+ 1.5	+ 0.0	+ 0.0
Credit cooperatives	1976	+13.5	+13.0	+ 5.5	+ 2.9	+ 4.5	+ 0.5	+ 0.2	+ 0.1	+ 0.2
	1977	+13.1	+12.9	+ 5.0	+ 3.1	+ 4.7	+ 0.2	+ 0.4	+ 0.0	− 0.2
Mortgage banks	1976	+19.7	+ 8.2	+ 2.2	− 0.0	+ 5.9	+ 11.5	+ 4.1	+ 6.0	+ 1.4
	1977	+19.4	+10.7	+ 3.3	− 0.0	+ 7.3	+ 8.7	+ 3.1	+ 3.9	+ 1.7
Instalment sales financing institutions	1976	+ 1.4	+ 1.4	+ 0.4	+ 1.0	+ 0.0	+ 0.0	+ 0.0	+ 0.0	+ 0.0
	1977	+ 1.7	+ 1.6	+ 0.5	+ 1.1	− 0.0	+ 0.1	+ 0.1	+ 0.0	+ 0.0
Other banking groups 3	1976	+ 4.9	+ 2.6	+ 2.9	+ 0.1	− 0.4	+ 2.2	+ 0.6	+ 0.5	+ 1.1
	1977	+ 0.3	+ 0.6	+ 1.0	+ 0.1	− 0.5	− 0.3	− 0.5	+ 0.0	+ 0.2
		%								
All banks	1976	+10.9	+ 9.4	+ 8.6	+ 23.3	+ 7.6	+ 16.9	+ 18.6	+28.2	+ 9.4
	1977	+ 9.8	+ 9.0	+ 6.7	+ 19.8	+ 9.8	+ 12.7	+ 20.1	+14.7	+ 4.9
Commercial banks	1976	+13.2	+10.4	+ 7.8	+ 25.9	+15.6	+ 32.5	+ 40.7	+28.5	+ 7.4
	1977	+10.6	+ 8.7	+ 5.1	+ 17.6	+22.4	+ 21.7	+ 24.2	+18.8	+13.7
Big banks	1976	+16.7	+13.7	+ 9.1	+ 25.5	+49.4	+ 35.1	+ 35.5	+38.7	x
	1977	+ 8.0	+ 8.5	+ 4.3	+ 13.6	+38.8	+ 5.3	+ 7.7	−12.3	x
Regional banks and other commercial banks	1976	+11.5	+ 8.4	+ 6.3	+ 31.2	+ 7.6	+ 33.3	+ 58.1	+31.1	+ 9.0
	1977	+13.8	+ 9.7	+ 5.8	+ 24.0	+17.0	+ 37.1	+ 55.3	+30.3	+15.1
Branches of foreign banks	1976	+ 7.1	+ 6.0	+ 6.4	x	x	+ 21.4	+ 37.9	x	x
	1977	+ 6.7	+ 2.6	+ 2.4	x	x	+ 50.1	+ 53.2	x	x
Private bankers	1976	+ 7.7	+ 8.3	+ 9.7	+ 0.8	−13.3	+ 0.0	+ 9.1	x	x
	1977	+ 8.2	+ 7.5	+ 7.3	+ 13.6	+ 1.1	+ 18.2	+ 14.8	x	x
Central giro institutions	1976	+ 4.6	+ 2.2	+ 2.8	+ 16.4	+ 0.8	+ 9.0	+ 5.9	+19.2	+ 4.8
	1977	+ 7.9	+ 5.7	+ 5.6	+ 31.4	+ 5.1	+ 11.7	+ 20.5	+11.3	+ 6.6
Savings banks	1976	+11.9	+12.0	+12.4	+ 28.3	+ 7.9	+ 11.6	+ 12.8	+23.4	+ 9.3
	1977	+ 9.8	+11.1	+ 8.8	+ 24.9	+ 9.5	+ 5.0	+ 20.0	+13.5	+ 0.2
Central institutions of credit cooperatives	1976	− 1.9	+12.3	+14.1	x	− 6.9	− 32.4	− 38.7	+ 9.3	+28.6
	1977	+17.8	+ 8.9	+ 6.6	x	+26.9	+ 49.6	+ 61.6	+ 0.0	+ 3.7
Credit cooperatives	1976	+16.0	+16.4	+13.1	+ 23.1	+19.6	+ 9.5	+ 10.2	+21.5	+ 7.1
	1977	+13.4	+13.9	+10.3	+ 20.5	+17.0	+ 4.2	+ 22.7	+ 5.5	− 5.5
Mortgage banks	1976	+12.2	+ 6.5	+ 8.0	x	+ 6.1	+ 33.1	+ 50.4	+41.4	+11.8
	1977	+10.9	+ 8.1	+10.7	x	+ 7.2	+ 19.2	+ 25.7	+19.5	+13.0
Instalment sales financing institutions	1976	+10.1	+ 9.9	+ 8.7	+ 10.5	+ 7.1	x	x	x	x
	1977	+11.3	+10.5	+ 9.6	+ 11.1	− 1.1	x	x	x	x
Other banking groups 3	1976	+ 8.7	+ 6.5	+ 7.7	x	− 9.8	+ 14.5	+ 5.4	+19.9	+60.8
	1977	+ 0.5	+ 1.3	+ 2.4	x	−15.5	− 1.5	− 3.8	+ 1.1	+ 4.9

1 Including self-employed persons. — 2 Including Equalisation of Burdens Fund and ERP Special Fund. — 3 Banks with special functions and postal giro and postal savings bank offices. — x Not worth showing since the amounts outstanding are of little significance. Discrepancies in the totals are due to rounding.

by some DM 11 billion in 1977. Even so, the banks' free liquid reserves increased by about DM 6 billion last year, as mentioned, and lombard loans amounting to DM 6.5 billion were repaid if the December 1977 figure is compared with that of December 1976. In all, therefore, some DM 24 billion of bank liquidity was created; it chiefly stemmed from — and was almost equally divided among — purchases of foreign exchange by the Bundesbank (DM 8 billion), the lowering of the minimum reserve ratios (DM 8 billion) and the raising of the rediscount quotas (DM 6.5 billion). The reduction in the public authorities' net balances at the Bundesbank (DM 5.0 billion) also enlarged liquidity; it was accompanied by contractionary "other influences" of similar size (DM 4 billion).

(d) Interest rate trends

Declining money market and bank interest rates

Owing to the interest rate and liquidity policy measures of the Bundesbank, money market rates have been declining, with minor fluctuations, since April 1977; this applies both to the rates for day-to-day money and to those for one-month and three-month funds, which were quoted at about 3½% in March 1978 compared with about 4.7% at the beginning of 1977. Interest rate competition among the banks for customers' deposits was not very keen in 1977, as usual at times when conditions in the money market are easy. The interest rates paid on time deposits and borrowed funds, which are a good indicator of the banks' "demand for money", fell continuously during the year if the usual effects of the end-of-year operations of banks on the interest rates for three-month time deposits are left out of account. Depending on the size of the deposits, these rates were between 1.1 and 1.3 percentage points lower in March 1978 than at the beginning of 1977. The interest rates on savings deposits were also on an average 1 percentage point lower than a year before. Since February 1978 the interest rate on most savings deposits at statutory notice has been only 2½%, for the first time since December 1950.

In their lending business the banks passed on the reduction in the cost of funds to borrowers, but it is not yet clear whether their interest margin remained unchanged or widened somewhat. The interest rates charged for short-term bank loans (see the chart on page 23) fell on an average by between 0.7 and 1.0 percentage points between the end of 1976 and March 1978. Credits of under DM 1 million in current account at present (March 1978) cost an average of 7.3%, and those of over DM 1 million about 6.2%. The banks charge an average rate of 4.3% for discounting bills. Interest rates on long-term loans have fallen by as much as 1.5 percentage points since the end of 1976. In March 1978 the average effective rate payable on mortgage loans secured by first mortgages on residential real estate was 6.1%; only once since the war (in the late fifties) has a lower level been recorded.

Long-term interest rate reaches its lowest level

The long-term interest rate, as measured by the yield on bonds outstanding, dropped sharply in 1977 from 7.4% at the beginning of the year to 6% in September, at which level it remained until the end of the year. Early in 1978, however, it began to move downwards again: by the end of March it had fallen as low as 5.6%. The bonds of the Federal Government and its special funds, which are regarded as market leaders, are now bearing interest at the rate of only 5.2%. The movement of interest rates in the bond market largely paralleled that in other markets and was significantly influenced by it, primarily because the banks resumed their predominant role as buyers of bonds, as will be described later on. However, the fall in the long-term interest rate was possible only because confidence in the development of the value of money grew further at the same time. Interest rates in the bond market have now dropped distinctly below the previous lowest level since the war, which was recorded in the summer of 1959. In international terms they are lower than in all other major industrial countries except Switzerland.

(e) Bank lending

Housing and consumer credit well to the fore

Lending by the monthly reporting banks to domestic non-banks (including credits based on the purchase of securities) grew by DM 96 billion in 1977; this was nearly as much as in 1976, the year with the largest-ever credit expansion in absolute terms. The greater part of this expansion was accounted for by bank lending to enterprises and individuals, which increased by DM 69 billion in the year under review and thus slightly more than in 1976 (DM 66 billion). Of the lending to the private sector, notably housing loans rose faster than before. In 1977 they went up by DM 27 billion net, which was even more than

Acquisition of financial assets by the domestic non-financial sectors * p

Item	1975 DM billion	1975 % of total	1976 DM billion	1976 % of total	1977 DM billion	1977 % of total	Memo item: Level 1977 DM billion	Memo item: Level 1977 % of total
Funds placed with financial institutions								
1. Funds placed with banks	82.1	58.9	69.2	45.8	83.5	56.4	983.9	54.3
Currency and sight deposits	23.2	16.6	4.6	3.0	20.4	13.8	235.8	13.0
Time deposits and borrowed funds	–16.3	–11.7	18.9	12.5	24.2	16.4	246.5	13.6
Savings deposits	67.3	48.2	36.3	24.0	27.8	18.8	453.8	25.0
Bank savings bonds	8.0	5.7	9.4	6.3	11.1	7.5	47.8	2.6
2. Funds placed with building and loan associations	7.3	5.2	6.9	4.6	6.5	4.4	88.9	4.9
3. Funds placed with insurance enterprises	16.3	11.7	17.7	11.7	19.7	13.3	194.5	10.7
Acquisition of securities	16.0	11.5	27.3	18.1	17.2	11.6	261.7	14.4
1. Bonds	10.7	7.7	24.7	16.3	14.5	9.8	169.4	9.3
2. Shares	5.3	3.8	2.6	1.7	2.7	1.8	92.3	5.1
Acquisition of other financial assets 1	17.9	12.8	29.9	19.8	21.1	14.3	285.0	15.7
Acquisition of financial assets by the non-financial sectors, total	139.6	100	150.9	100	148.1	100	1814.0	100
Households	104.3	74.7	100.3	66.5	98.7	66.7	1109.0	61.1
Enterprises	30.2	21.7	44.6	29.6	44.5	30.1	438.0	24.2
Government	5.1	3.6	5.9	3.9	4.8	3.2	267.0	14.7
Memorandum item:								
Incurrence of liabilities by the non-financial sectors, total	138.9	100	151.9	100	151.7	100	1774.0	100
Households	7.3	5.2	14.0	9.2	13.1	8.6	89.0	5.0
Enterprises	66.9	48.2	91.1	60.0	102.0	67.2	1345.0	75.8
Government	64.7	46.6	46.8	30.8	36.6	24.1	340.0	19.2
Financial surplus (+) or deficit (–)	0.6	.	– 1.0	.	– 3.6	.	40.0	.
Households	97.0	.	86.3	.	85.6	.	1020.0	.
Enterprises	–36.7	.	–46.5	.	–57.4	.	–907.0	.
Government	–59.7	.	–40.8	.	–31.8	.	– 73.0	.

* Households, enterprises (including housing), government (including social security funds). — **1** Mainly claims on the rest of the world. — **p** Provisional figures.
Discrepancies in the totals are due to rounding.

in 1972, the boom year for residential construction (DM 24.5 billion). At the end of 1977 housing loans made up 36.2% of the total volume of lending to the private sector (as against 34.6% in 1972). Promises of housing mortage loans, which constitute only part (albeit the greater part) of the banks' housing loans, likewise rose strongly in the year under review: the new mortgage loans promised by the banks for housing construction purposes amounted to DM 21.5 billion compared with just over DM 16 billion in 1976. Employees continued to increase in importance as borrowers from banks, taking up almost DM 14 billion of new loans (primarily at long term) in 1977 after having enlarged their bank debt by some DM 13 billion in 1976. The outstanding volume of such credit rose by 20% in 1977 and thus far more steeply than all other types of lending. At the end of 1977 it accounted for roughly one tenth of the total volume of lending to the private sector, compared with 7.4% at the end of 1974.

Relatively low demand of major industries for credit

Lending to industry (excluding housing), by contrast, increased much more slowly — by 6.7% — in 1977, although in absolute terms enterprises remained the principal borrowers from banks, as in 1976. In all, the banks granted loans totalling DM 28 billion to enterprises in 1977 (compared with DM 33 billion in 1976). A breakdown by industry, however, shows widely differing trends. The distributive trades, which had borrowed exceptionally heavily from banks (DM 11 billion) in 1976, raised a "mere" DM 5 billion in 1977. The service and manufacturing sectors, on the other hand, took up much more bank credit in 1977 than in the preceding year. Most of the loans to the manufacturing sector went to four industries: mechanical engineering and vehicle building, electrical engineering, the food, drink and tobacco industry and the wood, paper and printing industry. Their borrowing from banks grew at annual rates ranging between 6% and 9% (compared with 5% for the manufacturing sector as a whole). The other sectors, such as the chemical industry and the iron and steel industry, hardly took up any new funds from banks at all in 1977 (in line with the slack state of their business) or even — like the plastics, rubber and asbestos processing industry — reduced their bank debt.

Borrowing requirements of public authorities

The public authorities borrowed DM 27 billion from banks in 1977, compared with DM 31 billion in 1976 and DM 48 billion in 1975. The Federal Government accounted for DM 14.5 billion of this amount; hence it raised more bank loans in 1977 than in the preceding year (DM 11.3 billion) even though its overall borrowing requirement was smaller than in 1976. The Länder Governments and local authorities, by contrast, took up less credit from banks than a year before. It is noteworthy that in 1977 — as in 1976 — the funds raised by the public authorities were almost entirely at long term. In large part they consisted of communal loans, which the lending institutions financed by issuing communal bonds in the bond market. Altogether, lending to the public authorities at the end of 1977 was 12.7 % higher than a year previously. Thus it still rose distinctly faster, in relative terms, than lending to enterprises and individuals (9 %), but the banks' debtor structure shifted only a little in favour of the public authorities.

Differences among the various banking groups

The extent to which the individual banking groups participated in the expansion of lending to domestic non-banks varied widely. Growth rates ranged from 17.8 % for the central institutions of credit cooperatives to 0.5 % for banks with special functions. As shown by the table on page 25, the average growth rate of just on 10 % was exceeded primarily by banks which lend mainly to small and medium-sized businesses, the housing sector and individuals, i.e. which have a wide range of customers, so that changes in the demand structure largely cancel each other out. This is true of the credit cooperatives and the group of "regional banks and other commercial banks", whose lending grew by 13.4 % and 13.8 % respectively. It is striking that the latter — as already in 1976 — also granted a large amount of communal loans in 1977. Moreover, the mortgage banks (which do not include the central giro institutions, which likewise conduct issuing business) also expanded their domestic lending sharply (10.9 %). The reason for the rapid growth of their lending — apart from the favourable terms on which they were able to obtain funds in the capital market — was partly that the demand for mortgage loans rose sharply and partly that the public authorities' financial requirements remained fairly large. No less than one third of the new bank loans to public authorities was accounted for by the mortgage banks. The growth rate of the savings banks' volume of credit corresponded to the average figure (9.8 %). The big banks and central giro institutions, by contrast, increased their lending to domestic non-banks comparatively little last year, at about 8 % each. To some extent this may have been because the credit needs of these banks' principal customers — major industrial enterprises — grew only moderately. However, precisely these borrowers are more able than others to meet part of their credit requirements in foreign credit markets, sometimes at lower rates of interest.

(f) Trends in the bond market

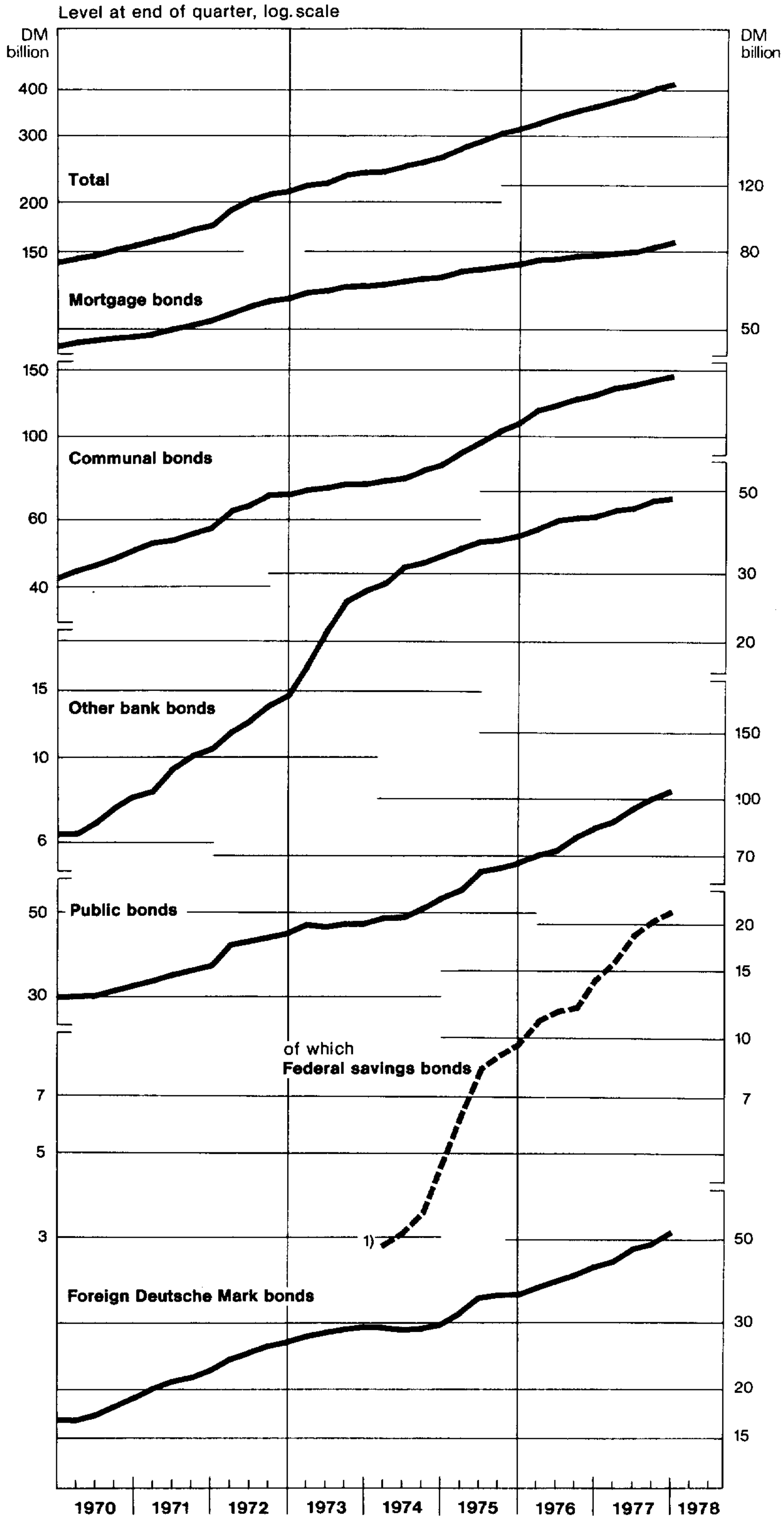
Financing operations in the economy as a whole

In 1977 the bond market maintained its prominent position among the various sectors of the credit market. The outstanding amount of bonds issued by domestic borrowers increased by about 14 % last year. The volume of the bond market thus grew faster than the volume of business of the banks (approximately 11 %). However, these two sectors cannot be directly compared because they overlap in many respects: in 1977 the banks were not only the most important lenders but also the chief group of issuers in the bond market. In order to eliminate such double-counting it is advisable to consider the credit flows in the economy within the framework of the capital finance account, in which all financial transactions of the domestic non-financial sectors (households, enterprises, public authorities) can be recorded. Financial assets mainly comprise the claims which these sectors have on financial institutions, in the form of securities and on foreigners.

Slightly smaller acquisition of financial assets

In 1977 such assets rose by a total of DM 148 billion against DM 151 billion in the preceding year and DM 139.5 billion in 1975; they thus grew somewhat less in 1977 than in 1976. This was partly due to the reduced acquisition of financial assets by households, which amounted to DM 98.5 billion last year compared with DM 100.5 billion in 1976 and DM 104.5 billion in 1975. Moreover, the financial asset acquisition of the public authorities also declined (DM 5 billion against DM 6 billion in 1976). In contrast to earlier years, their contribution to the overall acquisition of financial assets is of fairly insignificant size today as the social security funds are having to run down their financial assets whereas until a few years ago they contributed substantial amounts to the overall supply of capital in Germany. Enterprises (including housing) increased their financial assets last year

Outstanding amount of selected types of bonds



1) Amount outstanding at end-1969: DM 280 million.

Shorter-term forms of investment preferred

about as much as in 1976. Since households usually account for the great bulk of the acquisition of financial assets, their investment behaviour very largely determines the structure of total assets. In 1977 more than half of the acquisition of financial assets consisted of funds placed with banks (see the table on page 27), preference being given to the shorter-term forms of investment. as already mentioned. Investments in securities made up only 11½ % of financial asset acquisition in 1977 compared with 18 % in 1976; hence the non-financial sectors supplied the bond and share markets with fewer funds last year than in 1976. If investments in the bond market have nevertheless grown substantially, as noted, then this is because the importance of this market as an interbank market is increasing. As such it facilitates maturity transformation, which must be considered the main purpose of investing bank funds in securities (largely in securities issued by long-term lending institutions).

In 1977 the domestic sectors took up new loans amounting in all to DM 151.5 billion, i. e. to about as much as a year before. In these overall terms as well — i.e. including the loans which were not granted by banks (about DM 64 billion) — the structure of borrowers was similar to that applying to bank credits alone. Enterprises' credit needs grew most, especially in the housing field. At just over DM 102 billion they were about DM 11 billion larger than a year before. The new borrowing of households was slightly lower than in 1976, and that of public authorities considerably so. Nervertheless, the central, regional and local authorities raised more funds by issuing bonds, medium-term notes and Federal savings bonds than they had done a year earlier, namely DM 20 billion compared with DM 16 billion in 1976.

Large net sales of bonds

Total net sales of bonds in 1977, calculated at market value and including the steeply increased purchases of foreign bonds, amounted to DM 54 billion. This was about as much as in 1976 if the bonds resold in the course of open market operations by the Bundesbank (DM 6.5 billion) are added to net domestic sales in that year. Banks were the principal issuers. They again chiefly issued communal bonds, although sales of these securities, at DM 16 billion, were about one quarter lower than in 1976. By contrast, sales of mortgage bonds, at about DM 7 billion, almost doubled compared with the previous year; while this did not take the mortgage bond back to its former position, it did represent a certain normalisation. This reflects the improvement in the competitive position of the issuers of mortgage bonds in the mortgage market, which is due, first, to the fact that the yields on securities have declined more than the interest rates paid on savings deposits and, second, to the fact that the banks are increasingly able — because the maturities of mortgage bonds are lengthening — to make firm interest rate commitments for prolonged periods. In 1977 the institutions issuing mortgage bonds expanded their promises of capital for housing construction by 60 %, whereas the savings banks did so by only 14 %. However, this too must be regarded as a return to normal from the extreme conditions of earlier years rather than as a really new development.

Greater recourse to the bond market by public authorities . . .

The public authorities also drew heavily on the bond market last year. In the aggregate they financed more than half of their cash deficit of DM 38 billion by issuing bonds and reducing the security holdings of the social security funds, compared with barely one third in the preceding year. Including indirect calls on the bond market through the raising of loans against borrowers' notes at issuing institutions (which procure the funds they need for the purpose by issuing communal bonds), the proportion of the public sector deficit financed by recourse to the bond market probably amounted to more than four fifths, against an estimated two thirds in 1976. The significance of the bond market as a source of finance for the government thus continued to grow (just as, conversely, the greater issuing activity of the public authorities in the bond market contributed to the expansion of that market).

. . . but enterprises show little interest in financing through securities

Enterprises continued to show little interest in financing through the issue of securities. At some DM 4 billion, share and bond issues (excluding the issues of banks) made up only about 4 % of the funds they raised in 1977 compared with 5 % in the preceding year. Exclusive of the issues of the Federal Railways, which is counted among enterprises in this context, the proportion came to not quite 3 %. The corporation tax reform, which resulted on the one hand in an improvement in shareholders' revenue from shares owing to the tax credit and on the other in a reduction of the (tax) difference between the cost of own capital and that of borrowed capital for enterprises, has not yet stimulated fund-raising through the issue of shares. It should be borne in mind, however, that in general the advantages of the reform for share earnings will not be felt by shareholders until 1978, when they receive the dividends (including the tax credit) for 1977. In 1977 fewer new shares were put on the market than in 1976 (DM 4.4 billion market value against DM 6.1 billion). In the course of 1977 the yields on shares approached those on

Purchases of bonds, by group of buyers and type of securities

DM billion market value

Item	Year	Domestic bonds: Total 1	Bank bonds	Industrial bonds	Public bonds	Foreign bonds 2	All bonds
Residents	1975	51.4	37.0	− 0.1	14.5	1.4	52.8
	1976	44.7	31.7	− 0.5	13.6	1.4	46.1
	1977	49.1	29.2	− 0.4	20.3	4.6	53.6
Banks	1975	27.0	25.1	− 0.2	2.2	0.1	27.2
	1976	20.2	12.2	0.2	7.8	0.3	20.5
	1977	30.6	19.8	0.0	10.8	1.7	32.3
Non-banks	1975	16.9	11.9	0.1	4.8	1.2	18.1
	1976	31.1	19.4	− 0.7	12.3	1.0	32.1
	1977	19.3	9.5	− 0.4	10.2	2.8	22.1
Open market operations of the Bundesbank	1975	7.5	−	−	7.5	−	7.5
	1976	− 6.5	−	−	− 6.5	−	− 6.5
	1977	− 0.7	−	−	− 0.7	−	− 0.7
Non-residents 3	1975	− 3.4	e − 2.1	e − 0.1	− 1.3	×	− 3.4
	1976	3.1	e 0.1	e − 0.0	3.1	×	3.1
	1977	0.7	e − 0.3	e − 0.0	1.0	×	0.7
Purchases (= sales), total	1975	48.0	35.0	− 0.2	13.2	1.4	49.4
	1976	47.9	31.7	− 0.5	16.7	1.4	49.2
	1977	49.8	28.9	− 0.4	21.3	4.6	54.3

1 Net sales plus/less changes in issuers' holdings of their own bonds. — **2** Net purchases of foreign bonds by residents. — **3** Net purchases or net sales (−) of domestic bonds by foreigners. — **e** Estimated. Discrepancies in the totals are due to rounding.

bonds. It may therefore be assumed that in future investors will be more interested in purchasing shares, and this might be reflected in higher share prices. The sustained recovery of prices in 1977 may already have owed something to this development. It is accordingly becoming more attractive for public limited companies to broaden their capital base, which has contracted sharply in many enterprises during the last few years, by taking up liable funds in the capital market. Whether the companies will significantly exploit this possibility, as intended by the corporation tax reform, still remains to be seen.

Substantial issues of foreign Deutsche Mark bonds

Issuing activity in the market for foreign Deutsche Mark bonds was particularly brisk in 1977. Foreign issuers were able to raise capital in this market at lower interest rates than in the Euro-dollar market, but in return they had to accept a higher exchange risk. In itself the exchange risk undoubtedly curbed the demand of foreign borrowers for Deutsche Mark loans. Conversely, foreign investors were very eager to avoid exchange losses and possibly make exchange gains vis-à-vis their own currencies by acquiring securities denominated in Deutsche Mark, so that they were satisfied with relatively low rates of interest. Altogether, foreign Deutsche Mark bonds totalling DM 13.2 billion (gross) were issued in 1977 against DM 8.7 billion a year before. About three quarters of the bonds sold (net) were bought by foreigners, although domestic investors also showed more interest, which they had not done in earlier years.

Banks the leading group of buyers

Banks were the leading group of buyers in the bond market last year. They bought domestic and foreign bonds amounting to DM 32 billion, equivalent to three fifths of total sales. In 1976 their purchases had come to DM 20.5 billion, or two fifths of sales. The reasons for the banks' heavier buying in the bond market were, on the one hand, the continued easing of conditions in the money market in the second half of the year and, on the other, the lower demand of the public authorities for direct loans. Hence banks made up for the reduced propensity to buy of domestic non-banks, which cut down their bond purchases by about one third, viz. from DM 32 billion in 1976 to DM 22 billion in 1977. Households, which are the principal buyers of securities among non-banks, spent only approximately DM 11.5 billion on bond purchases last year against DM 19 billion in 1976. Moreover, only a minority of the bonds they bought consisted of bonds in the stricter sense. Two thirds (DM 7.5 billion) were Federal savings bonds, the prices of which are stable, and most of the remainder seems to have been made up of the units of bond-based investment funds, which were very much in demand last year, particularly by individuals. In all, DM 6.3 billion of such securities were sold last year against DM 2.8 billion in 1976. Important though the increase in bank buying was for the decline in the

Individuals prefer Federal savings bonds, which carry no price risk long-term interest rate and the financing of the government deficits, there is no mistaking the fact that last year's shift in the structure of purchasers in favour of banks enhanced the dependence of the bond market on the banks' propensity to buy. At the beginning of 1978, however, domestic non-banks appear to have given up their cautious attitude towards the acquisition of securities after interest rates had begun to fall again along a broad front and the interest rates paid on savings deposits had been reduced once more. Foreigners, who up to last November bought relatively few Deutsche Mark bonds issued by residents (after deduction of coupon tax the yield on these is lower than that on foreign Deutsche Mark bonds), purchased more domestic bonds in December and January in view of the appreciation of the Deutsche Mark.

Lengthening of maturities

The fact that transactors were not generally expecting an early change in the interest rate trend is also reflected in the lengthening of maturities. In 1977 30% of the bonds sold (gross) had periods to maturity of 10 years and more compared with only 17% in the previous year. In February 1978 bonds running for 10 years and more accounted for as much as 44% of gross sales, so that issuing practice again more closely resembled that of the period prior to 1973. In February 1978 the first public bond issue with a fixed period to maturity of 15 years was successfully placed.

(g) The monetary target for 1978

Setting a new target

Despite the difficulties the Bundesbank was faced with in 1977 in realising its quantitative monetary target, in December 1977 it announced a growth target for the central bank money stock in 1978. As in the two preceding years, it chose an average annual growth of 8%; because of the rapid expansion towards the end of 1977, this will again require a distinctly smaller increase in the course of 1978 if the average target is to be achieved. The Bundesbank believed this figure to be the most compatible with the economic policy objectives of strong economic growth and a further reduction in the rate of price rises. Its choice was based on the consideration that the production potential is likely to increase by about 3% in 1978, but that the real growth of the national product should go beyond this figure (in its Annual Economic Report the Federal Government assumes that the national product will expand by 3½%); furthermore, while price rises in 1978 should be smaller than in 1977, on an annual average they will probably not be below 3%, not least because of the increase in value-added tax (however, this implies a rate of less than 3% in the course of the year). In contrast to previous years the Bundesbank refrained from making a precise estimate of the change in the "velocity of circulation", not only because shorter-term forecasts of this variable have turned out to be rather insecurely based but also because the monetary growth target is derived mainly from a medium-term orientation. That strong, and unexpected, influences may emerge in this field in the course of a year has already been indicated. When analysing past developments and reviewing the monetary growth target in the course of this year, special attention will have to be paid to the question of whether and, if so, for what reasons changes have taken place in cash holding habits, and what inferences have to be drawn from this.

3. Balance of payments developments[1]

Exports no longer support economic activity

The external influences on economic activity in Germany underwent a radical change some time ago. Formerly, when domestic activity was sluggish and spare capacity was available, enterprises used to seek and find compensation on foreign markets, but in general this did not happen in 1977. As explained in more detail on page 5, the new bout of weakness in the world economy dampened foreign demand for German goods as well. While in 1976 exports increased by 16% and thus contributed to the upturn in the domestic economy, in 1977 they rose in value by only 6½% to a total of DM 274 billion. In volume they went up by as little as 5% (1976: +14%), and thus hardly faster than world trade, the growth of which slowed down sharply (to 4% compared with 12% in 1976). With competition on world markets becoming increasingly keen, Germany thus — in global terms — captured few additional market shares abroad in 1977; given the strong upvaluation of the Deutsche Mark, this was not surprising. Taking the average for the year the Deutsche Mark appreciated by 9% against the average of 22 major curren-

1 Compared with the figures published in the February Monthly Report, the balance of payments data have in part been revised.

cies. For exchange rate reasons alone the prices of German goods abroad went up so much that German exporters were unable to raise their Deutsche Mark prices significantly as well. Export prices therefore rose by an annual average of only 1½% and thus less than domestic sales prices (+2½%). Hence the profitability of exports presumably deteriorated further, while domestic business offered no adequate compensation. In detail, the trend of exports was rather mixed. Those to the United States, the OPEC countries, the United Kingdom and Austria increased at a much more than proportional rate, whereas those to other countries faced with greater balance of payments problems (such as centrally planned economies) and a low level of domestic economic activity as well (such as Italy, France and the Scandinavian countries) declined slightly. Thus, although German enterprises were able to score notable successes on some foreign markets depending on the conditions prevailing there (which demonstrated their adaptability once again), the expectations of exporters were not fulfilled on the whole. From the outset, of course, Germany's economic strategy had not been to try to solve its own economic problems by launching an export offensive at the expense of its partners. Still, at the beginning of 1977 there was reason to expect that the growth prospects for Germany would be much more favourable; at that time it was assumed — also by the international organisations concerned — that the expansion of world trade would be about twice as rapid as it actually turned out to be. As described above, economic policy endeavoured to strengthen the domestic expansionary forces as soon as it became apparent that the economic upswing was beginning to falter.

Unusually great price elasticity of imports of finished goods . . .

Even though domestic growth was sluggish at times, the German economy supported business activity in major partner countries and aided the international balance of payments adjustment process. Imports of goods increased by 6% in value and 5% in volume. In addition, "invisible" imports of services of all kinds rose by 9%,[1] which was especially significant in international terms since Germany is the world's biggest importer of services after the United States. Specifically, finished goods were imported on a considerable scale again in 1977. In real terms imports of these products, which are becoming ever more important for the development of the international division of labour, rose by no less than 8%; this was over three times as fast as domestic demand in Germany (+2½%). Imports of capital goods, in particular, continued to grow very strongly, namely by 11% in real terms. As overall expenditure on machinery and equipment increased less than half as much (+4½%), foreign suppliers again expanded their market share, as they have been doing for years in this field, in which German producers occupy an especially prominent position on the world market. This development seems to have owed a great deal to the fact that last year's appreciation of the Deutsche Mark, which more than offset the accrued price differentials, made numerous imports more competitive on the German market, as already mentioned. Imports of raw materials and semi-finished goods, by contrast, virtually stagnated owing to the subdued growth of domestic industrial production (+3%) and for reasons connected with the stock cycle. Because of the good harvest, the volume of agricultural imports likewise grew no further over the record level of 1976.

. . . especially from developing countries

Imports of finished goods from non-oil developing countries outside Europe — i.e. from that part of the world that is particularly in need of support — expanded especially vigorously (+10%). The fact that the German market was largely (though not always completely) open to such products, which compete strongly with domestic goods, was a major prerequisite of this expansion. It enabled the developing countries to improve their foreign trade position and ultimately to strengthen their capacity to absorb imports as well. After trade with these countries had been roughly in balance in 1976, the German trade account with this region even showed a deficit of DM 2.7 billion in 1977. Other countries with balance of payments problems also benefited from the relatively strong German demand for imported products. Germany's trade surplus with France fell from DM 7.8 billion to DM 6.3 billion. Vis-à-vis Italy, Germany even incurred a deficit of DM 2 billion in 1977, compared with virtual equilibrium one year earlier. In trade with centrally planned economies the German surplus also declined, namely by DM 1.1 billion to DM 5.4 billion. If the overall German foreign trade surplus nevertheless rose by DM 4 billion

1 Including expenditure on the transport and insurance of imports, which — in accordance with international practice — is included in service transactions in the annual balance of payments.

Main items of the balance of payments

DM billion

Item	1970	1971	1972	1973	1974	1975	1976	1977
A. Current account								
Foreign trade								
Exports (f.o.b.) **1**	125.3	136.0	149.0	178.4	230.6	221.6	256.6	273.5
Imports (f.o.b.) **1**	102.9	112.7	121.7	137.7	171.9	177.1	214.6	227.6
Balance	+22.4	+23.3	+27.3	+40.7	+58.7	+44.5	+42.1	+45.9
Supplementary trade items **2** and balance of merchanting trade	− 1.6	+ 0.3	− 0.6	− 0.1	− 1.3	− 1.2	− 0.2	− 1.4
Overall balance of trade	+20.8	+23.5	+26.7	+40.6	+57.4	+43.3	+41.9	+44.5
Services	− 7.9	− 9.0	−10.2	−13.3	−15.7	−16.0	−14.2	−17.8
of which								
Foreign travel	− 5.4	− 7.0	− 8.6	−11.5	−12.2	−13.9	−14.2	−16.3
Transfer payments	− 9.8	−11.5	−14.0	−15.8	−16.4	−17.5	−18.0	−17.9
of which								
Remittances of foreign workers	− 5.0	− 6.5	− 7.5	− 8.5	− 8.0	− 7.0	− 6.6	− 6.4
Balance on current account	+ 3.2	+ 3.1	+ 2.5	+11.5	+25.4	+ 9.8	+ 9.7	+ 8.7
B. Long-term capital account (capital exports: −)								
Private								
Direct investments	− 1.0	+ 0.2	+ 1.2	+ 0.9	+ 1.6	− 1.9	− 2.3	− 2.7
German investments abroad	− 3.2	− 3.7	− 5.0	− 4.4	− 5.0	− 4.9	− 6.2	− 6.2
Foreign investments in Germany	+ 2.2	+ 3.9	+ 6.2	+ 5.3	+ 6.6	+ 3.1	+ 3.9	+ 3.5
Portfolio investments	− 0.7	+ 2.5	+14.7	+ 6.9	− 3.6	− 4.2	+ 3.9	− 3.1
Foreign securities	− 2.0	+ 0.5	+ 4.0	+ 0.4	− 1.1	− 2.6	− 0.9	− 5.4
Domestic securities	+ 1.3	+ 2.0	+10.7	+ 6.5	− 2.5	− 1.6	+ 4.8	+ 2.3
Loans and advances	+ 3.7	+ 6.3	+ 2.1	+ 8.0	− 2.4	−11.4	− 3.7	− 3.6
Loans granted	− 3.0	− 0.3	+ 2.1	+ 4.1	− 2.8	−13.8	−10.0	− 9.9
Loans raised	+ 6.7	+ 6.7	− 0.0	+ 3.9	+ 0.4	+ 2.4	+ 6.3	+ 6.4
Other	− 0.5	− 0.7	− 1.0	− 0.6	− 0.5	− 0.5	− 0.6	− 0.6
Official	− 2.4	− 2.2	− 1.5	− 2.2	− 0.9	+ 1.2	+ 2.4	− 1.7
of which								
Loans to developing countries	− 1.1	− 1.3	− 1.3	− 1.5	− 1.6	− 1.4	− 1.3	− 1.2
Balance	− 0.9	+ 6.3	+15.6	+13.0	− 5.8	−16.8	− 0.3	−11.6
C. Basic balance (A plus B)	+ 2.2	+ 9.4	+18.0	+24.4	+19.6	− 7.0	+ 9.4	− 2.9
D. Short-term capital account (capital exports: −)								
Banks	+ 7.9	+ 1.2	− 0.4	− 5.1	− 9.7	− 2.3	+ 6.7	+ 8.5
Assets	+ 0.1	+ 0.1	− 1.6	− 7.9	−12.0	−13.0	− 2.7	+ 2.1
Liabilities	+ 7.8	+ 1.1	+ 1.2	+ 2.8	+ 2.3	+10.8	+ 9.4	+ 6.4
Enterprises	+ 8.4	+ 2.0	− 3.6	+ 5.2	− 9.3	+ 6.5	− 5.7	+ 4.6
Financial credits	+ 6.4	− 1.4	− 4.6	+ 0.6	+ 3.1	+ 2.5	− 0.0	+ 8.5
Trade credits	+ 2.0	+ 3.4	+ 1.0	+ 4.6	−12.4	+ 4.1	− 5.7	− 3.9
Official	− 0.3	+ 1.1	+ 0.5	+ 0.3	− 0.0	+ 0.7	− 0.5	− 0.5
Balance	+16.0	+ 4.3	− 3.5	+ 0.3	−19.1	+ 5.0	+ 0.5	+12.6
E. Balance of recorded transactions (C plus D)	+18.3	+13.7	+14.5	+24.7	+ 0.5	− 2.1	+ 9.9	+ 9.6
F. Balance of unclassifiable transactions (balancing item)	+ 3.6	+ 2.7	+ 1.2	+ 1.7	− 2.4	− 0.1	− 1.1	+ 0.8
G. Overall balance on current and capital accounts (E plus F)	+21.9	+16.4	+15.7	+26.4	− 1.9	− 2.2	+ 8.8	+10.5
H. Contra-entry to the Bundesbank's external position **3**	+ 0.7	− 5.4	− 0.5	−10.3	− 7.2	+ 5.5	− 7.5	− 7.9
I. Change in the Bundesbank's net external assets (increase: +)	+22.7	+11.0	+15.2	+16.1	− 9.1	+ 3.3	+ 1.3	+ 2.6

1 Special trade. — **2** Mainly warehouse transactions for account of residents. — **3** Counterpart of changes in the Bundesbank's external position (foreign exchange account) which are not caused by external current and capital transactions: mainly the allocation of IMF special drawing rights and changes in the DM value of the external position owing to valuation adjustments.
Discrepancies in the totals are due to rounding.

in 1977,[1] this was mainly because of the strong improvement in trade with OPEC countries. For the first time, Germany recorded a surplus (DM 1.5 billion) in trade with these countries, compared with a deficit of DM 3.7 billion in the preceding year. Germany also registered a trade surplus vis-à-vis the United States, for the first time since 1974; it amounted to DM 1.2 billion against a deficit of DM 3.1 billion in 1976. It was important that exports of motor vehicles to the United States increased strongly (+34%), although the market shares lost in the past could not nearly be recaptured. The exports of the mechanical engineering industry to the United States also rose steeply (+19%), partly, it seems, in connection with the establishment of production plants by branches of German firms.

Deficits on invisibles continue to rise steeply

Germany's exceptional position as an importer of services and a net payer in the field of transfer payments (unilateral transfers) became even more pronounced in 1977. It emerged once again that the German surpluses on foreign trade are often closely related to the deficits on services and transfer payments; in a number of southern European countries, in particular, demand for German products is undoubtedly strongly boosted by receipts from "invisible" transactions. On services account alone (including spending on the transport and insurance of imports) expenditure exceeded corresponding receipts by DM 18 billion, whereas in 1976 the deficit had amounted to "only" DM 14 billion. On the one hand, spending by Germans travelling abroad increased to the record amount of DM 25 billion (compared with DM 22 billion one year earlier), so that Germany incurred a deficit of DM 16.5 billion (against DM 14 billion in 1976) even though German receipts from foreign visitors also grew distinctly. On the other hand, there was an unusually steep rise (from DM 4.5 billion to DM 6.5 billion) in the profits distributed by German corporations to their foreign shareholders. This is mainly attributable to the corporation tax reform that came into force at the beginning of 1977 and to the resultant reduction in the tax advantages enjoyed by non-residents; in 1977 the profits for the 1976 accounting year were distributed, during which the tax burden on non-residents was smaller than after the reform. Finally, Germany's transfer payments to other countries amounted to DM 18 billion (net) in 1977; the most significant items here were the home remittances of foreigners working in Germany (DM 6.5 billion), pension and maintenance payments (DM 4.5 billion) and contributions to various international organisations (roughly DM 4 billion), notably to the European Communities.

The final outcome: a small reduction in the surplus on current account

If the surpluses on merchandise transactions are combined with the deficits on services and transfer payments, the outcome is that the surpluses on the current account of the German balance of payments decreased by DM 1 billion compared with the preceding year to a total of DM 8.7 billion; they thus amounted to only about one third of the record figure of 1974. Expressed as a proportion of the gross national product, the current surplus declined to only 0.7% against 0.9% in 1976 and 1.0% in 1975. Any greater reduction in Germany's surplus position, such as foreigners have sometimes called for, is subject to limits. The autonomous influence that Germany can exert on its current transactions must be rated relatively small, not least because of the feedback of considerable foreign influences on the German economy and because a lack of external stimuli cannot nearly be offset in the short run by a corresponding expansion of domestic demand. This indicates the limits to autonomous cyclical policy in a country that is highly dependent on foreign trade owing to its relatively small home market and the high degree of specialisation of its enterprises, notably in the capital goods industry. As exports of goods and services make up more than one quarter of Germany's gross national product, any slowdown in exports has a directly dampening effect in the short term. Moreover, a substantial part of German imports — namely raw materials, energy and semi-finished goods — depend primarily on domestic production, so that these imports moderate immediately if slackening exports curtail domestic output (of course, this does not necessarily happen in the case of imports of finished goods that compete with domestic products). In view of these relationships, and for other reasons as well (e.g. the time required to adapt the pattern of production to a range of goods better tailored to domestic needs), it is not to be expected that a slowdown in exports can be offset in

1 According to the figures of the Federal Statistical Office, which records exports on an f.o.b. basis and imports at c.i.f. values, the trade surplus amounted to roughly DM 38 billion in 1977. If, in keeping with international practice when drawing up balances of payments, expenditure on the transport and insurance of imports is included not in merchandise transactions (as in the official foreign trade statistics) but in service transactions, Germany's trade surplus amounted to DM 46 billion (see the table on page 34). This adjustment does not affect the balance on current account, however, because the deficit on services is then shown correspondingly higher. The regional foreign trade balances, in contrast to the overall figures, show imports at their c.i.f. values.

the short run by an increase in domestic demand and that the balance on current account will deteriorate accordingly.

In any case, the scale of the German surplus on current account is now such that it is hardly a disturbing factor in the world economy. A country whose exports consist mostly of capital goods (over half of total exports), which must concentrate increasingly on exporting technologically sophisticated equipment (often large-scale industrial plants) and which can do so successfully only if it helps foreign buyers to finance these investments (which are often highly capital-intensive) by providing financial or suppliers' credits, will tend to have a surplus on current account rather than a deficit for this reason alone. The crucial point for the other trading partners is that this does not cause serious difficulties in balancing external payments; if the capital exports of the surplus country, either through financial credits or through longer-term suppliers' credits, are considerable, this condition is fulfilled.

Successful adjustment in the financial sector through large long-term capital exports

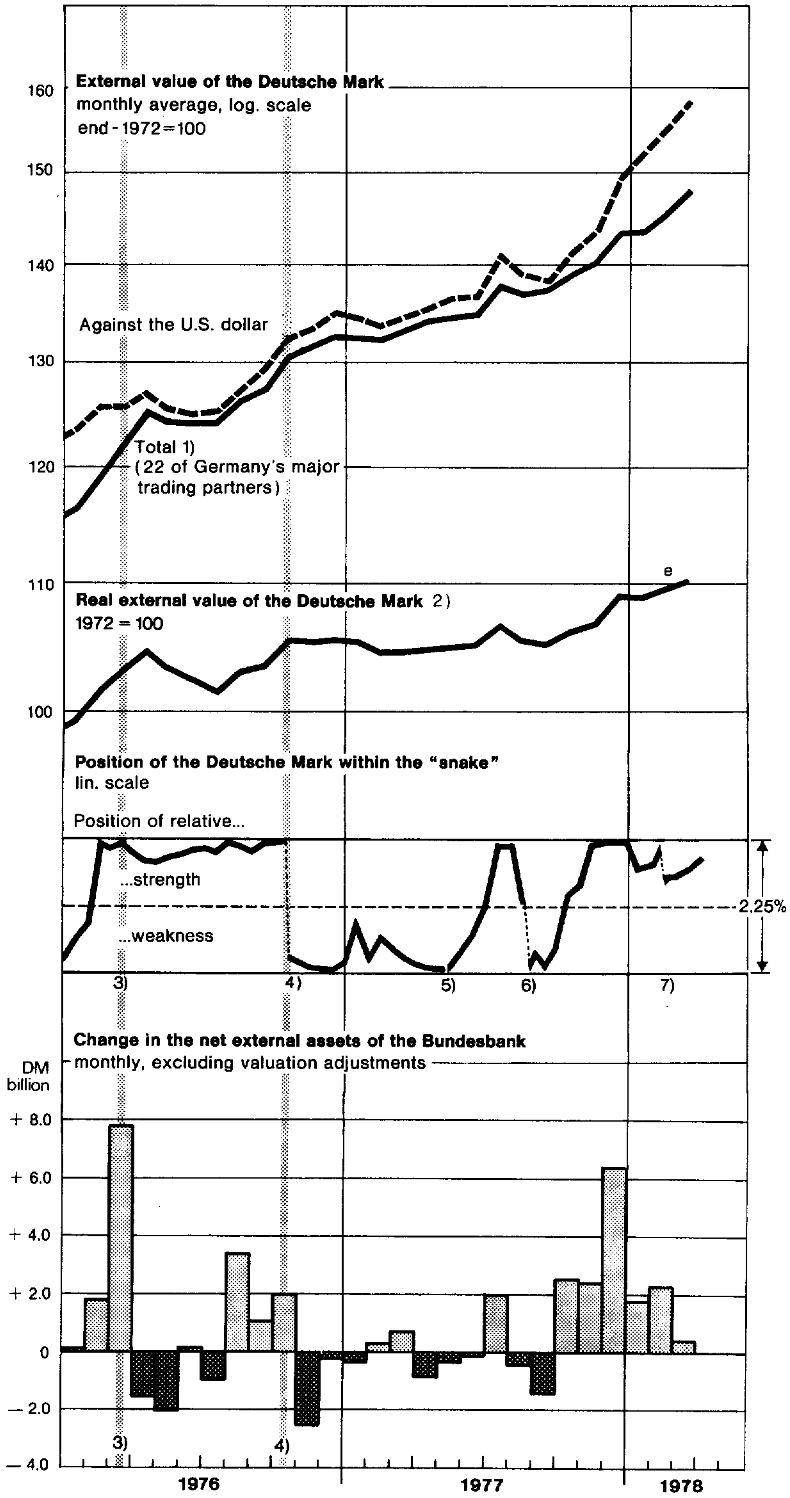
In 1977 Germany exported roughly DM 12 billion of long-term capital, thus providing other countries with far more long-term funds than would have been required to finance the current account surplus. This was largely owing to developments in the credit markets in Germany, which are under the influence of monetary policy. In the judgment of foreign borrowers, the level of interest rates in Germany (and the interest rates on securities denominated in Deutsche Mark in international markets) declined so sharply that the inclination to borrow in Deutsche Mark grew despite the exchange risk. In particular, longer-term lending by German banks to foreigners again went up strongly (by about DM 10 billion) in 1977. These funds flowed mainly to European industrial countries in a weak balance of payments position and to non-oil developing countries — significantly, that is, to regions showing a trade deficit with Germany. At the same time German banks raised long-term loans abroad (above all in the Euro-market, and in some cases also direct from OPEC countries); German net capital exports in this sector therefore amounted to only DM 5 billion, while the banks otherwise acted as a "turntable" between deficit and surplus countries. Substantial sums also flowed abroad through security transactions, namely about DM 3 billion (net) through portfolio dealings alone (one year earlier there had been an inflow of DM 4 billion). In contrast to the preceding year, domestic banks and non-banks purchased about DM 3 billion of foreign Deutsche Mark bonds, the yield on which was higher than that on domestic bonds. In addition, German investors acquired DM 1.75 billion of bonds denominated in foreign currencies (1976: DM 0.75 billion), mostly dollar bonds, which were also comparatively high-yielding. Simultaneous capital inflows through purchases of German bonds by foreigners played only a minor role in 1977 (DM 0.5 billion).

Relatively large German direct investments, which contrasted with declining activity in this sector by non-residents, likewise fostered the outflow of capital on balance. In 1977 German enterprises spent roughly DM 6.25 billion (including reinvested profits) on direct investments in foreign subsidiaries or participations in foreign enterprises. This was admittedly no more than in 1976, but even so the foreign investments of German enterprises in 1977 were far greater than at the beginning of the seventies; for an export-orientated economy such as Germany's, direct investments are essential for many reasons, not least for the sake of the country's own sales strategy. The changeover to production in foreign branches also owes something to cost considerations, which are the more likely to favour investments abroad, the more domestic production costs rise and the costs of acquiring foreign participations fall. Such considerations are of course also influenced by exchange rate movements and expectations. Conversely, foreigners regularly make direct investments in Germany as well; in 1977 these amounted to roughly DM 3.5 billion (compared with, for instance, about DM 5 billion a year at the beginning of the seventies). On balance, therefore, "direct" German investments in other countries in 1977 were only about DM 2.75 billion larger than the corresponding foreign investments in Germany; as a proportion of the total domestic net capital formation of German enterprises (excluding housing) this is no more than roughly $5^1/_2$ %.

Sustained outflows of funds in the field of trade credits

In the field of trade credits, which are much more closely bound up with foreign trade, the net outflows of funds continued. As more suppliers' credits were granted in connection with exports, the claims of German exporters arising from credit terms granted increased by about DM 7 billion in 1977 (1976: DM 10 billion). On the other hand, domestic firms received DM 3 billion in the form of down-payments for future German exports and

Exchange rate movements *
and external position of the Bundesbank



* Based on official spot rates.- 1) Weighted external value in relation to the central rates of end-1972.- 2) Weighted external value against the currencies of 13 industrial countries after adjustment for the price discrepancies (as measured by the wholesale prices of industrial products) between Germany and other countries.- 3) Withdrawal of France from the European narrower margins arrangement with effect from March 15, 1976.- 4) Realignment of exchange rates in the European narrower margins arrangement with effect from October 18, 1976.- 5) Devaluation of the Scandinavian currencies in the European narrower margins arrangement with effect from April 4, 1977.- 6) Withdrawal of Sweden from the European narrower margins arrangement and devaluation of the Danish and Norwegian kroner with effect from August 29, 1977.- 7) Devaluation of the Norwegian krone in the European narrower margins arrangement with effect from February 13, 1978.- e Estimated from February 1978.

through using credit terms granted by foreign suppliers. Trade credit transactions thus resulted on balance in an outflow of roughly DM 4 billion, which on its own would have been sufficient to finance about half of the German surplus on current account.

Large inflows in the short-term sector . . .

The financial credits of enterprises and short-term external capital transactions of banks led to net inflows in 1977 (+DM 17 billion). German enterprises (including the branches and subsidiaries of foreign firms) raised DM 8.5 billion (net) of short-term financial credits abroad in 1977, mainly no doubt because of the lower interest rates in the Euro-market. The inflow of funds to the banks, by contrast, was increasingly determined by speculation as the year progressed. Until the autumn external payments were balanced mainly by imports of funds by the banks — a process that took place "outside" the central bank, as it were — but a change occurred towards the end of the year, when Germany's external position was once more strongly affected by exchange rate unrest. As always during such periods, the banks' short-term capital transactions no longer tended to bring about equilibrium in these circumstances; instead, the banks exacerbated the existing disequilibria in the foreign exchange markets. The renewed disturbances in the exchange markets in the autumn of last year were mostly attributable to the unsolved balance of payments problems of the United States (see also Part A II of this Report dealing with international monetary developments and external monetary policy). A further significant factor was that two European central banks which, up to then, had strongly supported the dollar by major purchases (inter alia in order to replenish their reserves), and which had financed the U.S. balance of payments deficit in this way, changed their intervention policy in the autumn. From then on the dollar weakened against a fairly large number of currencies, and other central banks were obliged to intervene in order to prevent abrupt exchange rate fluctuations. The net external assets of the Bundesbank alone increased by over DM 11 billion in the last three months of 1977, following a net outflow of reserves totalling almost DM 1 billion[1] in the previous months of the year (by the end of March 1978, when this Report went to press, another DM 4.5 billion had flowed in). This was the steepest rise in reserves within such a short space of time since the transition to generally floating exchange rates in the spring of 1973.

. . . because of renewed disturbances in the foreign exchange markets

Substantial "real" appreciation of the Deutsche Mark despite countermeasures

It is obvious that foreign exchange movements of this magnitude greatly restrict the freedom of action of monetary policy. The Bundesbank soon tried to take countermeasures by lowering its interest rates and tightening the minimum reserve regulations on external liabilities in mid-December. Nevertheless, the external value of the Deutsche Mark continued to rise during this period. In the second half of 1977 the trade-weighted exchange rate of the Deutsche Mark increased by about 6½ % against the currencies of 22 of Germany's major trading partners, and this trend continued in the first few months of 1978, so that at the end of March 1978 the effective exchange rate of the Deutsche Mark was 11 % higher than at the end of 1976. This increase far exceeded the price and cost differential between other countries and Germany, so that the Deutsche Mark appreciated considerably "in real terms". As measured by the disparity between the movement of the prices of industrial goods in Germany and that abroad, this competitive disadvantage in terms of prices amounted to about 4½ % in March compared with end-1976.

4. Subdued growth prospects in the medium term

Slower economic growth and increase in unemployment in the medium term

As regards real growth and the reduction of unemployment, the overall performance in 1977 was unsatisfactory. There was widespread disappointment, not least in foreign countries, about the failure to achieve the envisaged target for real growth. The more short-term reasons for this failure — weak foreign demand, cost increases in Germany, the impact of public finance — have already been discussed. But if a somewhat longer-term view is taken, it becomes apparent that the expansionary forces in Germany have lost momentum in the last few years. As may be seen from the table on page 40, the real gross national product grew by an average of only 2 % between 1973 and 1977, compared with 5 % a year between 1969 and 1972 and in the other years since 1960. In part this slowdown in growth was no doubt of cyclical origin, but it also owed something to temporary non-cyclical adjustment processes; this is indicated by the below-average utilisation of the production potential and the higher unemployment of the past few

1 Over the whole of 1977 the net external assets of the Bundesbank increased by DM 10.5 billion as a result of transactions; at the end of the year the total reserves had to be written down by DM 7.9 billion owing to the valuation adjustment of the external position.

years. But even if the utilisation of the production potential were running at a normal level, the national product would be only about 3 % higher than it is at present according to our calculations (and about 5 % higher according to the calculations of the Council of Economic Experts). Economic policy is endeavouring to utilise this potential more effectively, but once these temporary reserves have been used up it will be found that, owing to the profound changes that have occurred, the longer-term scope for growth is much smaller than it used to be, whereas expectations in Germany and abroad are in many cases still determined by earlier standards.

Smaller increase in fixed assets

The longer-term reduction of the scope for growth is primarily due to the sustained weakness of capital investment. In real terms the average increase in total fixed assets between 1973 and 1977 (according to the assets and liabilities account of the Federal Statistical Office) was about 8 % smaller than that between 1969 and 1972. Moreover, the share of enterprises in the expansion of fixed assets decreased while that of the government rose. Enterprises' production capacity thus grew even less than the above aggregates imply.

It is mainly because of the slacker investment activity of enterprises that the production potential, which reflects the longer-term scope for real growth, has been increasing by only 3 % a year (and sometimes even less) since 1973. The longer-term growth trend has thus flattened out noticeably, even though in 1978 and also in 1979 the real national product might expand faster than the production potential because, as noted, available reserves can be used up. But the longer-term scope for growth can be widened only if the investment ratio increases again. The fact that the extensive programmes to boost economic activity (nine in all since 1974), which were and are directed in large part towards supporting capital investment, have not so far been particularly successful in this respect suggests that the underlying economic conditions have undergone some deep-seated changes which hamper economic growth. Some of these changes in the overall economic situation are not hard to identify.

Decline in the population

One of the changes in basic conditions is undoubtedly the fact that the stimuli imparted to economic activity by population growth have been lacking for several years. From the beginning of the sixties until 1974 the population rose each year by nearly 500,000 or almost 1 %, but since then it has been declining, in 1977 alone by over 100,000 persons. According to estimates of the Federal Statistical Office, in the next few years as well the population can be expected to fall by 0.3 to 0.4 % a year. It is obvious that, as the population decreases, the demand for goods will diminish in some sectors, with particular implications for the demand for housing and in the fields of health and education. How this will ultimately affect overall demand is still an open question, but it is likely that the fall in the population and the steady decline in the proportion of children and subsequently of young persons will in the long run modify the pattern of consumption, which will have an adverse impact on the growth of private consumption, or at least on the quantities of goods and services consumed.

Environmental protection a new cost factor

The underlying conditions for overall economic growth have also been changed in recent years by the necessity for better protection of the environment. Various goods which used to be wholly or largely "free" (air, water) are increasingly ceasing to be so; their use in the production process requires mounting expenditure to maintain or restore the ecological balance. This process is irreversible, and it will continue and, if anything, accelerate even if certain of the very far-reaching statutory provisions are eased. Between 1971 and 1975, according to surveys by the Ifo Institute, roughly DM 8.5 billion was spent by the manufacturing sector on measures to protect the environment; this was about 5 % of aggregate fixed capital formation in this sector. The concurrent rise in operating costs as a result of environmental protection measures is likely to have been far greater in that period. These new cost components, which are growing in importance, are bound to be included in enterprises' profitability planning and to influence their investment decisions; this may lead to new investments either not being made at all or being made abroad because costs there are lower, which will lessen the scope for growth in Germany.

Slower technological progress

Over the years the stimulus to growth resulting from technological progress has diminished as well. In the fifties and sixties the business community benefited considerably from the technological advances of the thirties and forties, which could not be applied

Longer-term trends in economic growth

Year	Production potential 1, 2	Gross domestic product 1	Utilisation of production potential 2, 3	Unemployed persons		Population
	Percentage change on previous year	Percentage change on previous year	%	Thousands	% of dependent labour force	Percentage change on previous year
1960–1968 5	4 + 4.5	+ 4.7	4 99.5	228	1.0	+ 0.9
1969–1972 5	+ 5	+ 5.2	100.5	190	0.9	+ 0.9
1973–1977 5	+ 2.5	+ 2.2	97.5	804	3.5	e – 0.1
1974	+ 2.5	+ 0.5	99	582	2.6	+ 0.1
1975	+ 2	– 2.6	94.5	1074	4.7	– 0.4
1976	+ 2.5	+ 5.6	97	1060	4.6	– 0.5
1977	+ 3	+ 2.6	97	1030	4.5	e – 0.2

1 At 1970 prices. — **2** Rounded figures. — **3** Production potential = 100. — **4** Period from 1962 to 1968. — **5** Annual averages. — **e** Estimated.

commercially until then. It also rapidly narrowed the "technology gap" that had initially existed vis-à-vis the United States. Now that this leeway has largely been made up, technological progress is becoming increasingly dependent on new developments, which are less numerous and productive and above all require higher development and capital expenditure than is needed in a period of "catching up" or imitation. This does not mean that innovations which boost sales and productivity are not to be expected in future as well, but the growth stimuli have become less reliable, and owing to the defence of existing social and economic positions it is becoming more and more difficult to exploit technological progress for the purpose of cutting costs.

Change in the distribution of income to the disadvantage of enterprises

The business community's propensity to invest and thus also the scope for growth were sharply reduced by changes in the distribution of income. In particular, income from wages and salaries has risen much faster than aggregate income in the past few years. In the overall income distribution account this increase was necessarily at the expense of enterprises' earnings. The available data on the distribution of national income reflect this trend. Gross entrepreneurial and property income — admittedly a very heterogeneous variable, which includes the income of members of the professions, agriculture and housing and households' interest income as well as the profits generated by enterprises — has not kept pace with the growth of overall income in the last few years; its share in national income averaged 27½% between 1975 and 1977 (adjusted for changes in the structure of employment), compared with 30% in the first few years of this decade and almost 32% at the beginning of the sixties. This shift in income distribution becomes even more apparent if the property income of households and the entrepreneurial and property income of the government are left out of account. Calculated in this way, gross private entrepreneurial income in 1977 was about 53% higher than at the beginning of the seventies, while gross wage and salary income went up by 85%. In net terms, i. e. after deduction of the much higher government levies, the rise in entrepreneurial income lagged even further behind that in the other types of income. In real terms, i. e. after adjustment for the decline in the value of money in the meantime, net entrepreneurial income even decreased noticeably on occasion, whereas real net wage and salary income grew continuously, except in 1976. Pensioners' real income, which remained largely unaffected by these distribution processes until 1977, occupies a special position: in real terms it increased by an average of about 5½% a year between 1975 and 1977, and by as much as nearly 7% in 1977 alone.

The low level of earnings over many years has prevented many enterprises from building up their capital and reserves to an appropriate extent in order to cover the increased risks. In the annual accounts of enterprises that the Bundesbank evaluates, the ratio of capital and reserves to the balance sheet total has been declining for years; at the end of 1976 (the last year for which such data are available) it stood at 23% compared with almost 30% ten years earlier, and it is likely to have decreased further in 1977. The basis for assuming additional risks, such as any major capital project involves, has thus been lastingly weakened.

Additional burdens due to the restructuring of external conditions

These primarily "endogenous" curbs on growth have been accompanied in the last few years by an extensive restructuring of external conditions that has tended to act in the same direction. First of all, the abandonment of the system of fixed exchange rates cleared the way for the gradual elimination of the undervaluation of the Deutsche Mark, which had previously had the effect of an export subsidy. Hence a major safety valve which had often enabled enterprises to offset any weakening of domestic demand by stepping up their efforts in the export field no longer operated as efficiently as in earlier years. Between the end of 1972 and March 1978 the external value of the Deutsche Mark rose by 43 %, and in real terms — i. e. after adjustment for the inflation differential (on the basis of wholesale prices) — by about 11 %, against the currencies of Germany's principal trading partners. This does not mean that the German economy is in general no longer competitive, but at least former competitive advantages have disappeared, earnings prospects in export business have deteriorated, and the number of cases in which enterprises can hold their own on foreign markets only by accepting temporary losses may be increasing. At the same time the appreciation of the Deutsche Mark has enabled foreign suppliers, as mentioned elsewhere in this Report, to expand their market shares in Germany. This is particularly true of some developing countries, whose export capabilities have grown in the last few years and which have secured themselves a strong market position in Germany thanks to their comparative cost advantages. The adjustments necessary in Germany's economic structure on account of external changes are thus more profound today than they were in the past, especially in the years when the exchange rate of the Deutsche Mark was fixed and, for a prolonged period, undervalued. Such adjustments are of course easier if they take place under generally favourable earnings conditions, so that any loss of jobs is soon offset by the creation of additional jobs in sectors which are faring better.

Less scope for growth in the years ahead as well

Largely as a result of the above-mentioned factors, the scope for growth of the German economy in the coming years must be rated smaller than it was in the sixties or at the beginning of the seventies, for instance. These adverse prospects naturally call forth counteractive forces. As noted elsewhere, government fiscal policy is endeavouring to encourage private capital investment, although there are no signs of a major easing of the tax burden. The authorities are also attempting to reduce the legal obstacles and administrative delays (which are often considerable) when starting new capital projects. But the basic problems affecting the distribution of income are more difficult to solve. It is planned to slow down the rise in the income of pensioners by modifying the pension adjustment system. A further cost burden on enterprises, which would otherwise be likely, might be avoided in this way, at least in the years immediately ahead. The focal point of the distributional problems thus shifts to the relationship between wages and profits. When this Report went to press it was not yet evident to what extent this year's wage settlements would take account of the narrowing in recent years of the overall scope for income distribution and whether an increase in corporate earnings (which would foster growth) and an enlargement of enterprises' capital base would be possible in 1978. At all events, strong self-sustaining economic growth demands a lasting expansion of private capital investment, not least as a prerequisite for an upturn in the demand for labour and a reduction in unemployment.

II. International monetary developments and external monetary policy

Recovery of the world economy proceeding only slowly

Last year the progress that had been hoped for in overcoming the consequences of the world recession was not achieved. While in the United States there was a marked increase in the gross national product and the high level of unemployment was further reduced, output and demand in Europe and Japan rose much more slowly than expected. World trade, which had expanded strongly in 1976 and had been a powerful support to economic recovery, provided a much weaker stimulus last year. Fears gained ground that in view of the low level of economic growth and the high level of unemployment in some countries protectionist interference in the freedom of world trade might spread.

In 1977 balances of payments throughout the world developed unevenly. Some countries, in particular the United Kingdom and Italy, succeeded impressively in improving their balances of payments. At the same time, however, new disequilibria arose. On the one hand, the balance of trade and current balance of the United States moved into unexpectedly high deficit. On the other hand, Japan recorded an extremely large surplus on current account, due in the main to sizable surpluses in trade with the United States. In Germany the current account surplus fell relatively little; however, in 1977 it was equivalent to only 0.7% of the gross national product. The surplus of the OPEC countries remained high, not least because of the strong increase in U.S. demand for imported oil.

For the best part of 1977 it appeared that there would not be any great difficulty in financing the U.S. deficit on current account. This was because, in particular, the Bank of England purchased a considerable amount of dollars in order to prevent the value of sterling from moving up and replenished its foreign exchange reserves, which had been greatly depleted during the 1976 sterling crisis. The experience that large-scale interventions in the exchange markets may conflict with the objectives of domestic monetary policy was confirmed in the process. It was for this reason that in October 1977 the U.K. monetary authorities gave up the intervention policy they had been pursuing up to then. At the same time the true extent of the U.S. balance of payments problem became clear to the public at large. Instead of capital inflows, which would have been necessary to finance the U.S. deficit on current account, there were large-scale speculative outflows of dollars in the last few months of 1977. A crisis of confidence overshadowed the dollar.

Crisis of confidence in the dollar

In view of the uncertainty in the foreign exchange markets emanating from the weakness of the dollar, the central banks of the countries mainly affected found it necessary to intervene heavily in order to maintain orderly market conditions and to combat excessively strong exchange rate fluctuations. For a long time the U.S. monetary authorities remained passive and aroused the impression that they were not very concerned about the weakness of the dollar. Even after they had begun to undertake stabilising intervention operations, particularly in the dollar/Deutsche Mark market in autumn 1977, this was not interpreted as a change in the U.S. attitude. This situation did not alter until the intervention operations were stepped up sharply soon after the turn of the year and an increase in key interest rates was justified by explicit reference to external requirements. After an additional swap arrangement had been agreed in January 1978 between the Bundesbank and the U.S. Treasury, a joint statement was published by the German and U.S. Governments in the middle of March. In it the United States expressed, inter alia, its readiness to utilise — for the first time since the transition to floating — its own monetary reserves and its automatically available reserve position with the International Monetary Fund to support the dollar. In addition, the amount of the existing swap arrangement between the central banks of both countries was doubled.

Financing the U.S. balance of payments deficit calls for a reversal in capital flows

There is no doubt that in future the financing of the U.S. deficit on current account cannot be left to the central banks of other countries to the same degree as it was last year. This would conjure up the danger of global inflation like that experienced at the beginning of the seventies. Until the root causes of the deficit have been eliminated, it will have to be financed as far as possible by capital inflows instead. The prospect of money and capital flows being reversed is not at all unfavourable. The U.S. capital market should prove to be attractive to foreign investors as soon as the conviction has established itself in the markets that the dollar rate has settled down to a new basis.

It would contribute to an improvement in the U.S. balance on current account if the difference between the levels of economic activity in the United States on the one hand and Europe and Japan on the other could be reduced. Thanks to the efforts of Japan and Germany to expand domestic demand, the basic conditions for this process have meanwhile improved. It can also be expected that the "oil deficit" of the United States will hardly increase further in 1978, and may possibly fall. Owing to the change this would induce in expectations of stabilising the exchange rate of the dollar, an effective energy policy in the United States would be valuable even if the actual impact of such a policy on the current account balance were not to be felt until later. However, a resurgence of inflationary trends in the United States would constitute a serious obstacle to a reduction in the deficit on current account.

1. Exchange rate developments and exchange rate policy

The unrest in the exchange markets in 1977 and in the first few months of 1978 is a reflection of the widely-felt uncertainty about the prospects for better equilibrium in the world economy. Large though they were in individual cases, the fluctuations in the exchange rate of individual currencies against the U.S. dollar do not reveal the full extent of this unrest because the central banks intervened on an exceptionally large scale in order to maintain orderly conditions in foreign exchange markets, and thus dampened down fluctuations in exchange rates. Nevertheless, the shifts in the pattern of exchange rates were so great that lasting changes in the competitiveness of the economies of numerous countries in terms of prices must be expected.

(a) Strong fluctuations in exchange rates

From the middle of last year onwards the strong movements in exchange rates were triggered by the weakness of the dollar. In their wake, however, there were also considerable shifts in the pattern of exchange rates between the other currencies themselves.

Considerable exchange rate movements of the Deutsche Mark . . .

Apart from relatively short periods of slight recovery, the rate quoted for the dollar in Frankfurt moved downwards during almost the whole of 1977 and in the first few months of 1978. From October 1977 onwards this development accelerated sharply until the dollar reached its lowest point ever on March 1, 1978 at DM 1.9920. This meant that the Deutsche Mark appreciated against the dollar by almost 19% in only 14 months. In the course of March 1978 the rate steadied somewhat; nevertheless, at the end of March the Deutsche Mark was still almost 17% higher than at the end of 1976.

Particularly from December 1977 onwards, the short-term fluctuations in exchange rates — from day to day and frequently also from hour to hour — reached a degree reminiscent of the most hectic weeks and months after the general transition to floating in spring 1973. Thus, the rate for the dollar in terms of the Deutsche Mark fell in the course of December by no less than 5½%, with the last week of December alone witnessing a drop of almost 5 Pfennigs, or 2.3%. The largest jump in the rate from one day to the next occurred on January 5, 1978, when the rate for the dollar soared by almost 9 Pfennigs, or 4.2%, after the U.S. Treasury had announced the conclusion of a swap arrangement with the Bundesbank and thus declared its intention of preventing a further slide in the rate of the dollar through support operations of its own.

. . . Swiss franc . . .

The fluctuations in the exchange rates of other currencies were also considerable. The value of the Swiss franc, which besides the Deutsche Mark and the Japanese yen was particularly in demand, rose against the dollar by no less than 44% between March 1, 1977 (last year's low) and March 1, 1978 (the highest level so far). After the Swiss authorities had taken drastic action to ward off capital inflows at the end of February 1978, the appreciation against the dollar decreased in the course of March to 37%. Since the Swiss franc moved up more than the Deutsche Mark against the dollar, the franc also appreciated strongly against the Deutsche Mark.

. . . yen . . .

The Japanese yen, whose exchange rate vis-à-vis the dollar has risen considerably less than that of the Deutsche Mark and Swiss franc in recent years, caught up substantially in 1977; by the end of March 1978 its value in terms of the dollar had increased by approximately 32%.

. . . and sterling

Among the currencies that formerly tended to be "weak", the recovery of sterling since the autumn of 1976 was particularly striking. The mere prospect of agreement being reached on the standby credit granted by the International Monetary Fund (IMF) at the beginning of 1977 and the establishment of a safety net for sterling balances under the auspices of the Bank for International Settlements (BIS)[1] strengthened confidence in the pound to such an extent that by the end of January 1977 it had appreciated against the U.S. dollar by as much as 10%. In order to keep the upward movement within limits the Bank of England purchased very large amounts of dollars in the market, with the result that the foreign exchange reserves of the United Kingdom rose by over $ 16 billion between January and October. When the U.K. authorities finally revised their exchange rate and intervention policy at the end of October 1977 in view of the danger of unduly inflating the domestic money supply, a rapid increase in the exchange rate of sterling began again. In the course of the year this led to an appreciation of the pound against the dollar of over 12%; however, the rate of appreciation had fallen somewhat again by the end of March 1978.

Exchange rate adjustment in the "snake" ...

The European narrower margins arrangement was not spared tensions either, but it proved to be remarkably resilient in the face of the difficulties emanating from the dollar and also from inside the arrangement. Nevertheless, the agreed buying and selling rates for the partner currencies had to be adjusted on several occasions in order to reestablish realistic exchange rate relationships. On April 4, 1977 the Swedish krona was devalued by 6% vis-à-vis the parities agreed with the other partners and the Danish and Norwegian kroner were devalued by 3% each. This adjustment in exchange rates was carried out in a period of relative quiet on the exchange markets. As a result of the continuing unfavourable development of its balance of payments and monetary reserves, however, Sweden felt obliged to withdraw for the time being from the exchange rate arrangement on August 29, 1977, and to combine this step with a de facto devaluation of its currency by approximately 10%. Owing to their close economic ties with Sweden, Denmark and Norway took this opportunity to devalue their currencies in the exchange rate arrangement by another 5% each. As part of a comprehensive recovery programme adopted by the Norwegian Government, the Norwegian krone was devalued by a further 8% on February 13, 1978 in order to counter the strong increase in Norway's trade deficit and foreign indebtedness.

... and withdrawal of Sweden

(b) Exchange rate and intervention policy

The marked instability of the exchange rates of individual currencies frequently put the monetary authorities in a difficult position. As a result of the Rambouillet decisions of 1975, which are reflected in the new exchange rate rules of the International Monetary Fund and in the Fund's principles regulating the exchange rate policies of its members, monetary authorities are obliged to ensure the maintenance of orderly foreign exchange market conditions, to counter erratic exchange rate movements and to avoid manipulating exchange rates.

High level of interventions to stabilise the foreign exchange markets

In order to maintain orderly market conditions, interventions by central banks were often necessary in 1977 and in the first three months of 1978 in considerable amounts, leading to a corresponding increase in their dollar assets. Such intervention operations also led to a substantial and by no means desirable increase in the foreign exchange reserves of the Bundesbank (see the table opposite).

In a number of other countries the addition to reserves was initially quite welcome; this was true in particular of the United Kingdom and Italy. As Germany's experience in earlier years — under a system of fixed parities — has shown, large-scale interventions may, however, provoke a conflict with the objectives of monetary policy. This was impressively confirmed last year in the case of the United Kingdom, where the monetary authorities finally gave priority to the attainment of a money supply target — a target which had also been agreed with the International Monetary Fund.

Neglect of the weakness of the dollar involves considerable risks

For a time the monetary authorities inside and outside Europe had the impression that the U.S. Administration was viewing the deterioration in the exchange rate of the dollar vis-à-vis a number of "strong" currencies with equanimity. Apart from the fact that external economic considerations are not so important for U.S. economic policy as they are for some other countries where foreign trade makes up a much larger proportion of the gross national product, it had to be assumed that the U.S. authorities considered this

1 See Report of the Deutsche Bundesbank for the Year 1976, p. 62—3.

Changes in the net external position of the Deutsche Bundesbank due to interventions within the joint float and other foreign exchange movements*

DM billion

Period	Changes in net external position, total	Caused by: interventions in DM/dollar market 1	Caused by: interventions within joint float 2	Caused by: other foreign exchange movements
1977				
January – June				
Markets quiet	– 0.8	+ 0.7	–1.5	+0.0
July				
First dollar low	+ 2.0	+ 1.4	+0.0	+0.6
August – September				
Markets quiet	– 2.0	– 0.1	–0.3	–1.6
October – December				
Decline in dollar rate, strong tensions within joint float	+11.3	+ 9.3	+3.1	–1.1
1977, total	+10.5	+11.3	+1.3	–2.2
1978				
Beginning – mid-January				
Disturbances in markets continue	+ 3.0	+ 2.5	+0.3	+0.1
Mid-January – mid-February				
Markets quieten down, intervention balances within joint float reduced	– 2.0	+ 1.0	–0.9	–2.1
Mid-February – end-March				
Renewed decline in dollar rate	+ 3.5	+ 4.4	–0.1	–0.7
1978 January – March, total	+ 4.5	+ 7.9	–0.7	–2.7

* Excluding changes due to valuation adjustments. — 1 Interventions in U.S. dollars by the Bundesbank and in Deutsche Mark by the Federal Reserve Bank of New York (the latter under the swap arrangements with the Federal Reserve System and the U.S. Treasury). — 2 Including intra-marginal interventions. — Sweden withdrew from the joint float with effect from August 29, 1977.
Discrepancies in the totals are due to rounding.

deterioration in the exchange rate of the dollar to be a useful means of reducing the U.S. trade and current account deficits.

Just like other countries, the United States has gained greater freedom of action in economic policy as a result of the increased flexibility of exchange rates. However, the limits to the use of the exchange rate as an instrument of balance of payments adjustment are greater for the United States than for other countries. Even under a system of world-wide floating the dollar continues to play a dominating role. As the most important vehicle, investment and reserve currency it simply cannot be replaced in the foreseeable future. The process of recycling the enormous balance of payments surpluses of a number of oil-exporting countries, which is taking place in the main via the international financial markets, gives even greater emphasis to these functions of the dollar, particularly since the importance of sterling as a world currency continues to decline and other currencies are equally unable to assume the role of a reserve currency. Too rapid a fall in the exchange rate of the dollar vis-à-vis other major currencies can disrupt confidence and trigger capital movements out of the dollar into other currencies, and this in turn exaggerates the fluctuations in the exchange rate of the dollar far above the degree that would be warranted on economic grounds, leading to disturbances not only in the foreign exchange markets but also for world trade.

Strong dollar not attainable by interventions alone

What particularly justifies the desire for a strong and stable dollar is the position of the dollar as the key currency of the world economy. However, such stability of the dollar can be ensured in the long run only by a general economic policy directed towards internal and external balance. The close connection between domestic economic policy and external economic stability is reflected — not least on the initiative of the United States — in the amended Articles of Agreement of the International Monetary Fund. The member countries are explicitly called upon to create the conditions necessary for economic and financial stability and thus to contribute to as stable exchange rate relationships as possible.

At all events, the large U.S. deficit on current account can be reduced only gradually. This means that net capital imports are necessary for a considerable transitional period in order to ensure the smooth financing of the deficit. The balance of payments situation has recently been exacerbated by the fact that such compensating capital imports have not occurred, but that instead there have been particularly large outflows of capital from the United States at times. In such a situation currencies classified as "strong" — including the Deutsche Mark — run the risk of serving as major currencies of refuge, and inevitably become overvalued in the process. This is the reason why the Bundesbank has repeatedly pointed to the urgency of joint efforts to create a basis of confidence for exchange rate relationships.

Joint steps to stabilise exchange rates

The joint endeavours of the U.S. monetary authorities and the Bundesbank first bore fruit at the beginning of 1978. On the initiative of the United States, the Bundesbank granted a swap facility of considerable size to the U.S. Treasury in January in addition to the reciprocal credit line of $ 2 billion with the Federal Reserve System that has existed for a number of years. Under this arrangement the United States can draw on substantial amounts of Deutsche Mark in order to intervene in the foreign exchange market. Since it was established the new facility has been utilised on an appreciable scale.

Convinced that the return to a self-sustaining upswing also depends on stable foreign exchange markets, the governments of the United States and Germany reaffirmed in a joint statement on March 13, 1978 that continuing forceful action would be taken to counter disorderly conditions in exchange markets and that close cooperation to that purpose would be maintained. As part of these cooperative efforts the central banks of both countries agreed to increase their existing reciprocal currency arrangement (swap facility) from $ 2 billion to $ 4 billion. In addition, the U.S. Treasury intends to sell SDR 600 million (approximately $ 740 million) to the Bundesbank in order to purchase Deutsche Mark for intervention purposes. The United States also declared its readiness to draw on its automatically available reserve position with the IMF (approximately $ 5 billion) if and as necessary to acquire additional foreign exchange. What makes this arrangement particularly significant is the fact that it documents the will of the United States to contribute towards stabilising the foreign exchange markets by using its own monetary reserves.

(c) "Real" shifts in exchange rates and international competitiveness

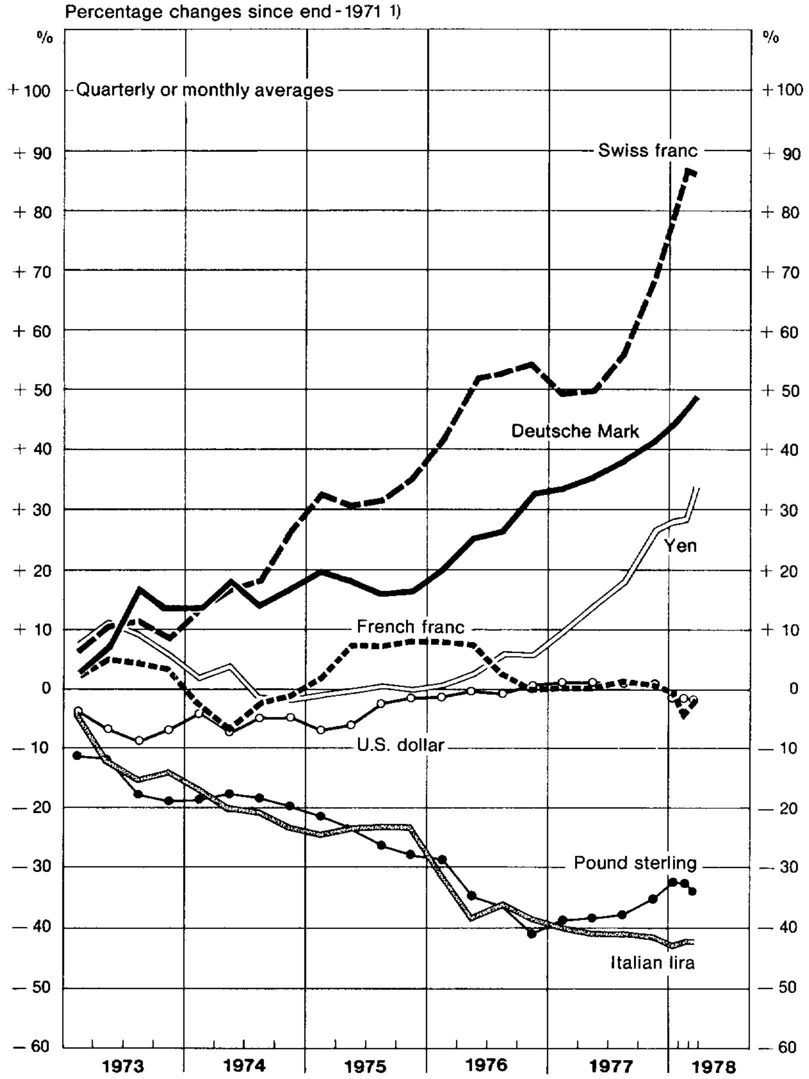
Exchange rate adjustments facilitate the reduction of external imbalances . . .

Experience to date with floating has shown that changes in exchange rates generally move in the direction indicated by price and cost differentials. In this way, exchange rate shifts contribute to the avoidance or reduction of external disequilibria, and since the transition to floating they have at least helped to keep the accumulation of disequilibria in balances of payments within limits. If exchange rates have not always fully performed this equilibrating function then the reason is that other influences were frequently more powerful. In the first few years after the transition to floating the differing levels of domestic demand (which in some cases was distorted through inflation) in individual countries had a stronger impact on current account balances than the change in relative prices induced by shifts in exchange rates. In a number of countries with high rates of inflation and balance of payments deficits it was even quite clear that a "vicious circle" of a declining exchange rate and inflation as a consequence of rising import prices may arise which cannot be broken so long as the inflationary expansion of domestic demand continues.

. . . but may lead to distortions in competitive positions

In 1977 as well the exchange rate shifts definitely moved in the "right" direction (see the chart opposite). However, particularly since the autumn the size of these shifts has frequently been larger than necessary to offset the differing movements of costs and prices, not only as regards the relationship of individual currencies to the dollar but also in terms of their weighted external value. This can be considered unproblematical — or even desirable — only in cases where there is still a need to "catch up" which justifies a "real" exchange rate adjustment that goes beyond the amount required to eliminate current price and cost differentials.

Effective exchange rates of major currencies against the currencies of 22 countries *

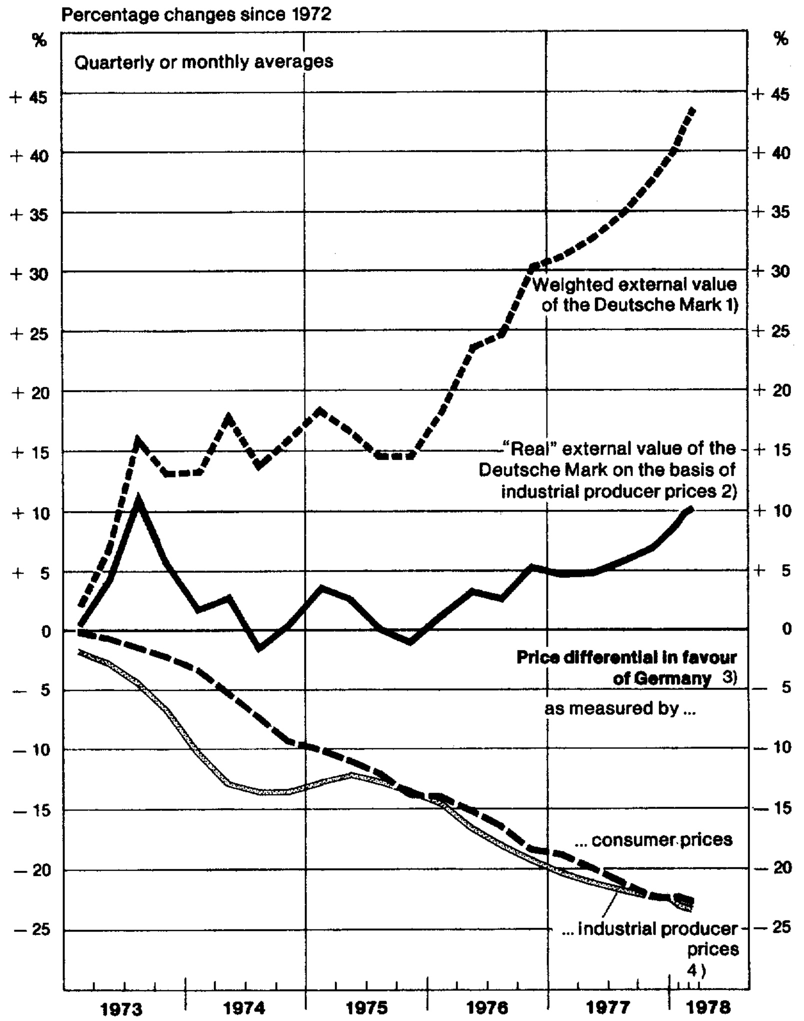


* The calculation is based on the spot middle rates of the 16 currencies officially quoted in Frankfurt and the spot rates of the currencies of 6 further major trading partners of Germany.- 1) For end-1971 the central rates agreed in the exchange rate realignment of December 18, 1971 were used; for the Canadian dollar, for which no central rate was fixed, the market rates of December 21, 1971 were applied. The weights were chosen in accordance with the regional pattern of the foreign trade turnover (exports plus imports) of the individual countries.

In the latest period of floating this is certainly no longer true of the Deutsche Mark. In previous years the weighted external value of the Deutsche Mark had already increased almost continuously – in 1976 by almost 16% (as measured by the currencies of 22 major trading partners), which considerably exceeded the advantage of the German economy in terms of stability. The weighted appreciation in 1977, at just over 8%, was admittedly much lower than in 1976; nevertheless, this additional upvaluation, which continued at the beginning of 1978 and had reached 11% by the end of March (compared with the end of 1976), gives reason to fear that the international competitiveness of some sectors of the German economy is seriously threatened and that at all events export profits are falling fast and losses are occurring in some cases. From January to October last year the pace at which the Deutsche Mark appreciated corresponded roughly to the inflation differential vis-à-vis foreign countries, with the result that the "real" external value of the Deutsche Mark remained at approximately the same level as at the end of 1976. However, since October 1977, when the deterioration in the exchange rate of the dollar accelerated considerably, the "real" external value of the Deutsche Mark has risen noticeably again, namely by 4% up to March 1978 (see the chart on page 48).

"Real" external value of the Deutsche Mark rises sharply

Effective exchange rate of the Deutsche Mark and international price differential



1) Against the currencies of 13 other industrial countries in relation to the market rates of 1972 (annual average).- 2) Weighted external value of the Deutsche Mark adjusted for the price differential in favour of Germany.- 3) Ratio of price movements in Germany to those in 13 other industrial countries (in national currencies, trade-weighted averages). A descending line indicates that price increases in Germany were lower than those abroad.- 4) Prices estimated.

If one looks primarily at the German balance of payments and reserve position — as is frequently done in international discussions — then a deterioration of this order in competitiveness in terms of prices may not appear serious at first sight. But what makes it the more significant is the fact that the persistent tendency of the Deutsche Mark to appreciate is coinciding with a relatively low level of economic activity. The cost and profit situation of large sectors of industry, which is already under heavy pressure, is being exposed to additional burdens through the movement of exchange rates, and the prospects for the continuation of the economic recovery are becoming increasingly uncertain. Admittedly, experience shows that the structure of the economy adjusts to such changed conditions, but such adjustment processes take time. Over the short term excessive shifts in exchange rates can be a considerable burden on an economy.

Less strongly fluctuating and realistic exchange rates foster the economic upswing

An appreciation of the Deutsche Mark that goes beyond what is justifiable is also bound to be disadvantageous for other countries in so far as it impedes the process of recovery of the German economy. Even a powerful stimulation of domestic demand and the pursuit of an expansionary monetary policy are no guarantee that the dampening effects of the rise in the exchange rate on business activity will be neutralised within a short period of time. This underlines the importance of more stable and at the same time realistic exchange rates in view of the present high degree of economic interdependence, particularly among the industrial countries. During the period of floating, too, Germany has contributed through its stability policy to the creation of sound economic and financial underlying conditions for exchange rate relationships — quite in keeping with the rules laid down in the new Articles of Agreement of the IMF. It is therefore highly desirable that Germany's efforts to bring about stronger economic growth should not now be undermined by destabilising external influences on the exchange rate.

U.S. competitive position strengthened

It is natural that particular attention is being paid to the question whether the correction of the external value of the dollar — a process that has been going on for some time — is in harmony with the changed underlying conditions or instead is threatening to go too far. This question is not easy to answer. As a result of exchange rate movements the weighted external value of the dollar has by no means changed spectacularly (see the chart on page 47). From the beginning of 1977 up to the end of March 1978 the weighted external value of the dollar fell by 2% at the most; the considerable devaluation vis-à-vis currencies such as the Deutsche Mark, the Swiss franc, the Japanese yen and sterling was offset almost completely by the appreciation of the dollar vis-à-vis a number of other currencies. Owing to the large share of Canada in the foreign trade of the United States, the appreciation of the U.S. dollar vis-à-vis the Canadian dollar by 12% since the beginning of 1977 is a particularly important factor. If this special influence is left out of account the decrease in the external value of the U.S. dollar in relation to the other major industrial countries is considerably greater, at over 13%. This certainly cannot be described as slight. A devaluation of the dollar to this extent can by no means be justified by reference to a corresponding price and cost differential to the disadvantage of the United States. This means that the international competitiveness of U.S. industry has improved considerably vis-à-vis Europe and Japan. This is fully reflected in the competitive advantage that U.S. firms have meanwhile obviously gained in many fields, particularly compared with their competitors in Germany. The increase in German direct investments in the United States confirms this trend.

Reduction in Japan's competitive advantage in price terms

As a result of the enormous surplus on current account of $ 11 billion which Japan achieved in 1977 the yen has also undergone a considerable appreciation. From the beginning of 1977 to the end of March 1978 its weighted external value rose by about 30%, and from the end of January to the end of March 1978 alone by almost 9%. Together with the appreciation of approximately 7% in 1976 the external value of the yen has risen more strongly than that of the Deutsche Mark in the last 2¼ years. However, the Deutsche Mark had appreciated much more steeply than the yen in the preceding years since the general transition to floating. The competitive position of Japanese industry will probably not remain unaffected by these recent changes in the external value of the yen. A decrease in the extremely high trade surplus and the surplus on current account, particularly with the United States, is therefore to be expected provided the envisaged increase in the growth of domestic demand and the opening of Japan's markets to imported goods actually does materialise. The export surplus of no less than $ 8 billion achieved in trade with the United States in 1977 makes it urgently necessary to correct the flow of trade between these two countries.

2. World economic activity and the balance of payments adjustment process

The "real" changes that have occurred recently in the exchange rates of major currencies, according to all available indicators, should have a substantial impact on trade and current account balances. On past experience, however, this will take a considerable time. This is likely to apply to the United States and Japan in particular.

(a) The pattern of current accounts in 1977

Differing trends in current accounts

The changes in the current accounts of the industrial countries were governed by contrasting trends last year (see the table on page 50).[1] It is true that some distinct successes were scored, particularly in Europe, in the adjustment process; thus, the United Kingdom and France succeeded in greatly reducing their current account deficits and Italy even achieved a considerable surplus. On the other hand, the current accounts of the United States and Japan definitely got out of hand: the dramatic rise in the U.S. deficit went far beyond the extent that would have been compatible with better equilibrium

1 The choice of the dollar as a common denominator overstates the current balances of countries with a "strong" currency and makes those of countries with a "weak" currency appear too small when large shifts in exchange rates occur.

Balances on current account of major countries and groups of countries*

Country/group of countries	1974	1975	1976	1977 **pe**	1976	1977 **pe**
	US$ billion				Surplus (+) or deficit (−) as a percentage of gross national product	
EEC countries	−11.1	+ 0.9	− 7.0	+ 1.5	− 0.5	+ 0.1
of which						
Germany	+ 9.9	+ 4.1	+ 3.9	+ 3.9	+ 0.9	+ 0.7
(Memorandum item: DM billion)	(+25.4)	(+ 9.8)	(+ 9.7)	(+ 8.7)		
France	− 6.0	− 0.1	− 6.1	− 3.2	− 1.8	− 0.8
United Kingdom	− 8.1	− 3.7	− 2.2	− 0.1	− 1.2	− 0.0
Italy	− 8.0	− 0.8	− 2.8	+ 2.2	− 1.6	+ 1.1
United States	− 5.0	+11.6	− 1.4	−20.2	− 0.1	− 1.1
Japan	− 4.7	− 0.7	+ 3.7	+11.0	+ 0.7	+ 1.6
Canada	− 1.5	− 4.7	− 4.2	− 4.0	− 2.2	− 1.8
OPEC countries	+61.8	+30.8	+42.3	+37.0	.	.
Developing countries (excluding OPEC countries)	−24.5	−40.0	−26.3	−23.0	.	.

* Balances of trade, services, and private and official transfers (transactions basis). — **pe** Partly estimated.
Sources: OECD and national statistics.

in international payments. The trebling of the Japanese surplus also conflicts clearly with this requirement. The surplus recorded by the OPEC countries continued to be very high, not least reflecting the deficit of the United States.

U.S. current account burdened by high "oil deficit" . . .

The U.S. current account deficit of $ 20 billion in 1977 was in large part due to steeply increased imports of oil. Within a single year the cost of the oil imported into the United States went up by as much as $ 10 billion to $ 45 billion, thus accounting for 30% of the total value of U.S. imports. Within only five years — between 1972 and 1977 — the cost of imported oil thus rose tenfold. In contrast to Germany and a number of other countries, the growth in exports to the OPEC countries was not nearly large enough to offset the U.S. "oil deficit". In view of the magnitudes involved, even a further increase in the absorptive capacity of these countries can hardly be expected to fully compensate the U.S. "oil deficit". An effective energy policy designed to curb U.S. demand for imported oil directly is therefore vitally important.

. . . and international differences in levels of economic activity

The large U.S. deficit on current account must, however, also be ascribed to a significant extent to the differences between the United States and other industrial countries as regards their levels of economic activity; contrary to expectations, these differences grew sharply in 1977. Once again — in the third year of a strong upswing — the U.S. gross national product went up by $4^3/_4$ % in real terms; this was distinctly more than the average rate of increase between 1965 and 1975. U.S. imports of industrial goods rose particularly fast, at about 20%; sales prospects on the U.S. market were thus especially favourable for other industrial countries — and also for developing countries — in view of the strong growth of domestic demand.

Large Japanese trade surplus with the United States

Japan's exporters derived particular benefit from this, as the large trade surplus with the United States of $ 8 billion clearly shows. It was mainly thanks to exports that the rate of growth of the Japanese gross national product, at about 5%, remained comparatively high in 1977; no strong stimulus was provided by domestic demand. The surplus on current account, at $ 11 billion, was greater than ever before even though demand was relatively weak in almost all industrial countries except the United States.

In Europe growth rates last year were distinctly below the average for earlier years. Germany was also involved in this weakening of economic activity even though the rise in the gross national product, at $2^1/_2$ %, was above the average for Europe. For quite a number of countries, including some which have for some time been giving high priority to the adjustment of their balances of payments, the German market continued to be highly absorptive. Many developing countries, too, benefited to an above-average extent from exports to Germany. Following the particularly high growth rates of German imports in preceding years, this was a development that must be considered very positive for the stabilisation of the world economy.

(b) Prospects for 1978

Faster growth would facilitate payments balance

An acceleration of economic growth in Germany and other major industrial countries such as is envisaged for the current year should also help to improve the prospects for reducing current account disequilibria. As described in detail elsewhere in this Report (beginning on page 9), major additional measures to boost domestic demand have been adopted since the autumn of 1977 in Germany after wide-reaching fiscal programmes which are now likewise bearing fruit had been approved in the spring. The initial effects of these measures are already being felt. In Japan, too, the signals are set for expansion. At the same time the pace of growth in the United States is likely to slow down slightly in the latter part of the year. In conjunction with the shifts that have already occurred in exchange rates, a more balanced utilisation of production capacity in the major industrial countries should contribute to adjustments in the desired direction in trade and current account balances. Other countries are likely to profit from this in significant measure as well.

Last year Germany in particular was repeatedly called upon to stimulate demand more strongly, especially by fiscal means. In the meantime the differences in opinion as to whether Germany could assume the role of a "locomotive" have been superseded by the conviction that joint efforts are necessary if a world-wide growth process leading back to a higher level of employment and better international payments equilibrium is to be set in motion. The consolidation of the upswing must be broadly based and cannot be made the task of just a few relatively "strong" countries.

Rates of inflation still too high in many countries

At the same time, however, one should not lose sight of the danger that inflation may accelerate again. In many countries the current rate of inflation is still disturbingly high. In the United States the increase in consumer prices last year, at over 6 1/2 %, was far higher than what is desirable in view of the international role of the dollar. Only in Switzerland and Germany were the rates of price increase below 4 % at the end of 1977. But the average inflation rate in Europe, at over 10 %, is still far too high, even if the monthly rates have distinctly decreased further in the last few months, not least due to the price reductions caused by the tendency of numerous currencies to appreciate. Quite a number of countries that have not yet scored adequate successes in the fight against inflation and which are faced with balance of payments problems as well are therefore understandably inclined to show restraint about taking measures to reflate domestic demand.

3. Financing the balance of payments deficits

Central banks finance the U. S. deficit

The little headway made in eliminating disequilibria and particularly the marked deterioration in the U. S. balance of payments have focused even more attention on the problem of financing deficits. The fact that central banks intervened in dollars on a record scale in 1977 and that their dollar balances increased accordingly means nothing else than that in the last analysis the U. S. balance of payments deficit was financed by foreign central banks. The extent of such financing by the central banks of the other Group of Ten countries and Switzerland alone, at about $ 26 billion, far exceeded the U. S. deficit on current account of over $ 20 billion (see the table on page 52). In addition, therefore, the foreign central banks financed a substantial net capital outflow from the United States. This striking result is particularly characteristic of the general uncertainty about the movement of the dollar and of the prolonged expectation that a few "strong" currencies might appreciate even further.

(a) The role of the international financial markets

Favourable financing conditions . . .

The conditions on international financial markets were in fact quite favourable for financing balance of payments disequilibria, including the substantial U. S. deficit. The OPEC countries had large amounts of "savings", as in previous years, which were available for investment purposes. Germany's considerable long-term capital exports, as well as those of other "strong" industrial countries, also supplied the international financial markets with funds.

Major items of the U.S. balance of payments

US$ billion

Item	1974	1975	1976	1977 1 1st to 3rd qtr	1977 1 4th qtr p	1977 1 Total p
1. Balance on current account	−5.0	+11.6	−1.4	−15.0	− 5.2	−20.2
2. Balance on capital account (including all assets of OPEC countries in the United States and balancing item)	+7.0	− 9.1	+0.3	+ 0.7	− 9.8	− 9.1
3. Balance on current and capital accounts (1 plus 2)	+2.0	+ 2.4	−1.2	−14.3	−15.0	−29.3
4. Financed inter alia by: changes in the official dollar balances of the other countries of the Group of Ten and Switzerland in the United States	−1.2	+ 1.6	+5.3	+12.8	+13.3	+26.1
Memorandum item: Net purchases (+) of U.S. dollars through interventions in the foreign exchange markets by the other countries of the Group of Ten and Switzerland	.	.	−0.5	+21.3	+14.5	+35.8

1 Not seasonally adjusted. — p Provisional.
Sources: Survey of Current Business and Federal Reserve Bulletin.

. . . lead to a further steep rise in international bond issues and bank credits . . .

The gross volume of new credit extended via the international bond and bank loan markets reached a record level in 1977, at $ 67 billion (see the table on page 53). However, the significant factor for international monetary relations is the net volume, which only slightly exceeded the previous year's level because of the steep increase in redemptions and the special way in which the U.S. deficit was financed.

. . . although developments in the individual sectors are mixed

The trends of the various types of credit were rather mixed. The volume of international bond issues, at $ 34 billion, was no greater than in the preceding year because issues of traditional foreign bonds in the United States and Switzerland declined. On the other hand, the volume of mostly medium-term syndicated Euro-currency loans granted by international bank consortia rose by one fifth to just under $ 34 billion; loan agreements involving more than a further $ 6 billion were just about to be concluded at the end of 1977. Short-term Euro-credits and short and medium-term traditional foreign loans by banks also contributed greatly to balance of payments financing in 1977. Inclusive of medium-term Euro-credits, the external assets of the banks of the Group of Ten countries and Switzerland and of the foreign branches of U.S. banks in major off-shore financial centres in the Caribbean and Asia increased by over $ 100 billion to about $ 650 billion. Net of double counting in the interbank sector, additional credit to final borrowers made up an estimated three quarters of this growth, which means that the total volume probably exceeded $ 400 billion at the end of 1977.

The dollar maintained its position as the most important currency for Euro-bonds, but the share of new issues denominated in Deutsche Mark rose from 19% to 27%. The volume of foreign bonds placed in the New York capital market fell sharply, mainly because fewer Canadian bonds were issued. There was a marked increase in the traditional foreign bonds denominated in yen. Of all the international bond issues, over $ 22 billion (i.e. two thirds) consisted of issues from OECD countries. Developing countries extended their direct access to the international bond markets, and particularly to the Euro-bond market, compared with 1976 and doubled their share, at almost $ 3 billion. Including the funds raised by international development banks, almost one fifth of the bond proceeds flowed to developing countries. Of the increase in medium-term Euro-credits, in fact, the greater part (approximately $ 18 billion) was accounted for by developing countries. While the oil-exporting countries in this group almost doubled their borrowing to over $ 6 billion, the growth attributable to the other developing countries remained at about the level of the previous year. In 1977 as well borrowing from banks served directly to strengthen monetary reserves in quite a few cases.

Slight easing of the overall debt situation of developing countries

There has been a slight easing in the overall debt situation of the developing countries; at least, it is less grave than was expected a year ago. Only in a few individual cases have serious refinancing difficulties arisen. The surplus funds newly invested with inter-

International credit and bond markets

US$ billion

Item	1973	1974	1975	1976	1977 p
A. Medium-term Euro-currency loans 1	20.9	28.5	20.6	27.9	33.5
1. By type of borrower					
Public agencies 2	14.6	19.5	13.9	20.4	27.0
Private agencies	6.3	9.0	6.7	7.5	6.5
2. By group of countries					
Industrial countries	12.7	19.0	6.8	10.9	13.0
of which					
Seven major OECD countries 3	(9.2)	(13.2)	(1.8)	(4.4)	(6.1)
Other OECD countries	(3.2)	(5.1)	(4.4)	(5.8)	(6.8)
Developing countries	7.3	8.0	11.0	14.2	17.6
Oil-exporting countries	2.8	0.8	3.2	3.4	6.3
Other developing countries	4.4	7.2	7.8	10.8	11.3
Centrally planned economies 4	0.7	1.1	2.7	2.5	2.6
Other 5	0.2	0.4	0.1	0.3	0.3
B. International bond markets	10.1	12.5	21.8	35.1	33.6
Euro-bonds 6	4.2	3.4	8.7	15.2	18.6
of which					
in U.S. dollars	(2.4)	(2.0)	(3.4)	(9.9)	(11.5)
in Deutsche Mark 7	(1.1)	(0.7)	(2.9)	(2.9)	(5.1)
By type of issuer					
Public agencies 2	2.0	2.6	4.8	9.0	9.5
Private agencies	2.1	0.8	3.9	6.2	9.1
Traditional foreign bonds	4.5	5.4	11.0	18.5	13.9
of which issued in Germany	(0.4)	(–)	(0.4)	(1.1)	(0.9)
Special issues 8	1.4	3.7	2.1	1.4	1.2
Total (A plus B)	31.0	41.0	42.4	63.0	67.1

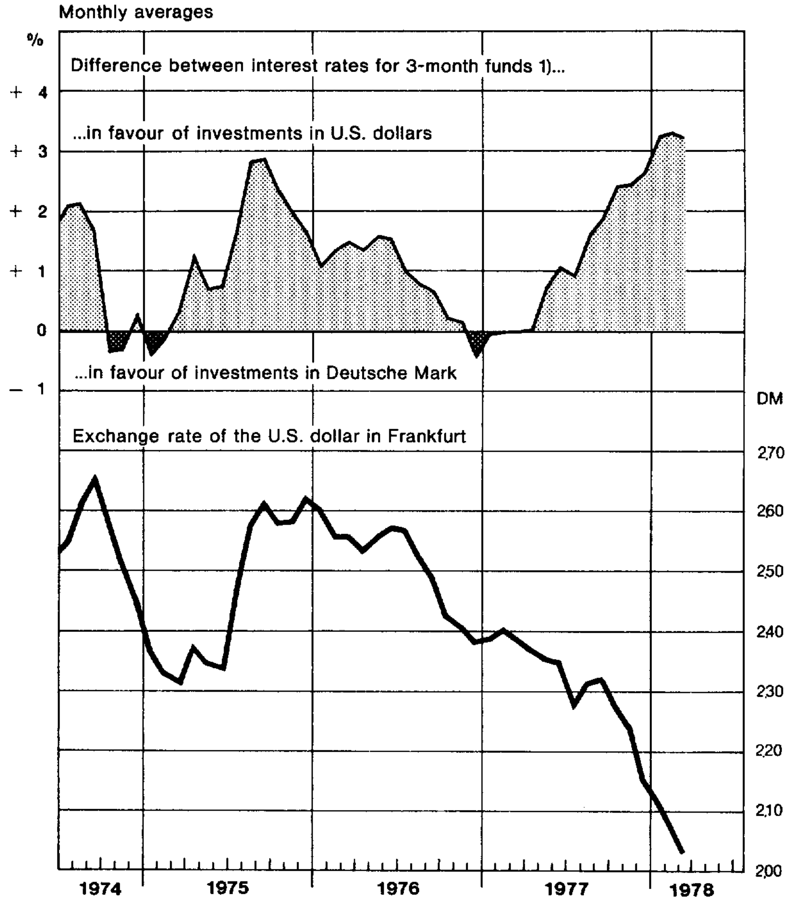
1 Publicised internationally syndicated loans running for more than 12 months and almost entirely financed on a roll-over basis which have not necessarily been taken up yet. — **2** Including public enterprises and financial institutions and including international organisations. — **3** Canada, France, Germany, Italy, Japan, United Kingdom, United States. — **4** Including Comecon institutions. — **5** Including international organisations. — **6** Internationally syndicated bond issues. — **7** Including some Deutsche Mark issues floated by purely German syndicates. — **8** Including special issues in Deutsche Mark. — **p** Provisional.
Discrepancies in the totals are due to rounding. — Sources: OECD and World Bank.

national banks by some OPEC countries in 1977 were only a little higher than the net short and medium-term bank credits taken up by oil-exporting countries in the same period. The other developing countries were able to reduce by a few billion dollars, to about $ 27 billion, the net debts to western banks they had accumulated in earlier years; at the end of 1977 their gross indebtedness amounted to just under $ 90 billion. In view of the fact that borrowing in international financial markets is becoming an increasingly important part of the developing countries' aggregate external debt, the question of assessing country risks on the part of banks is, of course, assuming greater significance.

Growing interest rate differential in favour of the U.S. dollar

In the loan markets with "strong" currencies, such as the Deutsche Mark, the Swiss franc and the yen, interest rates have fallen distinctly. In the sterling markets the renewed confidence in the pound even led to a spectacular fall in interest rates. The resultant prospect of exchange rate gains and the considerable interest rate advantage of the bond markets over the money markets led to short-term funds being offered additionally to the capital markets. By contrast, since May 1977 the money market rates in New York and in the Euro-dollar market have been tending to rise again — to some extent under the influence of U.S. monetary and interest rate policy — with the result that a substantial interest rate differential has developed in favour of U.S. dollar assets as against Deutsche Mark assets (see the chart on page 54). When the distinct weakening of the dollar occurred in the fourth quarter, long-term dollar interest rates also followed this trend. In the medium-term Euro-credit market for roll-over loans, the larger supply of funds resulted in keener competition among banks for good credit customers. The premiums on the London Interbank Offered Rate for "blue chip" borrowers contracted to $^5/_8$ — $^3/_4$ % p.a., while the average life of newly granted credits lengthened up to seven years towards the end of 1977.

International interest rate differential and exchange rate of the U.S. dollar



1) 3-month certificates of deposit of New York banks against 3-month interbank funds in Frankfurt.

(b) Decline in official standby loans

Despite large financial requirements, official balance of payments assistance declines sharply

The balance of payments assistance given by official institutions, particularly the IMF, tended to play a subordinate role in the period under review compared with the size of the balance of payments deficits. After the record level of lending by the International Monetary Fund in 1976, the volume of new drawings halved in 1977 to just over $ 4 billion gross. Taking the large repayments in the same period into account, only a small net volume of lending of about half a billion dollars remains. Within the European Communities only one Community loan amounting to $ 500 million was raised in favour of Italy. At first sight this development does not appear to fit into the picture of high financial requirements in many countries. The explanation is that in view of the plentiful supply of liquidity available in the financial markets many borrowers refrained from raising funds through the IMF, a method which is less convenient and involves the acceptance of economic policy conditions. Following the reversal of its balance of payments position, the United Kingdom did not have to make full use of its standby credit with the IMF. In view of the impressive success of its stabilisation policies Italy did not need to draw on the agreed short-term standby loan of the European Communities and was even able to repay by March 1978 the greater part of its outstanding IMF loans and the first instalment of the loan granted to it under the medium-term financial assistance arrangement of the European Communities. The Banca d'Italia has also been able to repay in the meantime $ 1 billion of the gold-pledged loan still outstanding with the Bundesbank. The movement of commodity prices likewise contributed to the reduced recourse to the IMF last year. The financing by the IMF of shortfalls in commodity earnings always lags a certain amount behind price fluctuations in the commodity market. The recovery of raw material prices in 1976 after the deterioration in prices in 1975 accordingly led to fewer calls in the year under review on the special facility in the IMF designed for this purpose, namely less than $ 100 million on balance.

It is possible that the pause in use of IMF credit will come to an end rapidly and that both the general resources of the Fund and the special facilities will soon be drawn on more heavily again. After the increase in quotas approved two years ago has entered into force, the Fund will be much better equipped to cope with such demands.

4. Faster growth of international liquidity

U. S. deficit the main cause of the record increase in world monetary reserves

The financing of balance of payments deficits, and particularly the special way in which the U. S. deficit was financed, led to an unprecedented expansion of international liquidity in 1977 (see the table on page 56). Altogether world monetary reserves increased by about $ 56 billion (after adjustment for changes in the value of gold and SDR holdings and of the reserve positions in the IMF denominated in SDRs). This is the steepest rise in reserves ever recorded in a single year. Since the beginning of 1974, when the oil price hike triggered major balance of payments deficits in the oil-importing countries and a sharp rise in the reserves of the oil-exporting countries, the stock of official monetary reserves has risen by approximately $ 133 billion to a total of $ 317 billion at the end of 1977.

The global increase in reserves in 1977 almost entirely took the form of higher foreign exchange balances, with about three fifths consisting of dollar claims on the United States. These reflect to a considerable extent the sizable dollar interventions of the central banks of the leading industrial nations. The oil-exporting countries, by contrast, were no longer very significant dollar investors. IMF lending made only a minor contribution to the increase in reserves in 1977 after approximately $ 6 billion in 1976.

Of the growth in world monetary reserves, the industrial countries accounted for $ 35 billion and the oil-exporting countries and other developing countries for $ 10 billion each. Until September 1977 this growth was mainly confined to the United Kingdom and Italy. Later on, not only the Swiss franc but particularly the Deutsche Mark and the Japanese yen became the target of speculative inflows, which was reflected in a strong upward surge in the monetary reserves of the respective countries. Thus, the dollar holdings of the Bundesbank went up by a total of $ 3.7 billion in the fourth quarter of 1977. The conspicuously small rise of only $ 0.7 billion in the reserves of Switzerland, despite substantial interventions by the Swiss National Bank, is explained by swap operations between the Swiss National Bank and commercial banks and the conversion of foreign bonds by the central bank; without these operations the reserves would have gone up by far more in 1977.

IMF drawing rights sufficient for normal cases . . .

In view of the steep rise in world monetary reserves and the availability of balance of payments loans there was no reason to contemplate a systematic further increase in international liquidity during the period under review, especially since it was to be expected that the IMF quotas would be raised by over one third to SDR 39 billion in the spring of 1978, in accordance with a decision taken as far back as 1976. This increase in quotas entered into force on April 1, 1978. A further general review of quotas is in any case due in the course of the current year; opinions differ considerably, however, as to the size of any new increase.

. . . and a new special facility created for specific critical cases

The temporary "additional financing arrangement" (Witteveen Facility) of the IMF amounting to SDR 8.7 billion (about $ 10 billion), which was approved in principle in the summer of 1977, is therefore to be regarded more as a precautionary measure for individual particularly critical cases. The special significance of this arrangement lies in the fact that the OPEC countries have promised substantial contributions amounting to approximately $ 5 billion. The share to be financed by the Bundesbank comes to about $ 1.3 billion. Disbursement of the funds by the IMF will be subject to the observance of economic policy conditions. It has not yet been possible to put this special facility into effect as the ratification procedure in the United States has not been completed.

No new allocation of SDRs

The question of a possible further allocation of special drawing rights was also discussed in the IMF last year. However, in the preliminary talks prescribed by the IMF Articles of Agreement the Managing Director of the Fund did not find a sufficient majority

World monetary reserves

(Special drawing rights, reserve positions in the IMF, foreign exchange, gold)

US$ billion

Item	Change 1: Average annual change 1970 – 73	Change 1: 1974	Change 1: 1975	Change 1: 1976	Change 1: 1977	Amount outstanding at end-1977
I. Development by type of reserves						
1. Foreign exchange holdings						
Claims of monetary authorities on the United States	+ 12.7	+ 9.9	+ 3.9	+ 11.3	+ 33.9	125.8
Sterling claims of monetary authorities on the United Kingdom	+ 0.6	+ 3.0	– 2.6	– 3.8	+ 0.3	4.1
Identified foreign exchange holdings of monetary authorities in the Euro-market	+ 6.5	+ 14.8	+ 7.0	+ 11.4	**pe** + 11.0	**pe** 71.0
Other foreign exchange holdings of monetary authorities	+ 2.6	+ 5.0	– 2.7	+ 6.6	+ 10.3	41.2
Total	+ 22.4	+ 32.7	+ 5.6	+ 25.5	+ 55.5	242.1
2. Special drawing rights, reserve positions in the IMF, gold	+ 1.4	+ 3.3	+ 4.4	+ 5.6	+ 0.0	75.0
Total monetary reserves	+ 23.8	+ 36.0	+ 10.0	+ 31.2	+ 55.6	317.1
Memorandum item:						
Total monetary reserves including changes due to valuation adjustments	+ 26.3	+ 36.9	+ 7.1	+ 30.6	+ 58.8	317.1
II. Regional development						
1. Industrial countries	+ 13.1	+ 3.7	+ 4.3	+ 10.4	+ 34.9	169.4
of which						
United States	– 1.3	+ 1.5	+ 0.5	+ 2.6	+ 0.2	19.4
Germany	+ 6.2	– 0.9	– 1.0	+ 3.8	+ 4.5	39.7
France	+ 1.0	+ 0.3	+ 4.0	– 2.8	+ 0.2	10.2
United Kingdom	+ 0.9	+ 0.4	– 1.4	– 1.2	+ 16.8	21.1
Italy	+ 0.2	+ 0.4	– 2.0	+ 1.9	+ 4.8	11.6
Japan	+ 2.1	+ 1.2	– 0.6	+ 3.8	+ 6.5	23.3
Switzerland	+ 0.9	+ 0.4	+ 1.6	+ 2.6	+ 0.7	13.8
2. Other developed countries **2**	+ 3.9	– 2.9	– 3.1	+ 0.4	+ 0.8	19.3
All developed countries (1 plus 2)	+ 17.0	+ 0.8	+ 1.2	+ 10.8	+ 35.8	188.7
3. Oil-exporting countries **3**	+ 2.5	+ 32.4	+ 9.8	+ 8.8	+ 9.8	75.4
of which						
Saudi Arabia	+ 0.8	+ 10.4	+ 9.1	+ 3.7	+ 2.9	30.0
Iran	+ 0.2	+ 7.1	+ 0.6	– 0.1	+ 3.4	12.3
Venezuela	+ 0.3	+ 4.1	+ 2.4	– 0.3	– 0.4	8.2
4. Other developing countries	+ 4.2	+ 2.8	– 1.0	+ 11.6	+ 10.0	53.0
All countries	+ 23.8	+ 36.0	+ 10.0	+ 31.2	+ 55.6	317.1

1 Excluding valuation gains on SDRs, reserve positions in the IMF and holdings of gold due to the devaluation of the dollar in 1971 and 1973, and excluding changes arising from fluctuations in the value of the SDR since mid-1974. — **2** Finland, Greece, Iceland, Ireland, Malta, Portugal, Spain, Turkey, Yugoslavia; Australia, New Zealand, South Africa. — **3** Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Oman, Qatar, Saudi Arabia, United Arab Emirates, Venezuela. — **pe** Partly estimated.
Discrepancies in the totals are due to rounding. — Sources: IMF, BIS and national statistics.

to support a new allocation. The mere wish to make the special drawing right the main reserve medium of the monetary system is not enough to justify the creation of additional liquidity in the form of special drawing rights, particularly since other sources of reserve creation continue to flow freely and in an uncontrolled manner. An improvement in the quality of the special drawing right, especially its provision with a more attractive rate of interest, has the full support of the German authorities.

5. Recent developments in the international monetary system

Second amendment to the IMF Articles of Agreement enters into force

On April 1, 1978, shortly before this Report went to press, the second amendment to the Articles of Agreement of the International Monetary Fund entered into force.[1] This amendment contains new rules governing the working of the international monetary system and monetary cooperation among the members of the IMF. For this purpose the

1 The principal amendments and their significance were discussed in the Monthly Report of the Deutsche Bundesbank, Vol. 29, No. 8, August 1977.

1974 "Guidelines for the Management of Floating Exchange Rates" of the IMF have been superseded by more comprehensive principles regulating exchange rate policy. Among other things, these principles form the basis for the task assigned to the IMF of monitoring the exchange rate policies of its members.

1976 gold arrangement terminated

The gold arrangement of the countries of the Group of Ten, Switzerland and Portugal expired at the end of January 1978 after running for two years. This arrangement was intended to forestall the possibility of gold again assuming a greater role in the monetary system as a result of a new de facto fixing of an official gold price or an increase in the total volume of official gold holdings. Experience gained since 1976 suggested that apprehensions of this kind were unfounded. The termination of the arrangement must also be seen in connection with the second amendment to the IMF Articles of Agreement, which grants monetary authorities considerable latitude in their gold transactions.

6. European monetary policy

New initiatives in the European Communities

Last year new initiatives were evolved in the European Communities for the more effective coordination of economic and monetary policy and an expansion of Community financial solidarity, and also with a view to reviving the economic and monetary union. The discussions on this point showed once again that greater progress is possible only through a very gradual process of harmonisation of national objectives. However, the envisaged further development of the harmonisation of monetary and exchange rate policy within the Community into a system of permanent consultations will undoubtedly improve economic cooperation to a noticeable degree.

The review of Community support mechanisms yielded concrete results. These facilities were increased in 1977 as follows: in the field of short-term monetary assistance, the Community central banks agreed in December 1977 to double the so-called creditor and debtor rallonges by the equivalent of $ 1.9 billion each while maintaining each member's quota. Since under normal circumstances each individual central bank cannot receive more loans than in the past, the new arrangement ensures that the whole of the loans available cannot be called upon by a single large debtor. In the case of the medium-term financial assistance of Community member states, all financial ceilings were doubled, likewise in December 1977. The sum total of the ceilings therefore rose to 5.45 billion European Units of Account (just under $ 7 billion), the ceiling for Germany increasing to $ 1.5 billion. From now on the funds will generally be made available in tranches in order to permit better surveillance of the economic policy conditions attached to them.

Any proposals by the Commission going beyond this, and particularly those aimed at the realisation of an economic and monetary union in one "qualitative leap", must be subjected to thorough critical scrutiny, especially since the first moves in this direction in 1971/72 produced a number of disappointments. Although the tensions in the international monetary system, which have raised additional problems for the Community countries as well, make a common economic and monetary policy appear quite urgent, the chances lie less in a "qualitative leap" than in gradual advances achieved on a pragmatic basis.

Part B: Notes on the Deutsche Bundesbank's annual accounts for 1977

1. Legal basis, classification and valuation

Legal basis, accounting system and annual accounts

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) of July 26, 1957 (Federal Law Gazette I, page 745); the provisions it contains regarding the accounting system and the annual accounts remained unchanged during the year under review.

Classification of the annual accounts

On the assets side of the balance sheet a new item 4

Claims on the European Monetary Cooperation Fund

has been added. On the liabilities side the items

Special deposits of the Federal Government
Balances on cash deposit special accounts

have been deleted.

The items

1 Loss for the year
2 Balancing item taken over from 1976 in respect of the valuation adjustment of the monetary reserves and other foreign currency positions — loss brought forward —
3 Balance sheet loss

have been added in an appendix to the profit and loss account.

Valuation

The provisions of the Companies Act (Aktiengesetz) were taken into account mutatis mutandis in the valuation (section 26 of the Bundesbank Act).

2. Conversion account

The combined conversion account of the institutions amalgamated to form the Deutsche Bundesbank is attached to the German original of this Report as Appendix 1.

Through the adjustment of the partial conversion accounts for the Bank deutscher Länder and the Land Central Banks to the position shown by the books at December 31, 1977, the Bank's title to the allocation of equalisation claims rose by DM 13,629.48 to DM 8,103,779,190.47; the claim on the Federal Government arising from the non-interest-bearing debt certificate issued in connection with the currency conversion in Berlin remained unchanged at DM 547,168,481.20 during the year under review.

The closing of the combined conversion account of the institutions amalgamated to form the Deutsche Bundesbank is envisaged for December 31, 1978, the way having been paved for this by the Act on the Conclusion of the Currency Conversion of December 17, 1975 (Federal Law Gazette I, page 3123).

3. Annual accounts

The annual accounts for 1977 are attached to this Report as an Appendix; as usual, the notes on them are in the same order as the items in the balance sheet and profit and loss account. At the same time a report is rendered on the Bank's activities during 1977.

Balance sheet

Comparison of balance sheet figures

At December 31, 1977 the balance sheet total had increased by DM 6,519.5 million, compared with end-1976, to DM 135,019.8 million.

Comparison of balance sheet figures

DM million

Assets	December 31 1976	December 31 1977
Gold	14,001.7	14,065.4
Reserve position in the International Monetary Fund and special drawing rights		
Drawing rights within the gold tranche	4,207.2	2,950.9
Loans under special borrowing arrangements	1,646.9	2,635.7
Special drawing rights	4,795.9	3,008.3
Balances with foreign banks and money market investments abroad	51,982.5	56,579.5
Claims on the European Monetary Cooperation Fund	–	1,708.3
Foreign notes and coins	21.3	22.7
External loans and other external assets		
Loans in connection with EEC medium-term monetary assistance	1,146.9	1,021.6
Claims arising from foreign exchange offset agreements with the United States	3,321.7	1,884.0
Other loans to foreign monetary authorities	4,837.9	3,832.5
Loans to the World Bank	2,541.5	2,517.7
Foreign bills of exchange	1,222.9	1,628.9
Domestic bills of exchange	12,184.7	12,399.7
Lombard loans	6,109.2	5,558.9
Cash advances (book credits)	1,795.5	904.7
Treasury bills and discountable Treasury bonds	–	–
Equalisation claims on the Federal Government and non-interest-bearing debt certificate in respect of Berlin		
Equalisation claims	8,136.3	8,136.4
Non-interest-bearing debt certificate	547.2	547.2
Securities	1,419.3	692.5
German coins	719.9	810.0
Balances on postal giro accounts	271.3	998.8
Other claims	929.1	1,191.6
Land and buildings	726.9	782.4
Furniture and equipment	29.9	35.6
Items in course of settlement	1,740.3	3,349.2
Other assets	1,092.9	1,131.6
Prepaid expenses and deferred income	26.7	27.8
Balancing item in respect of the valuation adjustment of the monetary reserves and other foreign currency positions — balance sheet loss —	3,044.7	6,597.9
Total	128,500.3	135,019.8
Contingent claims	1.5	1.0

Liabilities	December 31 1976	December 31 1977
Bank notes in circulation	59,038.3	65,567.4
Deposits of banks	51,297.5	52,491.3
Deposits of public authorities		
Federal Government	272.4	296.3
Equalisation of Burdens Fund and ERP special Fund	304.1	150.1
Länder Governments	2,094.0	1,629.4
Other public depositors	58.5	44.3
Special deposits of the Federal Government	209.6	–
Deposits of other domestic depositors		
Federal Railways	4.1	6.8
Federal Post Office	2,070.5	3,418.7
Other depositors	513.6	479.2
Balances on cash deposit special accounts	58.0	–
Liabilities arising from mobilisation and liquidity paper sold	6,476.4	5,366.1
Liabilities arising from foreign business	1,097.1	489.0
Contra-entry to special drawing rights allocated	1,488.8	1,386.9
Provisions	1,885.0	1,945.0
Other liabilities	38.9	104.5
Deferred expenses and accrued income	204.0	255.3
Capital	290.0	290.0
Reserves	1,099.5	1,099.5
Total	128,500.3	135,019.8
Contingent liabilities	1.5	1.0

Assets

Gold

At December 31, 1977 the gold holding amounted to DM 14,065.4 million against DM 14,001.7 million at end-1976. The increase is attributable to the restitution of gold by the International Monetary Fund to its members.

Reserve position in the International Monetary Fund and special drawing rights

At December 31, 1977 the drawing rights within the gold tranche amounted to DM 2,950.9 million against DM 4,207.2 million at end-1976. The changes are due to other members' Deutsche Mark drawings and transactions of similar effect equivalent to SDR 238.2 million, to Deutsche Mark repayments and transactions of similar effect equivalent

Drawing rights within the gold tranche

to SDR 616.9 million, and to the valuation adjustment at the end of the year. The level of drawing rights within the gold tranche represents the difference between the German quota of SDR 1,600 million and the Deutsche Mark balances at the disposal of the IMF equivalent to SDR 445.9 million.

Loans under special borrowing arrangements

Loans under special borrowing arrangements amounted to DM 2,635.7 million at December 31, 1977 against DM 1,646.9 million at end-1976. During the year under review loans totalling SDR 478.2 million were granted to the International Monetary Fund to finance Deutsche Mark drawings by the United Kingdom (SDR 458.0 million) and Italy (SDR 20.2 million) under the General Arrangements to Borrow (GAB) of the IMF. The loans under the 1975 IMF oil facility came to SDR 552.7 million after SDR 47.3 million had been repaid prematurely in the year under review.

Special drawing rights

The amount of special drawing rights (SDRs) held at end-1977 is shown at DM 3,008.3 million compared with DM 4,795.9 million at end-1976. The change is due to the surrender of SDRs under the European Community settlement arrangements (SDR 49.4 million), the sale of SDRs in freely agreed transactions (SDR 565.1 million), the payment of interest on SDRs bought by the Bank (SDR 43.7 million) and the valuation adjustment at the end of the year. The valuation adjustment affected both the total holding (SDR 1,176.5 million) and the contra-entry to SDRs allocated, as shown on the liabilities side (SDR 542.4 million).

Balances with foreign banks and money market investments abroad

Balances with foreign banks and money market investments abroad amounted to DM 56,579.5 million at December 31, 1977, against DM 51,982.5 million at December 31, 1976. In the year under review current transactions resulted in an increase of roughly DM 11.0 billion, but this was reduced by about DM 6.4 billion to approximately DM 4.6 billion by the valuation adjustment of foreign currency assets as at December 31, 1977.

Claims on the European Monetary Cooperation Fund

This item comprises claims arising from operations in the foreign exchange market in support of the currencies of European Community member states that participate in the European narrower margins arrangement.

Foreign exchange deals

The Bank's turnover in foreign exchange spot deals (foreign currency against Deutsche Mark) amounted to DM 32,676.6 million in the year under review, against DM 24,720.8 million in 1976. The number of deals, however, decreased slightly from 6,931 in 1976 to 6,860 in 1977. Such deals consisted of

	1976		1977	
	Number	DM million	Number	DM million
Purchases	3,488	12,245.3	3,696	17,822.9
Sales	3,443	12,475.5	3,164	14,853.7
	6,931	24,720.8	6,860	32,676.6.

The substantial increase in turnover compared with last year was mainly caused by purchases of U.S. dollars in the market in order to smooth exchange rate fluctuations and purchases of foreign exchange by the Bundesbank in connection with the conversion of foreign Deutsche Mark bonds and major loans which foreigners took up in Germany.

Cross deals (foreign currency against foreign currency) also increased during the year under review, at 622 deals equivalent to DM 5,645.2 million against 612 deals equivalent to DM 4,383.6 million in 1976. In addition, 328 U.S. dollar inter-centre switch transactions amounting to US$ 53.6 million were concluded, against 403 transactions amounting to US$ 48.6 million in the previous year.

External payments

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

External payments

Number of orders

Year	Outgoing external payment orders: in foreign currency	Outgoing external payment orders: in Deutsche Mark	Outgoing external payment orders: Total	Outgoing external payment orders: of which settled under automated standing order procedure	Incoming external payment orders: in foreign currency	Incoming external payment orders: in Deutsche Mark	Incoming external payment orders: Total
1976	552,083	1,225,617	1,777,700	1,506,411	17,143	199,156	216,299
1977	552,529	1,342,325	1,894,854	1,646,159	16,428	198,566	214,994

Sales of foreign cheques

During 1977 7,875 (1976: 7,268) foreign cheques payable to order worth DM 477.8 million (1976: DM 345.2 million) were sold. In addition, the Bank sold 26,045 traveller's cheques worth DM 2.5 million against 24,994 traveller's cheques worth DM 2.7 million in the previous year.

Simplified collection procedure for foreign cheques

The number and amount of items received under the simplified collection procedure for foreign cheques went up considerably during the year under review. Further details are given in Appendix 4 of the German original of this Report.

Foreign commission business

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

	1976 Number	1977 Number
Bills, cheques, etc.	20,683	26,584
Foreign notes and coins	4,272	4,591
	24,955	31,175.

Foreign notes and coins

Purchases and sales

At DM 22.7 million, the amount of foreign notes and coins held at the end of 1977 was DM 1.4 million higher than at December 31, 1976. During the year under review the Bank effected 61,495 purchases (1976: 59,653) and 42,018 sales (1976: 36,653) of foreign notes and coins.

External loans and other external assets

Loans in connection with EEC medium-term monetary assistance

As in 1976, the sub-item "Loans in connection with EEC medium-term monetary assistance" includes the German share of US$ 486.5 million, equivalent to DM 1,021.6 million, in a credit totalling US$ 1,398.3 million which the member states of the European Communities — with the exception of the United Kingdom — granted to Italy on December 18, 1974 under the arrangements for medium-term monetary assistance. This credit is to be repaid in fixed instalments in 1978.

Claims arising from foreign exchange offset agreements with the United States

The U.S. dollar claims arising from foreign exchange offset agreements concluded with the United States for the years from 1973 to 1975 are shown here.

Other loans to foreign monetary authorities

This item comprises the U.S. dollar loans granted to the Banca d'Italia and the Banco de Portugal against the security of gold.

Loans to the World Bank

As in preceding years, loans to the World Bank were mainly granted against borrowers' notes denominated in Deutsche Mark.

Foreign bills of exchange

At the end of 1977 the portfolio of foreign bills accumulated through purchases in Germany amounted to DM 1,628.9 million, compared with DM 1,222.9 million at December 31, 1976. The share of Deutsche Mark bills in the total value of the foreign bills purchased averaged about 70% in 1977 (1976: 60%).

Purchases of foreign bills of exchange in the Land Central Bank areas

Land Central Bank	1976 Number	1976 DM million	1977 Number	1977 DM million
Baden-Württemberg	20,544	668.9	23,351	861.5
Bavaria	6,760	695.3	7,775	1,309.1
Berlin	348	108.8	554	244.0
Bremen	779	158.7	1,449	217.2
Hamburg	5,906	463.9	6,629	733.5
Hesse	7,141	1,028.4	9,969	1,700.0
Lower Saxony	1,285	223.8	1,916	207.5
North Rhine-Westphalia	17,439	1,161.1	19,680	1,710.0
Rhineland-Palatinate	3,594	335.6	3,701	364.5
Saarland	1,804	271.7	1,883	322.7
Schleswig-Holstein	207	23.5	429	27.6
Total	65,807	5,139.7	77,336	7,697.6

Domestic bills of exchange

Taking the average of all return days, the Bank's portfolio of domestic bills in the year under review, at DM 14,728 million, was again notably larger than in 1976 (DM 9,043 million). At the end of 1977 the Bank held domestic bills worth DM 12,399.7 million against DM 12,184.7 million at end-1976. In the course of the year the portfolio of domestic bills fluctuated in accordance with liquidity, as described in Part A of this Report.

The domestic bill portfolio comprised	Dec.31,1976 DM million	Dec.31,1977 DM million
Domestic bills discounted	10,146.2	10,902.6
Prime bankers' acceptances acquired in the course of open market operations	1,320.5	1,497.1
Promissory notes of the Federal Office for Agricultural Market Organisation acquired in the course of open market operations	718.0	—
	12,184.7	12,399.7.

Purchases of domestic bills of exchange in the Land Central Bank areas

Land Central Bank	1976 '000	1976 DM million	1977 1 '000	1977 1 DM million
Baden-Württemberg	243	7,985.2	497	18,767.9
Bavaria	150	7,960.0	373	21,159.8
Berlin	14	2,131.9	28	4,444.0
Bremen	20	1,457.1	33	4,091.3
Hamburg	106	7,028.1	204	18,035.0
Hesse	162	17,151.2	366	41,398.3
Lower Saxony	70	2,959.1	121	5,870.9
North Rhine-Westphalia	228	14,377.1	527	40,019.2
Rhineland-Palatinate	39	1,478.8	58	2,437.5
Saarland	8	731.1	22	1,818.9
Schleswig-Holstein	24	978.5	36	1,652.0
Total	1,064	64,238.1	2,265	159,694.8

1 Including domestic bills bought in open market operations under repurchase agreements.

The average value of the bills purchased in 1977 was DM 70,503 compared with DM 60,373 in 1976.

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

	1976 Number	1976 DM million	1977 Number	1977 DM million
	3,335	35.9	4,800	47.0
as % of the total purchased	0.31	0.06	0.21	0.03.

Discount rate

During the year under review the Bank's discount rate for domestic and foreign bills stood at 3½% until December 15 and at 3% from December 16.

Prime bankers' acceptances

The amount of prime bankers' acceptances which the Bank is prepared to purchase in the course of its open market operations was increased from DM 1.5 billion to DM 1.8 billion with effect from August 25, 1977. As a consequence of this raising of the ceiling and of the continued relatively favourable buying rates of the Bank compared with the money market rates, the Bank's purchases of prime bankers' acceptances — as usual, only from the Privatdiskont-Aktiengesellschaft — again distinctly exceeded the previous year's figure (DM 5,641.9 million against DM 5,116.2 million in 1976). The resales from the Bank's portfolio via the broker to the market, at DM 418.8 million, were, however, much smaller than in the preceding year (DM 2,173.6 million), mainly because there were hardly any periods of great liquidity in the money market during the year under review; on the contrary, the banks' need for central bank assistance was relatively large throughout the year.

As a result, far more prime bankers' acceptances than in 1976 remained in the Bank's portfolio until payment on maturity, namely DM 5,046.5 million (1976: DM 2,155.9 million). At December 31, 1977 the Bank held prime bankers' acceptances stemming from open market operations in the amount of DM 1,497.1 million (end-1976: DM 1,320.5 million).

Agricultural Market Organisation bills

The Bank's commitment to purchase promissory notes of the Federal Office for Agricultural Market Organisation and the inclusion of such bills in the Bank's money market regulating arrangements expired at the end of 1976, and the Bank's portfolio of such bills at the close of that year, totalling DM 718.0 million, was paid during the first quarter of 1977.

Open market operations in bills under repurchase agreements

In order to ease special tensions in the money market the Bank conducted open market operations in bills under repurchase agreements on three occasions for several weeks during the year under review. In the course of these operations the Bank purchased trade bills at market rates outside the rediscount quotas on condition that the banks submitting the bills simultaneously repurchased them forward. The largest amount of bills held by the Bank as a result of such open market operations was DM 7,321 million (at August 31, 1977). During the year under review the market rate for open market operations under repurchase agreements stood at 4% between March 10 and May 31 and again between July 6 and July 14, at 3¾% between July 15 and July 26, and at 3½% between July 27 and September 5 and again between September 23 and November 3.

Lombard loans

Taking the average of all the return dates of the year under review, the Bank granted DM 1,974 million of lombard loans to banks (1976: DM 1,419 million). As in preceding years, such loans were subject to marked fluctuations, the bulk of them being granted in January, July and August.

Lombard loans in the Land Central Bank areas

DM million

Land Central Bank	Lombard loans granted		Outstanding at	
	1976	1977	Dec. 31, 1976	Dec. 31, 1977
Baden-Württemberg	14,275.3	17,065.9	1,637.1	1,600.9
Bavaria	5,271.4	10,616.2	295.8	189.5
Berlin	1,137.1	968.6	—	—
Bremen	761.2	1,148.4	18.0	1.5
Hamburg	5,526.5	7,991.0	193.3	145.6
Hesse	70,232.7	91,824.6	2,650.6	2,308.5
Lower Saxony	3,193.3	6,997.1	438.1	245.7
North Rhine-Westphalia	11,504.8	17,964.6	608.1	941.2
Rhineland-Palatinate	2,893.8	4,269.9	100.0	65.7
Saarland	534.6	843.8	24.1	30.4
Schleswig-Holstein	1,925.8	4,312.1	144.1	29.9
Total	117,256.5	164,002.2	6,109.2	5,558.9

Lombard rate

During the year under review the lombard rate stood at 4½% until July 14, at 4% from July 15 and at 3½% from December 16.

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

Cash advances (book credits)

	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.

Treasury bills which the Bank holds in its portfolio or which it has promised to purchase are to be counted towards the credit ceilings in addition to the book credits.

Federal Government Equalisation of Burdens Fund Länder Governments

Cash advances (book credits)

DM million

Borrower	December 31, 1976	December 31, 1977
Federal Government	1,651.0	822.4
Länder Governments		
Berlin	138.7	30.2
Hesse	5.8	—
Schleswig-Holstein	—	52.1
Total	1,795.5	904.7

At December 31, 1977, just as at end-1976, no cash advances (book credits) to the Equalisation of Burdens Fund were outstanding.

Federal Railways Federal Post Office

No book credits to the Federal Railways or Federal Post Office were outstanding at December 31, 1977; such credits are shown together with claims arising from the purchase of Treasury bills and discountable Treasury bonds in the item "Loans to Federal Railways and Federal Post Office" on the assets side.

Interest rate

Throughout the year the rate of interest on book credits was identical with the Bank's discount rate.

Treasury bills and discountable Treasury bonds

The Bank was again very active — more so, indeed, than in the preceding year — as the selling agent for the discountable Treasury bonds of the Federal Government and its special funds. These securities, which serve financing purposes, are distinct from the mobilisation and liquidity paper issued pursuant to sections 42 and 42 (a) of the Bundesbank Act, which will be commented on below. Treasury bills serving financing purposes were not issued in the year under review.

Federal Government

To meet the borrowing requirements of the Federal Government, discountable Treasury bonds amounting to DM 5,270.5 million (1976: DM 4,181.5 million) were issued. As usual, the bulk of these securities were purchased by banks and other institutional investors. For selling these bonds the Bank used the tender procedure on one further occasion (as it had done for the first time in 1976). The issue of 2-year discountable Treasury bonds by tender between November 7 and 11 yielded DM 1,771.5 million and was thus comparable in size to the 1976 tender (DM 1,620.6 million). After a prolonged period during which discountable Treasury bonds had not been available for sale this issue enabled a selling rate conforming to market trends to be determined more precisely for these securities. In addition, the Bank for the first time sold discountable Treasury bonds by a modified procedure according to which the amount buyers wished to take at a predetermined selling rate had to be communicated by a specified date and the bonds were allotted — if necessary, after scaling down — en bloc. This procedure seemed advisable in the circumstances as the Federal Government's offer of 2-year discountable Treasury bonds was relatively limited and only temporary because of the basic priority of the longer-term financing of Federal Government debt.

About one sixth of the total sales (DM 864.2 million) of Federal Government discountable Treasury bonds consisted of a special type, Federal "financing bonds", which since February 1975 have been sold in a standardised manner to private investors, mostly through banks (but also by the Bundesbank direct), as securities that are not returnable prior to maturity.

After the redemption of DM 4,662.1 million of discountable Treasury bonds (including financing bonds), the amount of Federal Government discountable Treasury bonds types "B" and "BN" (the latter not being returnable prior to maturity) outstanding at December 31, 1977 was DM 8,520.0 million (end-1976: DM 7,911.6 million). Of this total, DM 1,324.5 million was repurchasable by the Bank (type "B") — the same amount as in the previous year.

Federal Railways

The (returnable) discountable Treasury bonds of the German Federal Railways which fell due in 1977 (DM 400.0 million) were reissued. Of the securities of the German Federal Railways which are not returnable before maturity (marked "BaN"), DM 250.5 million was redeemed. The amount of Federal Railways discountable Treasury bonds outstanding at end-1977 was DM 410.1 million (end-1976: DM 660.6 million).

Federal Post Office

The German Federal Post Office redeemed DM 7.7 million of its outstanding discountable Treasury bonds in the year under review; new bonds were not issued.

At December 31, 1977 the outstanding amount of money market paper issued for the account of the Federal Government and its special funds was DM 8,930.1 million (end-1976: DM 8,579.9 million). Further details will be found in the following table.

Money market paper issued for the account of the Federal Government and its special funds

DM million

Type of paper	Outstanding at Dec. 31, 1976	1977 Issued	1977 Redeemed	Outstanding at Dec. 31, 1977
Discountable Treasury bonds of the Federal Republic of Germany "B"1 and "BN"2	7,911.6	5,270.5	4,662.1	8,520.0
of which "Financing bonds"	(975.5)	(864.2)	(591.5)	(1,248.2)
Discountable Treasury bonds of the German Federal Railways "Ba" and "BaN"2	660.6	400.0	650.5	410.1
Discountable Treasury bonds of the German Federal Post Office "PN"2	7.7	—	7.7	—
Total	8,579.9	5,670.5	5,320.3	8,930.1

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

Länder Governments

With respect to Länder Government money market paper, discountable Treasury bonds of one Land Government totalling DM 451.2 million were redeemed in 1977; the Länder Governments issued no new securities. The amount of Länder Government discountable Treasury bonds outstanding at end-1977 was DM 50 million (end-1976: DM 501.2 million); these bonds are not included in the money market regulating arrangements.

No public authority money market paper was held by the Bank during the year under review.

Equalisation claims on the Federal Government and non-interest-bearing debt certificate in respect of Berlin Equalisation claims

The Bank's equalisation claims on the Federal Government, as inscribed in the government stock register at December 31, 1976, increased by DM 116,140.13 in the year under review. The change of DM 13,700.48 in the equalisation claims arising from the Bank's own conversion account is explained in the combined conversion account of the institutions amalgamated to form the Deutsche Bundesbank as shown by the books at December 31, 1977, which account is attached to the German original of this Report as Appendix 1.

Non-interest-bearing debt certificate

In 1977 the Bank's claim on the Federal Government in respect of the currency conversion in Berlin remained unchanged at DM 547.2 million.

Equalisation claims and non-interest-bearing debt certificate in respect of Berlin in 1977

DM thousand

Type of paper	Outstanding at December 31, 1976	Increase in 1977	Outstanding at December 31, 1977
Equalisation claims arising from			
Own conversion account			
Bank deutscher Länder	5,504,419.8	4.1	5,504,423.9
Land Central Banks	2,599,335.1	9.6	2,599,344.7
	8,103,754.9	13.7	8,103,768.6
Conversion of Berlin pre-capitulation balances	31,071.5	100.7	31,172.2
Conversion of RM balances at banks in the Eastern Sector of Berlin	1,462.5	1.7	1,464.2
	8,136,288.9	116.1	8,136,405.0
Non-interest-bearing debt certificate	547,168.5	—	547,168.5
Total	8,683,457.4	116.1	8,683,573.5

Loans to Federal Railways and Federal Post Office

As at end-1976, no loans to the Federal Railways or Federal Post Office were outstanding at December 31, 1977. See also the notes on the items "Cash advances (book credits)" and "Treasury bills and discountable Treasury bonds".

Securities

The Bank's portfolio of securities — chiefly bonds of the Federal Republic of Germany, the German Federal Railways and the German Federal Post Office — decreased by DM 726.8 million to DM 692.5 million in the year under review (end-1976: DM 1,419.3 million).

Issue of bonds

In 1977 nine bond issues totalling DM 7,450 million (1976: thirteen issues amounting to DM 7,960 million) were launched through the Federal Bond Consortium, which is under the direction of the Bank. Of this amount, DM 1,600 million (1976: DM 1,490 million) was reserved for the issuers' own institutions and for price support operations.

At end-1977 the outstanding amount of bonds of the Federal Republic of Germany came to DM 27,439.4 million, of the German Federal Railways to DM 12,369.6 million and of the German Federal Post Office to DM 8,886.2 million.

Bond issues of the Federal Republic of Germany and German Federal Railways in 1977

Issuer	Amount issued		Terms				Start of sales 1977
	Total DM million	of which sold through Federal Bond Consortium DM million	Nominal interest rate (%)	Period to maturity in years	Issue price (%)	Yield (%)	
German Federal Railways	900	600	7	10	99.50	7.07	Jan. 21
Federal Republic of Germany	700	600	7	7	100	7.00	Mar. 2
Federal Republic of Germany	850	600	$6^3/_4$	10	99.50	6.82	Apr. 4
German Federal Railways	700	500	$6^1/_2$	12	100	6.50	Apr. 28
Federal Republic of Germany	900	800	$6^1/_2$	10	99.75	6.53	July 1
German Federal Railways	800	600	6	10	99.50	6.07	Aug. 17
Federal Republic of Germany	900	750	6	10	99.50	6.07	Sep. 15
Federal Republic of Germany	800	600	$5^1/_2$	6	100	5.50	Dec. 29
Federal Republic of Germany	900	800	6	10	99.75	6.03	Dec. 29

Issue of Federal savings bonds

With the assistance of the Bank, DM 7,617.4 million (gross) of Federal savings bonds were sold to private investors via banks and to a certain extent by the Bank itself in 1977 (1976: DM 4,976.7 million). Sales were particularly large in April (DM 1,342.1 million), August (DM 902.6 million) and December (DM 902.4 million), when purchasers expected that the interest rates for the new series of Federal savings bonds would be lower and therefore bought more securities at the old rates. DM 23.2 million (1976: DM 47.7 million) of Federal savings bonds from former tranches were resold to the issuer before maturity, and a further DM 113.9 million were redeemed on maturity during the year under review. The amount of Federal savings bonds outstanding rose from DM 14,508.1 million (end-1976) to DM 21,988.4 million at December 31, 1977. In the course of the year under review the rate of interest paid on Federal savings bonds was reduced three times to bring it into line with market rates; further details are given in the following table.

Gross sales, interest rates and yields of Federal savings bonds in 1977

Issues	Sales period 1977	Gross sales in DM million: Federal savings bonds A 1	Federal savings bonds B 2	Total	Interest rate (%) in and yield (%) after . . . year after issue: 1st year	2nd	3rd	4th	5th	6th	7th
1977/1	Jan. 2 – Apr. 4	1,706.3	1,262.4	2,968.7	4.75	6.00	7.00	7.25	7.50	8.50	
					4.75	5.36	5.87	6.19	6.42	6.71	
1977/2					4.75	6.00	7.00	7.25	7.50	8.50	8.50
					4.75	5.37	5.91	6.25	6.50	6.83	7.06
1977/3	Apr. 12 – June 24	881.4	657.3	1,538.7	4.25	5.75	6.25	6.75	7.25	8.00	
					4.25	4.98	5.38	5.69	5.97	6.25	
1977/4					4.25	5.75	6.25	6.75	7.25	8.00	8.00
					4.25	5.00	5.41	5.75	6.04	6.37	6.60
1977/5	July 1 – Aug. 25	735.2	605.9	1,341.1	4.00	5.50	6.25	6.75	6.75	7.25	
					4.00	4.73	5.21	5.56	5.77	5.98	
1977/6					4.00	5.50	6.25	6.75	6.75	7.25	7.25
					4.00	4.75	5.25	5.62	5.84	6.08	6.24
1977/7	Sep. 1 – Dec. 28	999.8	769.1	1,768.9	4.00	5.00	5.50	6.00	6.25	6.75	
					4.00	4.49	4.81	5.08	5.29	5.50	
1977/8					4.00	5.00	5.50	6.00	6.25	6.75	6.75
					4.00	4.50	4.83	5.12	5.35	5.58	5.75
Total	Jan. 2 – Dec. 28	4,322.7	3,294.7	7,617.4							

1 With annual payment of interest. – **2** With accrual of interest.

Issue of medium-term notes

Through the agency of the Bank, DM 8,451.4 million of Treasury bonds (medium-term notes) of the Federal Republic of Germany were sold by tender in four tranches in 1977 (1976: DM 2,409.4 million in one tranche). There were eight issues running for three, four and five years and bearing nominal interest rates of between $4^{3}/_{4}$ % and $6^{1}/_{4}$ %, as shown in more detail in the following table.

Treasury bonds (medium-term notes) of the Federal Republic of Germany issued by tender in 1977

Amount DM million	Nominal interest rate %	Running for . . . years	Selling price %	Yield on issue %	Month of sale
966.9	6	3	99.30	6.26	February
1,012.8	$6^{1}/_{4}$	4	99.10	6.51	
1,025.5	$5^{1}/_{4}$	3	99.60	5.40	June
1,016.9	$5^{1}/_{2}$	4	99.20	5.73	
827.5	5	4	99.40	5.17	July
1,180.3	$5^{1}/_{2}$	5	99.90	5.52	
1,184.7	$4^{3}/_{4}$	3	99.40	4.97	October
1,236.8	5	4	99.40	5.17	

Moreover, in agreement with the Bank DM 1,295 million of Treasury bonds (medium-term notes) of the Federal Republic of Germany and the Federal Railways were sold without using the tender procedure (1976: DM 2,765 million).

At the end of 1977 the outstanding amount of medium-term notes of the Federal Republic of Germany came to DM 18,897.4 million, of the German Federal Railways to DM 1,395.0 million and of the German Federal Post Office to DM 50.0 million.

Admission to stock exchange dealings

The Bank introduced the above-mentioned bond issues of the Federal Republic of Germany and the German Federal Railways together with one issue of the Equalisation of Burdens Bank for official dealing on all German stock exchanges. The Bank also introduced, in eight cases, medium-term notes issued in the year under review by the Federal Republic of Germany and four issues of medium-term notes of the German Federal Railways for regulated unofficial dealing on particular stock exchanges.

Price support operations

In the year under review, as in preceding years, the Bank undertook price support 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, one Land Government, the Reconstruction Loan Corporation and the Equalisation of Burdens Bank in order to smooth out price fluctuations.

The Bank as paying and collecting agent for bonds

As the paying and collecting agent for, in particular, bonds of the Federal Government (including external bonds) and its special funds, the Bank paid 7,135,542 interest coupons and matured bonds during the year under review (1976: 8,346,756). Of this number, 445,888 interest coupons and matured bonds were presented to foreign agents for payment (1976: 422,057).

German coins

The amount of German coins held by the Bank came to DM 810.0 million at end-1977 (end-1976: DM 719.9 million). In 1977 the Federal Government was credited with DM 532.6 million for coins taken over from the Mints and debited with DM 44.7 million for coins no longer fit for circulation (including DM 39.9 million for the silver DM 5 coins which had been withdrawn from circulation). Altogether, between 1948 and 1977 the Bank — acting for the account of the Federal Government — took over coins amounting to DM 8,510.2 million and redeemed DM 1,602.6 million of coins which were no longer fit to circulate or had been called in.

The total amount of coins in circulation at the end of 1977 (DM 6,097.6 million) divided by the number of inhabitants of the Federal Republic of Germany including the Land of Berlin at September 30, 1977 (61.4 million) yields a figure of DM 99.31 per head of population (1976: DM 92.70).

In the year under review the DM 5 commemorative coins "Carl Friedrich Gauss" and "Heinrich von Kleist" were put into circulation.

Balances on postal giro accounts

The postal giro account balances, including the branches' transfers in transit to the postal giro account of the Bank (Central Office) at Frankfurt am Main, totalled DM 998.8 million at December 31, 1977 (1976: DM 271.3 million). The Bank's credit balances on that account and on the postal giro account of the Land Central Bank in Berlin, other than those required for current payments, are offset daily, in rounded amounts, against the giro balances of the Central Cash Office of the Federal Post Office and the Postal Giro Office Berlin (West).

Postal giro transactions with third parties

	1976				1977			
	Transfers received from third parties		Transfers made to third parties		Transfers received from third parties		Transfers made to third parties	
Area	Number	DM mn	Number	DM mn	Number	DM mn	Number	DM mn
Land Central Bank								
Baden-Württemberg	100,416	19,546.6	18,869	2,015.0	90,163	19,491.4	19,840	1,928.8
Bavaria	79,145	12,127.8	14,748	5,463.2	64,439	10,067.0	13,198	6,306.5
Berlin	28,831	2,632.6	2,837	850.1	26,722	2,648.6	3,405	889.5
Bremen	11,902	577.8	1,534	0.2	10,380	536.3	1,811	0.2
Hamburg	70,183	14,788.4	1,762	88.6	61,741	16,153.9	2,398	123.4
Hesse	62,901	7,768.0	8,412	4,162.0	58,855	7,193.1	9,143	4,669.2
Lower Saxony	65,722	6,677.9	7,096	1,009.5	61,769	6,755.4	5,725	1,363.8
North Rhine-Westphalia	115,793	18,734.1	18,760	4,826.0	117,683	19,163.4	21,624	5,196.7
Rhineland-Palatinate	30,507	2,320.2	6,644	690.8	28,266	1,964.3	7,042	775.5
Saarland	5,162	1,670.6	1,006	0.1	5,909	1,700.1	948	0.4
Schleswig-Holstein	5,063	87.8	2,671	0.4	5,109	57.7	2,593	0.4
Total	575,625	86,931.8	84,339	19,105.9	531,036	85,731.2	87,727	21,254.4
Bundesbank — Central Office —	20,106	1,245.6	2,084	4.7	22,472	1,479.3	1,966	6.8
Grand total	595,731	88,177.4	86,423	19,110.6	553,508	87,210.5	89,693	21,261.2

Other claims

Other claims are shown at DM 1,191.6 million (end-1976: DM 929.1 million). They include the balance arising from intra-German settlements (commercial payments under the "Berlin Agreement"), which amounted to DM 659.8 million (1976: DM 718.3 million). The turnover on the relevant sub-accounts is shown in Part A, IV, of the German original of this Report.

Land and buildings
Furniture and equipment

With additions totalling DM 101.1 million and depreciation totalling DM 45.6 million, land and buildings are shown at DM 782.4 million. The balance sheet value of the furniture and equipment amounted to DM 35.6 million after additions totalling DM 22.9 million and depreciation totalling DM 17.2 million.

Items in course of settlement

The "Items in course of settlement" mainly comprise the intercity credit and debit transfers that were proceeding inside the Bank at the end of the year and the cheques and direct debit orders that were being cleared. At December 31, 1977 the balance of items in course of settlement stood at DM 3,349.2 million (end-1976: DM 1,740.3 million).

Other assets

The "Other assets" are shown at DM 1,131.6 million (end-1976: DM 1,092.9 million). As in the previous year, much the greater part of this amount consisted of interest due in 1978 but assignable to the profit and loss account for the year under review on funds invested abroad and on securities (DM 1,041.6 million against DM 998.0 million at end-1976).

This item also includes the Bank's 30 % share, amounting to DM 75 million, 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 this 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 225 million.

Prepaid expenses and deferred income

The prepaid expenses and deferred income comprise salary and pension payments made in the year under review but relating to 1978.

Balancing item in respect of the valuation adjustment of the monetary reserves and other foreign currency positions — balance sheet loss —

See the notes on page 77 of this Report.

Liabilities

Bank notes in circulation

The amount of bank notes in circulation rose from DM 59,038.3 million at end-1976 to DM 65,567.4 million at December 31, 1977.

Currency in circulation

DM million

End of	Bank notes	Federal coins	Currency in circulation, total
1972	44,503.5	4,441.2	48,944.7
1973	46,246.9	4,727.6	50,974.5
1974	50,272.5	5,128.8	55,401.3
1975	55,143.2	5,406.3	60,549.5
1976	59,038.3	5,699.8	64,738.1
1977	65,567.4	6,097.6	71,665.0

The denominations of the bank notes and Federal coins in circulation are shown in Appendix 4 to the German original of this Report.

In the year under review the Bank again took over Bundesbank notes of various denominations from the printing offices and put them into circulation or made them ready for that purpose.

The bank notes (including small money tokens) destroyed as being no longer fit for circulation or after having been called in amounted to:

	1972	1973	1974	1975	1976	1977
Number (millions)	363.1	460.1	424.0	399.4	486.4	459.1
Value (DM million)	12,693.8	16,528.0	15,638.0	15,110.5	18,556.5	18,086.2.

The number and value of the counterfeit bank notes detained in payments in the Federal Republic of Germany and Berlin (West) increased by about three and a half times compared with the previous year because — as in 1976 — counterfeit DM 100 notes were more widespread.

By contrast, the amount of counterfeit coins detained continued to decline in the year under review.

Counterfeits detected

	Bank notes		Federal coins	
Year	Number	DM '000	Number	DM '000
1972	1,848	124.2	7,487	29.5
1973	1,090	65.4	10,077	34.0
1974	881	59.4	8,181	28.6
1975	927	92.3	14,151	65.0
1976	2,709	275.0	8,249	31.0
1977	9,754	946.0	6,754	25.7

Deposits of banks

The banks' deposits on giro accounts mainly comprise the minimum reserves to be maintained with the Bank. The sub-item "Other" contains deposits of domestic banks on U.S. dollar accounts; the number of transfers between these accounts amounted to 87,368 in the year under review against 88,916 in 1976. Compared with 1976 the banks' deposits changed as follows:

Deposits of banks	Dec. 31, 1976 DM million	Dec. 31, 1977 DM million
Deposits on giro accounts	51,269.3	52,464.2
Other	28.2	27.1
	51,297.5	52,491.3.

Deposits of public authorities

The item "Deposits of public authorities" is composed of public authorities' current balances. These deposits showed the following changes compared with the end of the preceding year:

	Dec. 31, 1976 DM million	Dec. 31, 1977 DM million
Federal Government	272.4	296.3
Equalisation of Burdens Fund and ERP Special Fund	304.1	150.1
Länder Governments	2,094.0	1,629.4
Other public depositors	58.5	44.3
	2,729.0	2,120.1.

The special deposits of the Federal Government, which had amounted to DM 209.6 million at end-1976, were all used to finance certain economic stimulation programmes during the year under review.

Deposits of other domestic depositors

The deposits of other domestic depositors were made up as follows:

	Dec. 31, 1976 DM million	Dec. 31, 1977 DM million
Federal Railways	4.1	6.8
Federal Post Office (including postal giro and postal savings bank offices)	2,070.5	3,418.7
Other depositors	513.6	479.2
	2,588.2	3,904.7.

Giro transactions, simplified cheque and direct debit collections

In the turnover on giro accounts, the percentage of cashless settlements was:

	Number	Amount
1976	99.82	98.06
1977	99.84	98.13.

Annual turnover on the giro accounts of the Bank

	1976			1977		
	Number of transactions	Total amount	Average amount	Number of transactions	Total amount	Average amount
Turnover	'000	DM mn	DM '000	'000	DM mn	DM '000
(a) Credits						
Cash payments	1,120	172,384	153.9	1,131	180,390	159.5
Clearings with account-holders	10,906	2,569,968	235.6	11,197	2,838,823	253.5
Local transfers	30,094	2,592,238	86.1	35,902	2,808,280	78.2
Intercity transfers	171,005	2,643,873	15.6	166,163	2,814,467	16.9
Cheque and direct debit collections (total presented)	500,901	1,117,396	2.2	587,740	1,234,617	2.1
Total	714,026	9,095,859	–	802,133	9,876,577	–
(b) Debits						
Cash payments	1,460	180,083	123.3	1,496	190,131	127.1
Clearings with account-holders	4,042	2,510,217	621.0	3,859	2,790,272	723.2
Local transfers	30,094	2,592,238	86.1	35,902	2,808,280	78.2
Intercity transfers	174,090	2,691,563	15.6	169,221	2,862,092	16.9
Cheque and direct debit collections (total paid)	502,309	1,120,537	2.2	581,319	1,233,885	2.1
Total	711,995	9,094,638	–	791,797	9,884,660	–
(c) as % of total turnover (credits and debits)		%			%	
Cash payments		1.94			1.87	
Clearings with account-holders		27.93			28.49	
Local transfers		28.50			28.42	
Intercity transfers		29.33			28.73	
Cheque and direct debit collections (total presented and paid)		12.30			12.49	
		100.00			100.00	

The annual turnover on the giro accounts of the Bank went up steeply in comparison with 1976. This is mainly because of the increase of about 17% during the year under review (1976: about 18%) in the number of items presented by the banks under the simplified collection procedure for cheques and direct debit orders and the sharp rise of some 19% in the number of local transfers; in 1976 the latter fell by approximately 10%. Since intercity transfers decreased slightly in the year under review, for the first time for several years, it must be assumed that the banks, which had since 1973 been feeding a growing proportion of local transfers into the automated intercity transfer system in order to save themselves sorting work, are giving up this practice and carrying out local payments through the local transfer system again.

The percentage of automatically processed intercity transfers continued to rise, both in paper-based operations and in the paperless exchange of data media. In 1977 88 % (1976: 79 %) of the 406.5 million items presented for collection and 71 % (1976: 57 %) of the 123.2 million credit transfers, as well as the 181.2 million direct debits (1976: 105.2 million) and 46.0 million credit transfers (1976: 28.6 million) recorded on magnetic tape, were handled by the Bank's six computer centres. The volume of payments carried out through the paperless exchange of data media was approximately 69 % larger than in the preceding year. Such payments thus accounted for 34 % (1976: 25 %) of the payment items presented under the automated procedure. In the aggregate, 89 % of intercity transfers were processed automatically in the year under review. The development of the automation of intercity transfers since its inception in 1973 is shown by the following table:

Automation of intercity transfers

	Collection orders presented							Intercity credit transfers despatched						
		processed							processed					
		in paper-based operations							in paper-based operations					
	Total	conventional		automated		through the paperless exchange of data media		Total	conventional		automated		through the paperless exchange of data media	
Year	millions	millions	%	millions	%	millions	%	millions	millions	%	millions	%	millions	%
1973	317	175	55	142	45	–	–	113	113	100	–	–	–	–
1974	374	142	38	232	62	0.2	0	123	75	61	48	39	0.1	0
1975	423	143	34	272	64	8	2	163	85	52	73	45	5	3
1976	501	83	17	313	62	105	21	174	62	36	83	48	29	16
1977	587	47	8	359	61	181	31	169	36	21	87	51	46	28

If, however, local payments and clearing transactions, which are not yet processed automatically, are also taken into account, the degree of automation of cashless payments at the Bank comes to about 57 %.

As a result of the further automation, the concentration of the incoming items continued in 1977. The number of items debited in collections declined further from 25.9 million to 21.2 million and the number of items credited in credit transfers decreased from 20.8 million to 19 million. Since 1973 the number of items debited in collections has thus fallen from 98.7 million to 21.2 million, in spite of the simultaneous increase in the number of items presented from 317.1 million to 587.7 million.

Domestic commission business

Domestic bills, cheques and the like were acquired on a commission basis as follows:

	Number	DM million
1976	65,223	800.6
1977	67,416	744.6.

Liabilities arising from mobilisation and liquidity paper sold

In the year under review sales of mobilisation and liquidity paper pursuant to sections 42 and 42 (a) of the Bundesbank Act were in the aggregate — i. e. taking Treasury bills and discountable Treasury bonds together — lower than in the preceding year, at DM 18,862.6 million against DM 21,892.6 million. The decline in sales was due entirely to mobilisation and liquidity Treasury bonds, sales of which amounted to only DM 537.1 million (1976: DM 3,493.4 million) and were discontinued during the first few days of January 1977 in keeping with the change in the objectives of open market policy. The amount of mobilisation and liquidity Treasury bonds outstanding decreased to DM 2,478.0 million at

December 31, 1977, i. e. by about one third of the end-1976 figure (DM 3,623.9 million), because DM 1,683.0 million of such paper was redeemed on maturity.

By contrast, the turnover and outstanding amount of mobilisation and liquidity Treasury bills hardly changed compared with the preceding year. Sales totalling DM 18.3 billion (1976: DM 18.4 billion) were accompanied by redemptions amounting to DM 18.3 billion (1976: DM 18.4 billion). As usual, the revolving investment of foreign institutions' resources was a prominent feature of these transactions.

The liabilities arising from mobilisation and liquidity paper outstanding amounted to DM 5,366.1 million at December 31, 1977 against DM 6,476.4 million at end-1976.

Mobilisation and liquidity paper sold and redeemed

DM million

	1976	1977		
Type of paper	Outstanding at Dec. 31	Sold	Redeemed	Outstanding at Dec. 31
Treasury bills (running for up to 90 days)	2,852.5	18,325.5	18,289.9	2,888.1
Discountable Treasury bonds (running for 6 to 24 months)	3,623.9	537.1	1,683.0	2,478.0
Total	6,476.4	18,862.6	19,972.9	5,366.1

Liabilities arising from foreign business

At December 31, 1977 the liabilities arising from foreign business, at DM 489.0 million, were DM 608.1 million smaller than at end-1976; they were made up as follows:

	Dec. 31, 1976		Dec. 31, 1977	
	DM million	DM million	DM million	DM million
Deposits of foreign depositors				
Banks	289.3		408.2	
Other depositors	490.0	779.3	67.0	475.2
Liabilities to the European Monetary Cooperation Fund		306.0		—
Other				
Provision of cover for credits of				
non-residents	3.2		2.1	
residents	8.3		11.6	
	11.5		13.7	
Miscellaneous liabilities	0.3	11.8	0.1	13.8
		1,097.1		489.0.

No liabilities to the European Monetary Cooperation Fund were outstanding at the end of the year. Regarding the claims outstanding at December 31, 1977, see the note on item 4 on the assets side on page 61 of this Report.

Contra-entry to special drawing rights allocated

The contra-entry to the special drawing rights allocated by the International Monetary Fund and shown on the assets side in sub-item 2.3 corresponds to the allocations of SDRs to the Federal Republic of Germany between 1970 and 1972 totalling SDR 542.4 million.

Provisions

Provision for pensions

After the withdrawal of DM 104.4 million for the payment of pensions and widows' and orphans' allowances and an increase of DM 164.4 million, the provision for pension liabilities is shown at DM 1,645.0 million.

Other provisions

The provision for hazards inherent in domestic and foreign business remained unchanged at DM 300 million.

Other liabilities

The other liabilities are shown at DM 104.5 million at December 31, 1977 against DM 38.9 million at the end of 1976.

Deferred expenses and accrued income

Deferred expenses and accrued income amounted to DM 255.3 million at December 31, 1977 (end-1976: DM 204.0 million). As before, this item mainly comprises interest received in the year under review, but relating to the following year, on domestic and foreign bills and U.S. Treasury notes.

Capital

The capital of the Bank remained unchanged at DM 290 million; it is held by the Federal Government (section 2 of the Bundesbank Act).

Reserves

The legal reserves and other reserves remained unchanged at DM 969.0 million and DM 130.5 million, respectively.

Contingent liabilities and claims

The contingent liabilities and claims amounted to DM 1.0 million (end-1976: DM 1.5 million).

Profit and loss account

Comparison of expenditure and receipts

DM million

Expenditure	1976	1977	Receipts	1976	1977
			Interest received		
Interest paid on mobilisation and liquidity paper	341.2	119.4	Funds invested abroad	4,423.5	4,332.8
Other interest paid	4.8	5.3	Loans to domestic banks	402.1	709.0
	346.0	124.7	Equalisation claims	244.1	244.1
Administrative expenditure			Securities	476.5	71.3
Staff costs	506.2	525.6	Cash advances (book credits)	1.8	28.5
Other	108.4	103.4			
Note printing	86.4	102.0	Other interest received	3.0	2.6
Depreciation	67.1	62.8		5,551.0	5,388.3
Increase in provision for pensions	145.5	164.4	Fees received	7.8	9.3
			Other receipts	204.0	64.9
Pension payments in respect of the Reichsbank	36.4	35.5	Loss for the year	3,044.7	3,553.2
Other expenditure	22.6	17.1			
Write-downs on monetary reserves and other foreign currency positions	7,488.9	7,880.2			
Total	8,807.5	9,015.7	Total	8,807.5	9,015.7

Before allowing for the valuation adjustment of the monetary reserves and other foreign currency positions at the end of the year, receipts exceeded expenditure in 1977 by DM 4,327.0 million (1976: DM 4,444.2 million).

Receipts

Interest

	1976 DM million	1977 DM million
Interest received amounted to	5,551.0	5,388.3;
after deduction of interest paid, namely	346.0	124.7,
interest is shown in the profit and loss account at	5,205.0	5,263.6.

In the year under review total interest income, at DM 5,388.3 million, was DM 162.7 million lower than a year before. The interest received from funds invested abroad decreased by DM 90.7 million to DM 4,332.8 million, despite higher interest rates and larger investments, owing to the decline in the rate of the U.S. dollar. Interest income from lending to German banks – domestic bills, lombard loans and foreign bills bought in Germany – rose by DM 306.9 million to DM 709.0 million, as recourse to the central bank increased distinctly. The interest received from securities went down by DM 405.2 million to DM 71.3 million since the average security portfolio was very much smaller in the year under review. The interest accruing from equalisation claims remained unchanged at DM 244.1 million. Other interest income rose by DM 26.3 million to DM 31.1 million as a result of greater use of cash advances.

The interest paid, at DM 124.7 million, was DM 221.3 million lower than at end-1976; DM 119.4 million (1976: DM 341.2 million) was paid on Treasury bills and discountable Treasury bonds of the Federal Government (mobilisation and liquidity paper pursuant to sections 42 and 42 (a) of the Bundesbank Act), which in 1977 were sold in smaller quantities than in 1976.

Fees

DM 9.3 million of fees were received in the year under review (1976: DM 7.8 million).

Other receipts

At DM 64.9 million, the other receipts were DM 139.1 million lower than in 1976. The decrease is mainly due to the fact that fewer price gains were realised when selling securities.

Expenditure

Administrative expenditure
Staff costs

Administrative expenditure on personnel rose by DM 19.4 million compared with the previous year to DM 525.6 million owing to statutory or negotiated pay rate increases for established employees ("officials") and unestablished salary and wage earners.

During the year under review the Bank's total staff declined by 68 to 13,207. While there was a slight rise in the number of staff at the Central Office and the Main Offices, the number of personnel in the branches continued to decrease. Compared with the preceding years, however, the staff reduction slowed down distinctly as the automation of labour-intensive operations in the field of cashless payments has now been completed.

Number of persons employed in the Bank

	Beginning of 1977					Beginning of 1978				
				of whom					of whom	
	Central Office	Land Central Banks	Total 1	male	female	Central Office	Land Central Banks	Total 1	male	female
Officials	713	4,635	5,348	5,150	198	744	4,587	5,331	5,104	227
Salary earners	1,570	5,327	6,897	3,107	3,790	1,555	5,299	6,854	3,131	3,723
Wage earners	188	842	1,030	182	848	191	831	1,022	180	842
Total	2,471	10,804	13,275	8,439	4,836	2,490	10,717	13,207	8,415	4,792
1 of whom, working part time										
Officials, female			8					8		
Salary earners			281					306		
Wage earners			744					739		

Payments to serving members of the Directorate of the Bank and the Central Bank Council amounted to DM 6,385,905.29 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 5,332,732.98.

Changes in staff regulations

In 1977 the Bank again concluded a number of new pay agreements for its wage and salary earners, thereby bringing their legal situation into line with that of the wage and salary earners of the Federal Government.

Other

Other (non-staff) administrative expenditure declined by DM 5.0 million to DM 103.4 million in the year under review.

Note printing

Expenditure on note printing amounted to DM 102.0 million against DM 86.4 million in 1976.

Depreciation and increase in provisions

Depreciation on land and buildings and on furniture and equipment, like the increase in provisions, was discussed in connection with the respective balance sheet items.

Pension payments in respect of the Reichsbank

Payments to members of the former Deutsche Reichsbank and other persons to whom the Act Concerning Section 131 of the Basic Law applies, for whom the Bank is required to provide in accordance with section 41 of the Bundesbank Act, amounted to DM 35.5 million in the year under review (1976: DM 36.4 million).

Other expenditure

"Other expenditure" is shown at DM 17.1 million (1976: DM 22.6 million).

Write-downs on monetary reserves and other foreign currency positions

The valuation of the monetary reserves and other foreign currency positions necessitated write-downs totalling DM 7,880.2 million in the 1977 annual accounts (1976: DM 7,488.9 million).

Loss for the year

	DM million
After entering these write-downs in the profit and loss account there remains a loss for the year of	3,553.2;
together with the balancing item taken over from 1976 in respect of the valuation adjustment of the monetary reserves and other foreign currency positions — loss brought forward — of	3,044.7
there arises a balance sheet loss to be carried forward to 1978 of	6,597.9.

This amount is shown on the assets side of the balance sheet in item 23 as the balancing item in respect of the valuation adjustment of the monetary reserves and other foreign currency positions — balance sheet loss —.

Frankfurt am Main, April 1978

Deutsche Bundesbank
The Directorate
Dr. Emminger Pöhl
Dr. Emde Dr. Gleske Dr. Irmler Prof. Dr. Köhler Dr. Schlesinger Werthmöller

Part D: Report of the Central Bank Council

The annual accounts of the Deutsche Bundesbank for 1977, the combined conversion account of the institutions amalgamated to form the Deutsche Bundesbank as shown by the books at December 31, 1977, and the Report on the Fund for the Purchase of Equalisation Claims as at December 31, 1977, were audited by Treuarbeit Aktiengesellschaft Wirtschaftsprüfungsgesellschaft Steuerberatungsgesellschaft of Frankfurt am Main and Dr. Wollert — Dr. Elmendorff KG, Wirtschaftsprüfungsgesellschaft of Düsseldorf, whom the Central Bank Council had appointed to be auditors in accordance with section 26 of the Bundesbank Act.

In their certificates of audit the auditors confirmed without qualifications that the annual accounts for 1977, the bookkeeping and the conversion account as shown by the books at December 31, 1977, complied with German law and that the Fund for the Purchase of Equalisation Claims had been properly administered.

The Central Bank Council approved the annual accounts for 1977 on April 6, 1978. At the same time it confirmed the conversion accounts for the Bank deutscher Länder and the Land Central Banks as well as the combined conversion account of the institutions amalgamated to form the Deutsche Bundesbank as shown by the books at December 31, 1977, and approved the Report on the Fund for the Purchase of Equalisation Claims as at December 31, 1977.

Since the publication of the Report for the Year 1976 the following changes have taken place in the Central Bank Council and the Directorate of the Deutsche Bundesbank:

Retired from service

as at the close of May 31, 1977
the Governor of the Deutsche Bundesbank
Dr. Karl Klasen,

as at the close of July 31, 1977
the Member of the Managing Board of the Land Central Bank in Baden-Württemberg
Walter Offner,

as at the close of January 31, 1978
the Vice-President of the Land Central Bank in the Free and Hanseatic City of Hamburg
Helmut Dietze,

as at the close of February 28, 1978

the Member of the Directorate of the Deutsche Bundesbank
Werner Lucht,

the President of the Land Central Bank in Berlin
Werner Gust,

the Vice-President of the Land Central Bank in North Rhine-Westphalia
Josef Thoma,

as at the close of March 31, 1978
the Member of the Managing Board of the Land Central Bank in Bavaria
Kurt Wiesser.

Reappointed

with effect from June 1, 1977
Professor Fritz Duppré
President of the Land Central Bank in Rhineland-Palatinate,

with effect from June 16, 1977
Dr. Paul Schütz
President of the Land Central Bank in Saarland.

Newly appointed

with effect from June 1, 1977
Dr. Otmar Emminger
to be Governor of the Deutsche Bundesbank, simultaneously relinquishing his office as Deputy Governor of the Deutsche Bundesbank,

Karl Otto Pöhl
to be Deputy Governor of the Deutsche Bundesbank,

with effect from August 1, 1977
Helmut Holzmaier
to be Member of the Managing Board of the Land Central Bank in Baden-Württemberg,

with effect from February 1, 1978
Gerhard Jennemann
to be Vice-President of the Land Central Bank in the Free and Hanseatic City of Hamburg,

with effect from March 1, 1978

Ottomar Werthmöller
to be Member of the Directorate of the Deutsche Bundesbank, simultaneously relinquishing his office as Member of the Managing Board of the Land Central Bank in North Rhine-Westphalia,

Dr. Dieter Hiss
to be President of the Land Central Bank in Berlin,

Helmut Röthemeier
to be Vice-President of the Land Central Bank in North Rhine-Westphalia,

Edgar Krug
to be Member of the Managing Board of the Land Central Bank in North Rhine-Westphalia,

with effect from April 1, 1978
Dr. Walter Gulden
to be Member of the Managing Board of the Land Central Bank in Bavaria.

The Central Bank Council, acting also on behalf of the Directorate and of the Managing Boards of the Land Central Banks, expresses to the entire staff of the Deutsche Bundesbank its thanks for their loyal and understanding cooperation during 1977. The Council likewise wishes to record its appreciation of the excellent collaboration with the staff representative committees.

Frankfurt am Main, April 1978

Dr. Otmar Emminger
Governor of the Deutsche Bundesbank

Appendix to Part B

Balance sheet of the Deutsche Bundesbank as at December 31, 1977

Assets

	DM	DM	DM
1 Gold			14,065,395,703.28
2 Reserve position in the International Monetary Fund and special drawing rights			
2.1 Drawing rights within the gold tranche		2,950,877,153.10	
2.2 Loans under special borrowing arrangements		2,635,752,604.78	
2.3 Special drawing rights		3,008,313,001.56	8,594,942,759.44
3 Balances with foreign banks and money market investments abroad			56,579,497,899.34
4 Claims on the European Monetary Cooperation Fund			1,708,274,010.02
5 Foreign notes and coins			22,676,399.99
6 External loans and other external assets			
6.1 Loans in connection with EEC medium-term monetary assistance		1,021,650,000.—	
6.2 Claims arising from foreign exchange offset agreements with the United States		1,883,998,226.67	
6.3 Other loans to foreign monetary authorities		3,832,500,000.—	
6.4 Loans to the World Bank		2,517,697,950.—	9,255,846,176.67
7 Foreign bills of exchange			1,628,950,861.88
8 Domestic bills of exchange			12,399,682,561.13
9 Lombard loans			5,558,857,100.—
10 Cash advances (book credits)			
10.1 Federal Government		822,400,000.—	
10.2 Equalisation of Burdens Fund		—	
10.3 Länder Governments		82,267,000.—	904,667,000.—
11 Treasury bills and discountable Treasury bonds			
11.1 Federal Government		—	
11.2 Länder Governments		—	—
12 Equalisation claims on the Federal Government and non-interest-bearing debt certificate in respect of Berlin			
12.1 Equalisation claims		8,136,405,011.02	
12.2 Non-interest-bearing debt certificate		547,168,481.20	8,683,573,492.22
13 Loans to Federal Railways and Federal Post Office			
13.1 Cash advances (book credits)		—	
13.2 Treasury bills and discountable Treasury bonds		—	—
14 Securities			692,534,853.20
15 German coins			810,020,714.22
16 Balances on postal giro accounts			998,785,717.55
17 Other claims			1,191,618,638.04
18 Land and buildings			782,410,828.89
19 Furniture and equipment			35,656,130.—
20 Items in course of settlement			3,349,188,645.67
21 Other assets			1,131,597,284.91
22 Prepaid expenses and deferred income			27,776,731.46
23 Balancing item in respect of the valuation adjustment of the monetary reserves and other foreign currency positions — balance sheet loss —			6,597,891,849.27
Rights of recourse in respect of contingent liabilities	985,633.65		
			135,019,845,357.18

	DM	DM	DM
1 Bank notes in circulation			65,567,446,875.—
2 Deposits of banks			
2.1 Deposits on giro accounts		52,464,161,399.22	
2.2 Other		27,151,134.14	52,491,312,533.36
3 Deposits of public authorities			
3.1 Federal Government		296,321,042.66	
3.2 Equalisation of Burdens Fund and ERP Special Fund		150,077,735.74	
3.3 Länder Governments		1,629,436,693.32	
3.4 Other public depositors		44,279,151.91	2,120,114,623.63
4 Deposits of other domestic depositors			
4.1 Federal Railways		6,783,214.85	
4.2 Federal Post Office (including postal giro and postal savings bank offices)		3,418,771,490.84	
4.3 Other depositors		479,176,420.35	3,904,731,126.04
5 Liabilities arising from mobilisation and liquidity paper sold			5,366,060,000.—
6 Liabilities arising from foreign business			
6.1 Deposits of foreign depositors		475,225,575.84	
6.2 Liabilities to the European Monetary Cooperation Fund		—	
6.3 Other		13,808,925.93	489,034,501.77
7 Contra-entry to special drawing rights allocated			1,386,895,104.—
8 Provisions			
8.1 Provision for pensions		1,645,000,000.—	
8.2 Other provisions		300,000,000.—	1,945,000,000.—
9 Other liabilities			104,471,929.23
10 Deferred expenses and accrued income			255,278,664.15
11 Capital			290,000,000.—
12 Reserves			
12.1 Legal reserves		969,000,000.—	
12.2 Other reserves		130,500,000.—	1,099,500,000.—
Contingent liabilities	985,633.65		
			135,019,845,357.18

Profit and loss account of the Deutsche Bundesbank for the year 1977

Expenditure

	DM	DM
1 Administrative expenditure		
1.1 Staff costs	525,565,373.43	
1.2 Other	103,464,038.83	629,029,412.26
2 Note printing		101,970,020.15
3 Depreciation		
3.1 on land and buildings	45,614,276.98	
3.2 on furniture and equipment	17,234,929.17	62,849,206.15
4 Increase in the provision for pensions		164,437,638.35
5 Pension payments in respect of the Reichsbank		35,458,551.28
6 Other expenditure		17,060,194.34
7 Write-downs on monetary reserves and other foreign currency positions		7,880,164,271.86
		8,890,969,294.39

Receipts

	DM
1 Interest	5,263,657,909.50
2 Fees	9,298,578.30
3 Other receipts	64,878,494.—
4 Loss for the year	3,553,134,312.59
	8,890,969,294.39

Appendix to the profit and loss account

	DM
1 Loss for the year	3,553,134,312.59
2 Balancing item taken over from 1976 in respect of the valuation adjustment of the monetary reserves and other foreign currency positions — loss brought forward —	3,044,757,536.68
3 Balance sheet loss	6,597,891,849.27

Frankfurt am Main, February 3, 1978

Deutsche Bundesbank
The Directorate
Dr. Emminger Pöhl
Dr. Emde Dr. Gleske Dr. Irmler Prof. Dr. Köhler Lucht Dr. Schlesinger

According to the audit which we have duly carried out the bookkeeping and annual accounts comply with German law and the Bank's by-laws.

Frankfurt am Main, March 3, 1978

Treuarbeit Aktiengesellschaft
Wirtschaftsprüfungsgesellschaft
Steuerberatungsgesellschaft

Dr. Scholz
Certified Auditor

Dr. Haufschild
Certified Auditor

Dr. Wollert — Dr. Elmendorff KG
Wirtschaftsprüfungsgesellschaft

Thoennes
Certified Auditor

Dr. Geuer
Certified Auditor