Report of the Deutsche Bundesbank

for the Year 1972

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Members as at April 1, 1973

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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	Public authorities' cash transactions
	Bank supervision and 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

Contents

The German original went to press on April 12, 1973

Part A: General part

Economic trends and central bank policy

I. General survey

The economic performance of the Federal Republic of Germany in 1972 had conflicting aspects. The growth of the economy can certainly be termed satisfactory. In the autumn of 1971 a marked slowdown in activity had widely been feared, but a new impetus became apparent at the beginning of the year under review. The year ended with a strong economic upswing along a broad front. Full employment was never seriously threatened in 1972. Although conditions on the labour market continued to ease for a time, there was no appreciable release of manpower; in fact, new bottlenecks emerged as soon as enterprises applied for more staff in the wake of the upswing. There were no significant surpluses on the current account of the balance of payments; this likewise accorded with the objectives of economic policy. On the other hand, capital transactions with foreign countries continued to cause considerable disturbances. Large and predominantly speculative foreign exchange inflows at times forced the Bundesbank to make massive supporting purchases on the exchange market, thereby leading to an inflation of the domestic money circulation. This was no doubt one of the main reasons for Germany's failure to come any nearer to the goal of price stability in 1972, in spite of multifarious endeavours.

The Bundesbank's policy was principally geared to the aim of regaining price stability, although the vulnerable external flank was at times a major handicap. But even when stronger safeguards against external constraints were in effect, as from mid-1972 onwards, only initial signs were evident that the stability policy was producing results. Finally, new waves of foreign funds in February and early March 1973 jeopardised even these successes, although the Bundesbank applied its instruments, as far as the external situation permitted, at an earlier stage and with greater stringency than in any previous upswing. The present Report describes the background to this policy in more detail; in addition, it shows clearly that monetary policy alone cannot avert the danger of inflationary expectations gaining strength, but that all those involved in the economic process must make special efforts if this is to be accomplished.

1. The German economy in the new upswing

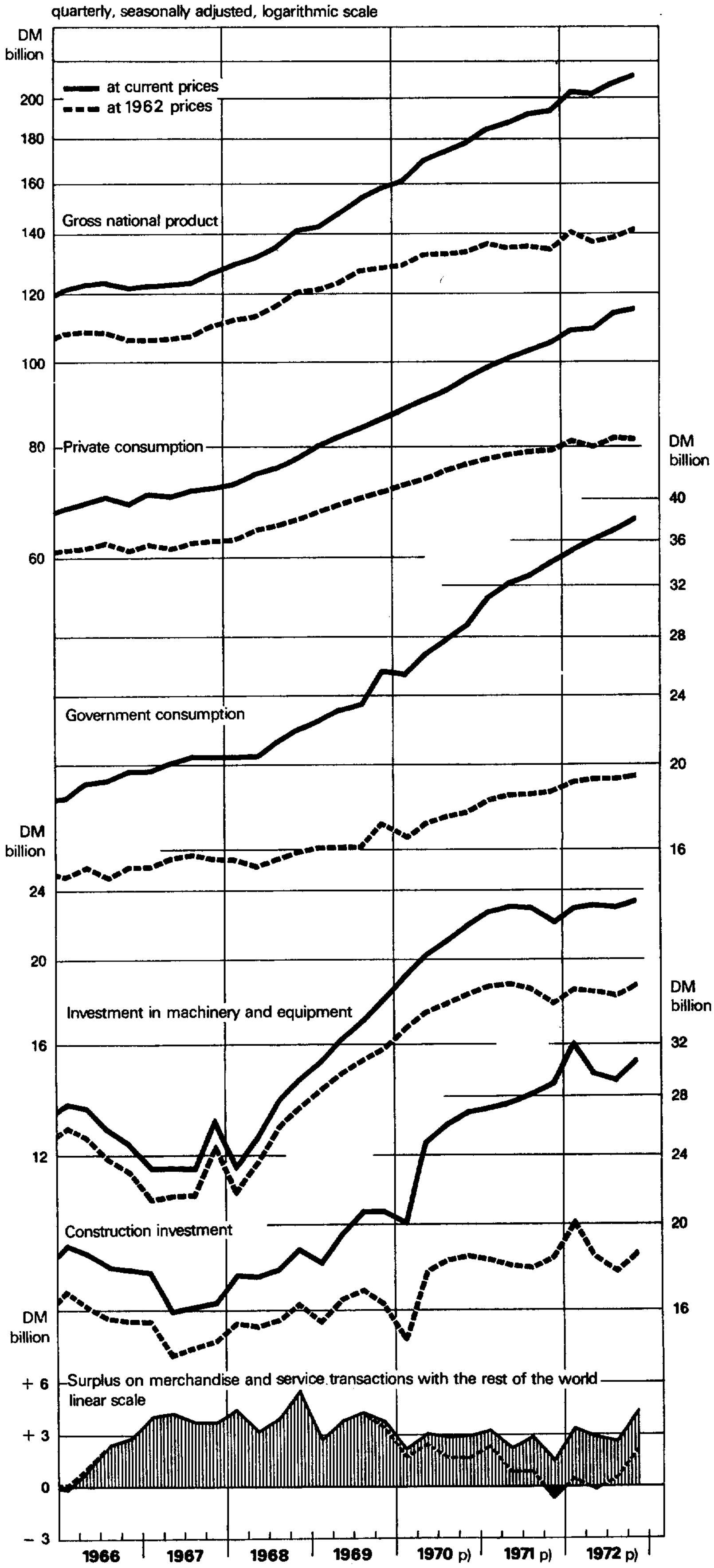
New economic upswing ...

The pessimism that had spread among enterprises in the autumn of 1971 began to wane before the end of that year, when the conclusion of the strike in the metal industry and the realignment of exchange rates removed two major sources of uncertainty in assessing the business situation. Another reason for viewing the future somewhat more confidently and abandoning any pessimism about business conditions — which was hardly justified by the facts even to begin with — seems to have been that the Federal Government stated unambiguously that it intended to intervene with measures to support demand in 1972 should the risk of a recession be discerned. The Bundesbank for its part had eased monetary policy again in December 1971 (although mainly for reasons relating to foreign trade and payments), so that from the monetary angle, too, the conditions were quite favourable for an economic upswing around the turn of the year. The change in mood was followed at the beginning of 1972 by an increase in the orders placed by enterprises, and before long by a general upturn in business activity. In particular, the relatively high level of construction, which in the winter of 1971/72 was held up less than usual by the weather, gave an additional boost to production and incomes. From this point onwards the underlying trend of activity was again upward; the sixth cycle since the war had begun.

... despite unfavourable starting conditions

The starting conditions for the new upswing were, however, fundamentally different from those of previous business cycles. As the relaxation preceding it had been short-lived, the degree of utilisation of plant capacities at the beginning of 1972 was hardly below the long-term average, and comparatively few reserves were available on the domestic labour market. The margin for economic growth was therefore small even at the start of the upswing; it was largely limited to the increase in the production potential, which at present in the Federal Republic of Germany is mainly determined by the constant expansion of the stock of fixed capital. The starting position was even more unfavourable in the case of prices and wages, for at the time the upturn in the economy began to gather pace consumer prices were still rising on the year by nearly 6 %. This was also the rate

Gross national product



p) Provisional.

at which labour costs per unit of output were increasing on the year. Thus the German economy began the new cycle saddled with a substantial burden from the standpoint of stability policy. As mentioned in the Bundesbank's Report for 1971, there was from the outset a danger that this price increase rate would form the foundation on which greater price rises would develop if the upswing continued. In the ensuing period these fears unfortunately proved to be well based.

(a) The upswing began with domestic demand

Private consumer demand initially one of the main driving forces of the upswing

The course of business activity in 1972, like the starting position of the new cycle, differed substantially from the pattern of previous upswings. Whereas in the initial stages of preceding cycles the main impetus had come from foreign demand and enterprises' capital investment, in 1972 the growth of aggregate demand was determined to an unusually large extent by consumer demand: expenditure on private consumption rose over the year by 9½ %, which was somewhat more than the gross national product (9 %). The consumption ratio therefore increased again slightly, whereas it had always declined in similar phases of the cycle in the past. Private consumption expanded particularly fast in the first few months of 1972 as there was a concentration of collectively agreed wage increases in this period. Higher wages and salaries had been granted to almost two thirds of employees by the end of the first quarter, and to no fewer than about 90 % by mid-year. Consumer demand was additionally stimulated by a number of government measures. In the spring the contributions pensioners had made to the cost of their health insurance in 1968/69 were refunded to them; around the middle of the year the anticyclical surcharge, which until then had been frozen at the Bundesbank, was repaid; and towards the end of the year recipients of social security pensions received in one sum the extra benefits that accrued as a result of advancing from the beginning of 1973 to mid-1972 the annual increase in existing pensions. These government measures alone meant that households' disposable income rose in 1972 by DM 8½ billion, or just over 1½ %. Although gross wage and salary income went up less than in 1971 (namely by some 9 %, compared with 12½ %), the aggregate disposable income of all households increased by 11 % on account of the higher transfer incomes, and thus at the same rate as between 1969 and 1971. A quite considerable proportion of these special payments at first seems to have been saved by the recipients, but in the end much the greater part was apparently devoted to consumption. This further intensified the upward trend of the prices of every-day goods, so that more than ever the increase in private incomes was purely nominal; the real income of households in 1972 did not even rise half as much as the nominal income. This ratio used to be much higher: between 1961 and 1971 (with the exception of the recession year 1967), for instance, it averaged almost two thirds.

Sustained expansion of the demand for housing

Another factor that fuelled activity in 1972 was housing construction, on which 20 % more was spent than in 1971. Demand therefore grew in this field over twice as fast as in the other sectors of the economy; the real share of housing in the national product accordingly increased, even though the Federal Government's medium-term projections envisage a decline in the volume of housing construction in relation to the real national product in the longer run. In 1972 about 660,000 dwelling units were completed — more than ever before in a single year. Households again formed the largest group among those initiating building projects, but the largest percentage increase (+ 33 %) was in the number of dwellings erected by industrial housebuilding firms, as in 1971. This group proved particularly dynamic in 1972 — more so, indeed, than before — so that it is contributing more than any other to the present construction boom.

Large housing backlog at the end of 1972

Judging from last year's construction plans these tendencies may be expected to continue, since in 1972 permits were issued for the construction of no less than 770,000 dwellings. In these circumstances the backlog of uncompleted residential buildings at the end of 1972 was bound to be larger again than a year before; at that date it came to over 1,000,000 units. Housing production would therefore rise considerably again in 1973 if it were possible to achieve an increase in output; in view of the growing manpower shortage, however, this appears doubtful. The prime cause of the present strong demand for residential property is the spread

Residential building, classified by parties commissioning the building

Item	1970 '000	1970 Percentage change on year	1971 '000	1971 Percentage change on year	1972 pe '000	1972 pe Percentage change on year
Authorised dwellings in residential and non-residential buildings	609	+ 9	705	+ 16	768	+ 9
of which Households	333	+ 4	387	+ 16	415	+ 7
Non-profit housing and rural settlement enterprises	103	+ 1	116	+ 13	118	+ 2
Commercial enterprises and housing enterprises	158	+ 29	187	+ 18	224	+ 20
Completed dwellings in residential and non-residential buildings	478	— 4	555	+ 16	660	+ 19
of which Households	281	— 1	314	+ 12	360	+ 15
Non-profit housing and rural settlement enterprises	89	— 20	99	+ 11	115	+ 16
Commercial enterprises and housing enterprises	97	+ 6	128	+ 32	170	+ 33
Building permits expired	17	— 6	19	+ 11	20	+ 2
Backlog of uncompleted dwellings at end of year	853	+ 15	981	+ 15	1,073	+ 9
Dwellings under construction	625	+ 16	752	+ 20	822	+ 9
Dwellings authorised, but not yet started	228	+ 13	229	+ 1	251	+ 10

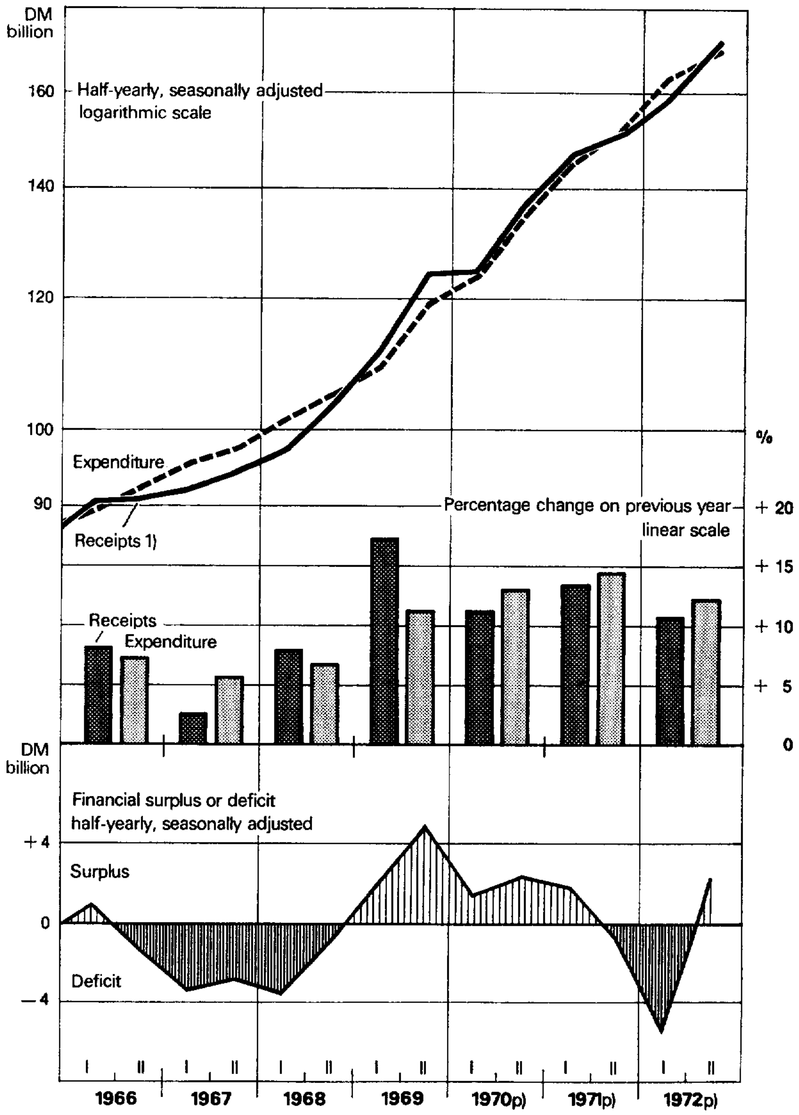
pe Partly estimated

of an "inflation mentality" which regards the acquisition of real assets as the only safeguard against the persistent dwindling of the value of money. An additional factor, as already mentioned, is that the purchase of a home of one's own continues to be greatly encouraged by government measures. In particular, the tax advantages in this field — special depreciation allowances under section 7 b of the Income Tax Act, diminishing balance depreciation under section 7 (5) of the Income Tax Act, 10-year exemption from land tax, the deductibility of loan interest as a special allowance on the purchase of undeveloped land — and the organised provision of loss allocations have gained steadily in importance in the last few years since it has appeared more and more worth while to many taxpayers, in view of the growing tax burden, to avail themselves of these concessions. Whether individuals' expectations in this field will always be met is, however, another question since the market is showing increasing signs of saturation and the rents obtainable in the market in many cases hardly guarantee an adequate return. Furthermore, during 1972 several occurrences demonstrated the financial risks run by individuals when they acquire, mainly for tax reasons, limited partners' shares in special housebuilding companies and other "depreciation firms". Nevertheless, the proportion of our economic resources that is absorbed in this way is growing steadily. The existing tax advantages, some of which were introduced over 20 years ago, are therefore contributing to a quite considerable misdirection of capital and labour, the more so as the original motive of relieving the great housing shortage of those days is hardly of significance now in such a general form. It would thus seem appropriate to curtail the tax advantages in this field, as already intended by the Federal Government with regard to section 7 (5) of the Income Tax Act. Equally the effect on construction demand of providing cheap public funds for building purposes is unlikely to be entirely ignored in this connection.

More than proportional increase in government expenditure

The continued very strong increase in government expenditure also made a major contribution to the economic upswing in 1972. If the central, regional and local authorities and social security funds are taken together, total public expenditure expanded by no less than $12^1/_2$ %, thus by considerably more than the nominal gross national product (+ 9 %). This owed something to the fact that the central, regional and local authorities had from the outset felt unable in their budget planning to limit the growth of their spending to a level which would tend

Receipts and expenditure of the government sector *



* Following the concepts of the National Accounts.-1) In 2nd half of 1970 and 1st half of 1971 including anticyclical surcharge (small residual payments in 2nd half of 1971), in 1972 less repayment of anticyclical surcharge.- p) Provisional.

to curb price increases. The cuts made at the beginning of the year were offset by new extra expenditure in the course of 1972. Government consumption, in particular, rose sharply last year, mainly because personnel costs again went up fast; moreover, there was an unusual increase in social security benefits owing to the special payments already mentioned. On the other hand, the construction projects carried out on behalf of the government did not quite regain the level of the previous year. In cash terms, admittedly, government expenditure on construction increased in 1972, but this seems to have been partly due to payments for construction work carried out in 1971. In 1972 more public construction projects were planned than in the year before, so that it is to be expected that government expenditure on construction will go up once again in the current year.

Repayment of the anticyclical surcharge lessens the growth in receipts

Another factor with an important bearing on the cyclical impact of the public authorities was that government receipts rose by only 11 %, and thus distinctly less than expenditure. This is the case, at least, if allowance is made for the reduction in receipts caused by the repayment of the anticyclical surcharge (to the total of DM 5.75 billion). If this special factor is excluded, the government's receipts went up much more rapidly (by 14 %), principally because of the inflationary expansion of taxable incomes and turnovers and the raising of certain excise taxes. The further increase in the government's cash deficit last year (of some DM 5 billion) is also exclusively attributable to the repayment of the anticyclical surcharge. Most of the deterioration in the financial position of the government sector as a whole fell in the first half of the year (see chart), when expenditure rose at a faster pace and the greater part of the anticyclical surcharge was refunded. The picture changed, however, in the further course of the year, since the government sector's financial balance improved quite considerably as a result of the explosion in tax revenue.

Stronger foreign demand in the second half of the year

Foreign demand, too, after decreasing in the course of 1971, rose again from the beginning of 1972 onwards. To begin with, no doubt some of the increase was due to catching up on orders which had been deferred during the Deutsche Mark float (May to December 1971). Up to about the middle of last year, moreover, foreign buyers placed no more orders than a year before in real terms. In fact, the total of export orders in hand declined slightly during this period. But the position changed abruptly from the late summer on. The inflow of foreign orders to industry swelled to a flood; in the fourth quarter it was no less than one third higher than in the fourth quarter of the previous year, which had been the low point of the cycle. In the first two months of 1973 new foreign orders, seasonally adjusted, actually exceeded this extremely high level. In the wake of this spate of orders, the growth of exports also speeded up towards the end of the year, so that in 1972 the value of exports increased by 10 % compared with 9 % in the previous year. At the same time the backlog of unfilled orders grew further. In many cases German exporters reacted to this abrupt rise in foreign demand by raising their Deutsche Mark prices at a faster pace, whereas in the first half of the year – mainly, no doubt, because of the revaluation of the Deutsche Mark in 1971 – they had put up their prices rather cautiously, if at all. The principal cause of this improvement in export business seems to have been that the growth of demand in many of Germany's trading partners accelerated sharply, thus triggering off an extremely strong need for imports. Since German industry, and particularly the capital goods sector, was still in a position to deliver at fairly short notice (at least in the autumn of 1972), German exporters derived above-average benefit from the world-wide upturn in demand. Although Germany's imports also increased rather steeply in the latter part of the year, the trade balance improved towards the end of 1972 and in the first few months of 1973. As described in detail in the section dealing with the balance of payments (page 63), at the same time the deficits on services and transfer payments continued to grow, so that over the whole of 1972 the current account showed a surplus of little over DM 1 billion, or hardly more than a year before. The current account thus presented a radically different picture from that of the years 1968/69, when the surpluses on current account ultimately led to the Deutsche Mark being unilaterally revalued in order to allay the unrest on international foreign exchange markets.

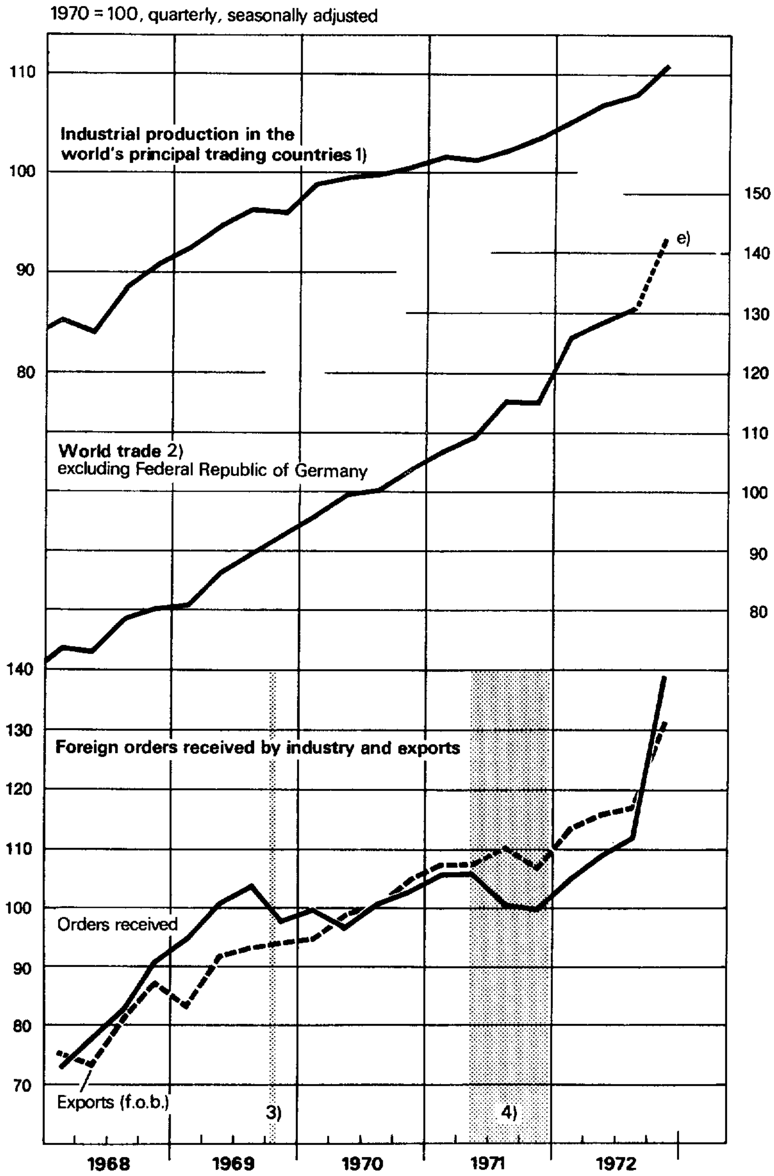
Propensity to invest grows only towards the end of the year

Enterprises' capital investment contributed little to the expansion of aggregate demand in 1972. Industrial fixed investment went up by only 2 % last year in value terms, compared with 11 % in 1971; in volume terms it actually fell slightly. During the year, however, there was a slight swing, so that in the fourth quarter of 1972 industrial fixed investment was 4½ % higher than a year before. As the earnings prospects improved, enterprises expanded their investment plans, the more so as a growing number of enterprises reached the limits of their capacity. At that stage it is not likely to have been very difficult to finance such investment as borrowing requirements could easily be met on domestic credit markets, even if at slightly rising interest rates. In addition, a more optimistic view was being taken of self-financing possibilities. The inflow of orders for capital goods was particularly brisk in the last quarter of the year, when producers of such goods booked 15 % more domestic orders than a year before – and this trend distinctly intensified at the beginning of 1973. A similar tendency was evident in the planning of non-residential buildings.

Strong growth in business activity around the turn of the year

Now that capital investment had started to rise again, at the end of 1972 and the beginning of 1973 all major components of demand were pointing upward. The nominal gross national product, as an indicator of overall business activity, rose by no less than 3 %, seasonally adjusted, in the fourth quarter of last year, equiva-

Economic activity abroad, world trade and foreign demand



1) Index of industrial production of the following countries weighted with their share in German exports: EEC member countries (former area), United Kingdom, Austria, Sweden, Switzerland, Japan, United States.- 2) World trade = world exports (f.o.b.) in U.S. dollars, excluding exports of the Federal Republic of Germany. Source: IFS.- 3) Revaluation of the Deutsche Mark by 9.3% on October 27, 1969.- 4) Flexible exchange rate of the Deutsche Mark between May 10 and December 17, 1971.- e) Estimated.

lent to an annual rate of 12 %. In the first three quarters, in comparison, the gross national product had gone up at an annual rate of 8 %. As the scope for increasing production — the determinants of which will be examined more closely in the following pages — has meanwhile narrowed again, the strong expansion of demand is increasingly at variance with the production possibilities; in other words, the inflationary gap between supply and demand is widening. Without further economic countermeasures, which, as things are, would mainly have to be directed towards curbing demand, this year the excess demand might reach dimensions surpassing those of previous boom years.

(b) Growth of production under the impact of demand

Upturn in production mainly in the latter part of the year

The expansion of demand and the calls made by it on the factors of production are not fully reflected in the figures on overall output for 1972. The real gross national product went up by about 3 % last year, and thus just as much as in 1971. Even though this was slightly above the rate of growth envisaged by the Federal

National product *

Item	1968	1969	1970	1971	1972	1968	1969	1970	1971	1972
	Billions of Deutsche Mark					Percentage change on previous year				
I. National product										
Working persons (thousands)	(26,340)	(26,820)	(27,200)	(27,170)	(26,950)	+ 0.2	+ 1.8	+ 1.4	— 0.1	— 0.8
Average man-hours worked	.	.	.	.	.	+ 0.4	— 0.6	— 0	— 0.7	— 0.6
Total man-hours worked	.	.	.	.	.	+ 0.6	+ 1.2	+ 1.4	— 0.8	— 1.4
Productivity										
per working person (DM)	(17,550)	(18,660)	(19,460)	(20,020)	(20,770)	+ 7.1	+ 6.3	+ 4.3	+ 2.9	+ 3.7
per man-hour worked	.	.	.	.	.	+ 6.7	+ 6.9	+ 4.3	+ 3.6	+ 4.4
Gross national product at 1962 prices	462.3	500.4	529.4	543.9	559.9	+ 7.3	+ 8.2	+ 5.8	+ 2.7	+ 2.9
Gross national product at market prices	540.0	605.2	685.6	758.9	828.5	+ 9.0	+12.1	+13.3	+10.7	+ 9.2
	1962 = 100									
GNP deflator	(116.8)	(120.9)	(129.5)	(139,5)	(148.0)	+ 1.6	+ 3.5	+ 7.1	+ 7.7	+ 6.1
Private consumption deflator	(116.5)	(119.4)	(123.6)	(130.0)	(137.6)	+ 1.9	+ 2.5	+ 3.6	+ 5.2	+ 5.8
II. Factor incomes at current prices	Billions of Deutsche Mark									
Compensation of employees 1	266.3	300.1	353.2	400.2	438.9	+ 7.4	+12.7	+17.7	+13.3	+ 9.7
Property and entrepreneurial income	150.6	160.5	176.0	182.6	195.5	+17.5	+ 6.6	+ 9.7	+ 3.7	+ 7.1
Private	146.9	156.5	171.8	178.0	191.9	+17.6	+ 6.5	+ 9.8	+ 3.6	+ 7.8
Government 2	3.6	4.1	4.2	4.6	3.7	+16.8	+12.2	+ 2.5	+10.1	—19.4
Net national product at factor cost (national income)	416.9	460.7	529.2	582.8	634.4	+10.9	+10.5	+14.9	+10.1	+ 8.9
plus Indirect taxes 3	65.7	80.6	81.6	91.0	100.9	+ 0.0	+22.6	+ 1.3	+11.5	+10.9
Net national product at market prices	482.6	541.3	610.8	673.8	735.3	+ 9.3	+12.2	+12.9	+10.3	+ 9.1
plus Consumption of fixed capital	57.4	64.0	74.8	85.1	93.2	+ 6.7	+11.4	+16.9	+13.8	+ 9.5
Gross national product at market prices	540.0	605.2	685.6	758.9	828.5	+ 9.0	+12.1	+13.3	+10.7	+ 9.2
Memorandum items:	Percentage of national income									
Wage ratio 4	63.9	65.2	66.7	68.7	69.2	.	.	.	.	.
Profit ratio 4	36.1	34.8	33.3	31.3	30.8	.	.	.	.	.
III. National expenditure	Billions of Deutsche Mark									
Private consumption	301.8	333.1	369.0	409.6	448.5	+ 5.8	+10.4	+10.8	+11.0	+ 9.5
Government consumption	84.3	95.1	109.0	130.7	147.1	+ 3.9	+12.8	+14.6	+19.8	+12.6
Gross fixed capital formation	124.8	146.2	181.1	203.1	214.5	+ 9.0	+17.2	+23.9	+12.2	+ 5.6
Machinery and equipment	52.9	66.9	82.9	91.1	92.5	+10.1	+26.5	+23.9	+ 9.9	+ 1.5
Construction	71.9	79.3	98.2	112.0	122.1	+ 8.3	+10.3	+23.8	+14.1	+ 9.0
Change in stocks	+11.5	+16.0	+15.3	+ 5.3	+ 5.1	.	.	.	.	.
Domestic expenditure	522.4	590.4	674.4	748.7	815.2	+ 8.9	+13.0	+14.2	+11.0	+ 8.9
Net exports of goods and services	+17.6	+14.8	+11.2	+10.2	+13.3	.	.	.	.	.
Exports	123.8	141.9	158.6	173.1	188.3	+12.5	+14.6	+11.8	+ 9.2	+ 8.8
Imports	106.2	127.1	147.4	162.9	175.0	+12.8	+19.6	+16.0	+10.5	+ 7.4
Gross national product at market prices	540.0	605.2	685.6	758.9	828.5	+ 9.0	+12.1	+13.3	+10.7	+ 9.2

Source: Federal Statistical Office and calculations of Bundesbank. — * Discrepancies in the totals are due to rounding; provisional figures. — 1 Gross wages and salaries, employers' contributions to social security funds (incl. supplementary pension funds for government employees and imputed pension funds for established government employees) and fringe benefits. — 2 After deduction of interest on public debt. — 3 Less subsidies. — 4 Compensation of employees or property and entrepreneurial income as % of national income.

Government in its 1972 Economic Report, the growth achieved appears fairly small in relation to that of earlier upswing years. However, the explanation is, on the one hand, that the trend varied in the course of the year and, on the other, that the scope for increasing output was narrow from the start of the business cycle. Apart from a temporary steep rise at the beginning of the year (when the production losses of end-1971, which were partly caused by strikes, were made good), the real national product rose comparatively little up to the late summer. Then, following the relatively pronounced break during the summer holiday months, output began to increase at a faster pace. The real gross national product in the fourth quarter of 1972 was 4½ % higher than in the same period of 1971 (when, admittedly, production had been affected by strikes). Industrial output, too, now reacted more strongly to the massive inflow of foreign orders. Over the whole of 1972, however, industrial goods production grew only a little faster, at 3.5 %, than the real national product. By contrast, there was a distinctly larger increase in output in the building industry (6½ %), although the main reason was, as already mentioned, that during the winter the production capacities could be used much more intensively than in previous years owing to the mild weather.

Growth in production mainly due to larger input of capital

It was mainly due to a larger input of capital that the supply of goods could be expanded last year. The stock of fixed capital in the German economy went up by an estimated 5½ % in 1972 as a result of new investment. The utilisation of plant capacities last year, as in the autumn of 1971, was no longer as high as during the period of cyclical strain in 1970, but hardly fell below the multi-year average. According to figures published by the Ifo Institute, utilisation of production capacities in industry at the beginning of 1972 was running at 85½ %, seasonally adjusted, compared with a multi-year average of 86½ %. In this central sector of the economy plant was therefore not being significantly under-utilised even at the beginning of the present upswing, so that from the outset the margin for stress-free growth through greater utilisation of capacities was small. Following the sharp upturn in sales in late 1972 and early 1973 these meagre reserves were soon being drawn on. Capacity utilisation in industry in January 1973, at almost 88 % (seasonally adjusted), was once again distinctly above the average of earlier years. Thus, one year after the start of the upswing the capacity reserves have already been used up, at least in industry; if stronger signs of excessive strain are to be avoided, output can be expanded only to the extent that the production plant and the number of employees are increased.

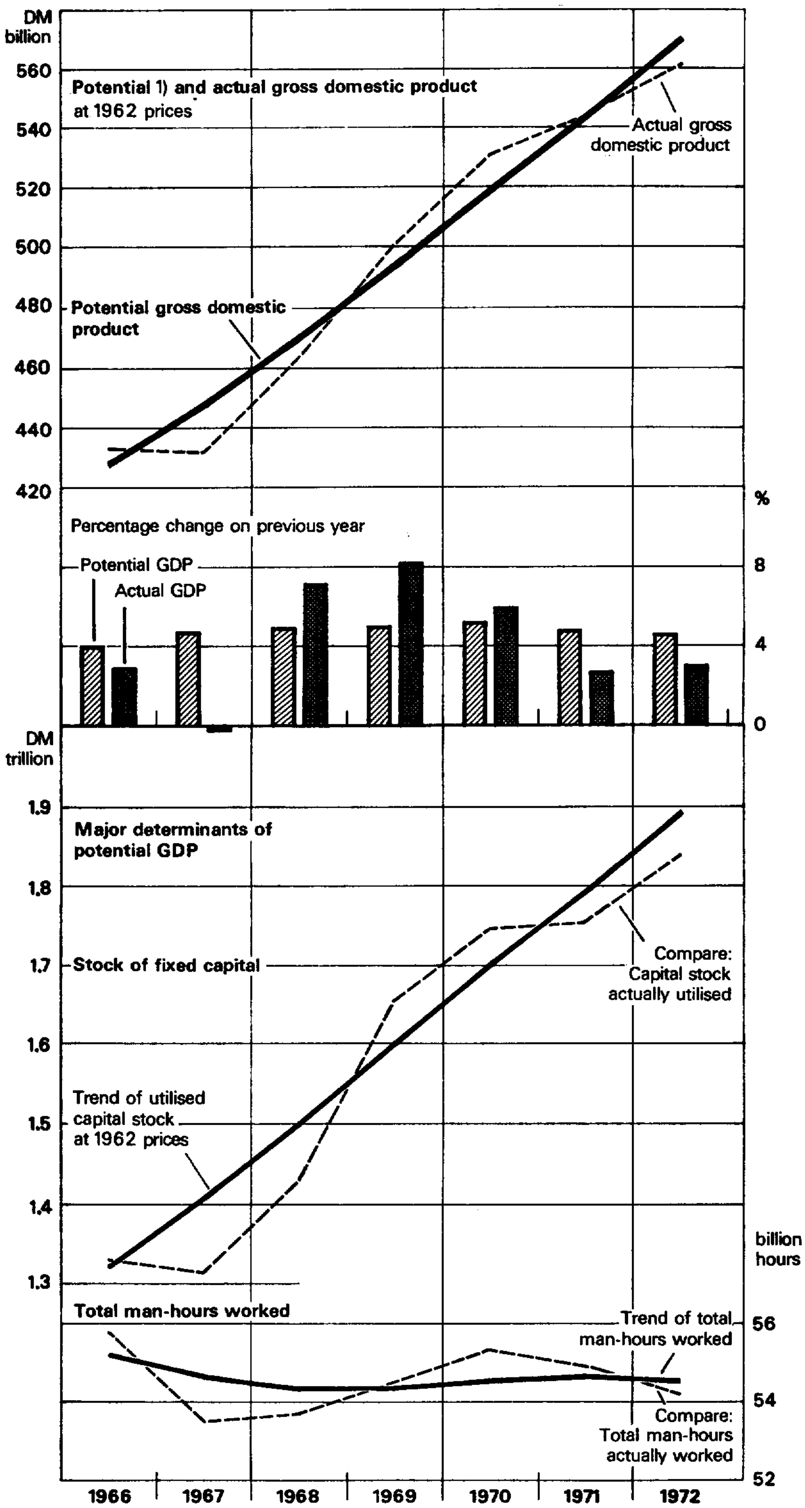
Further decrease in the domestic supply of labour

On the labour market, too, there was hardly room for a substantial strengthening of economic growth even at the beginning of the upswing in 1972, although the working population had fallen somewhat in 1971 and continued to drop slightly in the first half of 1972. The decline in the number of working persons in that period was wholly ascribable to a decrease in the domestic labour force, caused not only by the rise in the number of persons of pensionable age but also by the longer periods spent at school and university by young people and students. The downward trend was not fully visible in 1971/72 since even in that period of falling employment the number of foreign workers in the Federal Republic of Germany increased. In fact, between mid-1971 and mid-1972 the size of the domestic labour force fell by 300,000. Industry, in particular, released employees; in mid-1972 the number of wage and salary earners in this sector was some 200,000 smaller than a year before. In many firms the principal motive for this reduction in staff was internal rationalisation, which was accelerated because of the unsatisfactory earnings situation. As a rule the staff was reduced simply by largely refraining from new recruiting; there were no large-scale dismissals. In any case, released workers could easily be placed in other jobs. The decline in employment up to mid-1972 did not create any significant reserves of labour, as shown by the fact that the number of unemployed persons rose little during this period: the unemployment ratio stood at 1.3 % of wage and salary earners in the middle of 1972, seasonally adjusted, compared with 0.9 % a year before.

Recovery on the labour market from the summer on

From the summer of 1972 onwards the labour market reacted more clearly to the upswing; enterprises' applications to the labour exchanges for staff increased again and the number of unemployed persons, which was already small, started to fall. In the last few months of 1972 overall employment also rose, although this was

Potential and actual national product



1) Ascertained on the basis of a potential function for the years 1960 to 1972, using empirical trend values of the utilised capital stock and the total of man-hours worked. The potential GDP implies an average utilisation (based on the empirical values) of the factors of production; the optimum utilisation of the potential GDP desirable in the light of economic objectives is probably below the values shown here.

only because more foreign workers were recruited. The domestic labour force continued to decline during this period; it also appears that the tendency for working hours to be reduced persisted. At the beginning of 1973 the labour market again showed more distinct signs of strain: there were about 600,000 vacancies, seasonally adjusted, compared with only some 200,000 unemployed. Such a relationship has not been recorded since early 1969.

Structural limits of the supply of labour

Furthermore, studies of the pattern of unemployment have shown that the great majority of unemployed persons — with the exception of the seasonal component in winter — do not constitute a growth reserve since a brief period of unemployment is often unavoidable under normal circumstances when changing jobs and a fairly considerable number of unemployed persons are hard to place owing to age, physical disability or other factors. On top of this come problems relating to the regional distribution of the unemployed. So far, the manpower shortage has been eased by recruiting foreign labour. In January 1973 2.3 million foreigners were working in Germany, equivalent to $10^1/_2$ % of all wage and salary earners in this country. However, the limits set to the employment of foreigners are becoming increasingly evident. On the one hand, the supply of qualified foreign workers is declining and the cost of training unskilled labour is extremely high. On the other, the social cost of employing foreigners, who often settle in Germany with their families, is becoming more and more apparent. Particularly in the large towns — some 35 % of all foreigners work in only 12 German cities — the bottlenecks in infrastructure are growing, quite apart from the social problems presented by the integration of foreigners. It is probable that from this angle, too, the limits to economic growth will be narrower in the future than they have been in the past.

Utilisation of overall production potential roughly "normal"

As already noted, in the initial stages of the new upswing only small reserves of the factors of production were available; the average utilisation of overall production potential in 1972 was therefore relatively high. If the average degree of utilisation of the production factors "labour" and "capital" in the past is regarded as "normal utilisation", we estimate that the potential gross domestic product, at 1962 prices and assuming normal utilisation, was DM 570 billion in 1972. The actual real gross domestic product (DM 561 billion) was thus only $1^1/_2$ % below the potential GDP arrived at in this way, and this "under-utilisation" is likely to have disappeared completely in the first few months of 1973. Since demand, as mentioned above, has recently been expanding much faster than potential GDP (which can be expected to grow by no more than $4^1/_2$ % in 1973, as in 1972), the Federal Republic of Germany at the beginning of 1973 — that is, after an upswing lasting only a year — is already facing a phase of overheating.

(c) Continued sharp decline in the value of money

Persistent monetary erosion

The hope entertained in many quarters that the upward trend of prices would slacken in 1972 was not fulfilled, although, to judge from previous experience, the conditions for such a development are relatively favourable in the early stages of an upswing. It is true that in the first few months of 1972 the slight deceleration in the pace of price rises associated with the slowing of business activity in the previous year was maintained, but from the spring onwards the price rises speeded up again. Some price indices increased more at the lower turning point of the "price cycle" than they had previously done at its peak. For example, the lowest annual growth rate of the cost of living index in the course of 1972 was 5.1 %, while before that the largest year-on-year increase ever recorded, except for the record figure of the Korea crisis, had been 4.5 % in April 1966.

Faster rise in the prices of industrial goods in the course of the year

A particularly adverse feature was that despite the easing of the cost pressure in some areas industrial producer prices did not remain static or even fall (as they had done at similar stages of the cycle in the past), but rather continued to rise steeply. During 1972, and especially towards the end of the year, world market influences certainly played a part; but the main cause of the increase in industrial producer prices seems to have been that industrial firms were anxious to expand their profit margins, which had narrowed appreciably in 1970 and 1971, as soon as their sales situation improved. In the course of 1972 they put up their selling prices on the home market by as much as 4.3 %, and in February 1973 these prices were no less than 5.5 % higher than a year before. In export business the latitude for price increases does not appear to have been quite so large. As late as mid-year the prices of industrial exports expressed in Deutsche Mark were only just on 2 % higher than a year previously. The revaluation of the Deutsche Mark in the realignment at the end of 1971 by a weighted average of some 6 % had already made German goods considerably more costly abroad, so that for a while German producers could not raise their export prices much and hence were probably inclined to turn their attention to domestic sales rather than to less profitable exports. When, however, the upswing gathered momentum in other countries and the rise in industrial prices accelerated there as well (in the second half of 1972 such prices were 4.2 % higher than a year before in ten selected industrial countries according to the table opposite), German exporters raised their Deutsche Mark selling prices more steeply, and the above-mentioned effect of the revaluation – namely that greater attention was paid to domestic business – was felt less strongly owing to the world-wide inflationary tendencies.

Deterioration in the price situation owing to faster rise in import prices in the second half of the year

Import prices too initially reacted to the revaluation of the Deutsche Mark in the manner anticipated: they fell sharply, expressed in Deutsche Mark, even though prices continued rising abroad. In April 1972 imported industrial goods on the German market were an average of almost 5 % cheaper than a year before. This definitely had a dampening effect on the movement of domestic prices, since the prices of imported raw materials and semi-finished goods fell and the virtual standstill in the prices of imported finished products made it difficult to raise the prices of competing German goods. In the second half of 1972, however, the price situation in the import field, too, changed abruptly. Supply bottlenecks abroad, and also the strong upturn in business activity in Germany itself, resulted in import prices soaring from the autumn onwards. This tendency persisted at the beginning of 1973; in February the prices of imported industrial products were 9 % higher than a year before. The "stability gain" arising from the reduction in the prices of imports owing to the revaluation was thus foregone within a short period. The main reason for this, as for the trend in export prices outlined above, lies in the world-wide intensification of inflationary tendencies. The expected price-stabilising impact of the Deutsche Mark float and of the Deutsche Mark revaluation of December 1971 terminating the float was in fact clearly discernible at first, on the import side and the export side alike; but in the end the subsequent acceleration of the upward price trend throughout the world absorbed this impact. Whether the revaluation of the Mark and other currencies itself significantly contributed to this development cannot be determined with any accuracy. The Deutsche Mark revaluation certainly reduced the stabilising effect which the German surpluses on current account had up to then exercised on deficit countries. Even so, the return to a balanced current account, such as was aimed at and largely accomplished for Germany by the revaluation of the Deutsche Mark in 1971, cannot be designated, as is sometimes done, as "exporting inflation". It would, presumably, only be possible to say this if the current account moved permanently into deficit.

Increase in construction prices slackens

On the construction market the growth of prices slackened perceptibly in 1972, after two years of extremely rapid increase. The overall level of construction prices was on the average "only" 4½ % higher than a year before, compared with 9½ % in 1971 and no less than 16 % in 1970. One reason for the slowdown in the rate of price increase was that last year the agreed wage rises for construction workers, which as a rule can quickly be passed on to the prospective building owners, were distinctly lower than in 1971. Another reason was that the order situation in civil engineering, although it improved slightly over the previous year, did not permit of any major price increases. In the housebuilding field, on the other hand, where, as mentioned, there was substantial excess demand throughout the year, prices were again put up sharply (by an annual average of 7 %).

Dangerous deterioration in the price situation at the consumer stage

The renewed acceleration in the upward trend of prices at the consumer stage last year was extremely ominous. During 1971 the cost of living had already gone up by almost 6 %, and between December 1971 and December 1972 it rose by a further 6½ %. It went on increasing strongly at the beginning of 1973. If the price rises during the last three months (January to March 1973) are considered by

Price movements in selected countries

Percentage change on previous year

Country	Annual average 1962 to 1968	1970	1971	1972	1972 1st half	1972 2nd half	1973 Jan./Feb.
	Wholesale price index for industrial products						
Belgium	+ 1.4	+ 5.6	+ 2.1	+ 3.7	+ 2.7	+ 4.7	+ 7.9
France	+ 1.1	+ 6.7	+ 4.0	+ 5.4	+ 4.7	+ 6.1	+ 7.9
Italy	+ 1.9	+ 7.9	+ 3.8	+ 3.0	+ 2.5	+ 3.6	...
Netherlands	+ 3.1	+ 4.3	+ 4.1	+ 3.4	+ 2.3	+ 4.3	...
EEC countries total **1, 2**	+ 1.8	+ 6.3	+ 3.5	+ 3.9	+ 3.2	+ 4.8	**e** + 6.8
Austria	+ 2.3	+ 4.9	+ 6.3	+ 3.5	+ 3.1	+ 3.6	+ 5.2
Sweden	+ 2.4	+ 7.0	+ 2.9	+ 4.3	+ 4.2	+ 4.4	...
Switzerland	+ 0.6	+ 4.6	+ 2.1	+ 3.4	+ 2.6	+ 4.3	+ 7.0
United Kingdom	+ 2.4	+ 6.6	+ 7.8	+ 5.3	+ 5.0	+ 5.7	+ 6.4
United States	+ 1.3	+ 3.8	+ 3.6	+ 3.4	+ 3.5	+ 3.3	+ 3.9
Japan	+ 0.7	+ 4.2	— 0.7	+ 1.1	— 0.1	+ 3.0	+ 7.5
Selected countries, total **2**	+ 1.6	+ 5.3	+ 3.8	+ 3.7	+ 3.3	+ 4.2	**e** + 5.8
Compare:							
Federal Republic of Germany	+ 0.8	+ 5.9	+ 4.7	+ 3.2	+ 2.7	+ 3.6	+ 5.2
	Cost of living index						
Belgium	+ 3.4	+ 3.9	+ 4.3	+ 5.5	+ 5.1	+ 5.8	+ 6.9
France	+ 3.4	+ 5.6	+ 5.5	+ 5.9	+ 5.6	+ 6.5	+ 6.5
Italy	+ 4.2	+ 4.9	+ 4.9	+ 5.7	+ 4.9	+ 6.6	+ 8.4
Netherlands	+ 4.6	+ 4.4	+ 7.6	+ 7.9	+ 8.1	+ 7.7	+ 7.4
EEC countries, total **1, 3**	+ 3.8	+ 5.2	+ 5.3	+ 6.1	+ 5.6	+ 6.6	+ 7.2
Austria	+ 3.4	+ 4.4	+ 4.7	+ 6.3	+ 5.9	+ 6.8	+ 8.0
Sweden	+ 4.0	+ 7.0	+ 7.4	+ 6.0	+ 5.8	+ 6.2	...
Switzerland	+ 3.5	+ 3.6	+ 6.6	+ 6.7	+ 6.5	+ 6.7	+ 7.5
United Kingdom	+ 3.5	+ 6.4	+ 9.4	+ 7.1	+ 7.1	+ 7.1	+ 7.8
United States	+ 2.4	+ 5.9	+ 4.3	+ 3.3	+ 3.4	+ 3.3	+ 3.8
Japan	+ 5.5	+ 7.9	+ 6.2	+ 4.6	+ 4.6	+ 4.6	+ 6.6
Selected countries, total **3**	+ 3.1	+ 6.0	+ 5.2	+ 4.3	+ 4.2	+ 4.4	+ 5.1
Compare:							
Federal Republic of Germany	+ 2.6	+ 3.8	+ 5.2	+ 5.8	+ 5.3	+ 6.1	+ 6.7

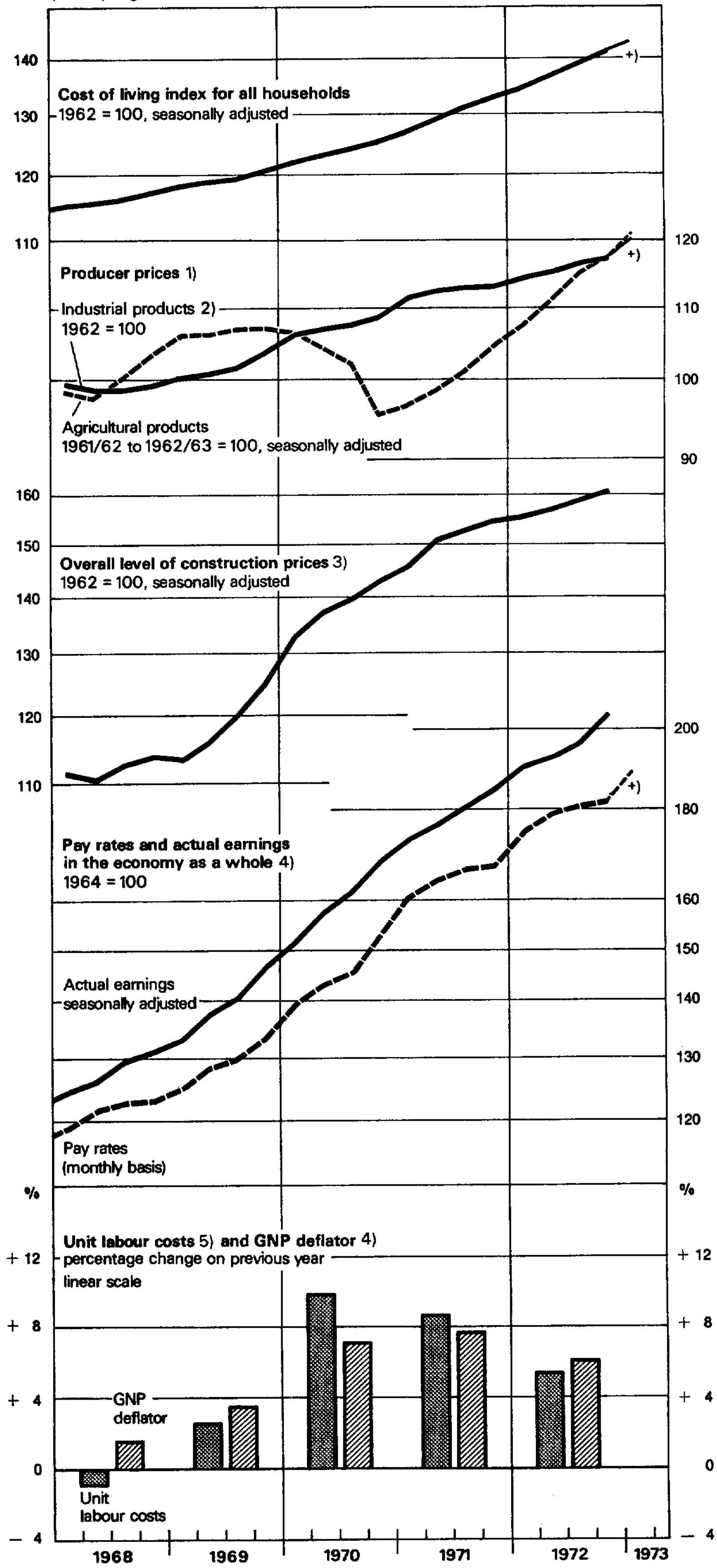
1 Former area, excluding Federal Republic of Germany and Luxembourg. — **2** Weighted with respective share of these countries' exports in world exports during the period from 1963 to 1969. — **3** Weighted with respective share of these countries in the 1968 GNP of the OECD countries. — **e** Partly estimated.

themselves, the growth rate, seasonally adjusted and on an annual basis, was approximately 7 %. The rise in the cost of consumer goods during the last year was not, however, solely attributable to cyclical influences. It also owed much to a substantial increase in the price of foodstuffs, caused partly by serious bottlenecks in supply (particularly in the supply of vegetables and meat); in March 1973 food prices were 8.8 % up on the previous year. A number of administrative measures, such as the raising of the taxes on spirits, tobacco and petroleum and the increase in postal charges, also had an adverse effect on the level of consumer prices. Even so, a decline of this kind in the value of money could not have occurred had there not been this primarily cyclical increase in the cost of industrial consumer goods. In the last two years consumer prices have risen by a total of 12½ %. Previously it had taken five whole years — namely from the beginning of 1966 to the end of 1970 — for the value of money to diminish to this extent. An international comparison also illustrates the dangerous course taken by consumer prices in 1972: the rise in consumer prices in Germany last year, at an average of 5.8 %, was 1.5 percentage points higher than the mean rise in Germany's ten principal trading partners, after having been in line with the international growth rate in 1971 and distinctly below the international rate in preceding years (see the above table).

Initial lull followed by faster rise in wages . . .

In the case of wages, as in the case of prices, it is possible to distinguish in 1972 between a brief initial phase when the pace of wage increases slowed down and a subsequent period when it speeded up again. At first sight the movement of the overall level of wage rates may seem to contradict this statement, since this level unquestionably rose fastest at the beginning of the year, and throughout the remainder of 1972 it went up less than in 1971. Its year-on-year growth rate declined from

Prices and wages



1) Excluding value-added tax.- 2) Unadjusted.- 3) Calculated by Bundesbank.- 4) From 1970 provisional.- 5) Index of actual earnings divided by index of real GNP per working person.- + Jan./Feb.

some 9½ % in the first quarter to 8½ % in the last. The reason was, as already noted, an exceptional bunching of new wage agreements in the first few months of the year. On the other hand, the size of the increase agreed in the various wage settlements declined somewhat for a period of several months from the beginning of 1972; the low point was reached in the spring, at an average rate of about 6½ %. Thereafter the agreed increase rates gradually mounted; at the turn of the year, when this year's wage round began, they were running at 8½ % or slightly more. Settlements of this size were reached in the metal industry and for government employees. Since then collectively agreed wage increases have gone up further, as shown by the recent settlement in the building industry; they are now around 9 %, and in some cases even higher.

... and increasing wage drift

Last year a striking change of mood, as compared with 1971, occurred in the wage negotiations, due no doubt in considerable measure to the improvement in economic conditions. While in late 1971 and early 1972 the decisive agreements were as a rule only reached after protracted and tough negotiations, and in some cases only after a labour dispute, later wage negotiations were completed relatively smoothly. This was because, on the one hand, it was no great problem for employers, given the ruling market situation, to pass on any extra costs in prices, while, on the other hand, the trade unions were seeking settlements that would not stimulate the vicious circle of prices and wages. This is also the reason why actual earnings have recently been increasing faster again than wage and salary rates. In the fourth quarter of 1972 actual earnings were 10½ % higher than a year before; they thus rose two percentage points more than pay rates. This wage drift is likely to have grown even further in the first quarter of 1973. Enterprises now have more overtime to pay for, and in many cases more bonuses are being paid above the agreed wage and salary scale. This and the general rise in profits are clear signs that the price increase is primarily attributable to demand.

2. Monetary policy between conflicting domestic and external objectives

Fluctuating scope for monetary policy

In view of the trend of business activity and the persistently strong price rises, the obvious course as the danger to the value of money increased was to apply the monetary brakes. However, throughout the entire first half of 1972 the essential precondition for this, namely that monetary policy should be free from external constraints, was lacking. Relatively large inflows of foreign exchange in the first two months after the realignment showed how little Germany was safeguarded against external influences by the parity changes. To begin with, therefore, the important thing was to defend the new pattern of exchange rates by suitable measures of liquidity and interest rate policy by the Bundesbank, and if possible to give no encouragement to thoughts of speculation. The domestic aims of monetary policy had for the time being to take second place. When in June and July 1972 the inflows of foreign exchange swelled again for speculative reasons, even though interest rates in Germany were relatively low and the cash deposit requirement was in force, it became evident that additional measures were necessary to safeguard monetary policy against external constraints. Behind the shield of the restrictions on capital movements introduced at that time greater scope for a restrictive monetary policy developed in the monetary field in the second half of the year. The Bundesbank then reduced bank liquidity more sharply and raised the level of interest rates step by step, although it always had to be mindful of the limits set to its policy by external considerations; while these had been extended, they were still very much in existence. The expansion of the money stock, which mainly derived from the preceding period of massive money inflows from abroad, could not be reversed, but it did prove possible to curb further growth to a certain extent. At the beginning of 1973 it appeared that the restrictive measures might result in a dampening of the expansion in demand, at least in some fields. The unrest on the international currency front that began at the end of January, and forced the Bundesbank in early February and early March to buy larger amounts of dollars than ever before, set monetary policy back considerably in its efforts to gain effective control of the money supply. Under these changed monetary conditions, the main features of which are the suspension of interventions against the U.S. dollar together with the operation of mandatory interventions against the currencies of a bloc of European countries, the Bundesbank is now trying once again to limit the excessively large monetary expansion.

(a) Monetary policy in the absence of adequate protection against external influences

External situation remains unstable

The dominant fact for monetary and credit policy after the realignment of exchange rates in December 1971 and at the beginning of 1972 was the instability on the foreign exchange markets. At the beginning of 1972 the spot rate of the U.S. dollar against the Deutsche Mark fell distinctly below the new central rate agreed in Washington and at the beginning of March it approached the lower intervention point again. Following the sterling crisis, which obliged the Bundesbank to purchase large amounts of sterling at the end of June under the special intervention arrangements for Community countries in which the United Kingdom was already participating, the unrest also spread to the U.S. dollar, so that up to mid-July the Bundesbank had to take in substantial quantities of dollars at the lower intervention point on several occasions. Principally because of this wave of speculation the central monetary reserves rose between January and mid-July 1972 by DM 20 billion to a total of DM 79.5 billion (valued at the exchange rates ruling at the time). According to the balance of payments, these huge inflows of foreign exchange were exclusively attributable to capital transactions with foreign countries, whereas the current account was slightly in deficit during that period. The various sectors of the capital account had very different shares in the overall influx of foreign exchange. Initially, short-term borrowing abroad by German firms was of some significance since interest rates on international credit markets were distinctly lower than in Germany. To eliminate the interest rate differential vis-à-vis foreign countries a cash deposit on certain external liabilities, to be maintained interest-free at the Bundesbank, was introduced at the beginning of March (the special minimum reserve regulations for the banks' external liabilities were tightened up again on March 1, thus impeding an inflow of funds from abroad through money imports by the banks). At the end of February 1972 the discount and lombard rates were lowered once more (to 3 % and 4 % respectively). Thereafter the influx of capital in this field reversed; at times, indeed, German enterprises repaid relatively large amounts of credit to non-residents.

Large inflow of foreign exchange owing to sales of securities to non-residents

The capital inflows caused by foreigners' purchases of securities were unaffected by these measures in the first half of the year. Between January and July DM 11 billion (net) of capital was imported into Germany in this way (not counting the acquisition of trade investments); this was over four times as much as in the whole of 1971. More than half of this amount was made up of net sales of German bonds to non-residents. The motive predominating in this period of monetary unrest was that foreigners sought to acquire Deutsche Mark assets, which at the same time offered a rate of interest that was quite substantial, though by no means particularly high after deduction of coupon tax. After the introduction of the cash deposit and the tightening of the minimum reserve requirements for banks' external liabilities, residents, too, had an inducement to obtain funds abroad by selling securities. One sign of this was the increase in issues of short-dated bank bonds, which were especially suitable for such transactions. Large quantities of such paper were sold to foreigners during that period.

New wave of speculation due to sterling crisis

The principal source of the foreign exchange inflows to the Bundesbank, however, was the speculative movements of funds that began at the end of June in connection with the sterling crisis. As always in such circumstances foreign funds flowed into the Federal Republic of Germany through every conceivable channel. Sales of securities to foreigners reached a new peak and the business community again raised short-term credits abroad. The barriers erected against interest-rate-induced capital imports through the cash deposit scheme were surmounted with ease since the interest rates for Euro-DM loans fell sharply in this period of speculation. Finally, the banks, too, recorded substantial inflows to non-resident accounts. In such circumstances it is not the interest yield that attracts foreign lenders, but rather the possibility of exchange profits, or at least the avoidance of losses, should the currencies they have surrendered be devalued.

Record of economic and monetary measures

1972	
Late January	The Bundestag decides to refund the contributions paid by pensioners towards the cost of their health insurance in 1968 and 1969 (total amount: DM 1.3 billion) from the beginning of April 1972.
February 24	The Bundesbank lowers the discount rate from 4% to 3% and the lombard rate from 5% to 4%. It cuts the rediscount quotas granted to banks by 10% with effect from March 1 (size of reduction: DM 2.3 billion). The reserve ratios on the growth of liabilities to non-residents subject to the reserve requirements are raised from 30% to 40%, also with effect from March 1.
March 1	The Federal Government introduces the cash deposit requirement for certain types of borrowing abroad. The cash deposit ratio is 40%, with an exempt amount of DM 2 million.
March 15	The Federal Government announces repayment of anticyclical surcharge (DM 5.9 billion) as from June 1972.
March 21	The EEC Council of Ministers decides to realise an economic and monetary union in stages.
April 24	Within the European Community the margins of exchange rate fluctuation are narrowed to 2¼%.
May 31	The Bundesbank raises the minimum reserve ratios on domestic liabilities by 8% and cuts rediscount quotas by 10%, both with effect from July 1 (amount of liquidity neutralised: about DM 4.5 billion).
June 9	The Federal Government decides to cut expenditure by DM 1.3 billion compared with the estimates in the draft budget (as amended up to April 1972).
June 23	After a monetary crisis centring on the pound sterling, in the course of which the Bundesbank has to spend DM 5.3 billion to support the pound, the sterling rate is floated. The United Kingdom leaves the intervention system of the European Community. The Bundesbank also buys dollars equivalent to some DM 2.8 billion. The foreign currency exchanges are closed until June 27.
June 28	The Fiscal Planning Council and the Advisory Council on Anticyclical Policy recommend that the net borrowing planned by the central, regional and local authorities in 1972 should be reduced from DM 19 billion to DM 16 billion.
June 29	Acting in accordance with the Foreign Trade and Payments Act, the Federal Government decrees that the acquisition of domestic bonds payable to bearer or to order by non-residents from residents shall be subject to authorisation. At the same time the Bundesbank raises the minimum reserve ratios on domestic liabilities by 20%, instead of by 8%, as from July 1. The reserve ratios on the total and on the growth of external liabilities are also increased. In addition, the Bundesbank cuts rediscount quotas by a further 10% with effect from August 1. The measures taken by the Bundesbank tie up some DM 8 billion of liquidity. In agreement with the Federal Government, the cash deposit ratio is raised to the legally permissible ceiling of 50% and the exempt amount is simultaneously reduced to DM 0.5 million.
July 13	The Bundesbank raises the minimum reserve ratios on domestic liabilities by a further 10% as from August 1 on account of additional inflows of foreign exchange (amount of liquidity neutralised: just over DM 3 billion).
September 6	The Federal Government decides on basic figures for the 1973 Federal budget (increase in expenditure of 10½%) and the medium-term financial plan up to 1976 (average increase in expenditure of 9% between 1973 and 1976).
September 14	The Fiscal Planning Council and the Advisory Council on Anticyclical Policy recommend that in 1973 expenditure should increase, in keeping with the growth of the gross national product, by not more than 10½%, and that net borrowing should not exceed the 1972 level.
September 21	The Bundestag decides to advance the date on which pensions are to be raised to July 1. From mid-November onwards the extra amounts due for the months from July to December are paid in a single sum (total amount: DM 2.1 billion).
October 6	The Bundesbank raises the discount rate to 3½% and the lombard rate to 5% with effect from October 9.
October 27	The Federal Government decides to use the extra tax revenue compared with the estimates in the 1972 draft budget (as amended up to September 1972) to reduce its net borrowing.
November 2	The Bundesbank raises the discount rate to 4% and the lombard rate to 6% with effect from November 3.
November 24	The Council of Experts for Assessing Overall Economic Trends in its 1972/73 Annual Report considers a distinct reduction in public authority deficits essential in 1973 if further expansive effects are to be avoided.
November 30	The Bundesbank raises the discount rate to 4½ % and the lombard rate to 6½ % with effect from December 1. It also decides to cut rediscount quotas by 10% as from February 1, 1973.
December 29	The 1972 Federal budget is enacted (total expenditure: DM 109.0 billion, with net borrowing amounting to some DM 4 billion).
1973	
January 1	The European Community is enlarged by the accession of the United Kingdom, Ireland and Denmark. The Federal Government reduces the amount exempt from the cash deposit to DM 50,000.
January 11	The Bundesbank raises the discount rate to 5% and the lombard rate to 7% with effect from January 12. It also decides to cut rediscount quotas by 10% as from April 1.
Late January	Following the introduction of a two-tier foreign exchange market in Italy (January 22) and the suspension of dollar interventions by the Swiss National Bank (January 23) an international dollar crisis erupts.
February 1–9	The Bundesbank buys $ 5.9 billion at the lower intervention point for a total of DM 18.6 billion.
February 5	The Federal Government adopts further measures to safeguard the economy against external constraints in the field of capital movements; in particular, it makes the purchase of domestic shares by non-residents and the raising of loans abroad subject to authorisation.
February 7	The Bundesbank decides that until further notice the banks' use of the rediscount quotas granted to them must not exceed 60% of the total amount. The effective cut is DM 6.9 billion.
February 12	The U.S. dollar is devalued by 10%. For the Deutsche Mark the new central rate of DM 2.9003 per U.S. dollar represents a revaluation of 11.1 % against the U.S. dollar. The foreign currency exchanges are closed on February 12 and 13. On February 14 the rates of the Italian lira and the Japanese yen are floated. By the end of February the Bundesbank has sold DM 2.8 billion of U.S. dollars at the upper intervention point.
February 17	The Federal Government adopts the 1973 Annual Economic Report; in which it announces, among other things, the introduction of a stability surcharge timed to expire on June 30, 1974, the raising of the rate of petroleum tax (both of these measures to come into force as from July 1, 1973), the floating of a stability loan, and the suspension, with immediate effect, of diminishing balance depreciation on certain buildings. In addition, the Federal Government approves the draft Federal budget for 1973, providing for total expenditure of DM 120.4 billion (an increase of 9.7 % over the actual figure for 1972), with net borrowing amounting to DM 4 billion.
February 22	The Bundestag raises the legally permissible ceiling for the cash deposit ratio to 100 %.
March 1	Renewed monetary unrest; the Bundesbank is obliged to take in $ 2.7 billion, equivalent to DM 7.5 billion, to support the U.S. dollar. The foreign currency exchanges are closed as from March 2 and reopen on March 19. To absorb the liquidity that has flowed to banks, with effect from March 1 the Bundesbank raises the minimum reserve ratios on domestic liabilities by 15 % of their previous level for sight and time deposits and by 7½ % for savings deposits (amount of liquidity neutralised: about DM 5 billion).
March 11	The Conference of Finance Ministers of the European Community in Brussels takes note that the Deutsche Mark will be revalued slightly on the reopening of the foreign currency exchanges. On March 14 the Federal Government decides to revalue the Deutsche Mark by 3 % with effect from March 19 and to fix the new central rate at SDR 0.294389 per Deutsche Mark. The Federal Republic of Germany, France, Denmark and the Benelux countries float their currencies against the U.S. dollar, but retain fixed exchange rates in relation to each other ("bloc float"). Norway and Sweden join the European "bloc float" on March 19.
March 29	The Fiscal Planning Council recommends that the central, regional and local authorities' net borrowing should be limited to the scale of 1972 by a statutory order.

Balance of payments between 1968 and 1972

Billions of Deutsche Mark

Item	1968	1969	1970	1971	1972	1972/73 Jan./July	1972/73 Aug./Jan.
1. Current account	+10.9	+ 6.0	+ 2.4	+ 1.1	+ 1.3	— 1.1	+ 2.5
2. Long-term capital transactions	—11.4	—23.1	— 2.9	+ 6.5	+13.0	+12.5	— 0.0
of which Portfolio transactions	— 5.6	—10.7	— 0.7	+ 2.5	+12.7	+11.1	+ 1.5
3. Short-term capital transactions of non-banks	+ 1.7	— 0.3	+ 6.0	— 0.3	— 5.4	— 0.2	— 5.0
4. Balancing item	+ 3.3	+ 2.8	+ 8.5	+ 7.9	+ 7.2	+ 9.9	+ 0.0
Overall foreign exchange balance	+ 4.5	—14.6	+14.0	+15.2	+16.1	+21.1	— 2.5
(a) Net position of banks (excluding Bundesbank) (improvement: +)	— 2.5	— 4.3	— 7.9	— 1.2	+ 0.4	+ 2.2	+ 1.1
(b) Central monetary reserves of the Bundesbank 1 (increase: +)	+ 7.0	—10.3	+21.9	+16.4	+15.7	+18.9	— 3.7

1 Excluding depreciation due to measures of exchange rate policy and excluding special drawing rights allocated.

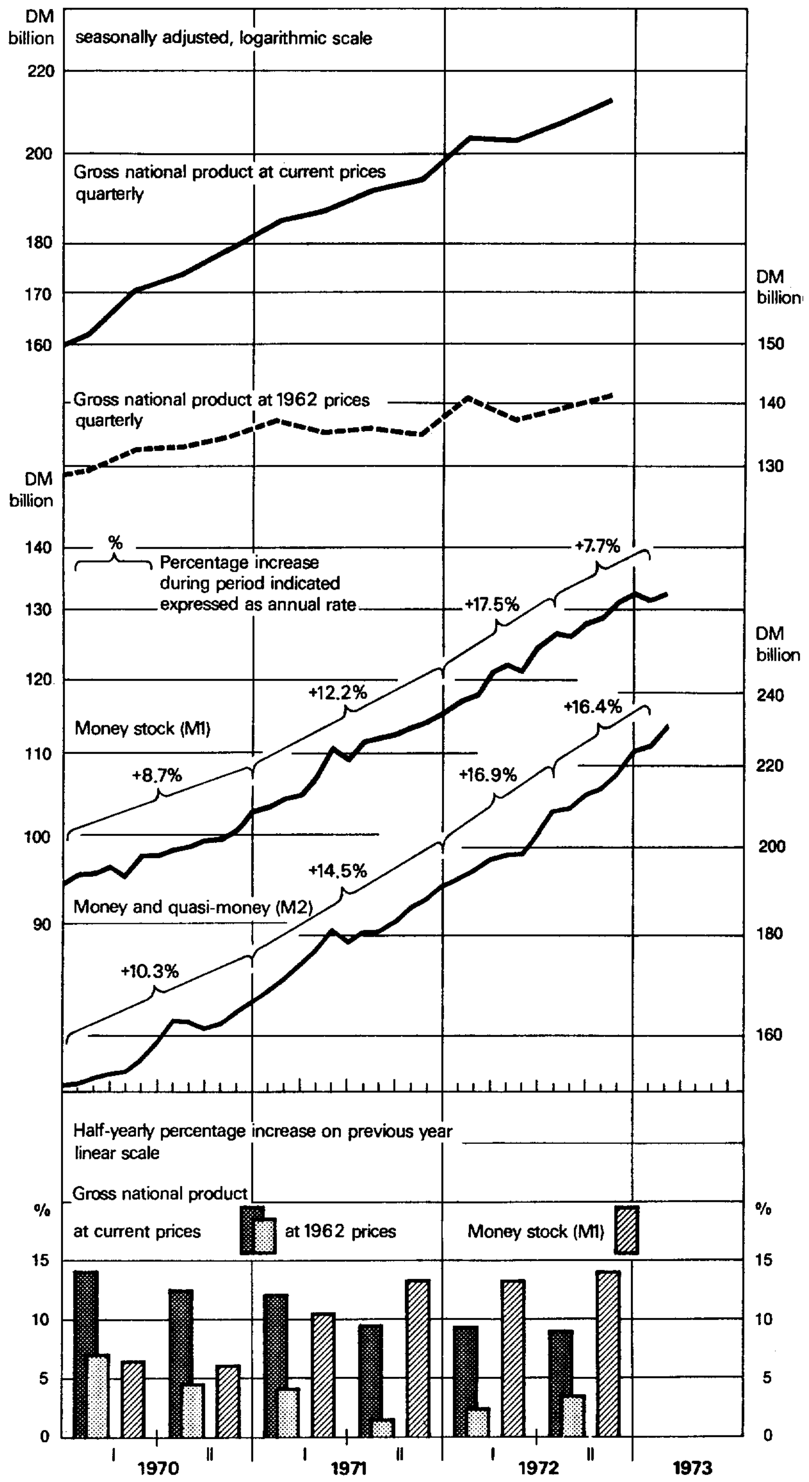
Monetary policy mainly guided by external considerations up to mid-1972

Up to the summer, and even beyond, the object of the Bundesbank's monetary policy was to prevent interest-rate-induced capital inflows. The discount and lombard rates, at 3 % and 4 % respectively, stood at a level which previously had been considered appropriate only during phases of sharply slackening business activity. In addition, the Bundesbank had to try to neutralise the increase in the banking system's liquidity caused by the exchange inflows, to ensure at least that there were no undesirable secondary effects, i.e. no extra lending by the banks on the basis of this liquidity. The tightening of the minimum reserve regulations on the banks' external liabilities and the cut in rediscount quotas on March 1 were already working in this direction. More bank liquidity was skimmed off in April and May by the fact that non-banks had to establish cash deposits with the Bundesbank for certain types of borrowing abroad. The Bundesbank continued its policy of mopping up newly created liquidity when in mid-year further massive quantities of liquid funds accrued to the banks in connection with the sterling crisis and through the repayment of the anticyclical surcharge. On July 1 and again on August 1 the minimum reserve ratios for domestic liabilities were raised by 20 % and 10 % respectively (and the minimum reserve requirement for the foreign money deposited with banks were made much more stringent). As from the same dates the rediscount quotas were cut by a further 10 %. These measures reduced bank liquidity by about DM 15.5 billion. The banks' free liquid reserves, which are here taken as a criterion of bank liquidity, were little higher at the end of July 1972 than at the end of 1971; they amounted to 6.8 % of total deposits.

Strong expansion of bank lending and the money stock

In the first half of 1972 the banks apparently had no difficulty in meeting all the requests for credit made to them, predominantly by trade and industry, and at the same time were able to purchase considerable amounts of securities. Altogether they extended DM 39 billion of new credit to domestic non-banks in this period, and thus almost 60 % more than a year before. This increase in lending occurred without interest rates rising; in fact, the banks' lending rates all declined, owing in part to the lowering of the discount rate in February. Credits in current account, for instance, cost an average of 8½ % in May 1972, compared with 9½ % in November 1971. Because of the strong domestic credit expansion, and because of direct inflows of funds to enterprises from abroad (at times these were very high), the money stock grew exceptionally fast up to the end of the monetary crisis in July last year, as described in more detail in a later section of this Report (page 46). For example, in the first six months of 1972 the currency and sight deposits (M_1) in the hands of domestic non-banks were an average of 13 % higher than in the previous year, while the nominal national product rose in the same period by 9½ % and the real national product by no more than 2½ %. Thus the monetary expansion not only far exceeded real economic growth but was also larger than the increase in overall turnovers and incomes. In other words, the average amount of

National product and money stock



money held expanded far more than was necessary to finance turnovers even though prices were rising steeply. The inflation potential created in this way became more and more menacing.

(b) Monetary policy following the introduction of effective external safeguards

Administrative interventions in capital movements

Considering the growing cyclical strains in Germany, the attempt to hold external influences at bay by means of low domestic interest rates could not in the end be kept up any longer. A strengthening of the safeguards against external constraints, with a view to giving greater autonomy to credit policy, became the more pressing when in June and July 1972 it became evident that a deliberate policy of low interest rates does not prevent speculative inflows of foreign funds — not, at all events, under the conditions obtaining in 1972, when confidence in the Deutsche Mark was greater than in the U.S. dollar or the pound sterling despite the downward trend in the value of money in Germany. In order to widen the scope for monetary policy, sharper intervention in Germany's capital transactions with foreign countries (which until then had been free from direct control) was therefore required. Once Switzerland, which had hitherto been relatively liberal with respect to capital transactions, had introduced controls, so that Germany was the only country with virtually free capital movements, such protective measures became a matter of particular urgency. Acting in accordance with suggestions of the Bundesbank, the Federal Government, using powers conferred on it by section 23 of the Foreign Trade and Payments Act, decided to make the acquisition of German bonds by non-residents subject to authorisation, and it was intended from the outset that this regulation should be applied highly restrictively. Furthermore, with effect from July 1 the Federal Government and the Bundesbank decided to raise the cash deposit to be maintained interest-free at the Bundesbank for certain types of borrowing abroad from 40 % to 50 % of eligible liabilities, and to curtail the exempt amounts severely. The aims of the new measures to safeguard monetary policy against external constraints were promoted by the fact that the unrest which flared up on foreign exchange markets throughout the world in mid-year gradually began to subside from the middle of July onwards. In addition, the Federal Government's firm stand in July removed the basis for any speculation on a fresh revaluation of the Deutsche Mark, especially as the facts — particularly the balanced current account and the movement of prices (it was not more favourable than in other countries) — lent no support to such an expectation.

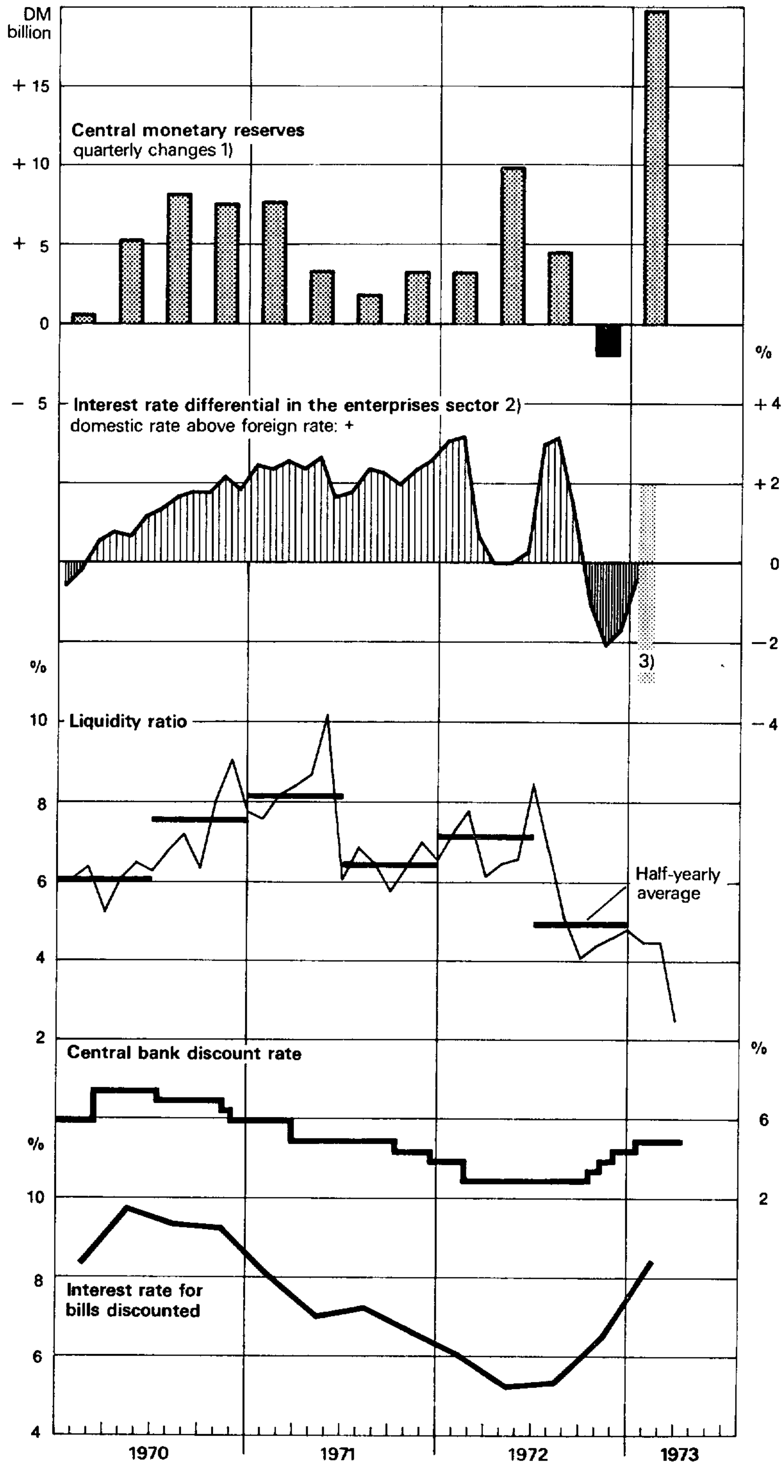
No external disturbances until early 1973

In the further course of 1972 and in January 1973 Germany was not affected by disturbances from the external flank. As the effectiveness of the protection against external influences increased, the dollar rate strengthened visibly on German foreign currency exchanges, and in the middle of January 1973 it approached the official central rate of DM 3.2225 per U.S. dollar. From mid-July onwards the central monetary reserves fell month by month, by a total amount of DM 4.5 billon up to the end of January 1973. This was mainly because in the latter part of 1972 German firms repaid some of the short-term credits they had taken up abroad, since it was cheaper to borrow funds in Germany in view of the sharp rise in the interest rates for Euro-credits (and the cost-enhancing effect of the cash deposit). Capital imports through security transactions with non-residents dropped to a low level once the controls had become fully effective. In the case of German bonds, which were subject to the authorisation requirement only, there was actually an outflow of capital owing to resales by foreigners. Even the fairly considerable improvement in the current account towards the end of 1972 did not alter the underlying downward trend in the monetary reserves.

More scope for restrictive monetary policy

The stabilisation of the external situation enabled the Bundesbank to adopt a more restrictive stance in monetary policy. The outflow of foreign exchange itself was instrumental in reducing the banks' free liquid reserves; from September last year onwards the liquidity ratio stood at between 4 and 4½ % of total deposits. After the interest rate differential between Germany and other countries had reversed in the enterprises sector at the beginning of October, it was also possible to raise the domestic interest rate level. The Bundesbank put up its interest rates in several steps between October 1972 and January 1973; the discount rate was increased to 5 % and the lombard rate to 7 %. However, these measures did not appreciably curb monetary expansion in the period reviewed. In spite of a distinct rise in lending rates and a — by previous standards — extremely tight liquidity position, bank lending to domestic non-banks went on growing strongly. It increased in the second half of 1972 by about DM 50 billion, or some 11 % more than in the same period of 1971. Credit expansion remained very large in January and February 1973. This implies, on the one hand, that the demand for credit continued very heavy, not least because of the very high level of construction activity and the upswing in the other sectors of the economy, and that it had not responded up to then to the

Foreign exchange movements, bank liquidity and interest rates



1) Only changes due to transactions, i.e. excluding allocations of SDRs and new valuations.-2) Monthly averages, calculated on the assumption that for domestic loans German enterprises pay a rate averaging about 3.5 percentage points above the Deutsche Bundesbank's discount rate, and that for Euro-DM loans they pay a rate 0.5 percentage point above the interbank rates; from March 1972 taking account of the costs caused by the cash deposit.-3) Introduction of mandatory authorisation for borrowing abroad.

quite substantial increase in interest rates from mid-1972 onwards. On the other hand, the banks' expansion of their lending business hardly seems to have been incommoded by the severe liquidity shortage that persisted up to the end of January 1973. They did not even cut back their acquisition of securities, the customary reaction in earlier periods of liquidity shortage. Recognising that there had been a distinct change in the banks' behaviour in this respect, and that it would only be possible to provoke reactions resembling those in the past if bank liquidity were squeezed even harder, the Bundesbank decided at the turn of the year to cut the banks' rediscount quotas by 10 % on two occasions; these measures came into force on February 1 and April 1.

Monetary expansion remains too large

First signs of a normalisation in the movement of the money stock were apparent in the second half of 1972. Between August last year and January 1973, that is, in the period during which the restrictive course of monetary policy was not hampered by external influences, the money stock (M_1) rose by only 7½ %, seasonally adjusted and expressed as an annnual rate, compared with 17½ % between January and July 1972; in January 1973 it was, however, still 12 % higher than a year before – a much larger figure than seems justifiable in view of the domestic situation. The more broadly defined money stock, which includes time deposits for up to four years, hardly responded to these retarding measures even during this period. In October 1972, when the Council of Ministers of the European Community formulated a quantitative target for the reduction of the growth in the money stock (this target is discussed in detail below) the more broadly defined money stock (M_2) was 15 % higher than a year before; but in January 1973 the year-on-year growth rate was 16½ %. Up till then monetary expansion thus accelerated again and for the time being moved still further away from the envisaged goal. Even so, at the beginning of 1973 there was a certain chance of gradually bringing monetary expansion in Germany more effectively under control.

(c) Monetary policy after the currency upheavals of February/March 1973

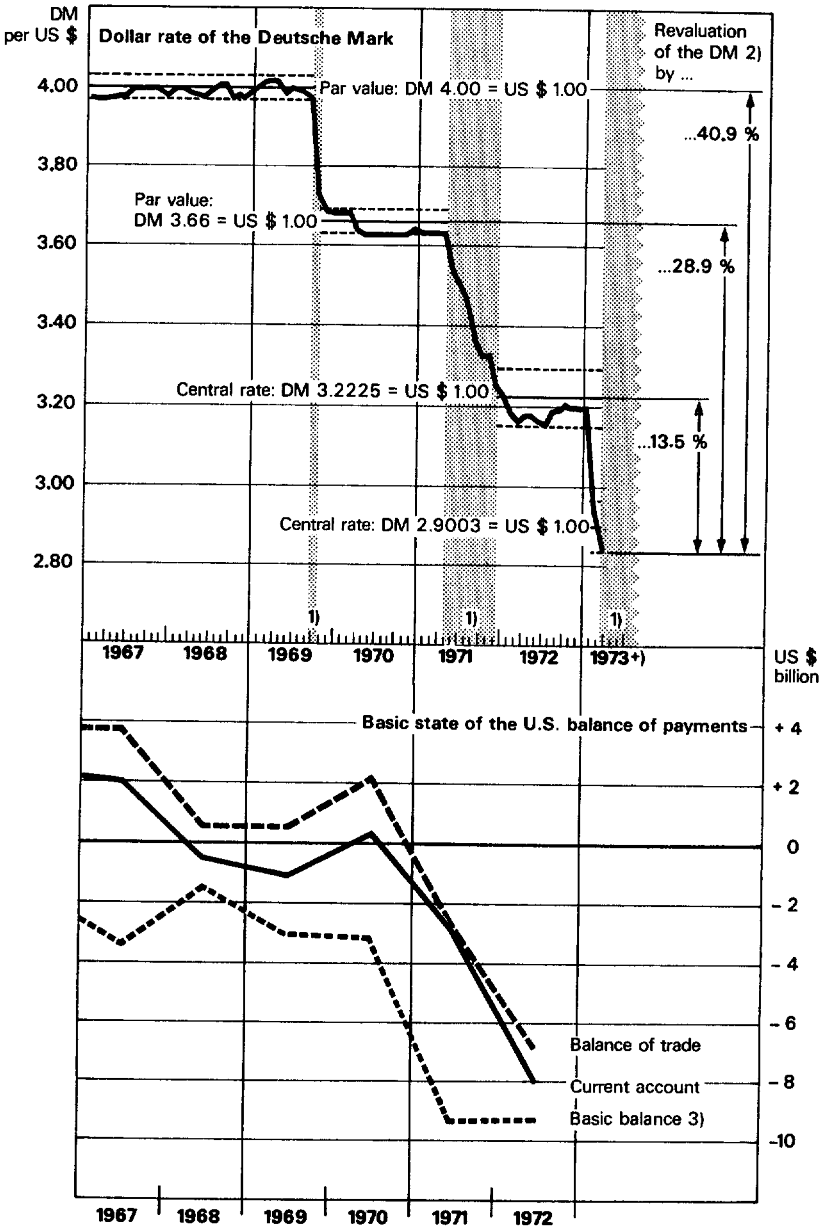
Massive new exchange inflows into Germany . . .

With the new deterioration in the international monetary situation at the end of January and beginning of February 1973 these initial signs of a consolidation of monetary conditions in Germany were imperilled. In the first few days of February the Bundesbank was exposed to a new tidal wave of foreign exchange which, while set in motion by monetary policy measures of Italy and Switzerland, was basically caused by lack of confidence in the U.S. dollar. Within seven business days the Bank had to purchase foreign exchange equivalent to DM 18.5 billion in order to support the rate of the dollar. The 10 % devaluation of the U.S. dollar on February 12 and Japan's adoption of a floating rate brought the flight out of the dollar to a temporary standstill during the second half of February. At times, indeed, the Bundesbank actually sold dollars. But by as early as the end of February it became evident how weak confidence in the U.S. dollar was, for the rate of the U.S. currency began to fall sharply again on the exchange markets. On March 1 the Bundesbank was obliged to purchase the equivalent of DM 7.5 billion in U.S. dollars to prevent the exchange rate from dropping below the lower intervention point of DM 2.8350 per U.S. dollar. In the following days, when the foreign exchange markets remained closed in most countries, a new line of defence against speculative monetary movements was built up in a series of international monetary consultations. The most important measure was the adoption by a group of countries belonging to the European Economic Community, Germany among them, of so-called "bloc floating", meaning that these countries keep the exchange rates of their currencies fixed in relation to each other within a margin of fluctuation of 2¼ %, but are not obliged to support the exchange rate of their currencies against the U.S. dollar (or any other currency). The new procedure has operated satisfactorily since the foreign currency exchanges were reopened (on March 19).

. . . have an expansive effect on the money circulation

The waves of speculation at the beginning of February and the beginning of March – that is, within a space of only about 30 days – resulted in the Bundesbank's gross monetary reserves mounting by a total of DM 24 billion. This increase in reserves was, however, accompanied by a roughly equal rise in the net short-term indebtedness of German enterprises and banks to foreign countries, since the exchange inflows originating from external current and long-term capital

Exchange rate of the dollar in terms of the Deutsche Mark and U.S. balance of payments



1) Periods of floating exchange rate against the US $.- 2) Fixing of March 30, 1973 (DM 2.8385 = US $ 1.00) in relation to the par values or central rates previously in effect.- 3) Current account plus long-term capital transactions.- + Latest rate: fixing of March 30, 1973.

transactions were fairly insignificant. With regard to international payments, this increase in monetary reserves thus merely constitutes a necessary counterpoise to the risk of a large-scale reduction in the high short-term external debt of German trade and industry. A different view has to be taken, however, of the repercussions on domestic liquidity, that is, the provision of banks and non-banks with domestic payment media. Initially it was important to neutralise with credit policy instruments the expansive effects the inflow of foreign exchange was having on bank liquidity. The Bundesbank therefore decreed (on February 7) that until further notice not more than 60 % of the banks' rediscount quotas could be used; in addition, on March 1 it raised the minimum reserve ratios on domestic liabilities. In conjunction with the heavy minimum reserve burden on the growth of external liabilities (it amounts to up to 100 % of such growth), this completely offset the increase in bank liquidity attributable to the inflows from abroad. Of course, the measures to absorb liquidity could not reverse the direct effect of the inflow of foreign funds to domestic non-banks, namely an expansion in the liquidity of the business community which was reflected partly in an increase in money and quasi-money holdings and partly in a reduction of domestic debt. This made enterprises more independent of domestic banks' lending and hence more independent of monetary policy. Only large and protracted return flows of funds to foreign countries, coupled with a restrictive policy at home, could gradually bring about a change in this situation.

The necessity for flanking measures of fiscal policy

Despite all past setbacks due to external considerations, monetary policy must endeavour to curb monetary expansion and, if possible, to prevent a further increase in the money stock. The stabilising effect of the exchange rate adjustments throughout the western world, which for the Federal Republic of Germany amount to a revaluation of about 5 % on a comparison of the beginning of April with the beginning of January 1973, can, however, only make itself felt by degrees. The question therefore arises as to how far the defensive front against the inflationary upward trend of prices in Germany can be strengthened by further measures of fiscal policy. It is true that from the present perspective the cash deficits of the central, regional and local authorities this year – if allowance is made for the measures to improve receipts adopted by the Federal Government in February – are likely to come to about DM 12 billion, and thus be DM 5 billion smaller than in 1972; in terms of anticyclical policy, this is undoubtedly a step in the right direction. But now that the prospects of an early return to price stability in Germany have again become more remote owing to the exceptionally strong upturn in activity at a time when resources are already in effect fully utilised, and also owing to the latest flood of money for which foreign countries are ultimately responsible, it would be appropriate to reduce the deficits of the public authorities as a whole even further. It is to be feared that a more rapid rise in receipts due to inflation will be accompanied by a faster increase in expenditure than has been provided for in the budgets. In order to prevent such a development it would be desirable for the Federal and Länder Governments and local authorities to agree to a limit being set to their borrowing, as recommended in principle by the Fiscal Planning Council at its meeting of March 29, 1973; to make a measure of this kind efficacious, the prospective extra receipts as compared with the budget estimates would have to be taken into account when fixing the ceiling, or alternatively would have to be frozen at the Deutsche Bundesbank as an anticyclical reserve. This move could ensure that the central, regional and local authorities abide by the rates of increase planned for their expenditure. Only if the public sector, which has a leading role in the control of business activity, makes an effective contribution of its own to the easing of cyclical strains, can it be generally supposed that the inflationary expectations will be countered and that management and labour will in some measure anticipate a deceleration of the price rises in their decisions; by so doing they would themselves be instrumental in achieving this objective.

3. Better control of the creation of money

The role of monetary policy in stabilising prices

Monetary policy was assigned a leading role in the fight against inflation in the course of 1972. This was shown particularly clearly by the resolution of the Council of Ministers of the European Community of October 31, 1972, in which, among the joint measures to combat inflation, a limitation of the growth in the money stock was called for in the following words: "The member states shall progressively reduce the growth rate of the money supply (money stock and quasi-money) until it equals that of the real gross national product, augmented by the normative price rise determined in accordance with overall economic aims and after taking account of the structural development of the relationship between money supply and national product. This target is to be reached not later than the end of 1974 . . . Member states with full employment must in 1973 effect a distinct moderation in the movement of their money supply, amounting to at least half of the reduction to be achieved by the end of 1974." The formulation of this objective is based on the recognition that the persistent and accelerating decline in the value of money is impossible without a corresponding expansion in the stock of money held by the public and, indeed, that the monetary sphere in its own right not infrequently promotes the inflation of prices and wages. For those responsible for monetary policy, the question arises in the light of the above objective as to how adequate their range of instruments is for restricting the growth of the money supply.

The vulnerable external flank

If monetary policy in Germany proved insufficiently effective in the past, this was not primarily due to the lack of suitable instruments of monetary and credit policy. Events in 1972 and the first few months of 1973, as outlined in the preceding analysis, offer evidence enough that the main obstacle to an efficient monetary policy was the lack of safeguards against external constraints. The situation had been no different at times in preceding years, after the Deutsche Mark had been made convertible in 1958 and capital transactions had been fully liberalised. In the past, admittedly, the waves of speculative inflows from abroad had recurred at much greater intervals and had not been quite so violent. Except during the seven months in 1971 in which the exchange rate of the Deutsche Mark was floating, the obligation to intervene against the U.S. dollar repeatedly led to the creation of central bank money even though this conflicted with domestic requirements. In an international monetary system with basically fixed exchange rates (which fluctuate only within defined margins) the safeguarding of national monetary policy — or for that matter of the coordinated monetary policy of a community of countries — against external influences is essential as long as interest rate policy and liquidity policy differ from those of other major countries for national reasons.

Principal approaches for monetary policy

Even, however, when the safeguards against external constraints are adequate it may be appropriate to improve the effectiveness of the instruments of monetary policy and possibly also to employ new instruments. Monetary policy in Germany is guided by the basic concept of controlling banks' supply of credit and the resultant increase in the money stock via bank liquidity and, in addition, of influencing non-banks' demand for credit by changing the interest rate level. The Bundesbank has a number of instruments for varying the banks' holdings of free liquid reserves (i. e. of such highly liquid assets as a bank can convert into central bank money at its discretion), e. g. changes in the minimum reserve ratios, changes in rediscount quotas, and open market policy. By raising the free liquid reserves, it can encourage the banks to move out of liquid assets into less liquid assets for the sake of obtaining a higher return, that is, to extend additional credits; up to now experience has been that the opposite reaction could be expected from a pronounced reduction in bank liquidity. As well as by quantitative measures, the Bundesbank influences the holding of free liquid reserves by changing certain interest rates, such as the rates for selling money market paper to banks; if the rates are raised, it becomes more attractive for the banks to hold paper representing claims on the Bundesbank, and this tends to restrict and increase the cost of bank credit to customers.

Competition between assets eligible at the central bank and interbank claims

The Bundesbank's control over the free liquid reserves — i. e. over the short-term assets that can be converted into central bank money at any time — does not, however, secure it a dominant influence over the liquidity management of an individual bank, for a bank can obtain the liquidity it needs for its business through other channels, namely through very short-term claims on other banks in Germany and abroad. From the standpoint of the individual bank, therefore, assets eligible at the central bank normally compete with its short-term claims on other banks. From the point of view of the creditor the latter claims are just as liquid as assets eligible at the central bank and frequently more profitable. For the individual bank there are no limits to the substitution of interbank claims, which cannot be converted into central bank money at any time, for free liquid reserves, which can. Many banks have traditionally ensured their solvency for the most part, and in some cases exclusively, by means of short-term claims on other banks, while assets eligible at the central bank have played a major role only among a small number of institutions. For the individual bank it makes no difference whether the short-term interbank claims are on a domestic or a foreign bank.

The special position of the central bank

In contrast to the individual bank, the banking system as a whole can ensure its liquidity only by means of assets eligible at the central bank. The need for central bank money can only be met provided that the entire banking system possesses assets that can be sold to the central bank at any time for the purpose of obtaining funds and are acquired by it. This special position of the central bank, consisting in the fact that it alone can raise or lower the stock of central bank money and, moreover, can prescribe what quantity of central bank money the banks are to maintain as a minimum reserve, was often not very clearly discernible in the past since it was obscured by the obligation to purchase foreign exchange. As long as intervention was mandatory and the margins of exchange rate fluctuation were very narrow, domestic banks could in certain circumstances force the Bundesbank to make central bank money available by repatriating financial assets from abroad and selling them to the central bank via the foreign exchange market. With the abandonment of mandatory interventions against the dollar this means of procuring central bank money — a means which often eluded control — has been restricted to the obligatory interventions against the currencies of the group of countries participating in the bloc float, except in so far as voluntary interventions against the dollar take place. The extent to which the central bank's foreign exchange reserves will change under these new conditions and, as a result, liquidity will flow to and from the banks, cannot be judged at the moment. But such tidal waves of foreign exchange as occurred in the days of mandatory intervention against the dollar are hardly likely. One aspect of the new monetary situation is that the German banks' financial assets abroad can no longer be regarded as assets eligible at the central bank in the same sense as before. The repatriation of such funds augments an individual bank's liquidity (provided that it does not lead to a simultaneous rise in the minimum reserve owing to the disappearance of offsetting facilities), but the funds recalled will only result in foreign exchange purchases by the Bundesbank if the exchange rate of the currencies of the countries participating in the bloc float against the Deutsche Mark drops to the lower intervention point. The free liquid reserves of the banks as a whole, which now comprise only domestic assets eligible at the central bank, have therefore been exceptionally low since the introduction of the bloc float.

New situation for the banks: they must adjust their expansion to the limits staked out by the central bank

The fact that the banks' free liquid reserves are now virtually exhausted has far-reaching consequences for their credit supply. As any net credit expansion requires a certain amount of central bank money (since both the currency in circulation and the liabilities subject to the minimum reserve requirement tend to rise), the banks must adjust their lending, provided that the freedom from external constraints persists, to the limits set by the willingness of the Bundesbank to make additional central bank funds available. Which bank can expand under these conditions and which cannot is decided by competition in deposit business and competition for scarce central bank money; the latter mainly takes place on the money market. An unbridled expansion of lending business may become very expensive for banks that have to borrow central bank funds from other institutions; in fact, unbridled expansion might ultimately jeopardise the standing of a bank.

New instruments of credit policy

In the past, control of bank lending via bank liquidity involved the disadvantage that the braking distance of restrictive measures turned out to be long — too long, in fact, considering the possibility of disturbances from the external flank in the meantime. Only time can show to what extent a tightening of liquidity policy, meaning a sharp reduction of the banks' provision with liquid reserves, will shorten this braking distance. In view of the growing need to regain control over the growth of the money stock, it was therefore an obvious step for the Bundesbank to study instruments of credit policy enabling it to exercise more direct influence over credit expansion in place of the indirect control of lending via bank liquidity. An instrument of this kind which is most readily reconcilable with the principles of a market economy is, on the basis of foreign models, a minimum reserve on the increase in bank assets — essentially, that is, on the increase in bank lending. In terms of liquidity policy, a reserve on the growth of bank assets would have a similar effect to a minimum reserve on bank liabilities; any increase in the assets side of a bank's balance sheet would be subject to a certain percentage of minimum reserves. The difference as compared with the minimum reserve on liabilities (whether on the total or on the growth thereof) would be that the causal connection between credit expansion and extra minimum reserve requirements would be more apparent, for any increase in a bank's total lending would be accompanied by a rise in the minimum reserves that institution was required to maintain, at least from the point at which an increase in lending was regarded as unduly high by the central bank and hence subjected to a special reserve burden. In the case of the minimum reserve on liabilities there is no causal relationship for the individual bank but only for the totality of banks. If the credit expansion results in an increase in deposits subject to the minimum reserve, the minimum reserve requirement rises, but this does not necessarily occur at the same institution. Owing to the greater clarity of the causal connection the minimum reserve on the growth of bank assets may therefore be a more suitable instrument for influencing lending than the minimum reserve on liabilities. This was the principal reason why the Bundesbank proposed to the Federal Government in December 1972 that powers for the Bank introduce a reserve on the increase in assets be included in the Bundesbank Act.

Credit ceilings

At the same time the Bundesbank proposed to the Federal Government that powers be incorporated in the Bundesbank Act to lay down a ceiling for credit expansion for a limited period; this proposal, too, should be seen in the light of the objective of shortening the braking distance of credit policy. The Bundesbank is fully aware of the problems posed by this credit policy instrument. A credit ceiling, to a greater extent than a reserve on the growth of assets, amounts to an administrative intervention in the business of an individual bank; if it were in effect over a long period it would tend to cement the competitive positions of the various banks. For this reason powers of this kind would only be desired and exercisable for a limited space of time. Moreover, under the Bundesbank's proposal a credit ceiling is to be used not as a supplement but only as an alternative to a reserve on the growth of assets. As with all other instruments of credit policy the credit ceiling should in the Bundesbank's view be applied only as a general measure and not selectively in the sense that the Bundesbank could differentiate according to the purpose of the loan. A possibility of differentiation in accordance with general considerations would only be necessary should certain banking groups or credits with particular maturities make differences in treatment indispensable in certain circumstances; it would, however, be a mistake to construe this wish, which is dictated in part by legal factors, as a chance, much less an intention, to distinguish between credits.

The endeavours to enhance the contribution of monetary policy to price stabilisation by more stringent application of existing instruments and the creation of new ones must not arouse the impression that monetary policy is in a position to solve outstanding problems on its own. Even under the conditions of the "bloc float", monetary policy must never lose sight of external considerations, although they are no longer as pressing as they used to be. Besides, there are intrinsic limits to monetary policy, also on the domestic front. A squeeze on the money supply and a high cost of credit have a very important bearing on business decisions in a functioning market economy with competition on the principal goods markets; but in a climate of inflationary overheating it becomes progressively more difficult to lend authority to economic calculation. Under these circumstances many decisions are taken on a financially inadequate and unsound basis, simply in the hope of speedily being able to replace missing capital and reserves and missing earnings by inflationary gains. This makes it all the more urgent to counteract the spread of such an "inflation mentality" at all levels of economic life, in the private field and the public field alike. A policy of scarce money is an important precondition, but by itself it is not sufficient to remedy the inflation mentality which is sapping the very foundations of our economic system.

II. International monetary trends and monetary policy

1. Upheavals in the world monetary structure

During the period under report, the foreign exchange markets on several occasions suffered violent shocks. In February and March 1973 these resulted in major upheavals which introduced a new chapter in international monetary relations. Significant principles underlying the Bretton Woods monetary system are jeopardised by these developments.

Despite exchange rate adjustments in December 1971 ...

The realignment of parities under the Washington Monetary Agreement of December 1971 (the "Smithsonian Agreement") in its first year failed to produce an improvement of the U.S. balance of payments and did not bring the anticipated calm and stabilisation to the world foreign exchange markets. In 1972, the U.S. balance of trade and current account deteriorated far more than had been expected at the end of the year 1971 in connection with the usual unfavourable initial effect of the parity change. The current account deficit in 1972 was almost three times what it had been in the preceding year (see the table on page 29); no signs of recovery were discernible until just before the end of 1972.

... fresh dollar crises occur

Under the impact of the persistent weakness of the dollar, speculative movements out of the dollar into other currencies recurred in the spring of 1972, the Deutsche Mark being the preferred target. In mid-1972 the crisis affecting sterling, which led to the floating of the pound, again precipitated heavy foreign exchange inflows into the Federal Republic of Germany; between mid-June and mid-July these totalled $ 4.7 billion, partly in sterling, partly in dollars. Following a temporary calming down of the international monetary situation between August 1972 and the early weeks of 1973, renewed serious disturbances occurred towards the end of January 1973. At that time, the foreign exchange crisis rapidly and dramatically came to a head and by March 1 triggered fresh shifts out of the dollar into other currencies in two heavy speculative waves totalling almost $ 12 billion. Once again the Deutsche Mark was saddled with the undesirable role of becoming the main currency of refuge. In spite of the fact that the German protective measures against short-term money inflows were immediately tightened, the Bundesbank was forced during the four weeks from February 1 to March 1 to take in no less than $ 7.6 billion through intervention purchases on the foreign exchange market. As from March 2, the foreign exchange markets of the principal industrial countries were closed for two weeks.

In the course of this monetary crisis quite a number of significant changes came about in the exchange rate policies of several major countries. On January 22, Italy introduced a two-tier foreign exchange market. On January 23, the Swiss National Bank discontinued its support of the dollar rate, so that henceforward the rate of the Swiss franc against the dollar and other currencies was mainly determined by market forces. On February 12, the U.S. dollar was devalued by 10 %; as from February 14, the exchange rates of the Japanese yen and the Italian lira were allowed to float. From this date onwards only two of the main trading partners of the United States still abided by their obligation to intervene in favour of the dollar parity, namely the Federal Republic of Germany and France. Finally they, too, discontinued their support for the dollar – in the company of the Benelux countries and Denmark – early in March, following a renewed speculative attack on the U.S. currency. On March 11, 1973 this group of six EEC countries decided to keep their exchange rates in relation to one another stable by reciprocal interventions in their currencies while at the same time allowing the dollar rate to float. This European currency zone was joined by Norway and Sweden, neither of which belongs to the EEC, when the exchange markets reopened on March 19. At the same time Germany revalued the Deutsche Mark by 3 %, so that it joined the monetary bloc with correspondingly raised intervention points for its currency. Austria, which had likewise discontinued support of the dollar at fixed intervention points, shortly afterwards revalued the schilling by 2¼ % and has since then aligned the rate of its currency to the rates of the EEC bloc by its own foreign exchange interventions. Other European countries likewise ceased to support the dollar rate, albeit without deciding to join the bloc of the EEC currencies.

Current accounts * of major countries

Billions of U.S. dollars

Country	1969	1970	1971	1972
United States	— 1.0	+ 0.4	— 2.8	— 8.0
United Kingdom	+ 1.1	+ 1.7	+ 2.5	+ 0.1
EEC countries				
Germany (Federal Republic)	+ 1.6	+ 0.6	+ 0.3	+ 0.4
France	— 1.8	— 0.2	+ 0.5	+ 0.6
Italy	+ 2.3	+ 0.8	+ 1.8	+ 2.5
Belgium-Luxembourg	+ 0.5	+ 0.8	+ 0.7	+ 1.2
Netherlands	— 0.0	— 0.4	— 0.2	+ 1.0
All EEC countries	+ 2.6	+ 1.6	+ 3.1	+ 5.7
Canada	— 0.9	+ 1.0	+ 0.4	— 0.6
Japan	+ 2.1	+ 2.0	+ 5.8	+ 6.7
Total	+ 3.9	+ 6.7	+ 9.0	+ 3.9

Sources: National statistics; in some cases estimates by OECD Secretariat. — * Balances of trade, services and private and official transfers (on transaction basis).

All major industrial countries now allow the dollar rate to float

Generally speaking, discontinuation of support for the dollar by the European industrial countries was brought about forcibly by the combined effects of two factors. The first one was the persistently large deficit in the U.S. balance of payments with its negative effects on confidence in the dollar parity; the second one was the existence of huge liquid dollar holdings which in the event of an impairment of confidence can readily be switched at any time into other currencies. This uneasy combination not only had the effect of making the exchange markets susceptible to disturbances in an extreme degree, but also spilled over the barriers against undesirable money inflows from abroad, which have in recent years been constructed or strengthened almost everywhere. The dollar holdings time and again induced bouts of inflation in those partner countries which were mainly called upon to finance both current U.S. deficits and the flight of capital out of the dollar by purchasing dollars at a fixed rate, and thus creating additional money supply at home. The extent to which German monetary policy was frustrated in this way in the course of 1972 and in the early months of 1973 is set forth in greater detail in the preceding Section I.

The international monetary scene at the present moment offers a many-sided picture. One numerically quite strong group of countries continues to base its exchange rates on the U.S. dollar, although in February 1973 only some of them followed the devaluation of the dollar by 10 %, while others either did not devalue, or did so only partially. Of the European countries, at present only seven smaller ones maintain a fixed relation to the dollar. One group of European countries, at the core of which are the aforementioned six EEC countries, has discontinued support for the dollar at fixed rates while maintaining exchange rates against one another stable within fluctuation margins of $\pm$ 2¼ %. Several other important countries, such as Canada, the United Kingdom, Switzerland, Italy and Japan, are allowing their exchange rates to fluctuate individually for the time being without aligning themselves to any other currency or group of currencies. However, the three EEC countries United Kingdom, Ireland and Italy have formally affirmed their readiness to join the monetary community of the other six EEC countries as quickly as possible, while in the meantime maintaining close contact with the other EEC currencies.

Thus, as regards the relation between the U.S. dollar and the currencies of almost all industrial countries, the fixed parities laid down in the Smithsonian Agreement of December 1971 or subsequently were abandoned after the partner countries of the United States had, in the fifteen months between the Washington Conference and the beginning of March 1973, taken in more than twenty billion non-convertible dollars in an effort to support the dollar rate.

On the date this Report was finalised, it is not possible to tell with sufficient clarity how long the suspension of fixed parities between the dollar and the currencies of

Basic data from the U.S. balance of payments

Billions of U.S. dollars

Item	Annual average 1960–67	1968	1969	1970	1971	1972
1. Trade balance	+ 5.0	+ 0.6	+ 0.6	+ 2.2	— 2.7	— 6.8
2. Current account	+ 3.1	— 0.5	— 1.0	+ 0.4	— 2.8	— 8.0
3. Long-term capital movements	— 4.4	— 1.0	— 2.0	— 3.4	— 6.5	— 1.3
4. Basic balance	— 1.3	— 1.4	— 3.0	— 3.1	— 9.3	— 9.2
5. Short-term capital movements (including balancing item)	— 0.6	+ 3.1	+ 5.7	— 7.6	—21.2	— 1.8
of which: Change in short-term external position of U.S. commercial banks (net outflow of money = —)	1 (+ 0.5)	(+ 3.7)	(+ 7.8)	(— 7.4)	(— 9.1)	(+ 2.6)
6. Overall balance of payments 2						
(a) Official reserve transactions	— 1.9	+ 1.6	+ 2.7	—10.7	—30.5	—11.0
(b) Liquidity balance 3	— 2.9	— 1.6	— 6.1	— 4.7	—22.7	—14.7

Sources: Survey of Current Business; BIS. — **1** Annual average 1961 to 1967. — **2** Excluding the following allocations of special drawing rights: 1970 about SDR 0.9 billion; 1971 about SDR 0.7 billion; 1972 about SDR 0.7 billion. — **3** Change in monetary reserves and in net liquid external liabilities.

most other industrial countries will persist. What impact the new exchange rate measures will have on the future monetary system in the world, the reform of which is at present being worked out, likewise remains to be seen.

2. The European monetary zone

Joint floating of a European bloc

Following the closing of the exchange markets in the Federal Republic of Germany and in other European countries as from March 2, 1973, the subsequent two weeks witnessed a number of monetary conferences regarding the measures to be adopted, both within the framework of the EEC in Brussels and also in that of the enlarged Group of Ten in Paris.[1] The crucial decisions on the discontinuation of support for the dollar and on the maintenance of parities within a European monetary zone were taken on March 11, at a meeting of the Council of Ministers of the EEC. The statement of the EEC Council of Ministers was worded as follows:

"The Council of the Community met on March 11, 1973 to examine the measures to be taken to cope with the international monetary crisis. The Council recorded the following decisions:

- the maximum margin between the Deutsche Mark, the Danish crown, the florin, the Belgian franc, the Luxembourg franc and the French franc will be maintained at 2.25 %; in the case of member states operating a two-tier foreign exchange market this undertaking will only apply to the regulated market;

- the central banks will no longer intervene in the fluctuation margins of the U.S. dollar;

- in order to protect the system against disruptive capital movements, the directive of March 21, 1972 will be more effectively implemented and additional controls will be put into operation as far as is necessary.

The British, Irish and Italian members of the Council stated that their Governments intended to associate themselves as soon as possible with the decision which has been taken to maintain the Community exchange margins.

To this end, the Commission will put forward the suggestions that it considers suitable at the same time as it submits its report on the adjustment of short-term

1 The original Group of Ten comprises the following countries: the United States, Canada, Japan, the United Kingdom, Sweden, Belgium, France, Italy, the Netherlands and the Federal Republic of Germany; Switzerland ranks as an associate member. At the consultations of the enlarged Group of Ten in Paris, the EEC member countries Denmark, Ireland and Luxembourg were also represented.

monetary support and the conditions for progressive pooling of reserves within the set period, that is, by June 30, 1973.

The Council agreed that in the meantime close and continuing consultation on monetary matters will be maintained between the competent bodies in the member states.

The representative of the Government of the Federal Republic of Germany gave notice of the intention of his Government to make a minor adjustment of the central rate of the Deutsche Mark before the exchange markets were reopened in order to make a contribution towards the orderly development of the operation of the exchange markets."

The decision of the EEC countries received additional support through certain decisions and declarations of intent agreed upon on March 16 in Paris in the enlarged Group of Ten. These decisions and declarations bore principally on two aspects:

Cooperation between the European bloc and the United States

1. The participants reiterated their determination to ensure jointly an orderly exchange rate system. If necessary to achieve this end, the participating countries will, after consultation with one another, intervene on the foreign exchange markets, also vis-à-vis the U.S. dollar. To the extent necessary, the financing of such interventions effected in the common interest will be facilitated by increasing individual credit lines in the swap network linking the U.S. Federal Reserve System with other central banks. These statements emphasise that the floating of the dollar rate must not lead to disintegration into conflicting monetary blocs.

2. The participants expressed their intention to prevent, or at least to curb the scale of disruptive international capital movements, which played such a great part in the latest exchange crises. Some participating countries immediately adopted additional measures to restrict such disruptive capital movements. Moreover, it will be attempted by joint measures or by efforts in the context of the work on a reform of the world monetary system to contain, if possible, present sources of disruption, such as the excessive expansion of the Euro-money markets, the placement of official reserves in those markets, and the uncoordinated switching of exchange reserves out of one currency into another. Likewise, the possibility of funding or consolidating foreign exchange reserves of excessive dimensions will be examined as a matter of priority.

Principles for the European joint float

Within the EEC monetary bloc, the principles decided upon in March 1972 within the EEC for the purpose of keeping the EEC currencies within a band of 2.25 % against one another, continue to apply to interventions in Community currencies and to settlement:

1. For the currencies concerned, the rates for the reciprocal limits have been fixed and published; when these limits are reached, the participating central banks will intervene on their exchange markets by purchasing or selling the partner currency as the situation requires.

2. In the margin between the limit rates intervention is normally only permissible after consultation among the central banks.

3. The liabilities between the central banks which arise as a result of interventions shall – unless in specific cases other arrangements have been made between creditor and debtor – be settled at the end of the month following upon the month in which the foreign exchange intervention took place.

4. As a general principle, the debtor is required to effect settlement of his debit balance in accordance with the composition of his currency reserves. However, special arrangements apply regarding the gold share in order to take account of the uncertainty regarding the future of gold within the international monetary system.

5. Following the establishment of the "European Monetary Cooperation Fund", which had been decided upon at the time when this Report was finalised, the clearing and settlement of claims and liabilities arising from interventions on the exchange market shall be channelled through this Fund. In the process, claims and liabilities in Community currencies will be expressed in units of account and become claims on and liabilities to the Fund. They thereby become multilaterally negotiable and subject to an exchange guarantee.

6. Moreover, the European Fund will carry out the administration of the credit facilities already existing among the EEC central banks. These facilities concern the financing of intervention balances in unlimited amount up to the end of the following month and the short-term monetary assistance available between the central banks. This short-term monetary assistance consists on the one hand of the normal quotas of participants in the amount of 1.36 billion units of account (= DM 4.6 billion), and on the other hand of the rallonges in the same amount which can, if so required, be concentrated on one or more debtor countries. The overall volume thus amounts to DM 9.2 billion at the present time. Credits under the short-term monetary assistance may be made available for a period of up to six months. Together with the short-term central bank financing resulting from foreign exchange interventions, which upon extension can run for up to $4^1/_2$ months and can be rolled over into short-term monetary assistance, there is thus quite an appreciable volume of reciprocal financing facilities with terms of up to ten months. A decision on a possible further enlargement of the European Fund is to be taken in the second half of 1973. It should, however, be emphasised strongly that in view of the present abundance of reserves in Europe these mutual financing facilities do not indeed present an urgent problem for economic and monetary integration in the EEC, but rather the contrary. Also, it would be a gross misunderstanding to regard — as is frequently done — the mutual assistance credits of the Fund as the nucleus of the future European central banking system. A future common central banking system will develop not as a result of assistance credits but only as a result of a coordination and subsequent harmonisation of monetary and credit policy in the member countries. For this, the nucleus is accordingly the *Committee of Central Bank Governors of the EEC,* which, of course, at the same time acts as the managing body of the European fund.

7. As far as the countries belonging to the monetary bloc without being members of the EEC are concerned — at the time of going to press this applied to Sweden and Norway — the financing of reciprocal foreign exchange interventions is carried out on the basis of bilateral swap facilities and forward exchange transactions between the central banks concerned. In this case, too, settlement is effected on the last day of the month following the one in which the exchange transaction took place.

3. Greater exchange rate flexibility — initial experiences and future prospects

Exchange rate developments after the dollar began to float

When the exchange markets reopened on March 19, 1973 it was found that the floating of the dollar rate together with the maintenance of stable parity relations within the European monetary group — frequently also described as "group floating" between the dollar and the European monetary group — operated smoothly. In this context a number of noteworthy experiences were gained during the first weeks of operation of the new system:

(i) The rate of the U.S. dollar vis-à-vis the currencies of the European group settled, without any supporting interventions, roughly at the level it had attained following the devaluation on February 12. The Deutsche Mark, which on March 19 had been revalued additionally by 3 %, during the first weeks consistently held a somewhat lower level vis-à-vis the dollar than the equivalent level of its new "hypothetical dollar parity". This hypothetical parity — based on the new IMF par value of the dollar and the new central rate of the Deutsche Mark — is DM 2.8158 per dollar (as against DM 3.2225 per dollar before February 12, 1973 and DM 2.9003 since February 14, 1973). Indeed, at the beginning of April the dollar rose for a time above the former intervention point of DM 2.8350 per dollar, at which the Bundesbank was forced to buy almost $ 2.7 billion early in March.

(ii) The interventions in currencies of the European monetary bloc for the purpose of maintaining the reciprocal exchange rate relations likewise were initiated without major technical hitches. From the very first, the Deutsche Mark, as the currency with relatively the lowest quotation within the currency group, had to be supported quite extensively by sales of "strong" currencies by the Bundesbank and by purchases of Deutsche Mark on the exchange markets of comparatively "strong" currencies in order to keep the exchange rates of the group within the agreed margin of $\pm 2^1/_4$ %. The quotation of the Deutsche Mark at the bottom end of the "snake" can be explained mainly by the fact that during the past exchange crises the Deutsche Mark had to bear the brunt of the speculative inflows while the exchange movements were reversed once the situation had calmed down. The unwinding of speculative Deutsche Mark holdings abroad was assisted by the fact that owing to the German measures adopted against the undesirable influx of foreign funds, the interest rates which foreigners can obtain for short-term Deutsche Mark investments were, in the early weeks after the exchange crisis was settled, close to zero, and indeed occasionally even negative.

The smooth start of the new group floating between the dollar and the European monetary zone facilitated the normalisation of the exchange markets, which during the past crisis had been severely dislocated. On the other hand, the crucial test will come only when the exchange rates are no longer determined by technical reactions to the preceding waves of speculation and shifts in payment dates, but by the long-term trends of balances of payments. In this context, two questions crop up: firstly, how is the position of the U.S. dollar in relation to the currencies of the European monetary bloc to be assessed; and secondly, what are the prospects for the ability of the currencies within this bloc to keep together?

Chances for the dollar following the parity adjustments

To begin with the dollar, the international *competitiveness of the U.S. economy* has no doubt been substantially improved by the 10 % dollar devaluation and the simultaneous effective revaluation of the Japanese yen. Together with the exchange rate measures adopted by the other major countries, the two dollar devaluations in December 1971 and February 1973 have on the weighted average – as measured by the calculated par values or central rates, or the market rates of the freely fluctuating currencies – moved the currencies of the other industrial countries about 16 % upwards in relation to the dollar. By the various devaluations of the dollar and revaluations of the Deutsche Mark since mid-1969, the latter has been revalued against the dollar by no less than 42 %. In addition, relative cost levels have moved still further to the detriment of the German economy as a result of the far greater wage rises in Germany. On the other hand, experience shows that it takes a relatively long time before even such major shifts in relative costs exercise a lasting effect on foreign trade and the balance of payments. Thus, it is accepted that the improvement of U.S. competitiveness will not significantly benefit the U.S. balance of trade before 1974. The problem therefore remains how the intermediate stretch of "heavy going", i.e. the period in which further difficulties in the U.S. balance of payments will appear, can be overcome. For the major part this is a bilateral U.S.-Japanese problem, which is being taken care of by the floating of the yen. As far as the relationship between the United States and Europe is concerned, the U.S. deficit is considerably smaller. The solution to the problem of how to overcome the transitional stage is not too difficult as long as confidence in the adequacy of the new exchange rate relations becomes firmer. In that event, a considerable element of the short-term capital flows out of the dollar will again become reversible.

Nevertheless, in the face of the potential disturbances to which some dollar liquidities are susceptible, it will be necessary, no doubt, to safeguard the European monetary zone for a lengthy transitional period by ensuring greater flexibility of the exchange rates vis-à-vis the dollar. The release of the dollar rate, in other words "floating", will presumably have to continue until the "heavy going" stretch of latent dollar weakness has been completed and the balance of payments of the United States is approaching permanent equilibrium. On a longer view, the recuperation of the U.S. balance of payments position is not only in the interest of the United States, but also in the best interest of Europe and of world economic equilibrium in general. This should not be overlooked in the coming discussions and negotiations on problems of trade policy.

Prospects of success for the joint float

It is unlikely that the maintenance of *exchange rate stability among the countries making up the European monetary bloc* will encounter any major problems as long as the monetary zone is confined to the present participants. These members are characterised by considerable parallelism in their demand and price trends as well as in the strength of their balances of payments. Of course, nobody is able to predict with any certainty whether this parallelism will be maintained in every case in the long run and whether or not in future one or other of the countries may be forced by circumstances to adjust its exchange-rate relations within Europe. But even such an eventuality is unlikely to cause much disruption in the present European monetary zone.

It is true that the risk of imbalances within the monetary bloc might become greater when the United Kingdom and Italy join, a step which is planned for a later date. Considering the present uncertainty about economic developments in these two countries, their immediate participation would have confronted not only the two countries themselves but also the other member countries with almost incalculable risks and burdens. In the opinion of the EEC Council of Ministers it was therefore in the interest not only of these two countries but also of the rest that the United Kingdom and Italy should stay outside the European monetary zone for the time being. In the case of the United Kingdom there arises an additional problem from the fact that, in the event of its acceding to the monetary zone with a not fully trustworthy sterling parity, considerable holdings of sterling balances abroad might shift to other bloc currencies. Foreign sterling balances are at present equivalent to over \$ 13 billion (some \$ $5^1/_2$ billion of which are held privately); this means that there would be a considerable potential for inflationary influxes into other member countries. In the interest of overall European stability, it is therefore to be hoped that by the time the United Kingdom accedes to the European monetary bloc it will have successfully concluded its present domestic stabilisation efforts and, moreover, that it accedes with an exchange-rate relationship which is not merely temporarily correct but also fully trustworthy in the longer term.

4. Protection against disruptive international capital movements

Destabilising capital movements form the hard core of monetary crises

Increasingly, the monetary crises in recent years have been influenced by destabilising capital movements. In terms of volume current-account disequilibria were of much less significance. For instance, during the three years between 1970 and 1972 the Federal Republic of Germany was obliged to take in foreign exchange from abroad totalling DM 54 billion. Of this amount, according to the balance of payments statistics, only DM 5 billion – in other words, one tenth – emanated from recorded surpluses on the German current account, while the rest reflected capital inflows. [1] This applies even more to the foreign exchange inflows into Germany during the monetary crisis in February and March 1973, which amounted to the equivalent of DM 24 billion; during the first two months of the year, these inflows were accompanied by recorded current surpluses of no more than DM 500 million.

In the case of the United States, the deficit on official reserve transactions over the three years 1970 to 1972 amounted to roughly \$ 52 billion. Of this sum, approximately \$ 22 billion came from the basic balance of payments (current account and long-term capital transactions), while short-term capital movements including net errors and omissions contributed over \$ 30 billion to the overall deficit. During the first three months of 1973, during which the latest dollar crisis took place, the disproportion between the overall foreign exchange outflow and

1 In this context, the statistically unrecorded balancing item has been added fully to capital movements. Even if this item included several billion Deutsche Mark of unrecorded payments for current transactions, the disproportion between the current account and the foreign exchange balance would still be extremely marked.

the deficit on the U.S. basic balance of payments was even more significant, although this example shows clearly that it was ultimately the disequilibrated current account and basic balance which determined, and triggered off, through lack of confidence, the much higher short-term money outflows.

In the light of the experience gained in connection with the latest crisis, one issue has become particularly topical, namely, how to cope in the most effective way with the disruptive effects of switching funds out of one currency into another. This question was raised time and again in the various monetary conferences held in February and March 1973. It is at present being discussed under the auspices of the Committee of Twenty dealing with the reform of the international monetary system. It may well be that this is not merely a passing problem but one which in future may also be of lasting significance for the functioning of the monetary system. It is unlikely that the solution of this problem will be sought merely in greater flexibility of exchange rates. On the one hand, even flexible exchange rates are liable to highly disagreeable distortions in the event of major losses of confidence due to money being shifted from one currency to another, as evidenced by the recent experience of Switzerland following the floating of its exchange rate. On the other hand, a number of countries will be unable to see their way to retaining flexible exchange rates as a permanent instrument in their defence against undesirable capital movements.

It is remarkable to note how under the impression of the exchange crises of the past two years the general attitude towards international capital movements has undergone a change. Whereas in the fifties and sixties most major countries had decided in favour of a gradual liberalisation of international capital movements, every effort is now being made to isolate troublesome forms of international capital movements, with the object of reducing them as far as possible or even of discouraging them altogether.

Three questions arise in this context. Firstly, how can the volume of liquid funds, i.e. funds which can readily be transferred into other currencies, be limited or reduced? Secondly, how can destabilising capital movements be countered directly in order to dampen their damaging effects on the exchange markets and the internal stability of the receiving countries? Thirdly, can the repercussions of destabilising capital movements be neutralised by suitable international financing facilities?

Sources of undesirable money inflows

Ad (1). The volume of liquid funds which can be set in motion once confidence in some currency is undermined is hard to estimate, especially when it comes to dealing with shifts out of the dollar. It is estimated that the dollar amounts held on foreign accounts at the present time total more than $ 90 billion. Over and above these, it is quite possible for dollars from the United States itself to start moving; but to what extent, it would be difficult to assess. The popular slogan according to which the European currencies have been overrun by the "vagabond dollars" of the Euro-market hardly stands up to an accurate analysis. Particularly during the monetary crisis in February and March 1973, the main portion of the dollars accruing to other countries most likely emanated from the United States itself, although the Euro-banks may well have exercised a turntable function and facilitated financing. For the inflows into the Federal Republic of Germany the following main sources may be cited: in the first place, shifts in the terms of payment, that is, advancing the payments for German exports and deferring the payments for imports; in the second place, transfers of operating funds of international corporations to the accounts of their German subsidiaries, and also transfers from foreign subsidiaries of German firms to their parent companies; and in the third place, switching the monetary reserves of central banks out of the dollar into the Deutsche Mark (the "diversification" of monetary reserves). Obviously, the financing of these various transfers of funds is in large measure independent of Euro-dollar credits. Only in the final stage of the exchange crises in February and March 1973 would purely speculative transactions involving borrowing on the Euro-dollar market seem to have played a major part.

U.S. balance of payments deficits and changes in monetary reserves of the rest of the world

Billions of U.S. dollars

Item	1969	1970	1971	1972
I. U.S. deficits [1]				
(a) Official reserve transactions balance	+ 2.7	—10.7	—30.5	—11.0
(b) Liquidity balance	— 6.1	— 4.7	—22.7	—14.7
II. Changes in monetary reserves				
(a) of the rest of the world				
Total monetary reserves [1]	— 0.4	+14.3	[2] +36.6	+23.0
of which: Foreign exchange reserves	+ 1.2	+14.3	[2] 33.4	+22.7
(b) of Group of Ten (excl. United States, incl. Switzerland)				
Total monetary reserves [1]	— 2.3	+11.6	+27.0	+ 9.6
of which: Foreign exchange reserves	— 0.7	+10.7	+23.9	+ 9.5

Sources: Survey of Current Business; International Financial Statistics of the IMF. — **1** Excluding allocations of special drawing rights. — **2** The growth of total monetary reserves includes an increase in the dollar value of $ 5 billion, and that of the foreign exchange reserves alone one of an estimated $ 1.9 billion, due to the 7.9 % devaluation of the dollar vis-à-vis gold.

For the period from 1970 to 1972 a rough idea of the origin of the exchange flows that disturbed the exchange markets can be obtained. The result is as follows: over the said period, the exchange reserves of the world except for the United States increased by $ $68\frac{1}{2}$ billion, in other words they tripled as compared with the level at end-1969. Approximately $ 46 billion of the increase in reserves derived from the growth of U.S. liabilities towards foreign monetary authorities. The difference of approximately $ 22 billion represents a reserve creation from other sources. This refers in the first place to the creation of money in the Euro-money market and the switching of central bank reserves out of the dollar into other currencies, especially the Deutsche Mark. In actual fact, such a diversification of monetary reserves induces an inflationary increase in international liquidity: the "new" reserve country is required to take in dollars via the exchange market, whereas the country switching its reserves out of the dollar merely changes the form of its investments, not however the overall volume of its monetary reserves.

The Deutsche Mark as a reluctant reserve currency

It is notable that there has recently been a sharp increase in the creation of foreign exchange reserves that has nothing to do with the U.S. balance of payments deficit. In the calendar year 1972 it is estimated that these sources outside the U.S. balance of payments deficit — sources which cannot be pinpointed exactly — accounted for as much as $ 12 billion. At the time of the large foreign exchange inflows in the first quarter of 1973 the switching of foreign exchange reserves out of the dollar into other currencies, and in particular into the Deutsche Mark, probably played a much greater role than ever before. A large part of the official Deutsche Mark reserves of other countries is not held directly in the Federal Republic of Germany but on the Euro-DM market and in the form of Deutsche Mark bonds. It is difficult to compile any statistics on this portion of the Deutsche Mark reserves. The possibility cannot be ruled out that other countries already hold more currency reserves in Deutsche Mark than, for example, in sterling. The Deutsche Mark would in this case have become — involuntarily — the second most important reserve currency after the dollar. The astonishing increase in the German foreign exchange reserves in recent years is matched by an almost equally large increase in German foreign liabilities, resulting in part from the holdings of reserves in Deutsche Mark. The Bundesbank naturally has to take account of this fact in its reserve policy by ensuring the investment in a liquid form of its foreign exchange reserves.

Any attempt to gain greater control over the volume of transferable liquid assets via international agreements must centre first and foremost on the creation of money in the Euro-currency market, the diversification of monetary reserves and the consolidation of the excessive foreign exchange reserves already created. The Committee of Twenty on Reform of the Monetary System (see pages 38/39) has recently turned its attention to this matter. The immense liquid resources that are available in the United States itself for capital exports cannot, however, be influenced thereby.

National protective measures against undesirable inflows

Ad (2). The question as to whether it is possible to provide effective *national protective measures* against disruptive capital transfers thus remains open. The Federal Republic of Germany, as the main country receiving inflows, has been able to gather some experience in this field during the period under report. During that period the cash deposit on certain types of borrowing abroad was introduced, sales of domestic fixed interest securities to foreigners were made subject to authorisation, and, finally, early in February 1973, when the latest exchange crisis was coming under way, all borrowing abroad and also the acquisition of German shares by foreigners were made dependent upon prior authorisation. The acceptance of foreign funds by German banks was rendered unattractive by a minimum reserve requirement of virtually 100 % on the growth of liabilities towards foreign countries. [1]

As regards the efficacy of such protective measures, recent experience has shown that the combination of measures applied in the Federal Republic of Germany is quite effective in respect of money inflows due to *interest rate or liquidity considerations*. On the other hand, such instruments are comparatively ineffective with respect to movements of funds based on *monetary considerations*, particularly those which come about through changes in the terms of payment and owing to the international integration of corporations. The same is true in even greater measure of purely *speculation-induced* money shifts. Nevertheless, the German protective measures at least had the effect that the foreign funds seeking access not only had to put up with a loss of interest but indeed for some time with additional charges and costs ("negative interest"). It seems likely that the lack of interest on foreign short-term funds on Deutsche Mark accounts in Germany and the low rates of interest on the Euro-DM market will in the course of time produce a dampening effect also on the movements of foreign funds – especially foreign monetary reserves – into Deutsche Mark for monetary reasons.

The *splitting of the foreign exchange market* into an official market for current transactions and a free market for "financial" or capital transactions – as practised in a number of countries – has proved to be only moderately effective in the presence of heavy speculative pressure. The various additional reasons which make the introduction of such a two-tier market inadvisable in Germany have already been presented in the last Annual Report. [2]

From past experience, we can conclude that in the face of lack of confidence in the dollar and the large volume of dollar funds available for transfer, the only effective protection against undesired inflows may well be the temporary floating of the dollar rate. It will thus have to be accepted that, pending a final rehabilitation of the dollar, recourse to this instrument will be necessary unless one is prepared to put domestic monetary policy entirely at the mercy of the international fluctuations of confidence in the dollar.

"Re-cycling" is no solution

Ad (3). In the international debate, and this includes the proposals made within the Committee of Twenty on Reform of the Monetary System, it has been suggested time and again that the problem of disruptive capital movements might be solved by special credit facilities for financing emergent foreign exchange deficits. By a more or less automatic "re-cycling", i.e. a channelling back from the receiving country to the deficit country with the aid of the central bank, the foreign exchange loss arising out of a reversible capital movement would be "offset". This is clearly no genuine solution. The inflationary effect in the receiving country would in no way be offset by channelling back the funds with the aid of the central bank; at the lending central bank the only change would be in the form of investment of the exchange surplus. Such an automatic financing arrangement would presumably remove the last barrier against such destabilising capital flows. The funds for

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1 On the cash deposit see the 1971 Annual Report, page 35; on the other measures see the details in the present Report, page 20.
2 See 1971 Annual Report, page 35.

Regional changes in world monetary reserves between end-1969 and end-1972 *
(gold, special drawing rights, IMF reserve position, foreign exchange)

Billions of U.S. dollars

Country	Changes 1970	Changes 1971 [1]	Changes 1972	Holdings 1969	Holdings 1970	Holdings 1971 [1]	Holdings 1972
1. United States	− 2.48	− 1.30	− 0.04	16.96	14.49	13.19	13.15
2. Other countries of the Group of Ten (plus Switzerland)	+12.91	+28.18	+10.88	35.33	48.24	76.42	87.30
of which: Germany (Federal Republic)	+ 6.48	+ 4.78	+ 5.04	7.13	13.61	18.39	23.43
France	+ 1.13	+ 3.29	+ 1.76	3.83	4.96	8.25	10.02
United Kingdom	+ 0.30	[2] + 3.76	[3] − 0.94	2.53	2.83	6.58	5.65
Italy	+ 0.31	+ 1.44	− 0.71	5.05	5.35	6.79	6.08
Japan	+ 1.19	+10.52	+ 3.01	3.65	4.84	15.36	18.37
Canada	+ 1.57	+ 1.02	+ 0.35	3.11	4.68	5.70	6.05
3. Other developed countries	+ 1.24	+ 5.74	+ 8.31	10.33	11.57	17.32	25.63
All developed countries (1 plus 2 plus 3)	+11.68	+32.62	+ 19.15	62.63	74.31	106.93	126.08
4. Developing countries	+ 2.65	+ 4.90	+ 6.20	15.58	18.23	23.12	29.32
of which: Developing countries excluding oil-producing countries [4]	+ 1.91	+ 1.50	+ 4.10	11.56	13.47	14.96	19.06
All countries	+14.33	+37.52	+25.35	78.21	92.54	130.05	155.40
Memorandum items:							
Former EEC countries	+ 9.08	+10.70	+ 7.48	20.92	30.00	40.70	48.18
Enlarged EEC	+ 9.42	+14.99	+ 6.74	24.59	34.01	49.00	55.74

Source: International Financial Statistics of the IMF. — * Gross reserves, including allocations of special drawing rights. — **1** Including increase of roughly $ 6 billion in the dollar value of total reserves due to the devaluation of the dollar. — **2** The actual reserve inflow amounted to about $ 8 billion (excluding allocation of special drawing rights) of which $ 2.25 billion was used for swap transactions and $ 2.3 billion for the repayment of debts to the IMF, the BIS and the United States. — **3** The actual reserve outflow was $ 1.9 billion net higher. This amount results from the liquidation of $ 2.2 billion of "special swaps" and $ 0.3 billion of debt repayment to the IMF (within the credit tranche). — **4** Algeria, Indonesia, Iraq, Iran, Kuwait, Libya, Nigeria, Saudi Arabia, Trinidad and Tobago, Venezuela.

financing further capital outflows would be continuously returned to the country of origin. In any case, it would in most instances not be an easy matter to distinguish to what extent a foreign exchange inflow was based on reversible capital movements affecting the deficit country and to what extent on other balance of payments deficits.

5. The monetary crises and the reform of the international monetary system

Main subjects of the reform

At their last Annual Meeting in September 1972, the Governors of the International Monetary Fund set up a committee to prepare the reform of the monetary system at ministerial and deputy level. The body is known as the "Committee of Twenty", and consists of 20 delegations in accordance with the composition of the Executive Board of the International Monetary Fund.

Work on the reform hinges on two problems:

(i) The future *exchange rate system* and quite generally the rules of the so-called "adjustment process", i.e. of economic and monetary policy in the presence of external disequilibria;

(ii) the future *reserve system*, meaning both the role of the various reserve components (gold, SDRs, foreign exchange) and the control of the size of monetary reserves (of so-called "international liquidity").

Implications of the crisis for the exchange rate system

The experience gained in the latest exchange crises as described above had quite an appreciable influence on discussions within the Committee of Twenty. As a consequence, the *curbing of destabilising capital movements* became, as already observed, a current problem in the work on the reform. As regards the future exchange rate system, there is admittedly no agreement as to whether the present floating of the dollar rate should be regarded merely as a temporary stopgap measure to discourage the flight out of the dollar or whether it indicates a need for *greater exchange rate flexibility as a regular instrument of balance of payments policy* in certain circumstances. Yet, it does appear almost certain that a future exchange rate system will contain a greater measure of flexibility than hitherto for the adjustment of external disequilibria. The Ministers of the Committee of Twenty at their Washington Conference at end-March 1973 laid down the following general guideline for the future exchange rate system: "... exchange rates must be a matter for international concern and consultation and ... the exchange rate regime should remain based on stable but adjustable par values. It was also recognised that floating rates could provide a useful technique in particular situations".

One of the demands in the reform of the international monetary system is for the so-called "symmetry" of the exchange rate system, i.e. uniform treatment of the dollar and of other currencies. It is the Americans themselves who wish to make sure that in the event of a fundamental disequilibrium in the U.S. balance of payments the dollar can be adjusted in relation to other leading currencies in the same way as this can be done with other currencies. On the occasion of the dollar devaluation in February 1973 the Managing Director of the International Monetary Fund explicitly welcomed the fact that the freedom of action of the United States in the field of parity changes was thereby confirmed. Nevertheless, it must be said that it subsequently transpired that such an autonomous change in the parity of the dollar is not without its problems in view of the very large dollar holdings throughout the world, which may again be set in motion on the smallest loss of confidence. The fact is that the dollar is not just "a currency like any other".

Control of international liquidity

The enormous expansion of world monetary reserves during the latest monetary crisis caused international attention to focus on another target of work on the reform, namely, *more effective control of international liquidity.* It has in the meantime come to be realised more and more – this matter was from the first a special concern of the German delegation in the Committee of Twenty – that this is attainable only provided the most expansive element of world monetary reserves, i.e. the funds held in national reserve currencies (foreign exchange reserves), is checked in its further expansion and cured of its former excesses. It is now generally accepted that special drawing rights should play a greater part than hitherto in the future world reserve system. On the other hand, it would amount to a bad case of self-deception to believe that this in itself would ensure better control of international liquidity. Special drawing rights will not be able to play the role allotted to them as the main reserve medium of the future until the unhampered expansion of foreign exchange reserves has been brought under control. Taking the average of the three years 1970 to 1972, the volume of special drawing rights increased by $ 3 billion annually, and that of foreign exchange reserves by as much as $ 22 billion. However, the way in which the further accumulation of exchange reserves is to be and can be limited is still by no means clear.

Prompted by the latest experience, the "Committee of Twenty" is now also exploring possibilities of restricting the capacity of the Euro-money markets to create money; under consideration are the introduction of minimum reserve requirements for foreign exchange balances, the introduction of open market operations on the Euro-market, or the limitation of the placement of monetary reserves on the Euro-markets. Another question under discussion is whether it might be feasible to formulate restrictive regulations governing the "diversification" of monetary reserves, i.e. switches out of the dollar into secondary reserve currencies. Here, the chief problem encountered is that many countries, particularly the smaller ones, are asking for complete freedom in their reserve policy. Another expedient for limiting international liquidity is the much-discussed consolidation or funding of foreign exchange reserves created in excessive amounts. This would in the last analysis have the effect of restricting the use of consolidated reserves to the financing of "genuine" balance of payments deficits; this would rule out their mere shifting from one reserve currency to another with the attendant destabilising consequences. Moreover, attempts are being made to draft a general code of rules about the treatment of disruptive transfers of money and capital. It remains to be seen whether and in how far it will be possible in the interest of international stability to find a common denominator for national aspirations, which in all these fields tend to be widely divergent.

III. Details of monetary developments

I. Money and credit

(a) Bank liquidity and monetary policy

1972 saw an intensification of attempts to safeguard domestically-orientated monetary policy against external influences by using instruments that had not been employed before. The intention was to create conditions enabling monetary policy to make a contribution of its own to the fight against inflation without impeding monetary integration within the European Community. Increased efforts on the part of monetary policy to hinder price rises by curbing monetary expansion are in line with the declared common objectives of the Community countries.

Domestic objectives of monetary policy

At the beginning of 1972 monetary policy tried to steer a largely neutral course, as the domestic economic situation did not warrant any special stimulation of demand. It soon became evident, however, that a new upturn in activity was getting under way, and that the danger of an acceleration in the pace of price rises was growing. From that point on, the aim of monetary policy had to be to try to narrow, if possible, the monetary scope for passing on cost increases in prices; that aim had been attained to a certain degree in the second half of 1971, under the influence of the economic slowdown, and credit policy had been eased somewhat as a consequence. But effective protection against external constraints was a prerequisite for successful counter-measures of monetary policy in the new upswing phase.

New ways of safeguarding monetary policy against external constraints

The realignment of exchange rates pursuant to the Smithsonian Agreement of December 1971 did not give rise to the widely expected outflows of foreign exchange from the Federal Republic of Germany; in fact, fresh inflows of foreign exchange occurred in January 1972, mainly for interest rate reasons. True, the Bundesbank endeavoured to reduce the interest rate differential with the means at its disposal. On February 25 it lowered the discount rate to 3 % and the lombard rate to 4 %, a step which was not without its dangers from the domestic point of view, and which later on proved insufficient to eliminate the interest rate differential altogether. In this situation it was impossible to staunch the interest-rate-induced inflows of foreign exchange by a further lowering of the cost of borrowing in Germany; it could only be done by raising the cost of borrowing abroad. For this reason the cash deposit requirement for certain types of foreign borrowing by trade and industry was introduced at the beginning of March 1972. Enterprises raising new loans abroad from early 1972 onwards [1] had to deposit interest-free on a special account with the Bundesbank initially 40 %, and later 50 %, of the amount borrowed. To begin with this measure led to credit repayments, but between June and September the rates of interest for Deutsche Mark credits on the Euro-market were so low (as a result of initially acute, but subsequently latent exchange rate speculation) that the barrier presented by the cash deposit was surmounted. The barrier could not be raised immediately since the Cash Deposit Act laid down that the maximum permissible cash deposit ratio should be 50 %. Not until the end of February 1973 was it possible to amend the Act and remove the limitation.

While the cash deposit scheme stopped – at least for a time – interest-induced borrowing abroad by trade and industry, and some of the credit formerly raised was even repaid, foreign funds poured into the German security markets on a mounting scale. The coupon tax on foreigners' interest income from the ownership of German bonds, which from 1964 until 1969 had made German securities wholly unattractive to foreigners and had a distinctly retarding effect even up to the late autumn of 1971, was now accepted, and this, like the low rates of interest for Euro-DM credits, was indicative of an increasing preference of foreign investors for Deutsche Mark securities and thus of a growing lack of confidence in the existing pattern of exchange rates. The introduction of mandatory authorisation for sales of German bonds to non-residents in mid-1972 put a stop to the foreign exchange inflows through this channel.

1 Borrowing was exempt from the cash deposit requirement up to the end of February 1972, provided that the credit contracts had been signed before January 1, 1972.

Bank liquidity *

Billions of Deutsche Mark

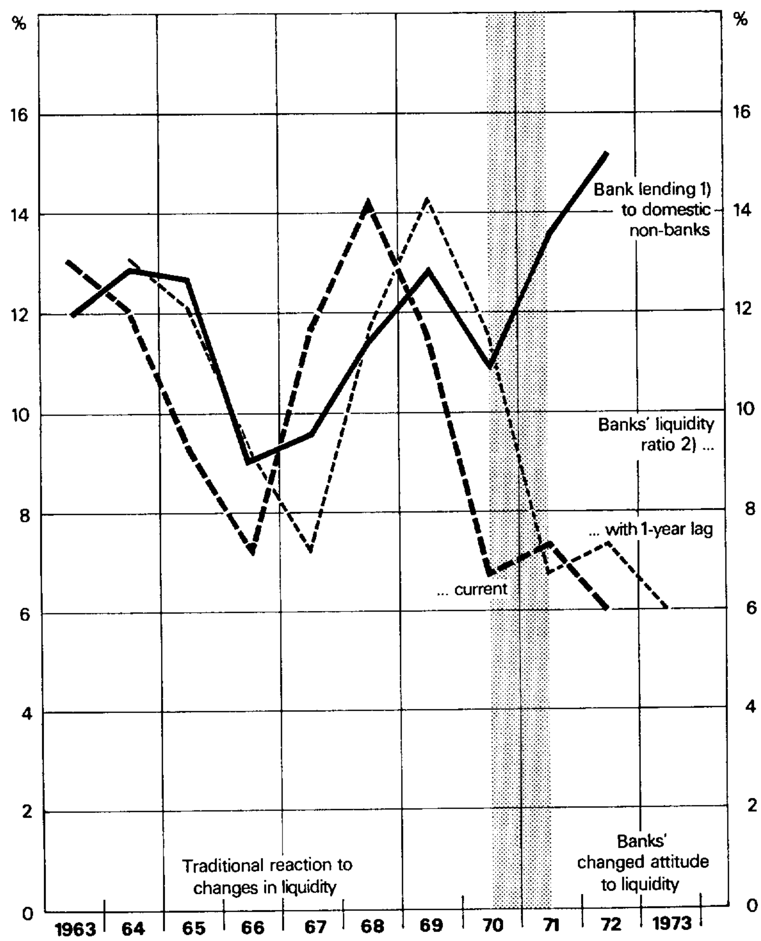
Item	1971	1972	Jan. to July 1972	Aug. 1972 to Jan. 1973	Feb. 1973
	Changes during period, on the basis of the averages of the four bank week return dates in the month				
I. Market factors					
1. Currency (increase: –)	– 3.6	– 6.0	– 2.7	– 0.2	+ 0.5
2. Non-banks' net balances with Bundesbank (increase: –)	– 4.5	+ 2.5	– 0.1	+ 3.1	– 1.5
of which:					
Cash balances (net) of Federal and Länder Governments, Equalisation of Burdens Fund	+ 0.2	– 1.8	– 2.7	+ 0.9	– 1.4
Special deposits in respect of anticyclical reserve and anticyclical surcharge	– 4.9	+ 5.7	+ 3.1	+ 2.6	+ 0.0
3. Public authorities' money market indebtedness to banks and Bundesbank (increase: +)	– 1.7	– 0.8	– 0.7	– 0.4	– 0.1
4. Net foreign exchange holdings **1**	+15.7	+17.3	+19.6	– 2.2	+11.6
5. Other factors	+ 0.3	+ 2.2	– 0.1	+ 1.7	– 0.2
Total	+ 6.1	+15.1	+16.0	+ 2.1	+10.2
II. Monetary policy factors					
1. Minimum reserve required of banks **2** (increase: –)	– 5.6	–12.5	– 8.1	– 6.3	– 0.7
2. Balances on cash deposit special accounts (increase: –)	—	– 1.5	– 0.7	– 1.0	+ 0.2
3. Open market transactions with domestic non-banks **3** (purchases by Bundesbank: +)	– 0.4	+ 0.2	– 0.6	+ 0.5	– 0.6
4. Cuts in rediscount quotas **4**	– 3.2	– 6.5	– 4.5	– 2.0	– 6.3
Total	– 9.3	–20.3	–13.9	– 8.8	– 7.4
III. Increase (+) or decrease (–) in bank liquidity, total (I plus II) = change in free liquid reserves	**– 3.1**	**– 5.2**	**+ 2.1**	**– 6.7**	**+ 2.9**
1. Excess balances **5**	+ 0.4	– 0.3	– 0.5	– 0.6	+ 5.4
2. Domestic money market paper **6**	– 1.4	– 2.5	+ 0.3	– 3.6	+ 0.0
3. Money market investment abroad **7**	+ 0.9	+ 0.4	+ 1.1	– 0.1	– 0.7
4. Unused rediscount quotas	– 2.3	– 3.9	– 1.4	– 1.9	– 2.4
5. Lombard loans (utilisation: –)	– 0.7	+ 1.2	+ 2.6	– 0.4	+ 0.5
	Position at end of period				
IV. Banks' free liquid reserves					
in billions of Deutsche Mark	24.2	19.9	26.4	18.5	19.0
as % of total deposits **8**	6.6	4.8	6.8	4.5	4.5

* Discrepancies in the totals are due to rounding. — **1** Net monetary reserves of the Bundesbank and other banks' short-term money market investment abroad. — **2** Excluding Federal Post Office. — **3** Including Federal Post Office. — **4** Including limitation of quota utilisation. — **5** Difference between minimum reserve requirement and banks' total central bank balances. — **6** Domestic Treasury bills and discountable Treasury bonds, Storage Agency bills, prime bankers' acceptances, Limit B bills of AKA Export Credit Company and medium-term notes of domestic public issuers to the extent they are included in the Bundesbank's money market regulating arrangements. — **7** Shorter-term claims on foreign banks (excluding foreign currency claims payable on demand), foreign Treasury bills, discountable Treasury bonds and other foreign bills acquired for the employment of money (mainly bankers' acceptances). — **8** Sight, time and savings deposits (excluding funds with maturities of 4 years and over) of non-banks and foreign banks.

Effectiveness limited to a relatively short period

The introduction of the cash deposit and the clamp-down on purchases of domestic bonds by foreigners gave monetary policy in the Federal Republic of Germany a period in which it could pursue its domestic objectives relatively undisturbed by external constraints. This period began in August 1972 and came to a provisional close in January 1973. In February and March this year severe waves of speculation channelled massive flows of foreign exchange into the Federal Republic of Germany; the above-mentioned safeguarding measures and the measures taken by the Federal Government with effect from February 5, 1973, under section 23 of the Foreign Trade and Payments Act, were unable to stem the influx. It is obvious that measures designed to prevent foreigners from holding Deutsche Mark assets or residents from borrowing abroad by making such transactions unattractive from the interest angle or by forbidding interest-bearing investment, as is the case with the above-mentioned measures, are bound to be ineffective if a parity change is thought to be imminent. For an individual country there is no way of evading massive waves of speculation — the central problem of a itself from other countries by means of all-embracing exchange controls or adopts monetary system with fixed but unrealistic exchange rates — unless it insulates

Bank liquidity and credit expansion



1) Annual growth rates of bank lending, including acquisition of securities.- 2) Free liquid reserves (= domestic money market paper, unused rediscount quotas, money market investments abroad, balances with the Bundesbank less minimum reserve required and less lombard loans taken) as % of total deposits; annual averages.

flexible exchange rates. In the absence of acute speculative crises, however, the steps taken to secure a limited freedom from external constraints made it possible to keep the expansion of the money stock over a period of six months at a lower level than previously (see page 46), even though – in that short space of time – the policy was not successful to the point of reducing the pace of price increases.

Two phases in the trend of liquidity

As regards changes in the liquidity of the banking system since the beginning of 1972, there is a clear distinction between the period from January to July, when the free liquid reserves remained unchanged, with some fluctuations, at a ratio of mostly 6 % to 7 %, and the period from August to January 1973, when the free liquid reserves were substantially reduced. The first period began and ended with massive inflows of foreign exchange, which raised bank liquidity by DM 7 billion (January/February) and DM 14 billion (June/July). Initially, this increase in liquidity was partly offset by a large-scale seasonal withdrawal of funds by the public authorities, which raised a sizable amount on the capital market at that time to build up a stock, thus depriving the banks of resources. Monetary policy followed suit in March by cutting the rediscount quotas; in January the minimum reserve ratios had been lowered in order to mitigate seasonal strains and in the expectation of foreign currency outflows. In June and July, on the other hand, fiscal policy had a strongly expansive effect. From June 15 onwards the anticyclical surcharge on income taxes (DM 5.9 billion), which up to then had been immobilised, was refunded to taxpayers as required by the law. Monetary policy then had to offset the resultant increase in bank liquidity as well as the heavy inflows of foreign exchange. The reserve ratios for domestic liabilities were raised on two occasions: by 20 % as from July 1 and by a further 10 % as from August 1. The reserve on the total of external liabilities has been 40 % for sight deposits, 35 % for time deposits and 30 % for savings deposits since July 1. The reserve on the growth of external liabilities, which had been raised to 40 % at the beginning of March, was fixed at 60 %, so that, inclusive of the reserve on the total, any growth of minimum-reserve-carrying external liabilities was subject to a reserve of 90 to 100 %.[1]

Reduction in bank liquidity from August on

By these measures the Bundesbank went beyond mere neutralisation of the previous inflows of liquidity and – relying on the improved external safeguards – tried to reduce bank liquidity as a whole; it could venture to do so the more readily as no more large-scale capital inflows through foreigners' purchases of domestic bonds were to be expected owing to the authorisation requirement. In fact, foreign exchange flowed out on balance from August 1972 onwards, and in the summer months cash deposits had to be maintained with the Bundesbank against borrowing, which squeezed bank liquidity further. Banks' free liquid reserves dropped to 4.5 % of total deposits during that period, thus standing at an extremely low level by previous standards. From the beginning of October onwards interest rates on the Euro-market rose slowly, enabling the Bundesbank to adjust its interest rates in stages to the tighter liquidity situation without running the risk of surmounting the interest rate barriers vis-à-vis other countries erected by means of the cash deposit. Between October and January the Bundesbank raised the discount rate in four steps by 2 percentage points in all to 5 % (as from January 12, 1973); in the same period the lombard rate was increased more steeply, from 4 % to 7 %.

External barriers again pierced

The Bundesbank had already decided upon a further reduction in bank liquidity through cuts of 10 % in the rediscount quotas as from February 1 and April 1, 1973, when the barriers erected against external constraints collapsed, despite new efforts to reinforce them with effect from February 5, under the impact of the greatest influx of foreign exchange that has ever hit the Federal Republic of Germany. Between February 1 and 9 the Bundesbank had to buy foreign exchange equivalent to DM 18.6 billion. The effects of these inflows on bank liquidity were counteracted to some extent by the reserves on the total and the growth of external liabilities, which work automatically. Where the foreign exchange inflows enlarged banks' domestic liabilities, however, not more than 17 % (corresponding to the reserve ratio for sight liabilities in the highest reserve class at the time) was neutralised. But the Bundesbank did not concentrate its measures of February 1973 to mop up liquidity on the minimum reserve; in any case, such measures only become effective with a time-lag (in this case as from March 1). Instead, it limited the permissible use of rediscount quotas to 60 %. It is true that the sharp rise in liquidity would have led to a reduction in the banks' rediscounting at the Bundesbank even without such a measure, but now the part of the rediscount quota that has become free cannot be used again for the time being. Thus the Bundesbank has restricted this means of creating central bank money until further notice, after having been forced to make available far more central bank money than was appropriate from the domestic point of view by another means, namely via the Bank's obligation to intervene on the exchange market. About one sixth of the foreign exchange influx drained out of Germany again a few days after the devaluation of the dollar (February 12); had there been no further changes, bank liquidity would have reverted approximately to the January level from March onwards.

On March 1, however, the Bundesbank had to purchase US$ 2.7 billion, equivalent to DM 7.5 billion, at the lower intervention point. This glut of foreign exchange caused the Federal Government to close the currency exchanges as from March 2 and – in line with an agreement reached with the other Community countries on March 11 — to release the Bundesbank from its obligation to support the U.S. dollar by foreign exchange purchases as from March 19, the day the currency exchanges reopened. On March 1 the Bundesbank raised the minimum reserve

1 Always provided that the external liabilities exceed the level of November 1971 (or the level of November 1970 reduced by 20 %, whichever is the higher).

ratios for domestic liabilities by 15 % of their level in the case of sight and time liabilities and by 7.5 % of their level in the case of savings deposits in order to compensate for the growth of bank liquidity associated with the influx of foreign exchange.

New activity in the field of open market policy

In addition to the above-mentioned measures of monetary policy – the changes in minimum reserves and the narrowing of the scope for rediscounting – the Bundesbank pursued a more active open market policy in 1972, in that it sold to individuals, in amounts of DM 5,000 and upwards, mobilisation and liquidity paper running for between 6 and 24 months and not included in the Bundesbank's money market regulating arrangements, so that it cannot be returned to the Bundesbank before maturity ("Bundesbank Treasury bonds"). Sales of such paper, which formally constitutes a Federal issue but for practical purposes is an issue of the Bundesbank, directly reduce free liquid reserves. This is, of course, not the case if paper included in the Bundesbank's money market regulating arrangements is sold to banks, as such paper represents liquid reserves for the banks.

Because of the favourable interest rates the Bundesbank Treasury bonds are proving relatively popular, and this compels banks to pay at least as much interest on time deposits. This has given the Bundesbank a means of influencing the cost incurred by banks when procuring funds in a particularly important field, even though in quantitative terms open market operations with non-banks have not yet reached very significant proportions. In addition, the improved terms for other Bundesbank securities not included in the money market regulating arrangements have meant that traditional purchasers, such as social security funds, are more inclined to invest in such paper. The purchase of close on DM 1 billion of mobilisation and liquidity paper by the Federal Insurance Institution for Salary Earners in January and February 1973 is a clear indication of this.

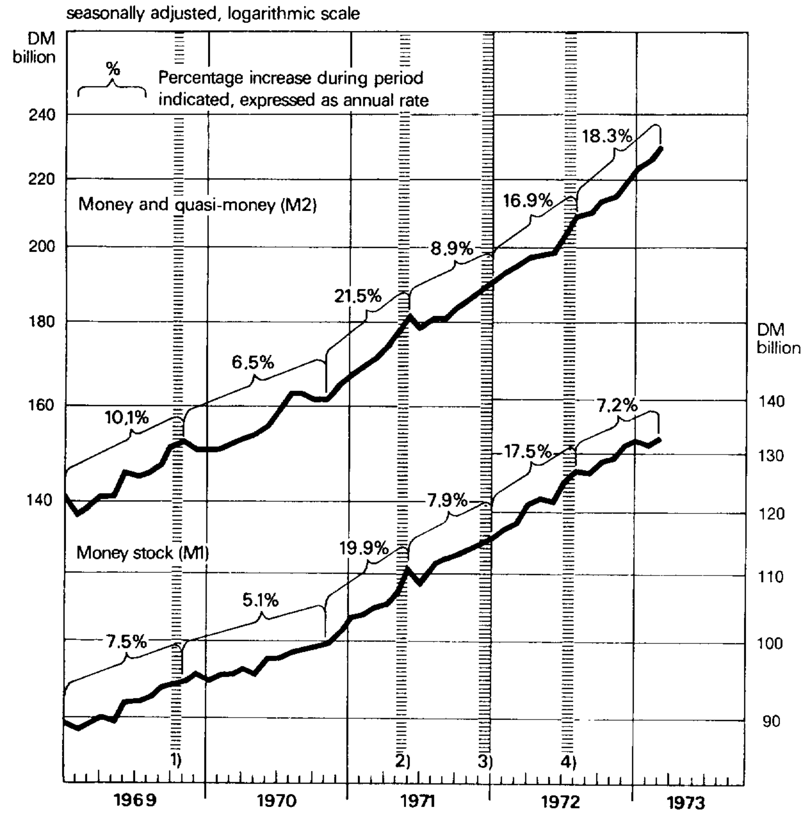
Change in liquid reserves

The composition of banks' free liquid reserves changed appreciably during 1972. The "domestic" liquid reserves, meaning primarily the banks' holdings of money market paper and unused rediscount quotas at the Bundesbank, contracted markedly; at the end of 1972 they amounted to no more than some DM 5.5 billion, against DM 11.5 billion at the end of 1971. At end-February 1973 they stood at about DM 4.5 billion. On the other hand, money market investment abroad, hitherto likewise counted towards banks' liquid reserves, changed relatively little. This was doubtless chiefly due to the fact that, under the conditions prevailing in 1972, the character of money market investment abroad as potential central bank money underwent an alteration. True, the central bank was obliged to purchase foreign exchange (except during the closure of the currency exchanges in mid-1972) right up to March 1, 1973; but the wider margins and the modified intervention procedure (intervention at the intervention points only) meant that in the banks' daily operations external assets, like domestic interbank assets, can be sold solely to other banks, and to the central bank only when the exchange rate reaches the lower intervention point; only under these circumstances, therefore, were such assets available – in overall terms – to the banking system as a whole to meet shortfalls in the required minimum reserve. The fact that liquid external assets frequently serve to offset external liabilities which would otherwise be subject to the minimum reserve requirement (pursuant to section 2, subsection 4 [j] or subsection 2 [a], Minimum Reserve Order) also limits the extent of their liquidity; hence even before March 1973 these investments were to be regarded only with reservations as a component of the free liquid reserves. Since March 19, 1973, this has applied with particular force as the Bundesbank has been obliged since that date to intervene at the lower intervention point only vis-à-vis five Community countries and a few other countries with fixed exchange rates.

Trend on the money market

As was to be expected given the liquidity situation just described, the German money market was often under great strain, especially in the second half of 1972. But on the day-to-day money market, which is by far the most active part of the money market in terms of turnover, there were distinct gluts of money even during this phase. This does not necessarily depend on unexpected flows of money to

Money stock



1) Revaluation of the Deutsche Mark.- 2) Floating of the Deutsche Mark exchange rate.- 3) Washington conference and return to fixed Deutsche Mark rate.- 4) Major measures to safeguard the economy against external influences come into force.

banks; a glut of funds on the day-to-day money market can also be caused by a great number of banks managing their accounts in an extremely cautious way and initially making greater provision than necessary for compliance with the reserve requirement on the average of the month, so that towards the end of the month their central bank balances are too large. On this financial market, unlike others, it is virtually impossible for lenders to employ their money elsewhere because there are no interest-bearing investments for such short periods. In the opposite situation, when demand predominates, such extreme interest rate movements usually do not occur on the day-to-day money market because potential borrowers — unlike potential lenders — have a short-term alternative to money market operations; within certain limits they can take up lombard loans, the cost of which serves as a guideline for the day-to-day money rate during phases of tension. Of late, however, it has not infrequently been the case that the banks have used so much of their lombard facilities with the Bundesbank, which have likewise been restricted since 1970, that the day-to-day money rate has been distinctly higher than the lombard rate.

On the longer-term money market, i. e. primarily the market for one-month and three-month loans, where the funds raised need not be repaid during the same minimum reserve period, interest rates took a far more steady course during the period under review. Here banks are able to make their arrangements at longer range as was clearly discernible, for instance, in December, for which traditionally tight month banks had fixed the maturity of a large quantity of Bundesbank mobilisation and liquidity paper. Extreme conditions of excess liquidity or liquidity shortage are thus largely ruled out on the market for three-month loans. A contributory factor in this connection is that the links with foreign money markets are much closer on this market than on that for day-to-day money.

(b) Monetary trend

Basic features of the monetary trend

Exceptionally fast monetary expansion

Monetary expansion in the Federal Republic of Germany in 1972 was very strong despite the Bundesbank's efforts to curb, for reasons of stability policy, the growth of money held by enterprises and individuals. The bulk of the expansion occurred in the first half of the year. The growth rate of the money stock declined from August onwards, but it was not possible to remedy the unsatisfactory overall trend. Several factors coincided. For one thing, domestic credit expansion was greater than ever. For another, the influx of funds from abroad up to the summer of 1972 made a major contribution to the growth of the money stock. Finally, the repayment of the anticyclical surcharge levied on income taxes in 1970/71 also had an expansive impact on the domestic money circulation. The release of these funds, which up till then had been immobilised at the Bundesbank, tended to produce an increase in the money stock, just as — conversely — the formation of these deposits had slowed down the growth of money and quasi-money. These strong expansive forces were accompanied by a high overall level of monetary capital formation, but, even taken together with other contractive factors, such capital formation was very far from offsetting the expansive influences and, indeed, slackened somewhat towards the end of the year.

The money stock (currency and sight deposits, M_1) at the end of 1972 was about 14.5 % higher than at the end of 1971. After adjustment for seasonal variations it becomes plain that this steep increase was mainly due to developments in the first seven months of the year. Seasonally adjusted, M_1 rose by some DM 11.4 billion or, expressed as an annual rate, by 17.5 % between January and July; between August and December 1972 the increase was DM 5.5 billion or 10.7 % at an annual rate. If January and February 1973 are included, the annual growth rate for the seven months then covered falls further to 7.2 %. Quasi-money (time deposits for less than four years), however, rose very fast in the second half of 1972, since during that period interest rates on time deposits mounted and on grounds of efficient money management non-interest-bearing sight deposits were converted into interest-bearing time deposits (it may also be assumed that funds were transferred from savings accounts to time accounts for interest rate reasons). If money stock and quasi-money are combined (M_2), it is found that there was no deceleration of growth, even in the last five months of the past year. At the end of 1972 M_2 was just under 17 % higher than at the beginning of the year, while at the end of February 1973 the year-on-year growth rate was as high as 18.2 %.

Credit expansion as strong as ever

Credit expansion, the principal domestic component in the growth of money supply, in 1972 continued in an almost straight line the strong upward trend it had started at the beginning of 1971. Bank lending to domestic non-banks, which had risen by about 13 % of its end-1970 level in 1971, went up by 14.5 % in 1972. This acceleration of credit expansion shows that banks did not feel the need to cut back their supply of credit despite the sharp reduction in their free liquid reserves last year (see also the chart on page 42). On the other hand, it reflects the strength of credit demand. A special part was played by lending to housing; in 1972 banks granted about 50 % more credit to this sector than in 1971. But other branches of economic activity which benefited by the uptrend in demand took up more bank credit as well. By contrast, public authorities borrowed less from banks (including the Bundesbank) in 1972 than a year before.

Relatively small rise in bank interest rates

The trend of interest rates does not appear to have curbed credit demand very much in 1972. True, banks' lending rates were higher towards the end of the year than in the initial months (see the table on page 54), but in comparison with the interest rate on capital the increase was very low. In mid-1970, when capital market yields were of a similar order to those of November 1972, short-term bank interest rates were over 2 percentage points higher than towards the end of 1972. The reason underlying this shift in the interest rate structure was that the Bundesbank kept its own interest rates — above all the discount rate — at a low level precisely because of the effects that were still being felt on the banks' interest rates, in

Money stock and its determinants

Millions of Deutsche Mark; increase: +

Item	1971	1972 Total	1st qtr.	2nd qtr.	3rd qtr.	4th qtr.
I. Bank lending to domestic non-banks, total	+69,054	+86,414	+12,782	+23,371	+17,532	+32,729
1. Deutsche Bundesbank	— 626	— 2,068	— 2,409	+ 5	— 158	+ 494
to enterprises and individuals	— 169	— 71	— 54	— 259	+ 150	+ 92
to public authorities	— 457	— 1,997	— 2,355	+ 264	— 308	+ 402
2. Other banks	+69,680	+88,482	+15,191	+23,366	+17,690	+32,235
to enterprises and individuals	+59,522	+78,227	+12,780	+20,725	+15,042	+29,680
Short-term lending	+17,977	+24,047	+ 3,225	+10,128	+ 1,095	+ 9,599
Medium and long-term lending	+40,944	+53,827	+ 9,008	+11,063	+13,953	+19,803
Holdings of securities issued by German enterprises	+ 601	+ 353	+ 547	— 466	— 6	+ 278
to public authorities	+10,158	+10,255	+ 2,411	+ 2,641	+ 2,648	+ 2,555
Short-term lending	+ 813	— 302	+ 7	— 148	— 137	— 24
Medium and long-term lending 1	+ 9,749	+10,688	+ 1,903	+ 3,070	+ 2,925	+ 2,790
Holdings of securities issued by German public authorities	— 404	— 131	+ 501	— 281	— 140	— 211
II. Net external claims of banks and Bundesbank	+11,516	+10,157	+ 7,962	+ 4,980	+ 3,213	— 5,998
III. Monetary capital formation with banks from domestic sources, total 2	+46,397	+62,130	+14,643	+13,821	+12,020	+21,646
of which Savings deposits and bank savings bonds	+28,478	+34,254	+ 7,412	+ 6,993	+ 5,317	+14,532
Time deposits 3	+ 7,073	+ 8,683	+ 1,559	+ 1,722	+ 1,968	+ 3,434
Bank bonds outstanding (excluding bank holdings)	+ 8,152	+14,984	+ 4,626	+ 3,788	+ 3,847	+ 2,723
IV. Central bank deposits of domestic public authorities	+ 4,203	— 3,846	+ 4,436	— 2,500	— 718	— 5,064
V. Other influences 4	— 5,003	— 4,782	— 8,222	— 4,507	— 3,742	+11,689
of which Balances on cash deposit special accounts (increase: —)	—	— 1,336	— 22	— 729	— 2,326	+ 1,741
VI. Money and quasi-money stock (= M_2) (I plus II plus V less III less IV)	+24,967	+33,505	— 6,557	+12,523	+ 5,701	+21,838
Currency and sight deposits (money stock = M_1)	+13,243	+17,546	— 4,377	+ 8,751	+ 2,198	+10,974
Currency 5	+ 3,523	+ 5,475	+ 124	+ 2,299	+ 612	+ 2,440
Sight deposits	+ 9,720	+12,071	— 4,501	+ 6,452	+ 1,586	+ 8,534
Time deposits for less than 4 years (quasi-money)	+11,724	+15,959	— 2,180	+ 3,772	+ 3,503	+10,864

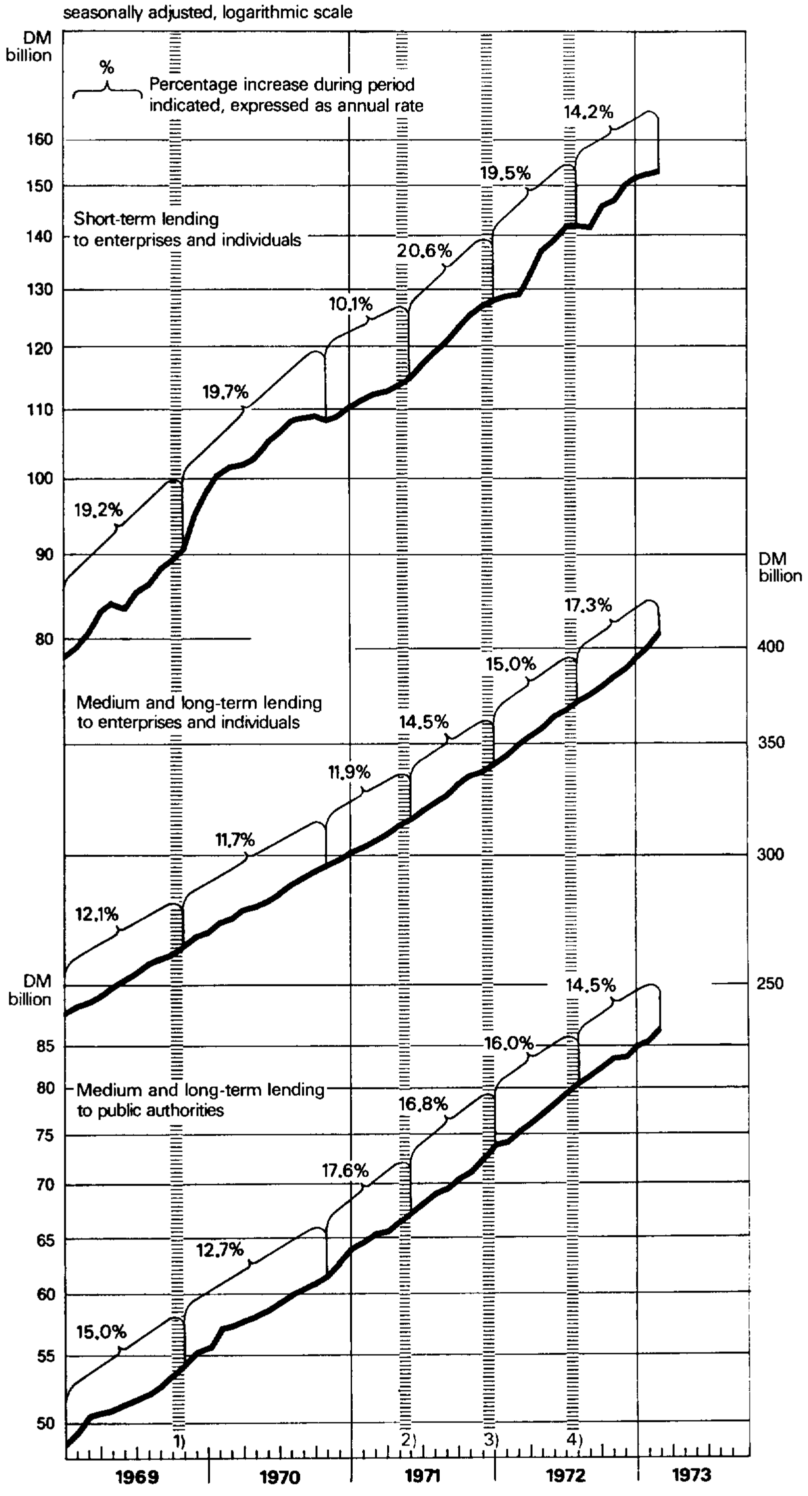
1 Including equalisation and covering claims. — 2 Apart from the items mentioned, including capital and reserves of Deutsche Bundesbank and other banks. — 3 With maturities of 4 years and over; including loans on a trust basis. — 4 Balance of the other items in the consolidated balance sheet of the banking system. — 5 Excluding banks' cash holdings, but including Deutsche Mark notes and coins held abroad.

order to prevent borrowing abroad from becoming worth while in spite of the 50 % cash deposit. The discount rate continued to represent a kind of guideline for "bulk credits", that is to say, credits in current account, bills discounted and private loans of medium and smaller size. The circumstance that, for the reasons mentioned, the discount rate lagged behind the increase in the banks' cost of procuring money — in other words, that it mounted more slowly than the interest on time deposits and money market loans and the yield on bank bonds — presumably contributed to the fact that a rather larger part of the banks' lending rates are no longer moving automatically with the discount rate.

Changed external conditions from the summer of 1972

The transfer of debt from foreign to resident lenders was only a minor factor in domestic credit expansion. In 1972 enterprises repaid close on DM 5 billion of statistically recorded financial credits to foreigners, whereas they had raised DM 1 billion (net) of such credits in 1971. However, these credits represent only part of Germany's financial relations with the rest of the world. On an overall view, non-banks again received large sums from abroad in 1972. The net external claims of the banks and the Bundesbank, the growth of which is indicative of the inflow of foreign funds to non-banks, rose in the year under review by altogether DM 10.2 billion, which was only DM 1.5 billion less than in 1971. Hence the increase in borrowing at home in 1972 cannot in the last analysis be put down to a slight reduction in statistically recorded indebtedness towards the rest of the world. As described in detail elsewhere in this Report, the main cause of the influx of foreign exchange,

Bank lending to domestic non-banks



1) Revaluation of the Deutsche Mark.-2) Floating of the Deutsche Mark exchange rate.-3) Washington conference and return to fixed Deutsche Mark rate.-4) Major measures to safeguard the economy against external influences come into force.

which was confined to the first seven months of the year, was initially the interest rate differential between the Federal Republic of Germany and the rest of the world, and later principally the speculation on an alteration of exchange rates. When in the middle of 1972, after the wave of speculation had ebbed away, further important measures to safeguard the economy against external influences were put into effect, the inflows of foreign exchange gradually dried up and, in fact, the capital flows in external transactions reversed direction. Between September and January net external claims contracted by roughly DM 4 billion. In February and

March 1973, however, the net external claims of the banks and the Bundesbank grew very steeply again owing to the large speculative inflows.

Monetary capital formation large, but moderates towards the end of the year

Such extremely expansive influences as those which coincided in 1972 boost not only the money stock but, to a certain extent, also the longer-term funds placed with banks and yielding higher returns. Monetary capital formation, which comprises the funds placed with banks for longer periods, correspondingly rose fast in 1972; it was perceptibly higher than in the previous year. Towards the end of 1972 the growth trend slowed down somewhat; as will be described in detail below, it was savings deposits that were particularly affected.

Special trends in the banks' lending and deposit business

Strong expansion in bank lending to enterprises and individuals

In 1972 domestic banks granted DM 88 billion of loans of all maturities (including acquisition of securities) to domestic non-banks; this was DM 19 billion or roughly 25 % more than in 1971. The credit demand of the private sector predominated; bank lending to enterprises and individuals increased by DM 78.2 billion, or by approximately one third more than a year earlier. A relatively large proportion of the credits granted to the private sector in 1972 (DM 35.3 billion) had maturities of less than four years. Thus the share of credits running for these short and medium periods was smaller than in the years 1969 to 1971, but very much larger than between 1963 and 1968.

Shorter-term lending to households, chiefly for the purpose of financing consumption, was quite appreciable in 1972; it totalled about DM 7 billion, compared with just on DM 5 billion in 1971. By far the greater part of the newly granted short and medium-term loans (DM 23.3 billion) was accounted for by the enterprises sector (excluding housing). Apparently the growth of credit demand varied considerably from sector to sector; it was particularly great in the sectors benefiting from the economic upswing, above all in the fields close to the consumer stage. The service trades, for instance, incurred about twice as much new short and medium-term debt towards banks in 1972, at DM 9.3 billion, as in 1971. Shorter-term credit demand grew equally strongly, in relative terms, in the distributive trades (DM 5 billion net against DM 2.8 billion) and the construction industry (DM 2.5 billion net against DM 1 billion). On the other hand, bank lending at short and medium-term to manufacturing grew hardly more in 1972 than in 1971 (DM 7.3 billion against DM 7.1 billion). Enterprises engaged in gas, electricity and water supply and transport and telecommunications actually raised far less short and medium term bank credit last year than in 1971. A rather striking feature on a year-on-year comparison was the small increase in the case of transport and telecommunications enterprises (DM 0.4 billion net against DM 3.2 billion); but here long-term borrowing was larger than a year earlier. The most important borrower in this category is usually the Federal Post Office.

Extremely vigorous growth of long-term lending

The main impetus to lending in 1972 came, however, from the expansion of long-term bank loans (those running for four years and more) to enterprises and individuals. They rose by roughly DM 43 billion, and thus by DM 14 billion or nearly 50 % more than in 1971. Long-term lending to enterprises (except housing) went up by DM 21 billion, which was over one third more than in 1971. As shown in detail in the borrowers statistics, virtually all branches of economic activity incurred more long-term debt towards banks in 1972 than in 1971, some of them obviously funding short and medium-term loans. Loans for residential building grew faster in 1972 than ever before. In the year under review banks extended DM 19.5 billion (net) of longer-term housing loans, which was DM 7.5 billion or two thirds more than in 1971 and over twice as much as in 1970. Banks' new assurances of mortgage loans for housebuilding purposes totalled as much as DM 21 billion (some 30 % more than in 1971), thus further enlarging the volume of credit promised but not yet granted. In financing housebuilding, banks (including government institutions promoting residential building) in 1972 again departed from the ratios previously observed with regard to the share of the prospective owner's own funds considered necessary when financing housebuilding, as shown by the fact that occasionally institutions publicly offered to take over the entire financing with borrowed funds up to the level of 90 % of the construction costs.

Lending to domestic non-banks (excluding security purchases) by banking groups

Banking group	Increase in millions of Deutsche Mark				Percentage increase against initial position			
	1969	1970	1971	1972	1969	1970	1971	1972
Commercial banks	16,516	11,581	18,298	26,573	20.8	12.1	17.0	21.1
Big banks	7,603	2,872	6,907	9,176	21.8	6.8	15.2	17.5
Regional banks and other commercial banks 1	7,923	7,321	9,958	16,024	21.5	16.4	19.2	25.8
Private bankers	990	1,388	1,433	1,373	13.2	16.3	14.5	12.2
Savings bank sector	17,597	24,139	28,150	32,873	12.2	14.9	15.0	15.2
Central giro institutions 2	3,924	11,442	11,910	13,070	7.3	19.7	16.9	15.8
Savings banks	13,673	12,697	16,240	19,803	15.1	12.2	13.9	14.9
Cooperative sector	6,427	5,722	8,542	10,589	19.2	14.4	18.6	19.4
Central institutions of credit cooperatives 3	994	290	971	787	23.6	5.6	17.7	12.2
Credit cooperatives	5,433	5,432	7,571	9,802	18.6	15.7	18.8	20.4
Mortgage banks	6,105	5,537	9,845	12,076	6.7	5.7	9.9	11.1
Instalment sales financing institutions	1,081	1,426	1,491	1,546	19.6	21.9	18.8	16.4
Banks with special functions	2,357	2,503	2,525	3,950	11.4	10.8	9.9	12.5
Postal giro and postal savings bank offices	1,175	336	1,037	1,041	18.8	4.5	13.4	11.8
All banks	51,258	51,244	69,888	88,648	13.5	11.9	14.4	16.0

1 Including branches of foreign banks. — 2 Including Deutsche Girozentrale. — 3 Including Deutsche Genossenschaftskasse.

Smaller increase in bank lending to the government sector

Unlike lending to trade and industry, bank lending to domestic public authorities rose hardly more steeply in the year under review than in 1971. Inclusive of public authority securities acquired by banks, bank loans to the public sector grew by DM 10.3 billion, and thus considerably faster than in 1969 and 1970, though appreciably less than in 1967 and 1968. In the year under review public authorities primarily raised long-term bank loans. Specifically, local authorities and their associations incurred about DM 6.5 billion of long-term debt towards banks, while the Federal and Länder Governments also resorted to long-term bank credit in relatively great measure, taking up DM 1.2 billion and DM 2.1 billion, respectively.

Contributions of individual banking groups to credit expansion

The individual banking groups shared in very different degrees in the direct lending to domestic non-banks. As shown in the above table, regional banks and other commercial banks expanded lending to domestic non-banks most of all, viz. by 26 %, which was far above the average growth rate of 16 %. Credit cooperatives and the big banks also reported above-average increases (20.4 % and 17.5 %) in the loans they granted to domestic customers. The contributions of central giro institutions and instalment sales financing institutions to credit expansion approximately equalled the average. The other banking groups stepped up their direct lending to domestic non-banks by rates ranging between 11.1 % (mortgage banks) and 15 % (savings banks).

Comparatively large purchases of securities

Despite the extremely tight liquidity position and the large-scale granting of direct loans, banks bought more securities in 1972 than in 1971. Altogether, banks' holdings of domestic and foreign securities mounted by DM 7.5 billion (1971: DM 5.9 billion). On balance, banks acquired domestic bank bonds only, so that in statistical terms they enlarged interbank assets and liabilities, but not lending to domestic non-banks, by these purchases. However, this inflow of long-term funds enabled the issuing institutions to grant additional loans to non-banks (the amount of which is included in the above-quoted figures on lending).

Heavy inflow of longer-term funds to banks

Banks' monetary capital formation from domestic sources, which tends to counteract the growth of the money and quasi-money stock, amounted to DM 62 billion and was thus roughly one third higher than a year before, as in 1971. The total of funds placed with banks at longer term (excluding time deposits for less than four years) at end-1972 was 14.1 % up on the previous year. Growth rates of a similar order had last been recorded in 1963 and 1964 (14.0 % and 13.8 %); in subsequent years the annual growth rate, with slight fluctuations, had averaged just on 11 %.

In 1972 the chief component of monetary capital formation was again saving through accounts, though it no longer carried the same weight as in preceding years. All in all, the absolute amount of savings deposits rose by DM 30.8 billion in the year under review, or DM 4.4 billion more than in 1971. However, they contributed only just on 50 % to overall monetary capital formation; in 1971 the share had been 57 %, and in earlier years too the share had been distinctly larger than in 1972. The other components of monetary capital formation grew disproportionately fast, one reason undoubtedly being that private savers preferred these other forms of investment to savings deposits because of the higher interest yields. The sale of bank bonds alone brought the banks DM 15 billion in 1972, or almost twice as much as in 1971. Time deposits with maturities of four years and over grew by DM 8.7 billion in 1972, and thus by nearly 25 % more than in the previous year. In addition, banks received about DM 3.5 billion (1971: DM 2.1 billion) from the sale of bank savings bonds during the year under review. Savers' growing interest-rate-consciousness is also reflected in the fact that in 1972 the savings deposits carrying the lowest rate of interest, i.e. those at statutory notice, rose at only about the same pace as in 1971, viz. by just under DM 14 billion, whereas savings deposits at agreed notice, which carry a higher rate of interest, grew over one third more than a year before (DM 17.1 billion against DM 12.8 billion). Savings deposits fixed for long periods again increased in importance. Their proportion of total savings deposits was over 44 % at end-1972, compared with 42.5 %, 42 % and 40 % at the end of the preceding three years. At the end of 1965 it had stood at roughly 33 %.

2. Capital market

(a) Overall acquisition of financial assets and borrowing

Strong increase in domestic acquisition of financial assets . . .

As regards the overall acquisition of financial assets by households, public authorities and non-financial enterprises, the picture that presents itself in 1972 is in many respects similar to the one already given of the savings deposited with banks alone. If the funds placed with banks are supplemented by the amounts invested at the same time by the domestic non-financial sectors with building and loan associations and insurance companies, and in securities other than those issued by banks, the total acquisition of financial assets in 1972 came to DM 123 billion; this figure was DM 20 billion (or 20 %) larger than that for 1971, when growth had likewise been rather vigorous, at 17 %. This rise in the acquisition of financial assets was by no means solely due to increased saving; to a certain extent it reflects the inflated monetary expansion, caused not least by the sustained inflows of foreign funds to domestic non-banks.

. . . particularly by enterprises owing to inflows of foreign funds

Specifically, last year households acquired financial assets totalling DM 72 billion or about 20 % more than a year earlier. Their share in the acquisition of financial assets by all domestic non-financial sectors was thus almost unchanged in comparison with 1971. This is noteworthy in so far as households received substantial special payments from public authorities in addition to their current income in the course of 1972, as will be described in detail below. The acquisition of financial assets by enterprises, on the other hand, increased disproportionately fast; at DM 38.5 billion it was 31 % up on the year. Enterprises' share in the expansion of the financial assets of all domestic non-financial sectors thus mounted vigorously; in 1972 it was about 31 %, against 28.5 % in each of the preceding two years. This reflected, for one thing, the inflow of foreign funds, which at times was very heavy. For another, it undoubtedly owed something to the fact that the recent acceleration of the upswing benefited the various sectors and enterprises in varying degrees; quite frequently, therefore, receipts flowed in at a faster pace while expenditure did not rise as rapidly, at least to begin with. Public authorities acquired DM 12.5 billion of financial assets, or over DM 1 billion less than in 1971. In the first six months the growth of financial assets was as much as DM 3 billion smaller than a year earlier owing to the refunding of pensioners' contributions to the statutory health insurance and the repayment of the anticyclical surcharge. This decline was not quite offset in the further course of the year – despite large tax receipts – since new special payments had to be made during that period. On aggregate, therefore, the public sector's share in the acquisition of financial

Acquisition of financial assets and incurrence of liabilities by domestic sectors *

Item	Billions of Deutsche Mark					Change on previous year in billions of Deutsche Mark				Percentage of total		
	1970	1971	1972 Total	1972 1st half	1972 2nd half	1971	1972 Total	1972 1st half	1972 2nd half	1970	1971	1972
1. Acquisition of financial assets												
(a) Longer-term	57.3	71.5	86.7	32.5	54.1	+14.3	+15.2	+ 8.8	+ 6.4	100	100	100
(aa) at banks	23.5	34.4	42.5	17.6	24.8	+10.9	+ 8.1	+ 6.6	+ 1.4	41.1	48.1	49.0
Longer-term time deposits 1	3.3	6.8	9.7	4.0	5.7	+ 3.5	+ 2.9	+ 2.3	+ 0.6	5.8	9.6	11.1
Savings deposits	20.2	27.6	32.8	13.7	19.1	+ 7.3	+ 5.2	+ 4.4	+ 0.9	35.3	38.5	37.8
(ab) at insurance companies	8.3	11.4	14.3	7.0	7.3	+ 3.1	+ 2.9	+ 1.8	+ 1.1	14.5	16.0	16.5
(ac) at building and loan associations	5.9	5.7	7.2	0.1	7.1	— 0.2	+ 1.5	+ 0.3	+ 1.2	10.3	7.9	8.3
(ad) Acquisition of securities	15.3	14.0	14.3	7.5	6.8	— 1.3	+ 0.3	+ 1.5	— 1.2	26.8	19.6	16.5
Bonds	10.5	9.6	13.9	7.8	6.1	— 0.9	+ 4.3	+ 4.4	— 0.1	18.3	13.4	16.0
Shares	4.9	4.4	0.4	— 0.3	0.7	— 0.4	— 4.0	— 2.9	— 1.1	8.5	6.2	0.5
(ae) Direct loans to other sectors	4.2	6.1	8.4	0.3	8.1	+ 1.9	+ 2.3	— 1.5	+ 3.9	7.3	8.5	9.7
(b) Short-term	30.1	31.2	36.2	19.3	16.9	+ 1.1	+ 5.0	— 2.6	+ 7.6	100	100	100
of which												
Currency and sight deposits	18.4	22.2	21.6	19.3	2.3	+ 3.8	— 0.6	— 0.2	— 0.3	61.2	71.1	59.8
Short-term time deposits 2	9.6	11.1	15.0	1.2	13.8	+ 1.6	+ 3.9	— 3.1	+ 7.0	31.8	35.7	41.5
Acquisition of financial assets, total	87.3	102.7	122.9	51.8	71.1	+15.4	+20.2	+ 6.2	+14.0	100	100	100
Households	50.8	59.6	71.9	29.9	41.9	+ 8.7	+12.3	+ 8.5	+ 3.8	58.2	58.0	58.5
Enterprises	24.9	29.3	38.4	18.5	19.9	+ 4.4	+ 9.1	+ 0.9	+ 8.2	28.6	28.6	31.3
Government	11.6	13.8	12.6	3.3	9.3	+ 2.3	— 1.2	— 3.2	+ 2.0	13.2	13.5	10.3
2. Incurrence of liabilities	90.0	108.5	127.3	59.5	67.9	+18.5	+18.8	+ 7.3	+11.4	100	100	100
Households	4.1	6.3	8.8	3.5	5.3	+ 2.2	+ 2.5	+ 0.8	+ 1.7	4.5	5.8	6.9
Enterprises	78.0	89.5	103.0	48.0	55.0	+11.6	+13.5	+ 2.3	+11.1	86.6	82.5	80.9
Government	8.0	12.7	15.5	8.0	7.5	+ 4.8	+ 2.8	— 4.2	— 1.3	8.8	11.7	12.2
3. Financial surplus or deficit (—) (1 less 2)												
Households	46.7	53.3	63.1	26.5	36.6	+ 6.6	+ 9.8	+ 7.7	+ 2.1	.	.	.
Enterprises	—53.0	—60.2	—64.6	—29.5	—35.1	— 7.2	— 4.4	— 1.5	— 2.9	.	.	.
Government	3.6	1.1	— 2.9	— 4.6	1.7	— 2.5	— 4.0	— 7.4	+ 3.4	.	.	.
Domestic non-financial sectors, total	— 2.7	— 5.8	— 4.4	— 7.6	3.2	— 3.1	+ 1.4	— 1.2	+ 2.6	.	.	.
4. Financial surplus or deficit (—) of financial institutions	3.9	a 4.0	a 4.4	6.4	a — 1.9	+ 0.1	+ 0.4	+ 0.9	— 0.4	.	.	.
5. Change in net external assets of all domestic sectors	1.2	a — 1.8	a 0.0	— 1.3	a 1.3	— 3.0	+ 1.8	— 0.3	+ 2.1	.	.	.
Change in external assets	34.4	a 17.9	a 14.9	14.8	a 0.0	—16.5	— 3.1	— 1.3	— 1.8	.	.	.
Change in external liabilities	33.2	19.8	14.8	16.1	— 1.2	—13.4	— 4.9	— 1.0	— 3.9	.	.	.

* Households, enterprises (including housing, but excluding banks and other institutional investors), and government; discrepancies in the totals are due to rounding; provisional. Revised figures will be published in the Monthly Report of May 1973 in connection with the capital finance account for 1972. — **1** With maturities of more than 1 year. — **2** With maturities of 1 year and less. — **a** After adjustment for a capital transfer by Deutsche Bundesbank to rest of the world equal to the revaluation losses of DM 6.1 billion (1971) and DM 1.1 billion (1972).

assets by domestic non-financial sectors showed a distinct drop, coming to only 10.5 % in 1972, against 13.5 % in 1971.

Overall investment pattern hardly changed

The pattern of financial asset acquisition, classified by types of investment, was not significantly affected by the above-mentioned divergences in the trends of the individual sectors. Short-term investment – which rose from DM 31 billion in 1971 to DM 36 billion in 1972 – moved approximately parallel with the overall acquisition of financial assets; at almost 30 % its share in the total remained the same as in 1971. In the longer-term sphere – where DM 86.5 billion, or DM 15 billion more than in 1971, was invested in the year under review – the proportion of funds placed with banks in 1972, at 49 %, was slightly larger than in 1971; the relative drop in savings deposits mentioned in the preceding section was offset by large accruals of longer-term time deposits and by the sale of bank savings bonds. No account is taken in this connection of the fact that banks were able to place considerably more bank bonds with domestic non-banks than in 1971. The growth of balances with building and loan associations and of claims on insurance companies – they accounted for about 25 % of the longer-term acquisition of financial assets by domestic non-financial sectors – was also roughly on a par with the overall trend. On the other hand, security purchases by enterprises (excluding banks, insurance companies and building and loan associations) were hardly greater in 1972 than in 1971 (DM 14 billion). Larger purchases of bonds contrasted with a sharp drop in the acquisition of shares. Only about DM 0.5 billion, or 0.5 % of the aggregate longer-term acquisition of financial assets, went into investment in shares during 1972, compared with as much as DM 4.5 billion (or 6 %) in 1971.

Strong expansion of domestic borrowing

The rise in the acquisition of financial assets in 1972 was accompanied by a very marked expansion of borrowing by domestic non-financial sectors. Households, public authorities and enterprises (excluding banks, insurance companies and building and loan associations) increased their indebtedness last year by DM 127.5 billion, which was DM 19 billion (or 17.5 %) more than in 1971. As usual, enterprises (including housing) accounted for the bulk of domestic borrowing (roughly 81 %); they stepped up their incurrence of liabilities especially much in the second half of the year, heavy borrowing by housing being of particular significance. According to preliminary figures, this branch of economic activity received all told about DM 35 billion of short and long-term credit from banks, insurance companies and building and loan associations, and also from government agencies, in the course of 1972, and thus nearly 46 % more than in 1971. The indebtedness of enterprises (excluding housing) went up by an estimated DM 68 billion in the period under review, or 3 % more than a year before. On an overall view, the share of enterprises (including housing) in borrowing by all domestic non-financial sectors diminished slightly, from 82.5 % in 1971 to the aforementioned 81 % in 1972. Households incurred a comparatively large amount of debt in 1972. At nearly DM 9 billion, new consumer credit (other than loans taken up to finance housebuilding) was more than one third up on the year; households therefore had a slightly larger share than in preceding years in aggregate borrowing by domestic non-financial sectors, viz. 7 % against 6 % in 1971 and a mere 4.5 % in 1970. If 1972 is considered as a whole, the public authorities likewise increased their indebtedness. They accounted for roughly 12 % of the debt newly incurred by all domestic non-financial sectors, compared with 11.5 % in 1971. It was, however, only in the first half of 1972 that public debt grew faster; in the second half, when the public authorities' finances – as mentioned before – improved considerably owing to the large tax inflow, their borrowing fell short of the 1971 figure.

Greater provision of funds by the banking system

Banks were again the principal lenders in 1972. In fact, their share in total lending to domestic non-financial sectors went up sharply from 66 % in 1971 to 72 % in 1972. Building and loan associations and insurance companies together supplied 11 % of all the funds lent out in 1972 – approximately the same proportion as in 1971. Direct borrowing by the domestic sectors through the issue of bonds and shares of their own remained relatively small. Public authorities and enterprises raised some 6 % of all the funds borrowed by non-financial sectors via the bond market, while share issues met only 2.5 % of these sectors' financial require-

Movement of interest rates since 1969

% per annum

Period	Bundesbank rates		Money market rates	Capital market rates	Bank interest rates 2					
					Lending rates			Deposit rates		
	Discount rate	Lombard rate	Three-month loans Frankfurt 1	Yield on public authority bonds outstanding	Credits in current account 3	Discount credits 4	Mortgage loans secured by residential real estate 5	Time deposits (three months) 3	Savings deposits at statutory notice	Savings deposits at agreed notice of 12 months
1969										
Feb.	3.0	3.5	3.91	6.3	7.50	4.86	6.90	3.01	3.50	4.52
May	4.0	5.0	4.38	6.5	8.03	5.73	6.99	3.24	3.50	4.52
Aug.	5.0	6.0	6.50	6.9	8.95	6.71	7.40	4.16	4.00	5.00
Nov.	6.0	7.5	7.75	7.4	9.60	7.57	7.49	4.88	4.00	5.00
1970										
Feb.	6.0	9.0	9.51	7.8	10.16	8.42	8.06	6.95	4.50	6.00
May	7.5	9.5	9.93	8.4	11.58	9.75	8.61	7.93	5.00	6.47
Aug.	7.0	9.0	9.16	8.4	11.40	9.39	8.75	7.67	5.00	6.48
Nov.	6.5	8.0	8.84	8.6	11.35	9.27	8.81	7.49	5.00	6.48
1971										
Jan.	6.0	7.5	7.50	7.7	10.69	8.24	8.59	6.64	5.00	6.47
Feb.	6.0	7.5	7.47	7.7	10.65	8.13	8.51	6.56	5.00	6.46
May	5.0	6.5	6.16	8.0	9.86	7.13	8.34	5.59	4.53	5.90
Aug.	5.0	6.5	7.56	8.3	9.87	7.26	8.58	6.21	4.53	5.91
Nov.	4.5	5.5	6.79	7.9	9.58	6.71	8.46	6.05	4.52	5.90
1972										
Feb.	3.0	4.0	4.88	7.3	9.05	6.09	8.25	5.12	4.50	5.88
May	3.0	4.0	4.71	7.8	8.39	5.28	8.13	4.55	4.02	5.42
Aug.	3.0	4.0	4.80	7.9	8.41	5.38	8.30	4.61	4.01	5.42
Nov.	4.0	6.0	8.07	8.4	9.08	6.62	8.49	6.26	4.01	5.42
1973										
Feb.	5.0	7.0	7.96	8.5	10.00	8.42	8.93	6.74	4.51	5.95

1 Unweighted monthly averages computed from daily quotations reported by Frankfurt banks. — 2 Average rates, calculated as the unweighted arithmetical mean of reported interest rates within the spread. The spread indicates the range within which 90 % of the reported interest rates fall after the 5 % of the reports with the highest rates and the 5 % with the lowest rates have been eliminated. — 3 Less than DM 1 million. — 4 Bills of DM 5,000 to less than DM 20,000 eligible for rediscount at the Bundesbank. — 5 Effective interest rate.

ments. Nevertheless, in 1972 far more resources were procured via the security markets as a whole than in 1971 (the following section will deal with this phenomenon in greater detail); this was, however, exclusively due to the steep increase last year in issues of bank bonds. There are many reasons, including institutional ones, for the failure of domestic enterprises and public authorities to make heavier calls on the security markets themselves. For instance, the issue of industrial bonds, inclusive of all incidental costs, is generally considered more expensive than borrowing from banks, even if the latter obtain some of the funds they need for the purpose by issuing bonds of their own. Partly owing to cost considerations and partly for administrative reasons, public authorities likewise prefer to borrow from banks, especially from those which finance their lending by issuing bank bonds — as "regular issuers" enjoying comparatively favourable terms.

(b) Security markets

Growing importance of the security markets

The total of funds raised on the bond and share markets, in the usual definition,[1] was DM 35.7 billion net (market value) in 1972, that is to say, almost DM 10 billion, or over a third, more than in 1971. However, this increase was not solely due to larger investments on the part of private customers, for much of it was a result of very substantial purchases by foreigners and resident institutional investors. In the first half of 1972 the inflow of foreign funds, in particular, to the German security market was unusually heavy. As this inflow severely disrupted

1 Net purchases of domestic and foreign securities by residents and of domestic securities by non-residents, after taking account of changes in domestic bond issuers' holdings of their own bonds.

monetary policy, the Federal Government decided at the end of June 1972 to make the sale of German bonds to foreigners subject to mandatory authorisation; thereafter capital imports via the security markets declined markedly. On aggregate, foreigners bought roughly DM 9 billion net of German securities, or over four times as much as in 1971. Total capital imports via the security markets (including sales of foreign securities by residents) came to nearly DM 12 billion, against DM 1.2 billion in 1971, when there had been net capital imports via the security markets for the first time since 1963.

At times large capital imports via security markets

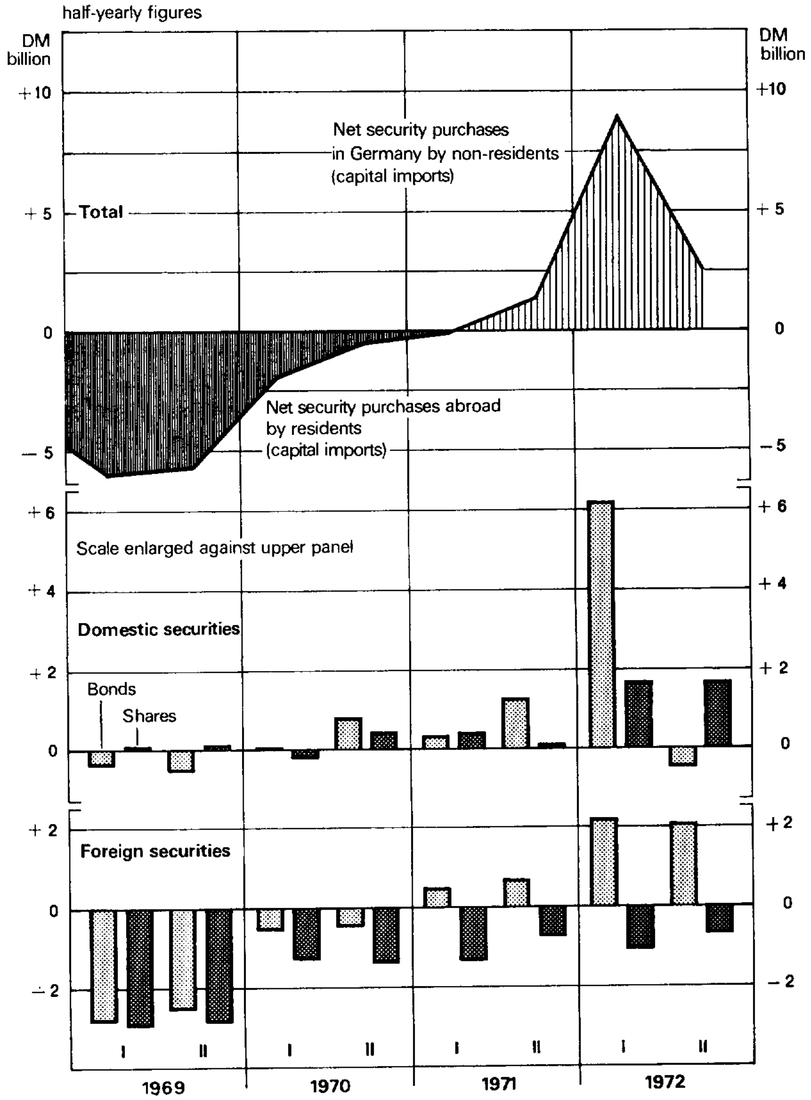
Reasons for large capital imports

There were a number of reasons for the growth of capital imports via the security markets, and the initiative sometimes proceeded from within the country as well as from abroad. Sales of fixed interest securities to foreigners afforded the banks a means of procuring resources not subject to the particularly high minimum reserve ratio applying to foreign funds. Besides normal domestic bonds, German issuing institutions sold to non-residents comparatively short-dated domestic bank bonds specially designed to suit the wishes of foreign investors. On the other hand, foreign interest in purchasing German securities – including foreign Deutsche Mark bonds – was very keen. Relatively soon after the realignment of exchange rates in December 1971 foreigners appear to have been attracted by this kind of Deutsche Mark asset, again on grounds of exchange rate speculation. This is suggested, inter alia, by the marked divergence from February 1972 onwards between the yields on foreign bonds denominated in Deutsche Mark and the yields on U.S. dollar bonds. Whereas the yield on foreign Deutsche Mark bonds (contrary to the trend of interest rates on the German bond market) fell further in February last year, the yield on foreign bonds denominated in U.S. dollars began to rise fast at roughly the same time. The interest rate differential, which had amounted to not quite half a percentage point at the beginning of the year, had widened to nearly 3 percentage points by August; foreign investors relinquished interest income to this extent in order to secure themselves possible advantages from the movement of the Deutsche Mark exchange rate in relation to other currencies, especially the U.S. dollar. The speculative motive was particularly pronounced in June when, following the weakness of the pound sterling, the international monetary situation took a critical turn. In that month security transactions with foreigners brought DM 2.75 billion into the Federal Republic of Germany. At that point the Federal Government decided – as mentioned before – that the sale of domestic bearer bonds and bonds payable to order to non-residents should be made subject to mandatory authorisation. This measure, which amounted to a ban on purchases of German bonds by foreigners, brought foreign buying on the German bond market to an abrupt halt; as from August 1972 non-residents on balance acquired no more German bonds – indeed, they even sold them. Since then sales of German bonds to foreigners have only been possible in the framework of offsetting arrangements. Under such arrangements German banks are allowed, on the basis of a general permit valid for a limited period only, to sell German bonds to foreigners to the extent they have previously acquired a "non-resident quota" by buying or redeeming foreign-owned German bonds. Bonds with maturities of up to four years do not count.

Sales of German bonds to foreigners subject to mandatory authorisation

Capital imports via other sectors of the capital market were not affected by the introduction of the mandatory authorisation for the acquisition of domestic bonds by non-residents. This applies, above all, to the market for foreign Deutsche Mark bonds. The initial purchase of foreign bonds by non-residents does not, of course, affect the German bond market or the German balance of payments, but foreign investors did not confine themselves to the acquisition of new issues, they also bought German-held foreign Deutsche Mark bonds. They found this all the easier as residents readily parted with the foreign bonds, which bore lower interest (this difference in interest is immaterial to foreigners if they not only have to pay the coupon tax on German bonds, but are also finally burdened with it). In order to keep capital imports through sales of German-owned foreign bonds within bounds, the Bundesbank called upon banks and insurance companies to refrain from selling foreign bonds to non-residents; other residents, however, continued to sell foreign bonds on a large scale. On the share market, too, where no restrictions on

External security transactions *



* Including trade investments and investment fund units.

purchases by foreigners were in effect last year, there were net capital imports in 1972, for the first time since 1966. At DM 1.6 billion they were, however, of much less significance than capital imports via the bond market (DM 10 billion). In connection with the new monetary crisis that erupted at the beginning of February 1973, the acquisition of shares was also made subject to mandatory authorisation, as part of the extended application of section 23 of the Foreign Trade and Payments Act; transactions falling within the non-resident quotas, however, continue to be permitted.

Bond market

Dominating role of the bond market

Of the two sectors of the security market, the bond market has again increased in importance over the share market, both in terms of the funds raised and in terms of its function as an intermediary for capital. In absolute amount, just on DM 30 billion net was invested in bonds during 1972, or half as much again as in 1971 (DM 19.4 billion). As noted, foreign investors made a major contribution to this steep rise; their purchases of German bonds went up from DM 1.6 billion in 1971 to DM 5.7 billion in 1972. Resident buyers likewise acquired considerably more bonds than a year before (DM 24 billion against just under DM 18 billion in 1971). In fact, domestic issuers received even more capital via the bond market in

1972 than implied by the overall figures on funds raised. Residents sold DM 4.3 billion of foreign bonds, primarily foreign Deutsche Mark bonds; their net purchases of domestic bonds were this amount higher than the net growth of their total bond portfolios of, as mentioned, DM 24 billion. Net sales of domestic fixed interest securities to residents came to over DM 28 billion in 1972, and inclusive of net purchases by foreigners to DM 34 billion.

The movement of interest on capital

Strong rise in interest rates since March 1972

The vast increase in net sales of domestic bonds in 1972 described above occurred from March last year onwards against the background of declining prices and thus rising interest rates. In some periods it could be inferred from this that the issuers were making unduly heavy calls upon the market. Since the bond market had proved very productive at the beginning of the year, issuers apparently overrated the market's capacity at times later on. The yield on public authority bonds outstanding, which is the prime indicator of the trend in interest rates on the bond market, fell by 0.6 percentage point to 7.3 % in the first two months of 1972; but in March, when the cash deposit requirement came into effect, this trend was reversed. From then on the interest on capital began to mount, reaching the level of 8 % at the end of June, and this level was more or less maintained during the summer months. From October onwards the yield on public authority bonds outstanding increased further and stood at 8.6 % at the end of the year. There are no signs, though, of any close correlation between the movement in the interest rate on capital and purchases by foreigners. When such purchases were particularly large – between March and June – the yield climbed, rather than dropped. When, conversely, foreigners' purchases ceased after the middle of the year owing to the introduction of the authorisation procedure, the yield actually decreased slightly for a time. To some extent the explanation seems to be that banks bought and sold securities "anticyclically" to foreigners and that foreign demand was occasionally met out of the banks' own portfolios.

To keep in line with the interest rates for bonds outstanding, issuers repeatedly had to improve the terms of new issues, especially the nominal interest rate. At the beginning of the year bonds with a coupon of 7 1/2 % and 7 1/4 % could easily be sold, but the further reduction of the nominal interest rate to 7 % in February and March turned out to be a failure. After the suspension of issuing by "occasional issuers" in April and May, the 8 % bond type reappeared in June and was maintained until the end of the year, though finally only by making concessions in the matter of the issue price. In view of the growing difficulty of selling new 8 % bonds, in January 1973 – for the first time since December 1970 – occasional issuers launched bond issues with a nominal rate of interest of 8 1/2 %.

Bond sales in detail

Record sales of domestic bonds . . .

In 1972 net sales of domestic bonds amounted, as mentioned, to DM 34 billion (market value). The total of domestic bonds outstanding thus rose by about one fifth within only twelve months. Gross sales in 1972 came to DM 47.5 billion (market value), compared with DM 30.3 billion in 1971 and DM 20.4 billion in 1970. The greater volume of gross sales was accompanied by increased redemptions (DM 13.1 billion, against DM 9.5 billion in 1971). More than half the redemptions – DM 7 billion – were of bonds with maturities of up to four years. This shows particularly clearly that gross sales figures are not a satisfactory indicator of financing via the bond market. In the following section, therefore, net figures are quoted throughout.

. . . especially of bank bonds

Among the long-term bonds (those with maturities of more than four years), it was sales of bank bonds that expanded most. At DM 24.1 billion, such sales were twice as high as a year before. The largest single item, as for several years past, was sales of communal bonds, though in relative terms sales of the other types of bank bonds grew faster than those of communal bonds. As for details, in 1972 DM 12.1 billion of communal bonds and DM 7.9 billion of mortgage bonds were sold. Last year sales of mortgage bonds were roughly two and a half times as large as the average of the years 1969 to 1971; they clearly reflected the undimin-

Sales and purchases of securities *

Billions of Deutsche Mark

Item	1969	1970	1971	1972	1972 1st qtr.	2nd qtr.	3rd qtr.	4th qtr.
Bonds								
Sales = total purchases	17.75	15.35	19.40	29.76	12.96	7.03	6.58	3.18
Sales								
1. Domestic bonds **1**	12.38	14.31	20.58	34.07	14.35	7.88	7.92	3.92
Bank bonds	12.26	11.93	14.86	26.07	9.45	6.69	6.56	3.38
Mortgage bonds	3.14	1.90	4.37	7.99	3.02	1.89	1.92	1.16
Communal bonds	7.26	7.65	7.12	12.90	5.40	3.21	2.97	1.32
Other bank bonds	1.85	2.38	3.37	5.18	1.02	1.59	1.67	0.89
Public authority bonds **2**	0.29	2.16	4.28	7.21	4.49	0.80	1.27	0.64
Industrial bonds	—0.16	0.22	1.44	0.79	0.41	0.39	0.09	—0.10
2. Foreign bonds **3**	5.37	1.04	—1.18	—4.31	—1.38	—0.85	—1.35	—0.74
Purchases								
1. Domestic purchasers **4**	18.70	14.54	17.78	24.03	10.58	3.20	6.64	3.61
Banks **5**	x 9.95	x 2.40	x 5.80	x 7.06	4.47	—0.36	2.41	x 0.54
Bundesbank **5**	x —0.47	—0.07	x 0.01	—0.36	—0.10	—0.14	—0.07	—0.05
Non-banks **6**	9.22	12.21	11.97	17.32	6.21	3.70	4.29	3.12
Insurance companies and building and loan associations	2.27	1.72	2.60	3.43	2.29		1.14	
Social security funds	—0.04	0.27	1.74	1.54	0.42		1.13	
Households	5.53	9.54	7.07	11.76	7.06		4.71	
Central, regional and local authorities	0.18	0.12	0.21	0.14	0.05		0.09	
Enterprises	1.19	0.54	0.55	0.58	0.31		0.28	
Differences of classification **7**	0.09	0.02	—0.20	—0.13	—0.20		0.07	
2. Foreign purchasers **8**	—0.95	0.82	1.62	5.73	2.39	3.83	—0.06	—0.43
Shares								
Sales = total purchases	8.58	6.26	6.87	5.90	1.70	1.01	1.30	1.90
Sales								
1. Domestic shares **9**	2.80	3.59	4.74	4.13	0.94	0.67	1.27	1.25
2. Foreign shares **10**	5.78	2.67	2.13	1.78	0.75	0.34	0.03	0.66
Purchases								
1. Domestic purchasers **11**	8.43	6.00	6.34	2.50	0.96	0.07	0.16	1.31
Banks **5**	1.18	0.72	0.13	0.41	—0.12	0.45	—0.07	0.15
Non-banks **6**	7.25	5.28	6.21	2.08	1.08	—0.38	0.23	1.16
2. Foreign purchasers **12**	0.15	0.26	x 0.53	3.41	0.74	0.94	1.14	0.59
Memorandum item:								
Overall balance of security transactions with other countries (capital exports: —; capital imports: +)	—11.95	— 2.63	+ 1.20	+11.68	+ 3.76	+ 5.28	+ 2.40	+ 0.25
Bonds	— 6.32	— 0.23	+ 2.80	+10.04	+ 3.77	+ 4.68	+ 1.29	+ 0.31
Shares	— 5.63	— 2.41	— 1.60	+ 1.63	— 0.01	+ 0.60	+ 1.11	— 0.06

* Discrepancies in the totals are due to rounding. — **1** Gross sales at market values less redemptions and repurchases or plus resales by issuers. — **2** Including Federal Railways and Federal Post Office, but excluding bonds issued by the Equalisation of Burdens Bank on behalf of the Equalisation of Burdens Fund. — **3** Net purchases (+) or net sales (—) of foreign bonds by residents; transaction values. — **4** Domestic and foreign bonds. — **5** Balance sheet values. — **6** Residual; also including purchases of domestic and foreign securities by domestic investment funds. — **7** As compared with the figures of the capital finance account on security purchases by the various categories of non-banks; the differences stem mainly from the fact that the National Accounts are based on nominal values rather than market values. — **8** Net purchases (+) or net sales (—) of domestic bonds by non-residents; transaction values. — **9** Market values. — **10** Net purchases (+) or net sales (—) of foreign shares (including direct investment and investment fund units) by residents; transaction values. — **11** Domestic and foreign shares. — **12** Net purchases (+) or net sales (—) of domestic shares (including direct investment and investment fund units) by non-residents; transaction values. — **x** Adjusted for statistical changes.

ished boom in housebuilding, which continued despite the increase in interest rates over the greater part of the year. Last year the mortgage banks were able to regain some of the ground they had lost. Their share in the housing mortgage loan assurances of banks and building and loan associations mounted from 29 % to 31 % (between January and November). Their share in housing mortgage loans paid out rose even more strongly. The fact that the mortgage banks are as a rule no longer charging a fixed interest rate for the whole life of their mortgage loans, owing to the shorter maturities of the paper they sell, has apparently not worked to their disadvantage.

Among the other bank bonds, sales of the bonds of specialised banks and of the "other" bank bonds issued mainly by central giro institutions to finance investment loans to trade and industry went up perceptibly. Net sales of the former grew from DM 660 million to roughly DM 1.6 billion, and those of "other" bank bonds increased even more steeply, viz. from DM 130 million to DM 2.6 billion. Most of the sales of the latter paper (as much as DM 2.1 billion) took place in the second half of 1972. This is undoubtedly to some extent a corollary of the restraint shown by enterprises in issuing bonds of their own. Over 1972 as a whole net sales of industrial bonds, at not quite DM 800 million, were only about half as large as in 1971, the sales being concentrated in the first half of the year, whereas in the second half the amount of such paper outstanding diminished slightly.

Sharp increase in sales of Federal savings bonds

By contrast, public issuers stepped up their raising of capital substantially last year. All in all, they received DM 6.8 billion from the sale of bonds, compared with DM 3.9 billion in 1971. The chief borrower was the Federal Government, which took up roughly DM 2.9 billion on the bond market (against DM 1.6 billion in 1971). More than DM 2.6 billion, or about 90 % of its total bond sales, was accounted for by Federal savings bonds (1971: DM 1.0 billion); they were in particularly great demand in the first two months of last year, when their interest terms were especially favourable. Apart from the Federal Government, the principal public issuers in 1972 were the Länder Governments (DM 1.9 billion) and the Federal Post Office (DM 1.5 billion). The Federal Railways and the local authorities drew on the bond market in relatively small degree only (DM 640 million and DM 110 million). If the proceeds of the sale of communal bonds, most of which likewise go to public authorities, are added to the amounts raised directly by public authorities through issues on the bond market, the public sector was the most important borrower on the bond market last year, at a total of roughly DM 19 billion.

Share of short-dated paper declines

Sales of bonds with maturities of up to four years were markedly smaller in 1972 than in 1971 (just on DM 2.4 billion, against over DM 3.2 billion in 1971). Of this total, DM 1.3 billion or over 50 % was accounted for by "other" bank bonds issued by central giro institutions, DM 840 million by communal bonds and DM 420 million by public authority issues.

Foreign issues launched in the Federal Republic of Germany acquired in full by non-residents

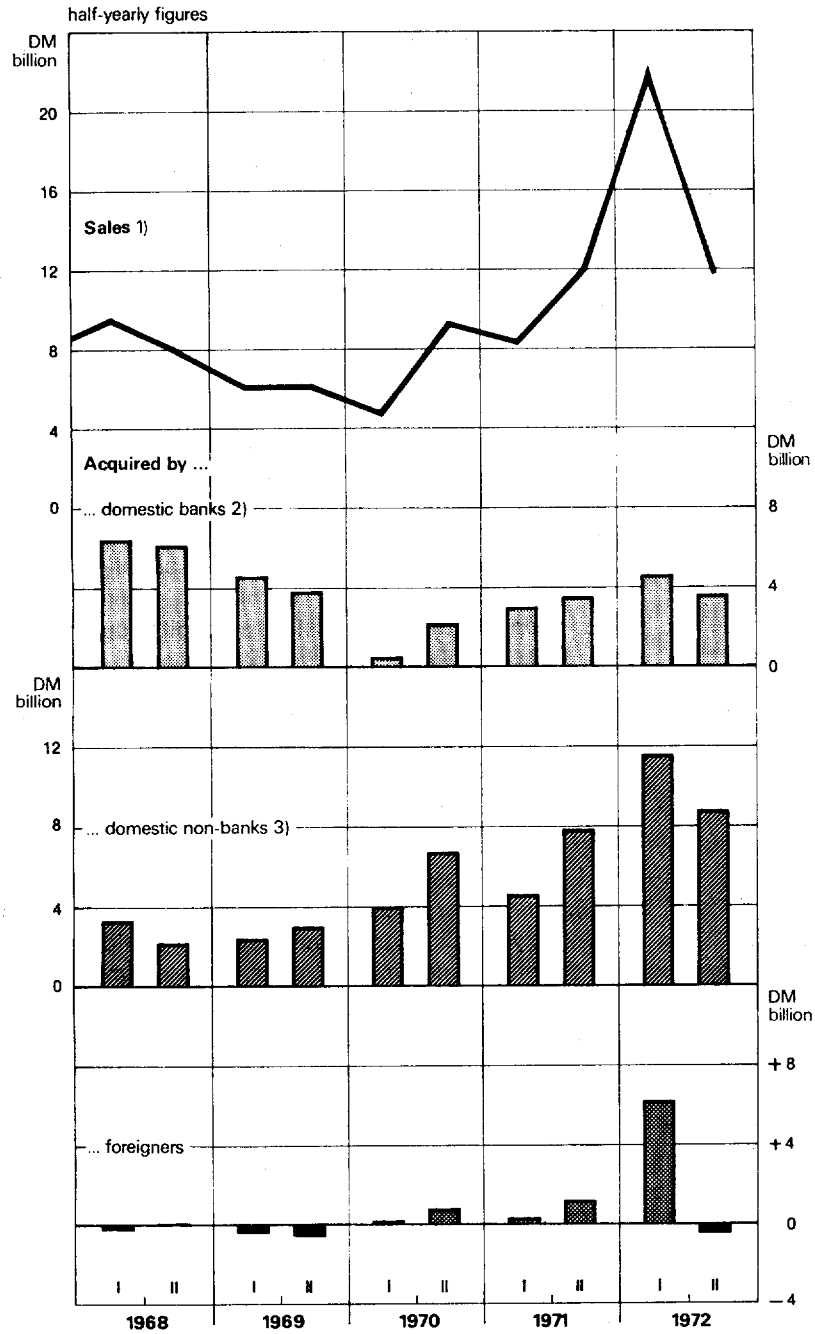
Last year foreign borrowers offered more bond issues for sale in the Federal Republic of Germany than in 1971. As already mentioned, this paper was unattractive to German buyers because of the low interest in comparison with domestic Deutsche Mark bonds; ultimately it was taken up by foreigners, who in this way acquired the desired Deutsche Mark assets without having to pay coupon tax on resultant income. In 1972 new issues of foreign Deutsche Mark bonds totalled DM 5.2 billion gross (1971: DM 3.7 billion). The larger gross sales were accompanied by markedly greater redemptions, viz. DM 1.2 billion against DM 330 million in 1971. About DM 500 million of last year's redemptions stemmed from the repayment of U.S. Treasury notes denominated in Deutsche Mark, which had been taken over by a group of large German banks in 1968 under the terms of the foreign exchange offset agreement concluded with the United States. The total of foreign Deutsche Mark bonds outstanding increased from DM 22.7 billion at the end of 1971 to DM 26.7 billion at the end of 1972.

Acquisition of bonds

Larger bond purchases by households . . .

As mentioned before, domestic investors bought altogether DM 24 billion of bonds in 1972; this was about one third more than in 1971 and nearly DM 10 billion more

Sales and acquisition of domestic bonds



1) Net sales at market values, after taking account of changes in issuers' holdings of own bonds: from 1969 excluding registered bank bonds.- 2) Excluding Bundesbank.- 3) Residual.

than in 1970. Among domestic non-banks, households were the principal group of buyers, acquiring DM 11.8 billion of bonds last year, compared with DM 7.1 billion in 1971. This figure was DM 2.25 billion higher than that for 1970, the previous record year, when households had invested DM 9.5 billion in bonds. The bulk of the purchases were made in the first half of the year. In the second half of 1972, when saving slackened distinctly at times, their buying declined appreciably. The large bond purchases of households (including the purchases of German investment funds, which are also counted among households) must primarily be seen against the background of the steep rise in incomes in recent years and the generally high level of saving. At the beginning of the year, when a lowering of interest rates was widely expected, hopes of price gains, in particular, seem to have lured savings on to the bond market; when, instead, the interest rate on capital rose, the employment of funds on the bond market at all events yielded higher interest than most other forms of saving.

Besides households, the other group of domestic non-banks that bought a major quantity of bonds in 1972 was that of private insurance enterprises. Insurance companies, which had begun to buy bonds on a larger scale in 1971, continued to step up their acquisitions in 1972. Last year they invested DM 3.1 billion in domestic and foreign bonds, compared with DM 2.5 billion in 1971. The social security funds, which, owing to their improved financial situation, had bought more bonds again in 1971, employed fewer resources in bonds in 1972. Last year they acquired just over DM 1.5 billion of bonds, compared with DM 1.75 billion in 1971. The only purchaser of bonds was the Federal Insurance Institution for Salary Earners, while the other branches of social insurance slightly reduced their bond holdings. The commitments of other domestic non-banks – central, regional and local authorities and non-financial enterprises – on the bond market were, as usual, of little significance in 1972 (see the table on page 58).

. . . and insurance companies

Last year bond purchases by domestic banks were comparatively large, amounting to DM 7.1 billion, or DM 1.3 billion more than in 1971. They ran particularly high in the first quarter (DM 4.5 billion), when banks were fairly liquid and the trend of interest rates – at least until February – was clearly downward. In the third quarter of 1972, too, following the heavy inflows of foreign exchange in the summer, their bond purchases were relatively large, at DM 2.4 billion. In the second quarter, by contrast, banks reduced their bond portfolios by DM 360 million, and in the fourth quarter they bought DM 540 million (net) of bonds. Nevertheless, in 1972 and at the beginning of 1973 the dependence of banks' bond purchases on their liquidity was not so pronounced as it used to be. This was especially apparent in January and February 1973, when, in spite of the fact that the banks' free liquid reserves were extremely low, their holdings of fixed interest securities mounted by DM 1.2 billion.

Changing role of the banks

Share market

The volume of capital raised via the share market was comparatively small in 1972. Overall sales of domestic shares plus the acquisition of foreign equities (including investment fund units) were lower in 1972 than in the years from 1968 to 1971. The picture is different only in the case of domestic shares, sales of which totalled DM 4.1 billion (market value); while this was less than in 1971 (DM 4.7 billion), it was more than in any earlier year. German investors' interest in foreign shares and investment fund units, which in 1969 resulted in purchases of no less than DM 5.8 billion, has waned steadily ever since. Last year only DM 1.8 billion was spent in this way. More than half the capital invested on balance on the share market in 1972, namely DM 3.4 billion, came from foreigners, a situation that is without parallel since World War II. Taken together, domestic banks and non-banks invested less than a billion Deutsche Mark (DM 0.7 billion) in German shares; the share market's significance as an instrument for the direct or indirect mobilisation of domestic savings for financing industrial investment has hardly ever been smaller than in 1972, in relative and in absolute terms alike.

Small share purchases by residents

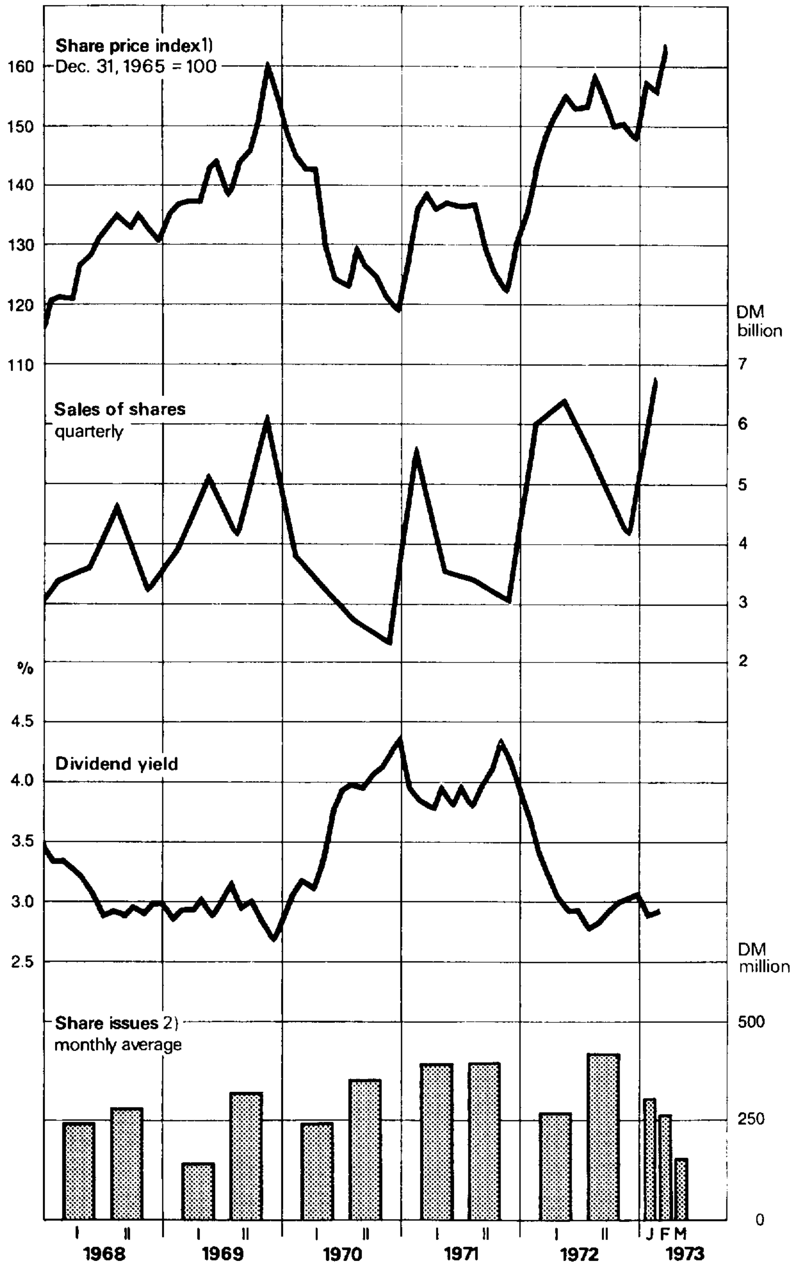
A striking contrast to the poor domestic "financing performance" of the share market in 1972 was formed by the turnover on this market. Stock exchange turnover in German shares attained a volume of just over DM 22 billion, thus being almost half as large again as in 1971. The frequently observed connection between stock exchange turnover and the price trend was confirmed once more in 1972. The greater stock exchange turnover was concentrated in the months from January to August, that is to say, in the period when the trend of prices was upward. In the last four months of 1972, when prices were tending to fall, share turnover on the stock exchange declined distinctly.

Strong rise in share sales

By and large, the price level on the German share market rose substantially last year. The uptrend in prices which started in November 1971 continued until August 1972. The share price index calculated by the Federal Statistical Office (December 31, 1965 = 100), which had stood at 118 at the beginning of the uptrend (November 8, 1971), rose by 39 points or one third to 157 in the middle of May 1972. Then it dropped to 152 in the middle of the year, but soon recovered and reached the highest level of the year on August 10, at 162. Thereafter prices

On balance higher share prices

Share market trends



1) Monthly averages, calculated from the index figures as at the four reference dates of each month.- 2) Market values.

eased to an index level of 148 in mid-December. Nevertheless, at the end of 1972 they were still 30 points or 25 % above the low of November 1971. At the beginning of the new year the decline in share prices gave way to a new rise, in the course of which the August 1972 peak was slightly exceeded on January 22. The eruption of the monetary crisis at the end of January and beginning of February 1973 and the extension of the mandatory authorisation for the acquisition of domestic bonds by non-residents to include domestic shares initially led to a slight drop in share prices; this, however, was made good in March, and on March 23 the share price index of the Federal Statistical Office reached a new peak at 168.

Option deals still insignificant

Option deals, meaning forward transactions in which the purchaser, against payment of the option price, acquires the right to demand at any time within the agreed period of the option deal that a specified amount of shares be delivered (option to buy) or taken (option to sell) at an agreed price, continued to increase in 1972. However, at a total of DM 215 million (against some DM 150 million in 1971), such transactions remained unimportant in relation to overall stock exchange turnover. In 1972 the bulk of option deals, at not quite DM 150 million, again consisted of options to buy, though options to sell, at some DM 70 million, gained ground.

Decline in dividends

In 1972, for the first time since 1967, fewer dividends were paid than in the preceding year. The companies whose shares are quoted on the stock exchange distributed on aggregate DM 4.3 billion to their shareholders in 1972; this was roughly DM 500 million less than in 1971, when total dividends had increased somewhat. The dividends paid in 1972 reflect the substantial drop in profits during 1971. They are, however, not indicative of the present or future earnings situation of enterprises. The trend of share prices last year was therefore not affected by the cuts in dividends. The average dividend – on a share with a nominal value of DM 100 – declined unusually fast in 1972. In December last year it amounted to 13.1 %; this was about one seventh less than in 1971 (15.3 %) and 2.7 percentage points less than in 1970, the year in which the average dividend reached its all-time peak (15.7 %). Never before has the average dividend dropped so sharply within a single year. The decrease in the dividend yield in relation to the current market value was even more pronounced, since it was depressed by last year's price rise as well. In December 1972 it came to 3.1 %, thus being nearly 25 % lower than in December 1971 (4.0 %). It last stood at this level at the beginning of 1970; in the meantime it had twice risen to 4.4 %, namely in December 1970 and October 1971.

3. Balance of payments

Balance of payments strongly influenced by monetary uncertainty lingering on after the realignment of exchange rates in December 1971

In 1972 the balance of payments of the Federal Republic of Germany was at times strongly influenced by the monetary uncertainty which lingered on even after the realignment of exchange rates in December 1971. The trend of the current account (the combined balance of trade, services and transfer payments) was quite satisfactory: at DM 1.3 billion, the surplus was only a little larger than in the preceding year (DM 1.1 billion). On the other hand, in 1972 – and especially in the first half – there were massive imports of money and capital which over the whole year (and if all the "balancing item of the balance of payments" is counted towards capital transactions) totalled DM 14.5 billion and thus were only slightly smaller than in 1971. The reasons underlying these inflows were manifold; at times the money and capital imports were mainly attracted by interest rate considerations, at others they were predominantly of a speculative nature. But the principal cause appears to have been lack of confidence in the permanence of the new exchange rate structure, chiefly attributable to doubts as to whether the devaluation of the dollar by an average of 8 to 9 %[1] agreed upon at the Washington monetary conference would suffice to restore the highly adverse U.S. balance of payments to equilibrium in the longer term.

After the realignment of exchange rates in December 1971 the Bundesbank initially tried to remove as far as possible the incentive for importing money by adopting a policy of low interest rates – a policy which, in fact, ran counter to domestic requirements – and by increasing the minimum reserve on foreign funds lodged with German banks. In addition, the cost to enterprises of procuring foreign money was raised, with effect from March 1, 1972, by the fact that for certain kinds of borrowing abroad they had to maintain at the Bundesbank a non-interest-bearing deposit of, at first, 40 % of the funds taken up.

The success of these various measures was demonstrated by the fact that the increase in the Bundesbank's reserves – they had risen by DM 3.25 billion in aggregate in January and February 1972 – slowed down sharply in the ensuing period and came to DM 0.8 billion between March and May. As the weakness of the pound sterling grew and rapidly spread to the U.S. dollar as well, thus giving rise to world-wide uncertainty on the foreign exchange markets, substantial amounts of foreign currency flowed into Germany again in June and July for speculative reasons. Owing to the Bundesbank's interventions to support the rates

1 See Report of the Deutsche Bundesbank for the Year 1971, page 45.

Strengthening of the external safeguarding measures

of the pound and the dollar, its monetary reserves rose by some DM 15 billion. In order to strengthen its measures to safeguard the economy against external influences, the Bundesbank again sharply increased the minimum reserve on banks' external liabilities. Furthermore, to enhance the effectiveness of the cash deposit scheme, the cash deposit was raised on July 1, 1972 from 40 % to 50 % (the legally permissible ceiling at that time) of all liabilities subject to the cash deposit requirement, and the amount exempt from it was reduced from DM 2 million to DM 0.5 million; at the same time it was made compulsory to report any assignments of claims, against payment, to non-residents. In addition, the acquisition of German fixed interest securities by non-residents from residents, which had resulted in an inflow of DM 6.2 billion during the first half of 1972, was made subject to mandatory authorisation. With the aid of this package of measures it was possible to reverse the direction of the capital flows. Mainly as a consequence of the repayment of external short-term financial credits by domestic enterprises and the return to Germany of foreign-held German bonds, the monetary reserves of the Bundesbank dropped by about DM 4 billion between the middle of July and the end of December 1972. This trend continued at the beginning of 1973; in January interest-induced inflows of money were not in evidence either in short-term or in long-term capital transactions, even though the Bundesbank had increased the discount rate from 3 % to 5 % from October 1972 onwards in the light of the domestic economic situation. This had of course raised the overall domestic interest rate level, but only to the extent possible in view of the administrative barriers (cash deposit, authorisation requirement for the sale of German fixed interest securities to non-residents) without at the same time creating a new interest rate differential vis-à-vis the rest of the world. On January 19, 1973 the dollar rate of the Deutsche Mark nearly reached the official central rate of DM 3.2225 for US$ 1.00 fixed at the Washington monetary conference of December 1971; it was thus higher than it had been before the Bundesbank adopted a more stringent policy in October 1972.

New unrest on the foreign exchange markets in late January and early February 1973 . . .

However, a new situation arose very abruptly when the Italian Government introduced a two-tier exchange market with effect from January 22, 1973, and a fresh wave of unrest spread across the international currency exchanges. The nervousness increased on the following day, when the Swiss National Bank suspended its interventions on the exchange market under the impact of large inflows of foreign currencies. The latent lack of confidence in the U.S. dollar was aggravated by the announcement of the record deficit in the U.S. trade balance for 1972, and the dollar rate fell in all major international foreign exchange centres. In the Federal Republic of Germany the dollar rate of the Deutsche Mark dropped to the lower intervention point on the afternoon of February 1, 1973, and the Bundesbank had to take dollars off the market. During the next few days the Bundesbank continued its supporting purchases in the spot exchange market. To curb the inflow of foreign money, the Federal Government adopted additional administrative measures under the Foreign Trade and Payments Act with effect from February 5, viz:

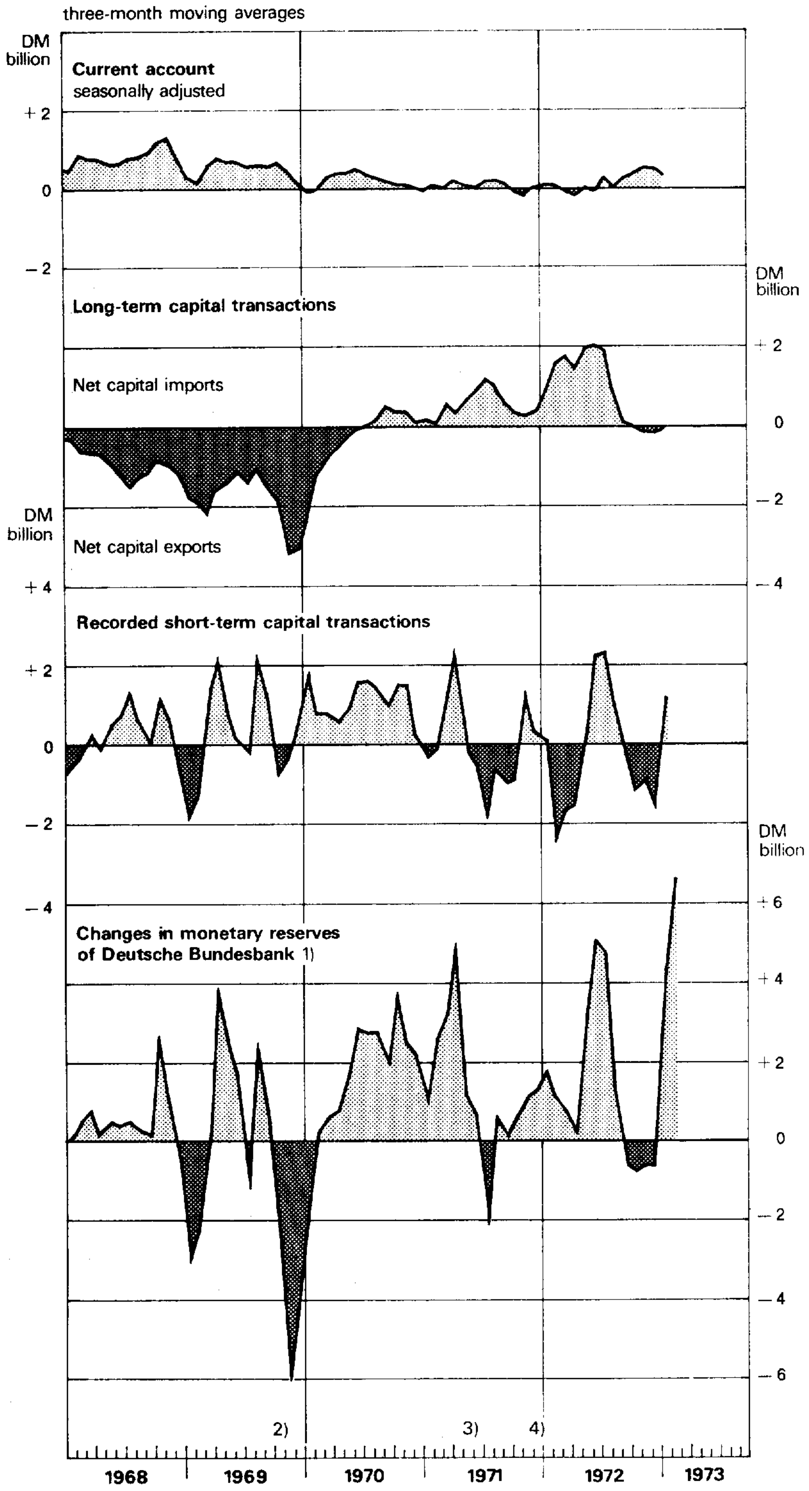
- the excess of credits and loans raised abroad over DM 50,000 was made subject to authorisation;

- the mandatory authorisation for the acquisition of domestic securities by non-residents from residents, which hitherto had been restricted to fixed interest securities, was extended to cover the acquisition of all domestic securities;

- the use by residents of periods for payment granted by non-residents was made subject to authorisation, except where consistent with the customary periods allowed for payment or with the customary advance payments accepted for goods delivered or services rendered, and provided that the amount involved exceeds DM 50,000;

- the excess of any assets contributed to enterprises, branches and operating plants in the Federal Republic of Germany by non-residents over DM 500,000 was made subject to authorisation.

Balance of payments



1) Excluding depreciation due to new valuation of monetary reserves as a result of monetary policy measures, and excluding allocation of special drawing rights.- 2) Revaluation of Deutsche Mark in October 1969.- 3) Floating of the Deutsche Mark exchange rate in May 1971.- 4) Realignment of exchange rates at the Washington monetary conference in December 1971.

These measures were bound to prove ineffective, however, as soon as confidence in the dollar was shaken throughout the world, as became more and more evident in the second week in February. The wave of foreign exchange inflows, which had caused the Bundesbank's monetary reserves to increase by approximately $ 6 billion, or nearly DM 19 billion, between February 1 and 9, came to a halt on Monday, February 12, when by international agreement the foreign currency exchanges were closed in Germany and other countries; the Bundesbank was thus released from its obligation to purchase dollars.

The situation was slightly eased by the 10 % devaluation of the U.S. dollar against the Deutsche Mark and other major currencies on February 12 and by the adoption of floating exchange rates by Japan and Italy; after the reopening of the foreign currency exchanges, the Bundesbank was able to sell about $ 1 billion at the new upper intervention point. However, as the realisation spread that the average (or "weighted") devaluation of the dollar was considerably smaller than the 10 % devaluation of the gold parity of the dollar, and as the effective revaluation of the Japanese yen was seemingly insufficient in the eyes of market participants to make a significant contribution to the reduction of the U.S. balance of payments deficit (a view that was expressed by U.S. circles too), massive speculative foreign exchange movements started again. Within two days the dollar rate of the Deutsche Mark went down to the new lower intervention point of DM 2.8350 per dollar, and on March 1 the Deutsche Bundesbank was compelled to purchase at this rate a total of $ 2.7 billion, equivalent to DM 7.5 billion. This was the largest amount of foreign exchange a central bank has ever had to acquire within a single day to support the exchange rate. As a consequence of the contacts then taken up internationally in the monetary field, the foreign currency exchanges in Germany and most other industrial countries were closed again on March 2, and the Bundesbank was once more released from its commitment to intervene in the exchange market.

... and again at the beginning of March 1973

Solution to the international monetary crisis in the spring of 1973

The new international monetary crisis was settled in a series of meetings of the Council of Ministers of the European Communities and the enlarged Group of Ten. The principal decisions reached to this end — they are discussed in more detail in Section II of this Report (International monetary trends and monetary policy) — were as follows:

- In order to contribute to the orderly development of exchange rate relationships, on March 14 the Federal Government revalued the Deutsche Mark by 3 % with effect from March 19, 1973; the new central rate of the Deutsche Mark was fixed at DM 1 = SDR (special drawing right) 0.294389.

- The central banks of the European Community are no longer obliged to intervene in order to maintain the margins of fluctuation of their currencies vis-à-vis the U.S. dollar. A number of member countries of the European Community retain the margins of 2.25 % for their currencies against each other, while allowing flexible rates to form in relation to the dollar and some other currencies.The United Kingdom, Ireland and Italy, while abiding by their fully floating exchange rates for the time being, intend to join the group of countries maintaining common margins of fluctuation as soon as possible. Countries not belonging to the European Community are free to enter the bloc of jointly floating currencies; so far Sweden and Norway have done so.

- The United States expressed its readiness to support the dollar rate from time to time in consultation with the other industrial countries, such support being financed by recourse to the credit arrangements ("swap agreements") made with the central banks of other industrial countries.

In the Federal Republic of Germany, as in other countries, the foreign currency exchanges reopened on March 19, 1973. For the Deutsche Mark, the exchange rates of that day represented an average ("weighted") upvaluation of 4.5 % by comparison with the market rates of early February; compared with the central rates of December 1971, the Deutsche Mark revaluation amounted to an average of 7 %. More details of the movement of exchange rates may be gathered from the table opposite. The release of the Bundesbank from its obligation to support the dollar and the Deutsche Mark revaluation will help to curb the upward trend of prices in the Federal Republic of Germany and the tendency towards trade surpluses visible since the autumn of 1972.

Exchange rate movements

Currency or country	Revaluation (+) or devaluation (–) of the Deutsche Mark against the currencies mentioned — Official spot middle rates of April 6, 1973 as compared with ... central rates of February 14, 1973 2	... central rates of end-1972 3	... central rates of realignment of December 1971	... par values before realignment 4
Revaluation (+) or devaluation (–) of the Deutsche Mark against major currencies				
U.S. dollar	+ 2.1	+13.5	+13.5	+28.9
Canadian dollar	+ 2.8	+14.1	+15.7	+19.3
French franc (commercial franc)	+ 0.7	+ 0.7	+ 0.7	+ 5.4
Italian lira	+ 4.8	+14.7	+14.7	+21.1
Japanese yen	– 0.3	– 2.4	– 2.4	– 5.2
Netherlands guilder	+ 2.8	+ 2.8	+ 2.8	+ 4.7
Norwegian krone	+ 0.9	+ 0.9	+ 0.9	+ 6.6
Pound sterling	+ 1.1	+ 7.2	+19.0	+24.5
Swedish krona	+ 0.8	+ 6.1	+ 6.1	+12.1
Swiss franc	– 2.7	– 4.3	– 4.3	– 4.5
Weighted revaluation (+) or devaluation (–) of the Deutsche Mark against ... 1				
... the countries participating in the "bloc float"	+ 1.5	+ 1.9	+ 1.9	+ 5.3
... the 16 countries whose currencies are officially quoted in Frankfurt/M.	+ 1.7	+ 5.0	+ 5.6	+10.8
... the entire world	+ 1.7	+ 5.6	+ 6.9	+13.7

1 Weighted with the share in German foreign trade (exports plus imports), classified by countries of origin and destination as an annual average from 1969 to 1971. — 2 Exchange rate structure after the dollar devaluation of 10 %; for countries with floating exchange rates: market rates of February 14, 1973. — 3 Exchange rate structure after taking account of the floating of the pound rate on June 23, 1972. — 4 Exchange rate structure of end-May 1970 (prior to the floating of the exchange rate of the Canadian dollar).

On the following pages the most significant trends in the various sectors of the balance of payments in 1972 are described. Where the annual figures fail to bring out contradictory movements — some of which were very marked — in the course of the year (this applies in particular to security transactions and short-term capital movements), different periods are chosen and analysed.

(a) Current transactions of the Federal Republic of Germany

Surplus on overall current account almost unchanged ...

Germany's current account (transactions in goods and services and transfer payments) showed a surplus of DM 1.3 billion in 1972, or almost the same result as in 1971 (DM 1.1 billion). However, there was a certain change in trend in the course of the year. While over a long period the surpluses dwindled — and at times even gave way to deficits — in the final months of 1972 the current account improved to a more than seasonal extent under the impact of a sharp increase in merchandise exports. But the annual current account figure for 1972, like that for 1971, differs greatly from the very large surpluses of 1968 (DM 10.9 billion) and 1969 (DM 6.0 billion); it shows that in contrast to those years there was no longer a tendency towards a fundamental disequilibrium. This opinion can be sustained even when it is taken into account that for reasons connected with the reporting procedure (a tendency to understate foreign exchange receipts and to overstate foreign exchange expenditure in the current account of the balance of payments) the surplus on current account is shown too low each year — at present by perhaps DM 1 or 2 billion — and that a marked decline in the current surplus would be appropriate in a phase of quickening economic upswing.

... despite divergent trends in the various sectors

In the course of 1972 the divergence between the surpluses on the balance of trade on the one hand and the deficits on services and transfer payments on the other widened. The trade surplus in the definition used here, according to which the freight and insurance charges incurred when importing goods are included not in merchandise transactions (as in the foreign trade statistics of the Federal

Statistical Office) but in services, rose by DM 3.8 billion to DM 26.4 billion.[1] By contrast, the deficit on service transactions and transfer payments combined grew by DM 3.6 billion to DM 25.1 billion, so that the overall surplus on current account ran, as noted, at no more than DM 1.3 billion. Since there is often a close mutual connection between foreign trade and so-called "invisible" current transactions (services and transfer payments) – the exchange of goods at the same time calls for transport services, the current level of exports would be impossible without the help of foreign workers, etc. – and since moreover other sectors of the current account show structural deficits of sometimes substantial dimensions (e.g. foreign travel), any appraisal of Germany's external position based solely on the surpluses in merchandise transactions would lead to entirely erroneous conclusions.

Steeper rise in exports

In 1972 Germany's *exports of goods,* in terms of volume, rose by 9 %. Since exports became 1 % dearer on average, it follows that in value terms they increased by nearly 10 %, to approximately DM 149 billion. German exports thus grew somewhat faster than in 1971 (+ 9 %); expressed as a percentage, their growth about equalled that of the national product, so that the export ratio, at 18 % of the gross national product, remained the same. Exports rose more steeply towards the end of 1972, but the vigorous upswing in Germany, which gathered more and more momentum in the final months of 1972, is likely to dampen interest in sales to foreign countries in the further course of 1973. Nevertheless, the export orders received by industry in January and February 1973 suggest that exports will continue to rise steeply. In those two months exports were in aggregate 21 % up on the previous year; seasonally adjusted, they were 6 % higher than in the preceding two-month period.

Forward exchange cover of export claims by the Bundesbank

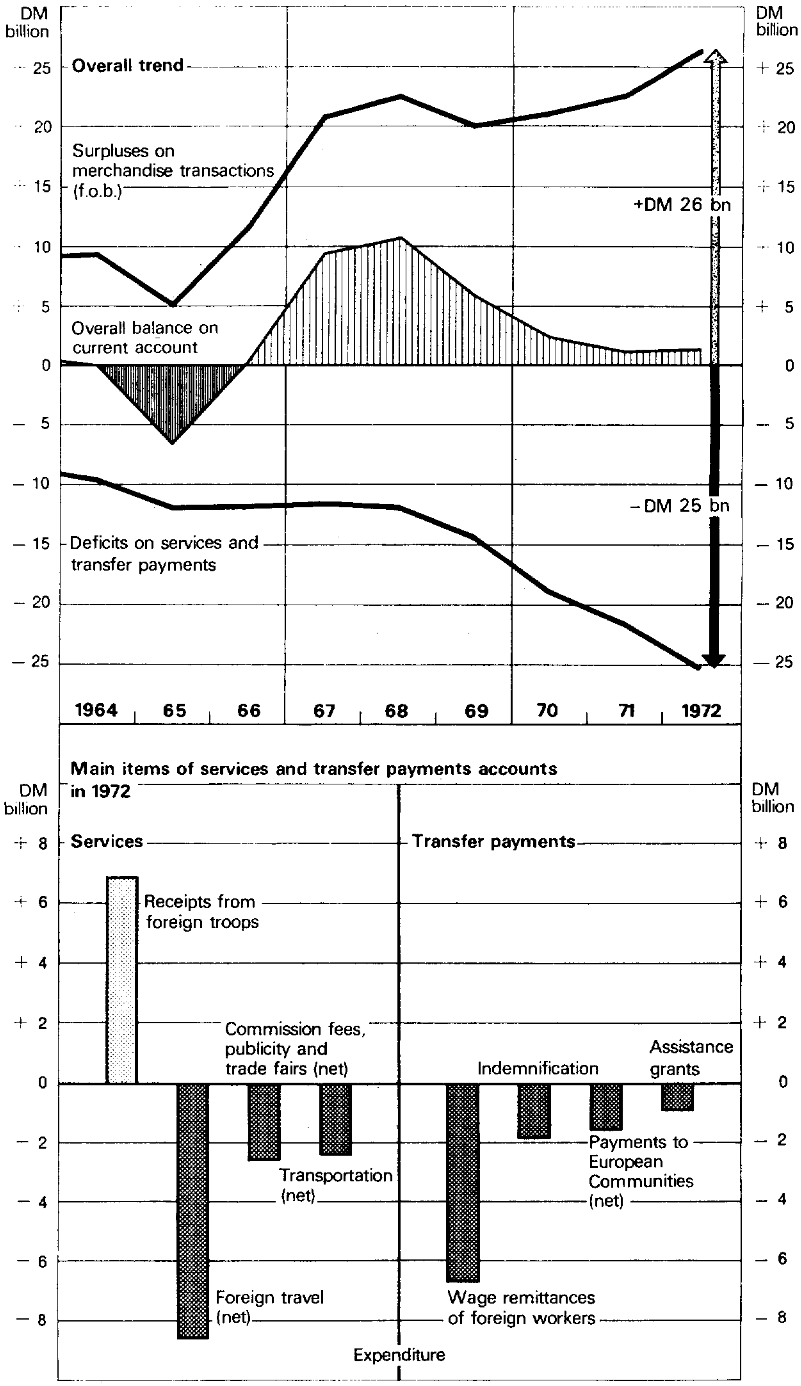
The success of German exporters in 1972 is all the more remarkable not only because cost-induced price increases and the impact of the 1971 revaluation adversely affected sales prospects, but also because the persistent monetary unrest throughout the world heightened the exchange risk in export transactions (at least where invoices not expressed in Deutsche Mark were concerned). To keep these risks down, the Federal Government created early in 1972 facilities enabling the exchange risk on longer-term export claims to be covered from the third year of the life of such claims onwards. The Bundesbank, too, introduced a forward exchange cover scheme for export claims with effect from January 1, 1973, although this scheme was closely linked to the containment of foreign debt. The Bundesbank offered to buy from German exporters domestic enterprises' export claims denominated in U.S. dollars and not otherwise covered, with maturities of between 3 and 24 months, at the rate of DM 3.15 per dollar against payment of a fee of 0.5 % of the transaction value; the offer was subject to the proviso that the exporters undertook neither to raise new foreign credits coming under the cash deposit requirement, nor to renew such credits when they were about to expire. Initially, no use was made of this offer, not least owing to the fact that forward exchange cover through the market was cheaper. But at the beginning of February 1973 contracts amounting to some DM 200 million were entered into. After the devaluation of the dollar and the adoption of a joint float against the dollar by Germany and a number of other European countries, it was not possible to renew this offer because the dollar rate no longer had to be supported by the Bundesbank once it reached a lower limit to which the Bundesbank's offer had been geared.

Growth of imports somewhat slower at times

Germany's *imports* in 1972, in terms of value, rose by 8 % to DM 123 billion (calculated at f.o.b. prices, i.e. without the freight and insurance charges included in the c.i.f. value of imports). The unit value of imports was, however, an average of about 2 % lower in 1972 than in the preceding year; the volume of imports grew by 9.5 %, that is, more quickly than the supply of goods produced at home. Foreign suppliers thus enlarged their share of the German market in 1972. This

1 In accordance with international practice in the compilation of balances of payments, the freight and insurance charges paid on imports have been eliminated from the official import figures and counted towards expenditure on services. This rearrangement of the freight and insurance charges on imports, which statistically results in an increase in the trade surplus on the one hand and a rise in the deficit on services on the other, does not affect the overall results of the current account.

Current account



is to be attributed not least to the price advantage which foreign goods initially had over comparable domestic products due to the Deutsche Mark revaluation of 1971. But from mid-1972 onwards foreign suppliers changed their pricing policy. Between July and December 1972 the purchase prices of imported industrial products rose by 5 %, that is, even more sharply than comparable domestic prices during the same period. Towards the end of 1972 most of the price advantage gained by the Deutsche Mark revaluation was lost. This trend intensified in January and February 1973, so that in some important fields – such as that of industrially produced consumer goods – the prices of imported products rose

Main items of the balance of payments *

Millions of Deutsche Mark

Item	1966	1967	1968	1969	1970	1971	1972 Total	1972 1st half	1972 2nd half
I. Current account									
1. Merchandise transactions									
Exports (f.o.b.) 1	80,557	86,950	99,445	113,528	124,932	135,770	148,836	71,721	77,115
Imports (f.o.b.) 1	68,932	66,303	76,807	93,533	103,627	114,018	123,074	60,517	62,557
Merchanting trade (net)	+ 200	+ 362	+ 65	+ 94	— 83	+ 907	+ 654	— 29	+ 683
Balance of trade	+11,825	+21,009	+22,703	+20,089	+21,222	+22,659	+26,416	+11,175	+15,241
2. Services	— 5,462	— 5,151	— 4,485	— 5,413	— 9,490	—10,674	—11,795	— 5,092	— 6,704
3. Transfer payments	— 6,295	— 6,422	— 7,312	— 8,650	— 9,359	—10,852	—13,297	— 6,617	— 6,680
Balance on current account (1 plus 2 plus 3)	+ 68	+ 9,436	+10,906	+ 6,026	+ 2,373	+ 1,133	+ 1,324	— 534	+ 1,858
II. Capital account (outflow: —)									
1. Long-term capital transactions 2, 3									
Private long-term capital transactions									
Direct investment	+ 2,213	+ 1,769	— 26	— 761	— 968	+ 504	+ 832	+ 827	+ 5
German investment abroad	— 1,228	— 1,042	— 1,589	— 2,118	— 2,504	— 2,685	— 2,847	— 1,146	— 1,701
Foreign investment in Germany	+ 3,441	+ 2,811	+ 1,563	+ 1,357	+ 1,536	+ 3,189	+ 3,679	+ 1,973	+ 1,706
Security portfolio investment	— 1,155	— 2,014	— 5,614	—10,721	— 683	+ 2,540	+12,747	+ 9,573	+ 3,174
Foreign securities	— 819	— 1,395	— 5,627	— 9,513	— 2,021	+ 532	+ 4,037	+ 1,802	+ 2,235
of which									
Foreign Deutsche Mark bonds	— 505	— 123	— 3,696	— 4,266	— 839	+ 1,011	+ 4,191	+ 2,240	+ 1,950
German securities	— 336	— 619	+ 13	— 1,208	+ 1,338	+ 2,008	+ 8,710	+ 7,771	+ 939
of which German bonds	— 128	— 835	— 151	— 953	+ 817	+ 1,615	+ 5,729	+ 6,216	— 487
Loans and advances	+ 1,032	— 1,146	— 4,083	— 9,285	+ 1,772	+ 6,551	+ 1,863	+ 1,467	+ 397
Banks	+ 297	— 887	— 3,299	— 9,104	+ 544	+ 2,722	+ 1,935	+ 688	+ 1,246
Enterprises 4	+ 735	— 259	— 784	— 181	+ 1,228	+ 3,829	— 72	+ 779	— 850
Other transactions	— 321	— 299	— 359	— 476	— 544	— 675	— 958	— 419	— 539
Total	+ 1,769	— 1,690	—10,082	—21,243	— 423	+ 8,921	+14,482	+11,447	+ 3,035
Official long-term capital transactions	— 2,531	— 1,490	— 1,329	— 1,837	— 2,456	— 2,385	— 1,471	— 612	— 859
Balance of long-term capital transactions	— 762	— 3,180	—11,411	—23,080	— 2,879	+ 6,536	+13,012	+10,835	+ 2,176
2. Statistically recorded short-term capital transactions									
Banks	— 574	— 4,823	+ 2,455	+ 4,325	+ 7,927	+ 1,174	— 420	— 4,769	+ 4,349
Enterprises	+ 1,880	— 1,634	+ 536	— 235	+ 6,454	— 1,383	— 5,561	— 3,100	— 2,461
Official 5	+ 337	— 361	+ 1,185	— 29	— 428	+ 1,038	+ 131	+ 1,135	— 1,004
Balance of short-term capital transactions	+ 1,643	— 6,818	+ 4,176	+ 4,061	+13,953	+ 829	— 5,850	— 6,734	+ 884
Overall balance on capital account	+ 881	— 9,998	— 7,235	—19,019	+11,074	+ 7,365	+ 7,162	+ 4,101	+ 3,060
III. Balance of statistically recorded transactions (I plus II)	+ 949	— 562	+ 3,671	—12,993	+13,447	+ 8,498	+ 8,486	+ 3,567	+ 4,918
IV. Balance of statistically unclassifiable transactions (balancing item) 6	+ 1,003	+ 422	+ 3,338	+ 2,731	+ 8,465	+ 7,860	+ 7,204	+ 9,675	— 2,470
V. Overall balance on current and capital accounts (III plus IV)	+ 1,952	— 140	+ 7,009	—10,262	+21,912	+16,358	+15,690	+13,242	+ 2,448
VI. Contra-entry to changes in central monetary reserves due to the allocation of special drawing rights and depreciations as a result of exchange rate policy measures 7	—	—	—	— 4,099	+ 738	— 5,369	— 496	+ 620	— 1,116
VII. Foreign exchange balance (surplus: +) 8	+ 1,952	— 140	+ 7,009	—14,361	+22,650	+10,989	+15,194	+13,862	+ 1,332

* Discrepancies in the totals are due to rounding. — **1** Special trade including supplementary items. — **2** Capital transactions are classified as "Private" or "Official" according to the sector to which the German party concerned belongs. — **3** Classification of long-term capital by "Direct investment", "Security portfolio investment", "Loans and advances" and "Other transactions" partly estimated. For further breakdown see table 9 ff. in the Statistical Supplements to the Monthly Reports of the Deutsche Bundesbank, Series 3, Balance of payments statistics. — **4** Including households. — **5** Chiefly concerning change in the Federal Government's assets resulting from prepayments on government imports and in the Federal Government's liabilities to the European Communities on so-called deposit accounts. — **6** Net errors and omissions on current and capital accounts. — **7** See footnote 8. — **8** The foreign exchange balance (= change in Deutsche Bundesbank's net monetary reserves) also contains the depreciation of the Deutsche Bundesbank's gold and foreign exchange positions expressed in Deutsche Mark due to the 9.3 % DM revaluation of October 27, 1969, the fixing of central rates in December 1971 and the new valuation, mainly of gold and IMF positions, in December 1972 and the raising of monetary reserves by the allocation of special drawing rights (January 1970 to 1972) (see also the table on page 79). As these changes are not attributable to current or capital transactions, a contra-entry has been inserted under VI in order to square the overall balance of payments in mathematical terms.

more steeply than the prices of comparable domestic goods between December 1971 (realignment) and February 1973.

Change in the trend of imports in the course of the year

In the latter part of 1972 the growth of imports, like that of exports, accelerated. While in the third quarter of 1972 imports rose by only 2 %,[1] seasonally adjusted, in the fourth quarter, under the impact of the vigorous upturn in domestic activity, German imports grew at a pace which had not been observed since the upswing phase of mid-1968. Between October and December imports were 8 % larger, seasonally adjusted, than in the preceding quarter, and 12 % up on the previous year. Early in 1973 the growth of imports speeded up even further: in January and February 1973 they were 21 % higher than a year before, and seasonally adjusted they increased in the first two months of 1973 by an average of 4 % over the preceding two-month period.

The rise in demand in the course of 1972 affected the principal categories of imported goods to rather different degrees. Imports of raw materials and semi-finished goods, for instance, which are closely related to domestic production and stock movements, grew comparatively little, and at times even fell in terms of value (not in terms of volume). It was not until the final quarter of 1972 that they picked up appreciably; during that period imports of raw materials and semi-finished goods rose by about 10 %, in both nominal and real terms, over the comparable quarter of 1971. After seasonal adjustment, too, such imports grew by 10 % in October, November and December. Imports of products for further processing, some of which are used in the industrial production process, took a more uniform course. Up to the autumn these imports, which include steel products, chemicals, plastics and paper, went up about 10 %; their growth quickened somewhat towards the end of the year. Imports of finished products, which as a rule are used directly for investment in Germany or for consumption, also expanded at a fairly steady rate in 1972. At the beginning of the year it was above all imports of consumer goods that increased strongly, as a result of the rising consumer demand at home; later on imports of capital goods (such as machinery) went up more steeply. Germany's agricultural imports (about 19 % of total imports) in the second half of 1972 grew in value terms by 12 % or nearly twice as fast as at the beginning of the year, but this is entirely attributable to the steeper price rises; in terms of volume, the increase in agricultural imports slowed down from 13 % (first half of 1972) to not quite 8 % (second half of 1972).

Further growth of the deficit on services

The deficit on *services* grew further in 1972. If the freight and insurance charges for merchandise imports are included, the deficit came to nearly DM 12 billion in 1972, compared with DM 10.7 billion in 1971, DM 9.5 billion in 1970, and as little as DM 5.4 billion in 1969. Germany's position as the world's leading "importer of services" was thus enhanced in 1972. The prime reason for the faster deterioration of the services account was the deficit on foreign travel, which rose by DM 1.6 billion to over DM 8.5 billion. The deficit would have increased even more if the large number of foreign visitors to this country, especially in August and September for the Olympic Games in Munich, had not spent DM 6 billion here, that is, 12 % more than a year earlier; in 1971 Germany's receipts from foreign visitors had risen by 10 %. The expenditure of Germans going abroad on holiday or business trips increased by nearly 20 % to DM 14.5 billion in 1972. Expenditure on foreign travel thus rose almost twice as fast as disposable private income, largely, no doubt, because foreign travel presumably became relatively cheaper after the Deutsche Mark revaluation.

The deficit on the other commercial services, taken as a whole, decreased slightly; it amounted to just on DM 9 billion in 1972, as against DM 9.3 billion in 1971. There were, however, major changes in various subsectors, for instance in transportation, where the deficit dropped to DM 2.4 billion in 1972 compared with DM 2.7 billion in 1971. While freight expenses were up on the year owing to larger merchandise imports, outlays on chartering foreign ships, which are likewise included in the transportation account, declined sharply. This may be due to some degree to a shift in favour of German ships in transportation; no doubt

1 The data on the seasonally adjusted trend of imports are based on c.i.f. import values.

Main balances on services and transfer payments accounts*

Millions of Deutsche Mark

Item	1966	1967	1968	1969	1970	1971	1972
A. Services							
1. Commercial services							
Travel	— 3,403	— 3,034	— 3,106	— 3,888	— 5,377	— 6,952	— 8,570
Investment income	— 1,482	— 1,783	— 808	— 348	— 930	— 173	+ 374
Transportation **1**	— 515	— 517	— 646	— 707	— 2,034	— 2,697	— 2,405
Commission fees, publicity and trade fairs	— 1,808	— 1,951	— 2,020	— 2,291	— 2,523	— 2,635	— 2,604
Other services	— 2,307	— 2,153	— 2,451	— 2,987	— 3,565	— 3,780	— 4,248
Balance	— 9,515	— 9,438	— 9,031	—10,221	—14,429	—16,238	—17,453
2. Other service items							
Receipts from foreign troops	+ 4,774	+ 5,127	+ 5,196	+ 5,546	+ 5,756	+ 6,582	+ 6,882
Receipts and expenditure of German public authorities	— 721	— 840	— 650	— 738	— 817	— 1,020	— 1,226
Balance	+ 4,053	+ 4,287	+ 4,546	+ 4,808	+ 4,939	+ 5,562	+ 5,656
Services, total (1 plus 2)	— 5,462	— 5,151	— 4,485	— 5,413	— 9,490	—10,674	—11,795
B. Transfer payments							
1. Transfers by public authorities							
Indemnification	— 1,663	— 1,674	— 1,770	— 1,515	— 1,598	— 1,620	— 1,853
Subscriptions to the European Communities (net)	— 233	— 484	— 1,148	— 1,460	— 611	— 569	— 1,580
of which: to the EEC Agricultural Fund **2**	— 41	— 197	— 856	— 1,146	— 293	.	.
Other payments	— 975	— 1,157	— 1,223	— 1,426	— 1,518	— 1,760	— 2,174
Balance	— 2,871	— 3,315	— 4,141	— 4,401	— 3,727	— 3,950	— 5,606
2. Private transfers							
Wage remittances by foreign workers **e**	— 2,500	— 2,150	— 2,150	— 3,200	— 4,600	— 5,800	— 6,700
to: Italy	— 1,000	— 850	— 850	— 1,000	— 1,200	— 1,400	— 1,500
Yugoslavia	— 200	— 200	— 250	— 550	— 1,000	— 1,300	— 1,450
Turkey	— 350	— 300	— 350	— 600	— 1,000	— 1,350	— 1,700
Greece	— 400	— 350	— 300	— 400	— 550	— 700	— 750
Spain	— 500	— 350	— 300	— 400	— 500	— 600	— 700
Portugal	— 50	— 50	— 50	— 100	— 150	— 200	— 250
Other countries	— 0	— 50	— 50	— 150	— 200	— 250	— 350
Other payments	— 924	— 957	— 1,021	— 1,049	— 1,032	— 1,102	— 991
Balance	— 3,424	— 3,107	— 3,171	— 4,249	— 5,632	— 6,903	— 7,691
Transfer payments, total (1 plus 2)	— 6,295	— 6,422	— 7,312	— 8,650	— 9,359	—10,852	—13,297

* Discrepancies in the totals are due to rounding. — **1** Including freight and insurance charges paid to foreigners in connection with sea-borne visible imports and, from 1970, also in connection with imports by lorry, contained in the c.i.f. import value. — **2** Owing to the new financial regulations of the European Communities, it is not possible to show payments to the EEC Agricultural Fund separately from 1971. — **e** Estimated.

it also owes something to the fall in the cost of chartering foreign ships, calculated in Deutsche Mark, as a result of the revaluation of the Deutsche Mark vis-à-vis the dollar (in December 1971) and the pound sterling (especially after the floating of the sterling rate in June 1972). The investment income account, which had ended up with deficits in previous years – although these deficits had been tending to decrease – for the first time showed a small surplus in 1972 (DM 0.4 billion). The reason for the improvement in the investment income account was that Germany's receipts from money and capital investment abroad went up by DM 0.6 billion to DM 6.7 billion, mainly owing to higher interest income from Germany's dollar reserves, while corresponding payments to the rest of the world, at DM 6.3 billion, remained virtually static. The fact that such payments failed to rise, although foreign countries, which again sharply increased their holdings of German bonds in the first half of 1972, earned over twice as much interest on them as in 1971, at DM 0.8 billion, is due to the decline in income from business and capital interests; in 1972 such income was mainly paid out for the year 1971, during which the earnings of many domestic enterprises had deteriorated (see also page 63). Moreover, the interest paid on foreign loans was lower on account of redemptions. The other commercial services (among which commission fees, publicity and trade fairs accounted for the largest amounts) showed greater deficits, amounting in all to DM 6.9 billion in 1972, or DM 0.4 billion more than a year earlier.

Receipts from foreign troops

If Germany's deficit on overall commercial services, which grew to DM 17.5 billion in 1972, is not fully reflected in the balance on services account, the reason is that

Germany's receipts from the troops of allied nations (which are also included in the services account), at DM 6.9 billion, were higher than in 1971 (DM 6.6 billion). The receipts rose because U.S. and U.K. military agencies required larger amounts of Deutsche Mark. To even out the associated foreign exchange burden on the balances of payments of the United States and the United Kingdom, compensatory payments were arranged on the basis of foreign exchange offset agreements running for several years; under these agreements a total of DM 2.8 billion was paid out in 1972. (Most of these payments are, however, shown in other sectors of the balance of payments, viz. goods transactions, transfer payments and capital movements.)

Steep rise of the deficit on transfer payments

The deficit on *transfer payments* rose unusually sharply, from DM 10.9 billion in the previous year to DM 13.3 billion in 1972. One major factor in this increase was that, despite a slight relaxation on the German labour market, a much larger number of foreign workers was employed in Germany in 1972 than a year earlier, namely an average of about 2.3 million, or 160,000 more than in 1971. Since at the same time the wages earned continued to grow perceptibly — by 9.5 % per wage earner, taking all the branches of the economy together — the remittances of foreign workers to their home countries rose by an estimated DM 900 million to DM 6.7 billion. The table opposite contains a breakdown by country of that total.[1] The second important cause underlying the higher deficit on transfer payments was the increase in Germany's payments to the European Communities, especially the larger contributions to the cost of the Common Agricultural Market. In 1972 the Community received some DM 1.6 billion, and thus about DM 1 billion more than in 1971,[2] from transfers of Community-owned revenue and from financial contributions by Germany, net of refunds (and other payments received). The other official transfers, chiefly indemnification payments (DM 1.9 billion) and pensions (DM 1.1 billion), were also considerably larger than those of 1971.

(b) Long-term capital transactions

Large volume of long-term capital imports

In 1972 the trend of the balance of payments was decisively influenced by long-term capital transactions. The inflow of long-term funds into Germany in the year under review totalled DM 13 billion, that is, twice as much as in 1971, whereas in 1970 just on DM 3 billion of long-term capital had been exported. By far the greater part of this capital entered Germany in the first half of the year. While at the beginning of 1972 the inflows were mainly attributable to non-residents' interest in acquiring Deutsche Mark assets, in the further course of the year residents' wish to obtain foreign funds by means of long-term capital transactions gained in importance. The Bundesbank at first tried to counteract the money imports by lowering interest rates further. From early March 1972 onwards an additional obstacle was put in the way of German enterprises' borrowing abroad in the shape of the cash deposit requirement for certain types of foreign loans. The more these restrictions took effect, the more capital imports switched to other channels, especially to security transactions. Foreign interest in acquiring Deutsche Mark assets increased when monetary unrest spread again throughout the world on the outbreak of the sterling crisis in June. The Federal Government therefore decided, at the end of June 1972, to make the acquisition of domestic bonds subject to authorisation under section 23 of the Foreign Trade and Payments Act. In the following months the trend in long-term capital transactions reversed: while the inflows had amounted to almost DM 11 billion in the first half of 1972, they only slightly exceeded DM 2.5 billion in the third quarter, and in the fourth quarter there were even outflows of long-term funds totalling nearly DM 0.5 billion.

1 The data on the wage remittances of foreign workers, which are based on estimates, differ somewhat from the figures published in the past, also as far as earlier years are concerned. In general, the figures had to be raised slightly, as a consequence of a survey completed early in 1972 by the Federal Labour Office which enquired into the more recent income situation, saving pattern and home remittances of foreign workers.

2 The burden placed on the transfer payments account by transfers to the European Community would have been even heavier in both 1972 and 1971 if the EEC Agricultural Fund had not participated (to the amount of DM 329 million in 1971 and DM 220 million in 1972) in the financing of the "revaluation adjustment" which the Federal Government granted to German farmers to prevent their incurring actual losses of income in the wake of the Deutsche Mark revaluation of October 1969.

Security transactions with foreign countries *
(excluding permanent interests through the acquisition of shares)

Millions of Deutsche Mark

Item	1969	1970	1971	1972 Total	1972 Jan./July	1972 Aug./Dec.
I. Transactions in German securities 1						
Bonds	— 953	+ 817	+ 1,615	+ 5,729	+ 6,505	— 776
Government and municipal bonds	— 550	+ 90	+ 670	+ 1,826	+ 2,018	— 193
Medium-term notes of domestic banks	} — 403	} + 727	} + 945	+ 1,205	+ 1,614	— 409
Other bonds 2				+ 2,698	+ 2,872	— 176
Shares and investment fund units	— 255	+ 521	+ 392	+ 2,980	+ 1,979	+ 1,002
Total	— 1,208	+ 1,338	+ 2,008	+ 8,710	+ 8,484	+ 226
II. Transactions in foreign securities 3						
Bonds	— 5,365	— 1,042	+ 1,184	+ 4,314	+ 2,895	+ 1,419
Foreign Deutsche Mark bonds	— 4,266	— 839	+ 1,011	+ 4,191	+ 2,849	4)+ 1,341
Foreign currency bonds issued abroad	— 1,099	— 203	+ 173	+ 123	+ 46	+ 78
Shares	— 2,012	— 961	— 917	— 598	— 511	— 87
Investment fund units	— 2,136	— 18	+ 266	+ 321	+ 259	+ 62
Total	— 9,513	— 2,021	+ 532	+ 4,037	+ 2,644	+ 1,393
III. Security transactions, total (I plus II) (net capital imports: +)	—10,721	— 683	+ 2,540	+12,747	+11,128	+ 1,619

* Discrepancies in the totals are due to rounding. — 1 Net sales of German securities to non-residents: +; returns of German securities from foreign countries: —. — 2 Mainly communal bonds, mortgage bonds and other bank bonds. — 3 Net purchases of foreign securities by residents: —; net sales of foreign securities by residents to non-residents: +. — 4 DM 500 million of which consists of the repayment of U.S. Treasury notes denominated in Deutsche Mark which were acquired by German banks in mid-1968 under the U.S. German foreign exchange offset agreement.

Substantial purchases of German fixed interest securities by non-residents . . .

The capital imports were mostly effected through security transactions, especially purchases of German securities by non-residents. In the first half of 1972, when there were no restrictions on such transactions, some DM 7.8 billion flowed into Germany in this manner. During that period DM 6.2 billion of German fixed interest securities alone were bought by foreigners. Some of the securities involved had terms which particularly facilitated the raising of funds abroad. This applied, at all events, to the medium-term notes of domestic banks with only short periods to maturity, by means of which DM 1.6 billion (net) of foreign funds were raised in the first half of 1972; in the first half of 1971, by contrast, only DM 1.5 billion (net) of such securities had been sold both at home and abroad. A breakdown by purchasing country of all transactions in German fixed interest securities shows that Belgium-Luxembourg bought the largest amounts (DM 1.5 billion in the first half of 1972); a very large proportion of these acquisitions appears to have been accounted for by Luxembourg, where a number of German banks now maintain legally independent branches, or have interests in banks domiciled in the country. Further important purchasers were the United Kingdom (DM 1.3 billion), the Netherlands (DM 0.7 billion), Switzerland (DM 0.6 billion) and France (DM 0.6 billion), that is, the countries which are centres of the Euro-money market.

. . . which cease after the introduction of restrictions

Following the introduction of the authorisation requirement, there were, from August onwards, net return flows of German bonds from abroad owing to sales and redemptions; by the end of the year these return flows amounted to DM 0.8 billion. The greater part of them were redemptions of German banks' medium-term notes; redemptions and sales of paper with maturities of four years or less (most of the medium-term notes fall into this category) do not result in so-called "non-resident quotas" [1] enabling securities to be sold to non-residents under general permits.

In 1972 non-residents also bought considerable amounts of German shares and investment fund units. Over the entire year imports of long-term funds through this channel (excluding shares acquired as a permanent trade investment) came to DM 3 billion, compared with DM 0.4 billion in 1971 and DM 0.5 billion in 1970.

1 Such quotas were created, upon application, in the event of German bonds being returned from abroad; within these quotas the Bundesbank granted German banks general permits for the sale of domestic fixed interest securities to non-residents.

Capital inflows in this form expanded sharply after the adoption of more stringent measures to safeguard the economy against external influences; the authorisation requirement for security purchases by non-residents was therefore extended to cover shares as well with effect from February 5, 1973.

Very large sales of German-owned foreign Deutsche Mark bonds to non-residents

Capital imports through the sale of German-owned foreign Deutsche Mark bonds to non-residents were also unusually large in 1972. On an annual basis they amounted to DM 4.2 billion (DM 1 billion in 1971); the banks' holdings of such items declined by DM 1.25 billion. In addition, the total net sales of Deutsche Mark bonds newly issued by foreign borrowers in 1972 (DM 4 billion) on balance went abroad; the volume of foreign Deutsche Mark bonds held by non-residents thus grew by more than DM 8 billion in 1972. At the end of 1972 about DM 21 billion, or nearly four fifths of the total amount of such securities outstanding (DM 26.7 billion), was presumably held by foreigners. As stated before (see page 55), the great interest shown in foreign Deutsche Mark bonds by non-residents was no doubt partly due to the wish to acquire assets denominated in Deutsche Mark which, unlike bonds floated by domestic issuers, were not liable to the 25 % coupon tax. The net sales of such items from German portfolios reached peak levels directly after the restrictions on capital transactions in German fixed interest securities were introduced in mid-1972; this suggests that in the circumstances residents, too, were very eager to procure foreign funds in this way. The Bundesbank appealed at the time to German banks and insurance enterprises to exercise restraint in selling foreign Deutsche Mark bonds from their portfolios to non-residents. In fact, only DM 0.2 billion flowed into Germany from such sales in the final quarter of 1972, compared with DM 3.5 billion in the three preceding quarters. In 1972 security transactions with the rest of the world resulted in net capital imports totalling DM 12.7 billion, nearly DM 10 billion of which accrued in the first half of the year, when no restrictions existed.

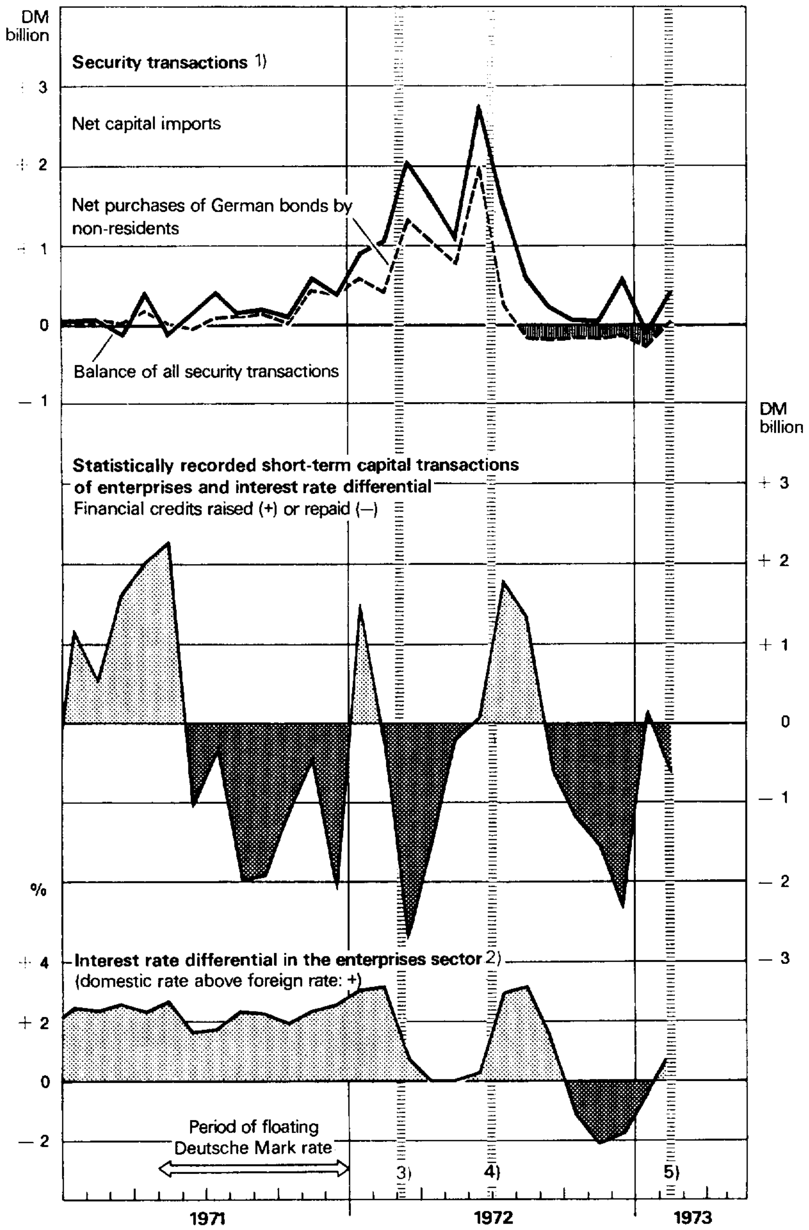
Sharp rise in foreign direct investment in Germany

The capital ties between Germany and the rest of the world through direct investment became even closer in 1972. German direct investment abroad, the growth of which has been quickening since the middle of the sixties, rose by DM 2.9 billion in 1972, as against DM 2.7 billion in 1971 and DM 2.5 billion in 1970. According to the statistics, it did not quite reach the volume of new foreign direct investment in Germany, which amounted to DM 3.7 billion in 1972 compared with DM 3.2 billion in 1971 and as little as DM 1.5 billion in 1970 (it is, however, likely that foreign direct investment in Germany is recorded more accurately in the statistics than German direct investment abroad, so that this difference is not particularly significant). As early as the mid-sixties mainly U.S. firms, but also U.K. enterprises, acquired businesses in Germany, or expanded existing interests, on a relatively large scale; in 1971 a new wave of investment began and continued in 1972, apparently in connection with the enlargement of the European Community. In 1972 the direct investment in Germany again mostly stemmed from U.S. enterprises. U.S. firms raised their direct investment in Germany in that year by DM 1.5 billion (DM 1.3 billion in 1971). Other countries that increased their investment over the previous year were the Netherlands (DM 0.4 billion), Belgium-Luxembourg (DM 0.3 billion) and Japan (DM 0.2 billion), while the direct investment of U.K. firms, at DM 0.3 billion, was well below the 1971 level (DM 0.9 billion). In contrast to 1971, when direct investment mostly took the form of lending to foreign-controlled German enterprises, in 1972 such investment primarily consisted in increases in the capital of subsidiaries and allocations of new capital and reserves to branches. The evident change in the nature of direct investment in Germany was doubtless partly due to the introduction of the cash deposit requirement, which made borrowing subject to such a deposit, whereas acquisitions of or interests in domestic enterprises remained exempt. It was also striking that branches of foreign banks operating or newly established in Germany were allocated DM 500 million of additional capital (DM 100 million in 1971), an inflow that was subject neither to the minimum reserve nor to the cash deposit requirement.

Cash deposit reduces long-term borrowing abroad

Other private long-term capital imports, at not quite DM 1 billion, were considerably smaller in 1972 than in 1971, when they came to almost DM 6 billion. This owes much to the fact that both banks and non-banks on balance raised no more

Security transactions with foreign countries and statistically recorded short-term capital transactions of enterprises



1) Excluding trade investments through the acquisition of shares.- 2) Difference between typical interest rate paid by domestic enterprises when borrowing from German banks and interest rate normally paid by enterprises for Euro-DM credits (from March 1972 including the costs caused by the cash deposit).- 3) Introduction of cash deposit requirement (March 1972).- 4) Introduction of mandatory authorisation for the acquisition of domestic bonds by non-residents from residents (end of June 1972) and tightening of the cash deposit regulations (July 1972).- 5) Extension of mandatory authorisation for the acquisition of German securities by non-residents to cover all domestic securities and introduction of mandatory authorisation for borrowing abroad (February 1973).

long-term credits abroad because of the cash deposit requirement introduced on March 1, 1972, which also covers such bank borrowings as are not subject to the minimum reserve. On the other hand, nearly DM 2.1 billion of loans granted to foreigners in earlier years — especially between 1968 and 1970 — were repaid to residents in 1972.

Persistent official long-term capital exports

Official long-term capital transactions were the only field in which there were net capital exports of any significance in 1972 as a whole. These outflows amounted to DM 1.5 billion, compared, however, with DM 2.4 billion in 1971 (when larger long-term credits were granted under the foreign exchange offset agreement with the United States). DM 0.2 billion of the capital outflows last year consisted of repayments by the Federal Republic of Germany under the London Debt

Agreements; as in previous years, by far the largest share was composed of loans to developing countries (DM 1.4 billion). The Federal Government also paid a second instalment of DM 236 million towards the increase in the capital of the International Development Association. Germany's total development aid payments – by international agreement, such payments include some private capital exports (e.g. direct investment in developing countries) and expenditure on technical assistance as well as official direct loans – amounted to about DM 5.5 billion in 1972, according to preliminary calculations; their share in the gross national product thus came to 0.67 %, and their share in national income to 0.87 %. In 1971 development aid payments amounted to DM 6.7 billion, that is, 0.88 % of the GNP or 1.15 % of national income.

(c) Short-term capital transactions

Outflow of funds in short-term capital transactions . . .

Over the whole of 1972, in contrast to all preceding years since 1967, statistically recorded short-term capital transactions led to an outflow of funds to the rest of the world totalling DM 5.9 billion (net). This was chiefly due to the fact that in 1972 domestic enterprises continued the reduction of their short-term external liabilities – it had begun in the second half of 1971 – at a faster pace, mostly on account of the cash deposit requirement. The repayments were not, however, spread evenly over the year. After the introduction of the cash deposit requirement early in March 1972, relatively large amounts of financial credits were repaid because the initial cash deposit ratio of 40 % (this percentage of eligible liabilities had to be lodged in a non-interest-bearing deposit with the Bundesbank by enterprises – and also banks – taking up certain types of credit abroad) sufficed to raise the actual cost of borrowing abroad above comparable domestic interest rates. Towards mid-year the repayments came to a halt and gave way to new borrowing when Euro-DM interest rates dropped to an unusually low level. One of the main causes was that the potential of foreign-held Deutsche Mark seeking profitable investment increased sharply when sterling and dollars were converted into Deutsche Mark during the monetary unrest in June and July, and that the measures taken at the end of June to safeguard the economy against external influences – principally the authorisation requirement for the acquisition of German bonds – stood in the way of the investment of such funds in Germany. Since foreign owners of Deutsche Mark were unwilling to part with these assets, a strong supply pressure developed on the Euro-DM market. The interest rate differential between Germany and the Euro-market grew to such an extent that despite the raising with effect from July 1, 1972 of the cash deposit ratio to 50 % – the maximum level permissible at the time – it once again became attractive for enterprises to borrow abroad for interest rate reasons. In July and August 1972 German enterprises took up external short-term financial credits totalling DM 2.7 billion. From September onwards the interest rate situation on the Euro-DM market returned to normal, so that the cash deposit requirement again had an effect. No significant change was brought about by the gradual raising of the discount rate by the Bundesbank from 3 % (early in October) to 4.5 % (early in December). In the last four months of 1972 domestic enterprises, according to their statistical returns, reduced their external liabilities arising from short-term financial credits by DM 5.4 billion; no doubt the lowering of the amount exempt from the cash deposit from DM 500,000 to DM 50,000 with effect from January 1973 also played a part towards the end of the year. By the end of 1972 enterprises' statistically recorded short-term external liabilities had dropped to just under DM 8 billion; their highest level ever was nearly DM 21 billion in mid-1971.

. . . especially owing to repayments of credits by domestic enterprises

Minimum reserves prevent net capital imports by banks

German banks (including the German branches of foreign banks) on balance imported no funds in 1972; in fact, with fluctuations – some of them pronounced – they exported DM 0.4 billion (net) of short-term money, whereas in preceding years they had regularly imported more or less substantial amounts. The fact that banks' short-term capital transactions did not produce inflows appears to be mainly attributable to the Bundesbank's minimum reserve regulations for external liabilities. The minimum reserve requirements were twice tightened up in 1972: first at the beginning of March, when the additional reserve ratio on the growth of external liabilities was raised from 30 % to 40 % and the base period changed, and again at the beginning of July, when the growth reserve was raised to 60 %.

Liabilities arising from short-term financial credits raised abroad by domestic enterprises

Millions of Deutsche Mark

Country/currency	Changes (increase: +)					Levels	
		1971					
	1970	Total	January to May	June to December	1972	End of June 1971 1	End of December 1972
Total	+ 7,041	— 1,956	+ 7,065	— 9,021	— 6,043	20,889	7,682
(a) By country of residence of foreign lender							
Belgium-Luxembourg	+ 1,592	— 446	+ 1,825	— 2,271	— 384	3,824	1,964
Netherlands	+ 1,025	— 5	+ 615	— 620	— 747	1,621	824
Switzerland	+ 1,753	— 171	+ 1,505	— 1,676	— 1,485	4,755	1,714
United Kingdom	+ 967	— 705	+ 1,654	— 2,359	— 1,253	4,563	1,091
United States of America	+ 713	— 382	+ 1,095	— 1,477	— 836	3,338	947
Other countries	+ 991	— 247	+ 371	— 618	— 1,338	2,788	1,142
(b) By principal currencies							
Deutsche Mark	+ 4,851	— 1,447	+ 5,537	— 6,984	— 3,748	14,286	5,343
U.S. dollar	+ 1,294	— 806	+ 1,273	— 2,079	— 1,215	4,216	1,180
Other currencies	+ 896	+ 297	+ 255	+ 42	— 1,080	2,387	1,159

1 Highest level so far recorded; including enterprises newly required to report from June 1971 onwards.

From then onwards minimum reserves of between 90 and 100 % had to be maintained on additional external liabilities, inclusive of the reserve on the total of such liabilities (which was also increased). This is the prime reason why in 1972 the growth of the banks' gross foreign liabilities, at DM 1.2 billion, was smaller than that of foreign assets, which rose by DM 1.6 billion.

There are, however, two significant exceptions to the principle of fixing minimum reserves on the basis of the entire liabilities side of the external position: the treatment accorded to interest arbitrage transactions and the arrangements for branches of foreign banks in Germany.[1] In the case of interest arbitrage transactions, "foreign currency liabilities towards non-residents, the equivalent of which has demonstrably been passed on to non-residents abroad to substantiate foreign currency claims, but not in conjunction with a Bundesbank swap transaction",[2] are exempt from the reserve requirement. In 1972 the volume of such transactions rose by DM 0.8 billion to DM 6.1 billion at the end of the year; this accounts for a substantial part of the increase in total gross assets and liabilities. Altogether, the minimum reserve requirement on the banks' external liabilities proved to be a rather effective instrument for curbing the growth of foreign liabilities. It is true that at times of great disturbance on the exchange markets it failed to prevent the inflow of funds to the banks, especially the inflows initiated by non-residents; however, the highly restrictive nature of this instrument, and especially the heavy burden it placed on the growth of external liabilities, did work in the direction of promoting a return flow of funds, the more so since restrictions were imposed on other forms of investment in Germany at the same time. The minimum reserve on external liabilities also inhibited a greater contribution by German banks to the expansion of the Euro-money market; but this instrument could only have a lasting impact on the continuous growth of this secondary market in international liquidity if similar steps were taken by other major countries.

Balancing item of the balance of payments

In 1972 the "balancing item of the balance of payments" showed a somewhat smaller surplus, at DM 7.2 billion, than in 1971 (DM 7.9 billion). These unclassifiable net foreign exchange receipts, most of which flowed in during the first half of the year, may be assumed to consist mainly of the use of deferred payment terms in import transactions, the receipt of advance payments for future exports, and the speedier settlement of existing export claims. It is probable that there was also quite a substantial volume of unidentified current transactions, which, if they were known, would have to be included in the current account. This would have raised the surplus on current account for 1972, as also for earlier years, above the figure shown in the relevant tables (see also page 67).

1 For details see "The short-term external position of German banks" in Monthly Report of the Deutsche Bundesbank, Volume 24, No. 10, October 1972, page 24.

2 See the Deutsche Bundesbank's Order on Minimum Reserves, Article 2 (4) j.

Monetary reserves of the Deutsche Bundesbank
(including reserve position in IMF and special drawing rights)

Millions of Deutsche Mark

Item	Change 1968	1969	1970	1971	1972	1st qtr. 1973	Total at March 31, 1973
Gold	+ 1,246	— 1,662	— 365	+ 353	+ 106	+ 26	13,997
U.S. dollar investments	+ 50	— 4,980	+26,337	+15,222	+14,571	+23,868	68,827
Other foreign exchange balances	+ 1,530	+ 1,518	— 3,445	+ 82	+ 36	— 32	227
Other financial investments abroad	+ 2,500	— 700	— 2,000	— 200	— 7	— 8	1,836
short-term	— 200	— 1,200	—	—	—	—	—
medium-term 1	+ 2,700	+ 500	— 2,000	— 200	— 7	— 8	1,836
Reserve position in IMF and special drawing rights	+ 1,854	— 4,455	+ 3,198	+ 1,281	+ 1,504	— 151	6,561
Drawing rights within the gold tranche	+ 442	— 2,560	+ 2,255	+ 560	+ 200	— 151	3,748
GAB credits	+ 1,412	— 1,895	—	—	—	—	—
Special drawing rights 2	—	—	+ 943	+ 721	+ 1,304	—	2,813
World Bank obligations	+ 196	— 65	+ 379	+ 272	+ 281	+ 2	2,461
Other external assets	— 88	— 88	— 64	+ 35	— 101	— 22	0
External liabilities (Increase: —)	— 279	+ 170	— 1,390	— 60	— 80	— 3,808	6,762
of which:							
Balances on foreigners' accounts	+ 267	+ 143	— 1	— 599	+ 48	— 3,471	4,369
(a) Total reserves (net) = Changes due to external current and capital transactions (plus allocation of special drawing rights)	+ 7,009	—10,262	+22,650	+16,985	+16,310	+19,875	87,147
(b) Depreciation of monetary reserves due to measures of exchange rate policy	—	3 —4,099	—	4 —5,996	5 —1,116	6 —7,217	—
(c) Net changes in monetary reserves as shown in the balance of payments under "Foreign exchange balance"	+ 7,009	—14,361	+22,650	+10,989	+15,194	+12,658	—

1 Investments resulting from payments made by the Deutsche Bundesbank under the foreign exchange offset agreements with the United States and the United Kingdom. — 2 DM 738 million of which was allocated on January 1, 1970, DM 627 million on January 1, 1971 and DM 620 million on January 1, 1972. — 3 To be attributed to the 9.3 % Deutsche Mark revaluation of October 27, 1969. — 4 Arising from fixing of central rates on December 21, 1971 (so-called Smithsonian Agreement). — 5 Caused by new valuation of gold holdings, drawing rights within the gold tranche and special drawing rights, which had not been effected in December 1971 owing to the fixing of central rates. — 6 Resulting from the devaluation of the dollar by 10% on February 12, 1973.

(d) Monetary reserves

Growth of monetary reserves concentrated in a few months

In 1972 the Bundesbank's monetary reserves grew by DM 15.7 billion as a result of current and capital transactions with the rest of the world (including the "balancing item"), and by DM 0.6 billion through the allocation of special drawing rights. Most of the rise in reserves occurred in the earlier part of the year, when the unrest on foreign exchange markets after the realignment of December 1971 was slow to subside, and during the summer, when the Bundesbank had to take in substantial amounts on the spot exchange market to support the rates of the pound and the dollar. Between mid-July 1972 and the end of the year the Bundesbank did not have to intervene on the exchange market; indeed, during that period it reduced its reserves by just over DM 4 billion.

The new valuation of gold holdings, drawing rights within the IMF gold tranche and special drawing rights, which had initially been postponed in view of the fixing of central rates in December 1971, was effected retroactively at the end of the year.[1] As a result of this new valuation the Bundesbank's reserves depreciated by DM 1.1 billion. After this "value adjustment", central monetary reserves amounted to DM 74.4 billion (net) at the end of 1972.

In the first quarter of 1973 the monetary reserves grew by a further DM 20 billion (net), principally owing to the speculative inflows of foreign exchange in February and early March. During that time the gross monetary reserves rose by as much as DM 23.7 billion, but this growth was accompanied by an increase of DM 3.8 bil-

1 See also page 83 of the present Report.

lion in the Bundesbank's external liabilities, caused mainly by the transfer of German banks' foreign Deutsche Mark balances to the Bundesbank. On account of the dollar devaluation of February 12, the Bundesbank's reserves again depreciated by DM 7.2 billion. At the end of March the central monetary reserves came to DM 93.9 billion (gross); they included about DM 69 billion of U.S. dollars, of which almost half was invested in medium-term claims on the U.S. Treasury. The other reserves were mainly composed of gold (DM 14.0 billion), drawing rights within the gold tranche (DM 3.7 billion), and special drawing rights (DM 2.8 billion). The external liabilities of the Bundesbank amounted to DM 6.8 billion at the end of March 1973; the net holdings of central monetary reserves as at that date were thus DM 87.1 billion. (For further details of the changes in and composition of the reserves, please refer to the table on page 79.)

Part B: Notes on the Deutsche Bundesbank's annual accounts for 1972

1. Legal bases, classification and valuation

Legal bases, accounting system and annual accounts

The provisions regarding the Bank's accounting system and the annual accounts (section 26 of the Deutsche Bundesbank Act of July 26, 1957 – Bundesbank Act – Federal Law Gazette I, page 745) remained the same as in the previous year.

Classification of annual accounts

The classification of the annual balance sheet and the designation of the balance sheet items largely correspond to the classification scheme used for the weekly return. As last year, the individual asset items are not grouped in the same way as in the return in view of the different purposes served by the balance sheet.

The item "Claim on Federal Government in respect of acquisition of claims resulting from post-war economic aid" was deleted following redemption of the claim during the year under review. The sub-item of the item "Securities"

> "of which Treasury bonds (medium-term notes) of Federal Government, Federal and Länder special funds with remaining life of up to 18 months . . .",

was likewise deleted, since no more medium-term notes are held by the Bank.

On the liabilities side of the balance sheet, the item "Balances on cash deposit special accounts" was inserted.

Valuation

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

After the fixing of central rates (decision of the Federal Cabinet of December 21, 1971) the Bank's assets and liabilities in foreign currencies were valued anew last year. The new valuation of gold, drawing rights within the gold tranche and special drawing rights was carried out on December 31, 1972, after the United States had notified the International Monetary Fund of the modified gold parity of the U.S. dollar on May 8, 1972, in accordance with the Washington agreements of December 17/18, 1971.

New valuation of foreign exchange position in February 1973 due to devaluation of the U.S. dollar

On February 12, 1973 the government of the United States informed the International Monetary Fund that, with immediate effect, 0.828948 special drawing right (SDR) would be equal to US$ 1 (previous rate: SDR 0.921053 = US$ 1). This measure constitutes a 10% reduction in the par value of the U.S. dollar. Consequently, the U.S. dollar position contained in the balance sheet as at December 31, 1972 has depreciated by DM 5.3 billion; further losses totalling DM 1.9 billion were suffered in connection with the U.S. dollars taken in during the first half of February. These currency losses amounting to DM 7.2 billion, which occurred after the balance sheet date, are referred to in an additional note to the annual accounts for 1972. In the Bank's returns, the currency loss has been shown as a separate item since February 15, 1973.

The 3 % revaluation of the Deutsche Mark, effective as from March 19, 1973, may necessitate a further new valuation. Since there are at present no intervention points for the U.S. dollar owing to the floating of the dollar rate of the Deutsche Mark, the extent of a possible new valuation cannot at present be anticipated.

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 corrections of the partial conversion accounts for the Bank deutscher Länder and the Land Central Banks, which now give the position shown by the books at December 31, 1972, the Bank's title to allocation of equalisation claims rose by DM 20,236.42 to DM 8,103,662,602.15; 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.

3. Annual accounts

The notes on the annual accounts for 1972, which are attached to this Report as an Appendix, will as usual follow the order of 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 1972.

Balance sheet

At December 31, 1972 total assets had increased by DM 14,475.2 million, compared with end-1971, to DM 112,614.6 million.

Comparison of balance sheet figures

Millions of Deutsche Mark

	December 31			December 31	
Assets	1971	1972	Liabilities	1971	1972
Gold	14,688.3	13,970.9	Bank notes in circulation	39,493.8	44,503.5
Balances with foreign banks and money market investment abroad	37,637.6	52,221.0	Deposits of banks	32,609.2	46,388.3
Other investment abroad	2,000.0	1,993.0	Deposits of public authorities		
Reserve position in the International Monetary Fund and special drawing rights			Federal Government	69.3	96.5
Drawing rights within gold tranche position	3,917.5	3,899.6	Equalisation of Burdens Fund and ERP Special Fund	286.4	197.3
Loans under General Arrangements to Borrow	—	—	Länder Governments	510.0	2,543.2
Special drawing rights	1,663.3	2,812.6	Other public depositors	66.5	58.3
Loans and other claims on the rest of the world			Special deposits Anticyclical reserves	4,131.2	3,936.5
Loans to World Bank	2,183.8	2,465.2	Anticyclical surcharge on income taxes	5,879.3	251.4
Other claims	124.7	21.7	Deposits of other German depositors		
Foreign notes and coins	4.0	3.6	Federal Railways	5.6	5.0
Foreign bills of exchange	1,612.2	1,185.2	Federal Post Office	1,735.2	2,703.3
Domestic bills of exchange	15,802.0	17,847.0	Other depositors	486.7	505.4
Lombard loans	1,396.3	1,145.9	Balances on cash deposit special accounts	—	1,336.0
Cash advances (book credits)	2,348.7	439.5	Liabilities for mobilisation and liquidity paper sold	6,477.0	4,464.8
Treasury bills and discountable Treasury bonds 1	76.6	317.6	Liabilities in respect of foreign business	966.5	915.8
Equalisation claims on Federal Government and non-interest-bearing debt certificate in respect of Berlin			Contra-entry to special drawing rights allocated	1,364.4	1,855.0
Equalisation claims	8,135.7	8,135.8	Provisions	2,402.5	1,296.0
Non-interest-bearing debt certificate	547.2	547.2	Other liabilities	29.5	52.2
Claim on Federal Government in respect of acquisition of claims resulting from post-war economic aid	41.3	—	Deferred expenses and accrued income	256.4	286.9
Securities	587.8	52.8	Capital	290.0	290.0
German coins	251.0	344.3	Reserves	1,079.9	929.2
Balances on postal giro account	366.9	525.4			
Other claims	650.0	641.3			
Land and buildings	363.9	479.0			
Equipment	14.2	24.8			
Items in course of settlement	214.5	2,777.2			
Other assets	392.1	743.9			
Prepaid expenses and deferred income	18.7	20.1			
Compensatory amount required for new valuation of assets and liabilities in foreign currencies – balance sheet loss –	3,101.1	—			
Total	98,139.4	112,614.6	Total	98,139.4	112,614.6

1 Including Treasury bills and discountable Treasury bonds shown in asset item "Loans to Federal Railways and Federal Post Office".

Gold

The gold holding, at DM 13,970.9 million at December 31, 1972, is shown DM 717.4 million smaller than at December 31, 1971. This is mainly due to the new valuation on account of the modification of the gold parity of the U.S. dollar in the year under review.

Balances with foreign banks and money market investment abroad

Balances with foreign banks and money market investment abroad amounted to DM 52,221.0 million at December 31, 1972 (DM 37,637.6 million at end-1971).

Foreign exchange deals

The Bank's turnover in foreign exchange spot deals (foreign currency against Deutsche Mark) amounted to DM 29,618.7 million in the year under review, against DM 47,612.0 million in 1971; the number of deals decreased from 5,566 in the previous year to 5,111. Such deals comprised

	1971		1972	
	Number	DM million	Number	DM million
Purchases	2,168	25,639.6	1,788	21,306.2
Sales	3,398	21,972.4	3,323	8,312.5
	5,566	47,612.0	5,111	29,618.7.

The bulk of the turnover was once again in U.S. dollars.

In addition, during the year under review the Bank effected 355 cross deals (one foreign currency against another foreign currency) totalling the equivalent of DM 1,853.9 million, as against 255 deals totalling the equivalent of DM 1,565.9 million in the previous year. Furthermore, during the year 597 U.S. dollar inter-centre switch transactions amounting to US$ 75.1 million were concluded, as against 627 transactions amounting to US$ 83.0 million in the previous year.

The commitments existing at December 31, 1971 in respect of U.S. dollar forward transactions (outright) with German banks, to the total of US$ 202.4 million, were settled in the year under review.

Sale of foreign cheques

During 1972 3,439 (1971: 2,945) foreign cheques made out to order worth DM 175.6 million (1971: DM 150.5 million) were sold.

In the same period the Bank sold 14,575 traveller's cheques worth DM 1.7 million, compared with 16,835 worth DM 2.4 million in the year before.

Other investment abroad

This item now contains claims denominated in foreign currencies besides those expressed in Deutsche Mark. At December 31, 1972 the aggregate claim amounted to DM 1,993 million, against DM 2,000 million a year before.

Reserve position in the International Monetary Fund and special drawing rights

Drawing rights within gold tranche

At December 31, 1972 the drawing rights within the gold tranche amounted to DM 3,899.6 million. The new valuation due to the modification of the gold parity of the U.S. dollar during the year under review resulted in a compensatory amount of DM 217.5 million being required. Otherwise, the change on the preceding year is attributable to other members' Deutsche Mark drawings and other transactions of similar effect totalling DM 1,423.1 million, against which there were Deutsche Mark repayments totalling DM 1,223.5 million. The holding of drawing rights within the gold tranche is the difference between the German quota of SDR 1,600 million (SDR 1 = 0.888671 grammes of fine gold) and the Deutsche Mark balances at the disposal of the IMF equivalent to SDR 459.8 million.

Credits granted under General Arrangements to Borrow

In 1972 no credit was granted to the International Monetary Fund under the General Arrangements to Borrow (GAB) of October 24, 1962.

Special drawing rights

Holdings of special drawing rights (SDRs) at December 31, 1972 amounted to DM 2,812.6 million. The new valuation resulted in a compensation requirement of DM 19.6 million for the SDRs acquired by the Bank against payment. The contra-entry on the liabilities side was reduced by DM 89.5 million, the amount by which the allocated SDRs depreciated. The increase on the year was due to the third allocation of SDRs on January 1, 1972 (DM 580 million) and to the acquisition of SDRs by the Bank during the year under review (DM 678.4 million). The contra-entry was raised by the amount of SDRs allocated to DM 1,855.0 million.

Loans and other claims on the rest of the world
Loans to World Bank

At DM 2,465.2 million, loans to the World Bank are shown DM 281.4 million higher than at the end of 1971. The principal reason for the increase was that new loans were extended to the World Bank to replace IBRD obligations in the Bundesbank's portfolio which fell due in the year under review.

Other claims

This sub-item contains the claim of the Federal Government arising from participation in the European Fund, amounting to DM 21.7 million, which was transferred to the Bank in 1970. Because of the new valuation due to the modification of the gold parity of the U.S. dollar it is shown DM 1.5 million smaller than a year before. After the liquidation of the European Fund the holding was repaid in gold on January 10, 1973.

Foreign notes and coins
Purchase and sale

At DM 3.6 million the holding of foreign notes and coins at the end of 1972 was DM 0.4 million smaller than at December 31, 1971. During the year under review the Bank effected 43,574 purchases of foreign notes and coins (1971: 45,205) and 21,163 sales of foreign notes and coins (1971: 22,612).

Foreign bills of exchange
Purchase

At the close of 1972 the holding of foreign bills arising from purchase within Germany was DM 1,185.2 million, as compared with DM 1,612.2 million at December 31, 1971.

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

Land Central Bank	1971		1972	
	Number	DM mn	Number	DM mn
Baden-Württemberg	21,961	1,003.8	24,047	842.1
Bavaria	14,388	1,590.2	14,788	1,060.7
Berlin	709	327.9	544	175.2
Bremen	2,021	252.4	1,748	167.6
Hamburg	6,658	1,959.8	5,505	1,225.5
Hesse	13,848	2,414.1	11,750	1,209.0
Lower Saxony	3,623	346.9	3,480	233.6
North Rhine-Westphalia	23,841	2,172.6	21,013	1,403.1
Rhineland-Palatinate	5,484	305.5	6,296	369.4
Saarland	2,815	570.6	2,623	476.8
Schleswig-Holstein	984	89.7	721	45.5
Total	96,332	11,033.5	92,515	7,208.5

The share of Deutsche Mark bills in the total value of foreign bills purchased averaged about 66% in 1972, against about 74% in 1971.

Foreign commission business

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

	1971 Number	1972 Number
Bills, cheques, etc.	9,788	9,344
Foreign notes and coins	5,215	5,559
	15,003	14,903.

Domestic bills of exchange

In 1972 banks made even greater use of their rediscount facilities with the Bundesbank than in 1971. Taking the average of all return dates, the volume of domestic bills rediscounted in 1972 came to DM 16,737 million, against DM 15,993 million a year earlier. At the end of 1972 the Bank held domestic bills worth DM 17,847.0 million, compared with DM 15,802.0 million at end-1971. Purchases of domestic bills fluctuated during the year owing to the changes in liquidity described in detail in Part A of this Report.

Recourse to the facility granted to the Export Credit Company for rediscounting bills within Limit B again grew in comparison with the previous year.

The domestic bill holding comprised	Dec. 31, 1971 DM million	Dec. 31, 1972 DM million
Domestic bills purchased by way of discount	14,943.0	16,293.3
Import and Storage Agency bills	—	324.6
Prime bankers' acceptances taken in the course of open market operations	859.0	1,229.1
	15,802.0	17,847.0.

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

	1971		1972	
Land Central Bank	'000	DM mn	'000	DM mn
Baden-Württemberg	474	11,881.4	463	12,459.1
Bavaria	324	11,587.2	312	12,530.6
Berlin	25	2,515.2	22	2,736.1
Bremen	49	1,739.9	49	1,954.0
Hamburg	103	6,776.6	115	8,072.0
Hesse	317	23,789.6	283	25,280.9
Lower Saxony	176	6,388.5	149	5,789.1
North Rhine-Westphalia	605	24,407.7	549	25,645.3
Rhineland-Palatinate	90	2,729.5	80	2,760.3
Saarland	23	1,399.1	20	1,408.4
Schleswig-Holstein	65	1,943.9	57	1,858.7
Total	2,251	95,158.6	2,099	100,494.5

At DM 47,877 the average amount of the bills purchased in 1972 was above that of the previous year (DM 42,277).

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

	1971		1972	
	Number	DM million	Number	DM million
	6,684	32.7	6,006	33.6
as % of the total purchased	0.30	0.03	0.29	0.03.

Domestic commission business

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

	Number	DM million
1971	64,940	694.2
1972	64,535	746.9.

Discount rate

The Bundesbank's discount rate for domestic and foreign bills in the year under review stood at 4% until February 24, at 3% from February 25, at 3½% from October 9, at 4% from November 3 and 4½% from December 1. With effect from January 12, 1973 the discount rate was raised to 5%.

Storage Agency bills

During the year under review the Bank's open market operations in Storage Agency bills rose to several times the 1971 figure. Purchases to the nominal value of DM 1,654.8 million (1971: DM 400.0 million) were accompanied by resales to the market to the nominal value of DM 1,302.3 million (1971: DM 397.3 million). DM 27.9 million (1971: DM 2.7 million) was kept in the Bank's portfolio until redemption; at December 31, 1972 the Bank's portfolio holdings came to DM 324.6 million (end-1971: no holdings).

Prime bankers' acceptances

In 1972, in connection with the growing exhaustion of all sources of central bank money, there was again more recourse to the Bank through open market operations in prime bankers' acceptances. Within the limits effective for some time past the Bank purchased a total of DM 5,417.7 million of prime bankers' acceptances from the Privatdiskont-Aktiengesellschaft (1971: DM 4,630.5 million), DM 1,376.8 million of which (1971: DM 1,641.4 million) were resold to the market via the broker and DM 3,670.8 million (1971: DM 2,991.6 million) presented for payment on maturity. At December 31, 1972 DM 1,229.1 million (end-1971: DM 859.0 million) of prime bankers' acceptances originating from open market operations were held by the Bank.

Lombard loans

Taking the average of all the return dates, the total of lombard loans extended by the Bank, at DM 959 million, was below the 1971 figure of DM 1,436 million. In 1972 such loans were again subject to heavy fluctuations. The largest amounts were granted in August, September, October and December.

Lombard loans in the Land Central Bank areas

Land Central Bank	Lombard loans granted 1971	Lombard loans granted 1972	Outstanding on Dec. 31, 1971	Outstanding on Dec. 31, 1972
Baden-Württemberg	8,661.8	9,024.4	212.6	239.3
Bavaria	5,226.3	7,127.7	111.2	61.1
Berlin	1,489.3	1,467.2	30.8	13.0
Bremen	1,748.1	1,331.6	4.5	1.3
Hamburg	6,583.6	7,211.3	18.0	12.0
Hesse	74,107.8	51,848.8	368.0	332.5
Lower Saxony	5,198.7	4,017.0	207.4	86.8
North Rhine-Westphalia	24,098.0	22,567.3	303.1	293.7
Rhineland-Palatinate	3,188.6	2,512.4	108.4	73.0
Saarland	665.4	727.6	15.1	22.6
Schleswig-Holstein	1,930.2	1,873.3	17.2	10.6
Total	132,897.8	109,708.6	1,396.3	1,145.9

Lombard rate

Until February 24, 1972 the lombard rate was 5%; from February 25 it stood at 4%, from October 9 at 5%, from November 3 at 6% and from December 1 at $6^1/_2$%. With effect from January 12, 1973 it was raised to 7%.

Cash advances (book credits)
Federal Government
Equalisation of Burdens Fund
Länder Governments

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

	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 own portfolio or which it has promised to purchase are to be counted towards the credit ceilings, in addition to the book credits.

Cash advances (book credit)

Millions of Deutsche Mark

Borrower	December 31, 1971	December 31, 1972
Federal Government	1,716.8	320.3
Equalisation of Burdens Fund	24.8	47.9
Länder Governments		
Berlin	142.7	54.2
Hamburg	120.1	—
Hesse	172.5	—
Rhineland-Palatinate	123.3	17.1
Schleswig-Holstein	48.5	—
Total	2,348.7	439.5

Book credits to the Federal Railways and Federal Post Office, which in future will be shown, together with claims resulting from the purchase of Treasury bills and discountable Treasury bonds, in the new asset item "Loans to Federal Railways and Federal Post Office" rather than in this item, were not outstanding at December 31, 1972.

Interest rate

Throughout the year the rate of interest on book credits was equal to the Bundesbank's discount rate.

Treasury bills and discountable Treasury bonds
Federal Government
Länder Governments

The Bank again carried out regulating operations on the market for Treasury bills and discountable Treasury bonds for the account of the Federal Government and its special funds. In addition, the Bank increasingly conducted open market operations in mobilisation and liquidity paper (pursuant to sections 42 and 42 (a), Bundesbank Act), as discussed separately below. Federal discountable Treasury bonds serving the financing of the budget (marked "B" to distinguish them from mobilisation paper) were redeemed in greater numbers than they were issued, so that the amount outstanding declined from DM 1.7 billion at end-1971 to DM 1.4 billion at end-1972. Conversely, new issues of discountable Treasury bonds of the Federal Post Office were slightly in excess of the amounts redeemed, so that the total outstanding rose from DM 174.1 million at end-1971 to DM 237.6 million at end-1972. The German Federal Railways hardly issued any Treasury bills (DM 100 million against DM 605 million in 1971), as they were able to meet more of their short-term requirements of cash advances within the statutory credit ceiling (section 20, Bundesbank Act) by taking book credits from the Bundesbank.

As will be seen in the following table, at December 31, 1972 the outstanding total of money market paper issued for the account of the Federal Government and its special funds was DM 2,137.6 million (1971: DM 2,274.1 million). Of that amount, DM 317.6 million of Treasury bills and discountable Treasury bonds of the German Federal Railways and the German Federal Post Office was held in the Bundesbank's portfolio (end-1971: DM 76.6 million); this item is shown on the assets side under "Loans to Federal Railways and Federal Post Office").

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

Millions of Deutsche Mark

Category of paper	Outstanding on Dec. 31, 1971	in 1972 Issued	Redeemed	Outstanding on Dec. 31, 1972
Discountable Treasury bonds of the Federal Republic of Germany "B" 1	1,700.0	500.0	800.0	1,400.0
Treasury bills of the German Federal Railways	—	100.0	—	100.0
Discountable Treasury bonds of the German Federal Railways	400.0	231.0	231.0	400.0
Discountable Treasury bonds of the German Federal Post Office	174.1	217.6	154.1	237.6
Total	2,274.1	1,048.6	1,185.1	2,137.6

1 "B" has been added to distinguish these debt instruments from the mobilisation and liquidity paper dealt with below.

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

	Dec. 31, 1971 DM million	Dec. 31, 1972 DM million
Equalisation claims arising from own conversion account		
Bank deutscher Länder	5,504.4	5,504.4
Land Central Banks	2,599.2	2,599.2
	8,103.6	8,103.6
Conversion of Berlin pre-capitulation balances	30.6	30.7
Conversion of RM balances at banks in the Eastern Sector of Berlin	1.5	1.5
	8,135.7	8,135.8.

The slight increase, of DM 20,236.42, 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, 1972, which account is attached to the German original of this Report as Appendix 1. The equalisation claims belonging to the Bank in respect of its own conversion account, of the conversion of Berlin pre-capitulation balances and of the conversion of RM balances at banks in the Eastern Sector of Berlin, as shown by the books at December 31, 1971, are inscribed in the government stock registers.

Non-interest-bearing debt certificate

In 1972 the Bank's claim on the Federal Government in respect of the currency conversion in Berlin remained unchanged at DM 547.2 million.

Loans to Federal Railway and Federal Post Office

See the comments on the items "Cash advances (book credit)" and "Treasury bills and discountable Treasury bonds".

Securities

The Bank's holding of securities at end-December 1972 amounted to DM 52.8 million (end-1971: DM 587.8 million). It mainly comprised bond issues of the Federal Republic of Germany, the German Federal Railways and the German Federal Post Office, and a small amount of other domestic bonds.

Issue of bonds

In 1972 the Federal Bond Consortium, of which the Bank is the manager, offered for sale nine new bond issues totalling DM 3,380 million (1971: seven issues amounting to DM 2,690 million). From these issues, an amount of DM 350 million (1971: DM 250 million) was reserved for the account of the issuers; this paper, except such as was required for placing with the issuers' own institutions (particularly social security institutions), serves the purpose of appropriate long-term price support operations.

Bonds issued through the Federal Bond Consortium in 1972

Issuer	Amount issued: Total DM mn	Amount issued: of which sold through Federal Bond Consortium DM mn	Nominal interest rate % (yield)	Issue price %	Start of sales 1972
German Federal Post Office	400	360	7½ (7.69)	98¾	Jan. 14
German Federal Railways	330	300	7½ (7.53)	99¾	Jan. 28
German Federal Post Office	400	360	7 (7.26)	98¼	Feb. 25
German Federal Railways	300	270	7¾ (7.82)	99½	May 23
Federal Republic of Germany	450	400	8 (8.07)	99½	July 26
German Federal Post Office	400	360	8 (8.00)	100	Aug. 21
German Federal Railways	300	270	8 (8.00)	100	Sep. 7
Federal Republic of Germany	400	350	8 (8.19)	98¾	Oct. 27
German Federal Post Office	400	360	8 (8.53)	97	Dec. 7

Issue of Federal savings bonds

With the cooperation of the Bank, DM 2,690.7 million (gross) of Federal savings bonds were sold to private investors through banks in 1972 (1971: DM 1,098.9 million). In the year under review premature returns of savings bonds from former tranches to the issuer totalled DM 76.6 million (1971: DM 87.4 million). Net sales in 1972 thus amounted to DM 2,614.1 million (1971: DM 1,011.5 million). At the end of 1972 DM 4,203.5 million of Federal savings bonds were outstanding (end-1971: DM 1,589.4 million).

In February 1972 the interest paid on Federal savings bonds (tranches 1972/3 to 1972/6) was lowered in line with market rates. On the issue of the Federal savings bonds 1973/1 and 1973/2, sales of which started on December 11, 1972, the interest rate was raised again in keeping with the changed market situation; the yield on the bonds sold at the end of the year was 7.73% for type A and 7.99% for type B.

Gross sales and interest rates of Federal savings bonds in 1972

Issues	Sales period 1972	Gross sales in millions of Deutsche Mark			Interest rate (%) in . . . year after issue						
		Federal savings bonds A 1	Federal savings bonds B 2	Total	1st	2nd	3rd	4th	5th	6th	7th 3
					Year						
1972/1 1972/2	Jan. 3–Feb. 16	788.9	576.7	1,365.6	6.5	7.0	7.5	8.0	8.5	9.0	9.0
1972/3 1972/4	Feb. 23–June 30	515.5	334.6	850.1	6.0	6.5	7.0	7.5	8.0	8.5	8.5
1972/5 1972/6	July 3–Dec. 6	218.1	168.8	386.9	6.0	6.5	7.0	7.5	8.0	8.5	8.5
1973/1 1973/2	Dec. 11–Dec. 29	42.6	45.5	88.1	6.5	7.5	7.5	8.0	8.5	9.0	9.0
	Jan. 3–Dec. 29	1,565.1	1,125.6	2,690.7							

1 With yearly payment of interest. – 2 With accrual of interest. – 3 For issues 1972/2, 1972/4, 1972/6 and 1973/2 only.

Issue of medium-term notes

Through the intermediary of the Bank, DM 1,000 million of Treasury bonds (medium-term notes) running for 3 to 4 years of the Federal Republic of Germany and the German Federal Post Office were sold by tender during 1972. The tranches sold were: Federal Republic of Germany 7%, 1st and 2nd Issues, and German Federal Post Office 6 1/2% and 7% Issues.

Treasury bonds (medium-term notes) sold by tender through the intermediary of the Bundesbank in 1972

Issuer	Amount DM mn	Interest rate %	Running for . . . years	Selling price %	Month of sale
Federal Republic of Germany 1st issue	244.15	7	3	100	January
Federal Republic of Germany 2nd issue	255.85	7	4	99 1/8	January
German Federal Post Office	230.02	6 1/2	3	98 7/8	January
German Federal Post Office	269.98	7	4	99 3/8	January

The Treasury bonds (medium-term notes) issued during the year under review were not included in the Bank's money market regulating arrangements. All previously issued Treasury bonds (medium-term notes) of the Federal Government, its special funds and the Länder Governments which, under their terms of issue, were included in the money market regulating arrangements were redeemed during 1972. At end-1971 the total of such "regulatable" medium-term notes outstanding had amounted to DM 920 million, while the Bank had had DM 395.3 million in its portfolio.

Admission to stock exchange dealing

Apart from the issues mentioned before, which were launched through the Federal Bond Consortium, the 7% bond issue of the Reconstruction Loan Corporation of 1972 and the 8% bond issue of the Equalisation of Burdens Bank of 1972, Em. 14, were introduced by the Bank for official dealings on all German stock exchanges.

In addition, the medium-term notes issued by the Federal Republic of Germany and the Federal special funds, along with three series of medium-term notes of the Reconstruction Loan Corporation, were introduced by the Bank for regulated unofficial dealings on the stock exchange.

Price support operations

In the year under review, as in preceding years, the Bank undertook price support for the account of the issuers 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.

The Bank as paying agent for bonds

As paying agent principally for bonds of the Federal Government and its special funds the Bank paid or presented for redemption 10,912,072 interest coupons and matured bonds during 1972 (1971: 11,051,164).

The Bank as conversion and paying agent for external bonds

In its capacity as paying agent for the external bonds of the Federal Republic of Germany the Bank paid 215,293 interest coupons and matured bonds during the year under review (1971: 185,440); in 1972 1,412,263 interest coupons and matured bonds (1971: 688,197) were presented to foreign agents for redemption.

German coins

The Bank's holding of German coins amounted to DM 344.3 million at the close of 1972 (end-1971: DM 251.0 million). In 1972 the Federal Government was credited with DM 872.3 million for coins taken over from the Mints, and debited with DM 3.0 million for coins no longer fit for circulation. Altogether in the years 1948 to 1972 the Bank took over coins amounting to DM 4,942.8 million, and cashed, to the debit of the Federal Government, DM 157.3 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 1972 divided by the number of inhabitants of the Federal Republic of Germany including the Land of Berlin at September 30, 1972 (61.8 million) yields the figure of DM 71.86 per head of population (1971: DM 59.69).

Of the Federal coins in the denomination of 10 Deutsche Mark issued to mark the 1972 Olympic Games in Munich, the fourth and fifth motifs and reproductions of the first motif were put into circulation during the year under review.

Balances on postal giro account

The postal giro account balances at December 31, 1972, including the branches' transfers in transit to the postal giro account of the Bank (Central Office) at Frankfurt am Main, totalled DM 525.4 million (1971: DM 366.9 million). Each day the Bank's credit balances on that account and on the postal giro account of the Land Central Bank in Berlin, in rounded amounts, are offset 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

	1971				1972			
	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	87,056	12,096.9	15,679	901.4	85,097	13,670.0	15,480	923.0
Bavaria	87,773	12,732.1	11,174	2,461.6	82,449	13,279.0	11,151	2,782.1
Berlin	20,124	2,102.6	5,946	454.6	20,829	2 317.4	4,655	539.3
Bremen	14,759	567.6	1,215	0.3	13,973	610.4	1,419	0.5
Hamburg	48,010	8,371.8	1,866	49.1	47,606	9,257.0	1,643	74.6
Hesse	51,372	7,292.3	3,970	1,314.3	49,797	7,335.3	5,850	1,194.2
Lower Saxony	70,774	5,352.0	6,690	510.6	68,098	5,089.1	6,896	669.7
North Rhine-Westphalia	169,960	17,133.2	16,683	3,676.3	132,550	18,559.6	17,490	3,923.1
Rhineland-Palatinate	43,390	2,531.5	5,446	45.9	39,028	2,597.4	5,741	76.5
Saarland	5,805	1,402.7	5,603	1.0	5,286	1,482.0	2,549	0.7
Schleswig-Holstein	5,166	131.7	2,421	11.8	4,355	112.2	2,396	12.8
Total	604,189	69,714.4	76,693	9,426.9	549,068	74,309.4	75,270	10,196.5
Bundesbank – Central Office –	12,464	1,543.5	3,324	1.8	13,938	3,708.1	3,145	3.2
Grand total	616,653	71,257.9	80,017	9,428.7	563,006	78,017.5	78,415	10,199.7

Other claims

The other claims of DM 641.3 million shown in this item (1971: DM 650.0 million) include, inter alia, the balance (DM 580.6 million, against DM 428.6 million in 1971) resulting from the settlement of interzonal payments.

Turnover on the relevant sub-accounts amounted to:

	1971 DM million	1972 DM million
West/East deliveries and services	2,458.4	2,487.5
East/West deliveries and services	2,455.0	2,343.0
	4,913.4	4,830.5.

Land and buildings; equipment

With additions of DM 130.9 million and depreciation of DM 15.8 million, land and buildings are shown at DM 479.0 million. Equipment increased to DM 24.8 million after additions of DM 25.0 million and depreciation of DM 14.4 million.

Items in course of settlement

The balance sheet item "Items in course of settlement" mainly comprises the intercity credit and debit transfers that were proceeding inside the Bank at the close of the year as well as the cheques and debit transfer orders in course of clearing. At December 31, 1972, there was a net claim of DM 2,777.2 million, as against one of DM 214.5 million at the end of 1971.

Other assets

Of the DM 743.9 million (end-1971: DM 392.1 million) shown in the item "Other assets", DM 735.9 million (end-1971: DM 383.4 million) represents interest falling due in 1973, but assignable to the profit and loss account for the year under review, on funds employed abroad and on securities.

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 1973.

Liabilities

Bank notes in circulation

The circulation of bank notes rose from DM 39,493.8 million at the end of 1971 to DM 44,503.5 million at December 31, 1972.

Currency

Millions of Deutsche Mark

End of year	Bank notes	Federal coins	Currency total
1967	31,574.2	2,255.1	33,829.3
1968	32,499.0	2,443.6	34,942.6
1969	34,616.5	2,657.9	37,274.4
1970	36,479.7	3,008.7	39,488.4
1971	39,493.8	3,665.3	43,159.1
1972	44,503.5	4,441.2	48,944.7

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

In 1972 DM 16,100.0 million of new Bundesbank notes of various denominations were taken over from the printing offices and put into circulation or made ready for that purpose.

Details of bank notes (including small money tokens) which were destroyed, being no longer fit for circulation or having been called in, are:

	1967	1968	1969	1970	1971	1972
Number (millions)	207.6	323.8	306.7	343.5	377.3	363.1
Value (DM million)	5,501.6	10,110.9	10,105.5	11,306.3	12,184.5	12,693.8.

The number and amount of counterfeit Deutsche Mark notes and Federal coins detained in payments during the year under review declined noticeably in comparison with 1971.

Counterfeits discovered

Year	Notes		Coins	
	Number	Thousands of DM	Number	Thousands of DM
1967	679	31,8	7,126	26,0
1968	1,202	45.5	10,941	44.6
1969	1,769	84.9	11,621	48.2
1970	4,772	243.0	10,902	46.4
1971	2,978	186.4	9.064	37.0
1972	1,848	124.2	7,487	29.5

Deposits of banks

Banks' deposits on giro account principally comprise the minimum reserves to be maintained with the Bank. The sub-item "Other" contains deposits of domestic banks on U.S. dollar accounts. Compared with 1971, banks' deposits changed as follows:

Deposits of banks	Dec. 31, 1971 DM million	Dec. 31, 1972 DM million
On giro account	32,590.6	46,364.4
Other	18.6	23.9
	32,609.2	46,388.3.

Deposits of public authorities

The item "Deposits of public authorities" comprises current balances and public authorities' special deposits. These deposits showed the following year-on-year changes:

	Dec. 31, 1971 DM million	Dec. 31, 1972 DM million
Federal Government	69.3	96.5
Equalisation of Burdens Fund and ERP Special Fund	286.4	197.3
Länder Governments	510.0	2,543.2
Other public depositors	66.5	58.3
Special deposits	10,010.5	4,187.9
	10,942.7	7,083.2.

Special deposits

In detail, the special deposits changed as follows:

	Dec. 31, 1971		Dec. 31, 1972	
	DM million	DM million	DM million	DM million
Anticyclical reserves				
of Federal Government	2,500.0		2,500.0	
of Länder Governments	1,631.2	4,131.2	1,436.5	3,936.5
Anticyclical surcharge on income taxes		5,879.3		251.4
		10,010.5		4,187.9.

Deposits of other German depositors

Deposits of other German depositors changed as follows:

	Dec. 31, 1971 DM million	Dec. 31, 1972 DM million
Federal Railways	5.6	5.0
Federal Post Office (incl. postal giro and postal savings bank offices)	1,735.2	2,703.3
Other depositors	486.7	505.4
	2,227.5	3,213.7.

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

	Number	Amount
1971	99.61	97.85
1972	99.63	97.92.

Annual turnover on giro accounts of the Deutsche Bundesbank

	1971			1972		
	Number of transactions	Total amount	Average amount	Number of transactions	Total amount	Average amount
Turnover	'000	DM million	DM '000	'000	DM million	DM '000
(a) Credits						
Cash payments	990	124,880	126.1	1,013	132,504	130.8
Settlement with account-holders	7,786	1,982,860	254.7	7,866	2,110,124	268.3
Local transfers	16,806	1,768,303	105.2	17,390	2,031,549	116.8
Intercity transfers	62,648	1,517,089	24.2	66,556	1,676,061	25.2
Cheque and debit transfer order collections (total lodged)	228,922	564,891	2.5	269,736	645,663	2.4
Total	317,152	5,958,023	—	362,561	6,595,901	—
(b) Debits						
Cash payments	1,379	130,950	95.0	1,422	141,316	99.4
Settlement with account-holders	4,423	1,972,389	445.9	4,487	2,096,027	467.1
Local transfers	16,806	1,768,303	105.2	17,390	2,031,549	116.8
Intercity transfers	61,326	1,510,391	24.6	63,580	1,671,575	26.3
Cheque and debit transfer order collections (total paid)	199,913	565,002	2.8	213,545	643,565	3.0
Total	283,847	5,947,035	—	300,424	6,584,032	—
(c) as % of total turnover (credits and debits)		%			%	
Cash payments		2.15			2.08	
Settlement with account-holders		33.22			31.91	
Local transfers		29.71			30.83	
Intercity transfers		25.43			25.40	
Cheque and debit transfer order collections (total lodged and paid)		9.49			9.78	
		100.00			100.00	

Balances on cash deposit special accounts

The balances on the cash deposit special accounts, amounting to DM 1,336.0 million at December 31, 1972, comprise the amounts required for December 1972, amounts paid in for earlier months, particularly owing to notifications of liability, and prepayments for January and February 1973. On the first business day of December (December 1) DM 876.1 million was paid into the cash deposit special accounts to remain there for the whole of the month, and DM 240.1 million in advance for 1973. In March 1972 DM 21.9 million was paid in advance for May 1972, the first month following introduction of the cash deposit requirement. In the first month in which deposits had to be kept (May 1972) the balances totalled DM 1.1 billion. In subsequent months special account holdings went down, to DM 0.7 billion in July 1972; between August and November 1972 they rose to DM 3.1 billion.

Liabilities for mobilisation and liquidity paper sold

In pursuance of its open market policy the Bank again availed itself of the facilities afforded by sections 42 and 42 (a) of the Bundesbank Act and sold Treasury bills and discountable Treasury bonds of the Federal Republic of Germany as mobilisation paper (exchange for the equalisation claims due to it from its own conversion account) or as liquidity paper.

Towards the end of the year the range of buyers of such money market paper increased markedly owing to growing interest on the part of private investors, after the Bank – with a view to activating its open market policy – had raised the interest rate offered and started to inform the public about the nature of the investment on a broader basis. The larger sales of discountable Treasury bonds of the type that is not returnable to the Bank before maturity and thus yields higher interest (types "N" und "LN") to private investors, in denominations of at least DM 5,000, were however of little significance in terms of quantity. The inflow of these small amounts was by far outweighed by the circumstance that large-scale buyers of mobilisation and liquidity paper, above all banks, allowed some of their investments in discountable Treasury bonds to expire; as a result the amount of such mobilisation and liquidity paper outstanding at December 31, 1972, at DM 1,573.8 million, was far below the level of end-1971 (DM 5,287.3 million). On the other hand, the amount of Treasury bills outstanding at the end of 1972 was larger than a year earlier (DM 2,891.0 million against DM 1,189.7 million), while total turnover in mobilisation and liquidity paper in 1972 was greater than a year before, sales coming to DM 17,956.1 million and redemptions to DM 19,968.3 million (DM 17,070.5 million and DM 18,125.3 million in 1971).

The total of mobilisation and liquidity paper outstanding at December 31, 1972 amounted to DM 4,464.8 million, against DM 6,477.0 million at end-1971.

Mobilisation and liquidity paper sold and redeemed

Millions of Deutsche Mark

Category of paper	1970	1971			1972		
	Outstanding on Dec. 31	Sold	Redeemed	Outstanding on Dec. 31	Sold	Redeemed	Outstanding on Dec. 31
Treasury bills (running for up to 90 days)	1,877.7	10,240.3	10,928.3	1,189.7	13,569.9	11,868.6	2,891.0
Discountable Treasury bonds (running for 6 to 24 months)	5,654.1	6,830.2	7,197.0	5,287.3	4,386.2	8,099.7	1,573.8
Total	7,531.8	17,070.5	18,125.3	6,477.0	17,956.1	19,968.3	4,464.8

Liabilities in respect of foreign business

The liabilities in respect of foreign business comprised

	Dec. 31, 1971		Dec. 31, 1972	
	DM million	DM million	DM million	DM million
Deposits of foreign depositors				
Banks	859.5		729.8	
Other depositors	81.6	941.1	168.4	898.2
Other				
Provision of cover for credits and guarantees by				
non-residents	1.3		0.1	
residents	21.8		17.1	
	23.1		17.2	
Miscellaneous liabilities	2.3	25.4	0.4	17.6
		966.5		915.8.

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 is equal to the allocations of SDRs to the Federal Republic of Germany on January 1, 1970 to 1972, totalling SDR 542.4 million = DM 1,855.0 million.

Provisions

The provision for pension liabilities is shown unchanged at DM 1,020 million. The amount of DM 62.9 million withdrawn for the payment of pensions and widows' and orphans' allowances was returned.

DM 1,106.5 million was withdrawn from the provisions for other purposes during the year under review. Of this amount, DM 1,074 million was used for covering the losses resulting from the new valuation of gold, drawing rights within the gold tranche and special drawing rights. The remainder (DM 32.5 million) served to cover the losses suffered during 1972 in U.S. dollar forward transactions with domestic banks which had been in the course of settlement at the end of 1971.

Other liabilities

The "Other liabilities" are shown at December 31, 1972 at DM 52.2 million, against DM 29.5 million at the end of 1971.

Deferred expenses and accrued income

In the same way as previously, the deferred expenses and accrued income (DM 286.9 million for 1972; DM 256.4 million for 1971) mainly comprise interest received in the year under review, but relating to the next year, on foreign and domestic commercial and Treasury bills.

Capital

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

Reserves

The legal reserve is shown unchanged at DM 847.3 million. DM 150.7 million was taken from the other reserves in order to redeem part of the compensatory amount required for the new valuation of foreign currency assets and liabilities carried over from 1971; they consequently diminished to DM 81.9 million.

Contingent liabilities and claims

The contingent liabilities and claims are shown at December 31, 1972 at DM 1.2 million, against DM 0.9 million at the end of 1971.

Profit and loss account

Comparison of expenditure and receipts

Millions of Deutsche Mark

Expenditure	1971	1972	Receipts	1971	1972
Interest on mobilisation and liquidity paper	298.4	235.6	Interest on money employed abroad	2,111.1	2,859.6
Other interest	4.0	3.0	Loans to domestic banks	1,069.7	657.3
	302.4	238.6	Equalisation claims	244.1	244.1
Administrative costs			Securities, Treasury bills and Treasury bonds	58.9	20.4
Personnel	332.9	375.3			
Materials	58.4	71.3			
Note printing	46.6	51.1	Other interest	35.9	11.6
				3,519.7	3,793.0
Depreciation on fixed assets	20.4	30.2	Fees	6.3	6.5
Transfer to provisions for pension liabilities	58.5	62.9	Other receipts	241.2	33.5
				3,767.2	3,833.0
Pension payments in respect of Reichsbank	35.4	35.3	Loss	3,101.1	—
Other expenditure	17.4	17.9			
	872.0	882.6			
Compensatory amount required for new valuation of foreign currency assets and liabilities	5,996.3	—			
Annual surplus	—	2,950.4			
Total	6,868.3	3,833.0	Total	6,868.3	3,833.0

Receipts

Interest

	1971 DM million	1972 DM million
The interest received amounted to	3,519.7	3,793.0
After deduction of the interest paid out, namely	302.4	238.6
interest receipts are shown in the profit and loss account at	3,217.3	3,554.4.

The interest received on funds employed abroad increased by DM 748.5 million to DM 2,859.6 million in 1972. Receipts from lending to German banks – domestic bills, lombard loans and foreign bills bought in Germany – amounted to DM 657.3 million in the year under review (1971: DM 1,069.7 million). Interest on equalisation claims remained unchanged at DM 244.1. Other interest income decreased by DM 62.8 million to DM 32.0 million.

Except for a fractional amount of DM 3.0 million (1971: DM 4.0 million), the interest paid out, at DM 238.6 million (1971: DM 302.4 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), Bundesbank Act).

Fees

DM 6.5 million of fees were received in the year under review (1971: DM 6.3 million).

Other receipts

"Other receipts" are shown at DM 33.5 million (1971: DM 241.2 million).

Expenditure

Administrative costs Personnel

The administrative costs in respect of personnel rose in comparison with the previous year owing to the statutory or negotiated pay increases for established employees ("officials") and unestablished salary and wage earners and to the rise in the number of persons employed. They amounted to DM 375.3 million in 1972 (1971: DM 332.9 million). The Bank's staff increased in number by 523 during 1972.

Number of persons employed in the Bundesbank

	Beginning of 1972					Beginning of 1973				
				of whom					of whom	
	Central Office	Land Central Banks	Total	male	female	Central Office	Land Central Banks	Total	male	female
Established officials	657	4,383	5,040*)	4,946	94	678	4,562	5,240*)	5,117	123
Salaried employees	1,405	6,244	7,649*)	2,927	4,722	1,477	6,450	7,927*)	3,076	4,851
Wage earners	135	822	957*)	141	816	157	845	1,002*)	151	851
Total	2,197	11,449	13,646	8,014	5,632	2,312	11,857	14,169	8,344	5,825

* of whom, working part time

	1972	1973
Established officials, female	2	1
Wage earners	168	223
Salaried employees	738	760

The payments to serving members of the Directorate of the Bank and the Central Bank Council amounted to DM 4,702,509.04 in the year under review. Former members of those bodies and of the Board of Directors and Board of Managers of the Bank deutscher Länder, and the Boards of Management of the Land Central Banks, including their surviving dependants, received payments totalling DM 3,377,370.49.

Changes in staff regulations

With effect from January 1, 1972 a revision of the pay scale (appendix 1 to the collective agreement in respect of unestablished salary earners of the Deutsche Bundesbank) was contractually agreed. In addition, the Bank concluded a number of further pay agreements for its unestablished employees which brought their legal positions into line with those of the Federal Government's unestablished staff.

Administrative costs Materials

The administrative costs in respect of materials rose from DM 58.4 million in 1971 to DM 71.3 million.

Note printing

The expenditure on note printing mounted, as compared with 1971, by DM 4.5 million to DM 51.1 million.

Depreciation and transfers to provisions

The depreciation on land and buildings and on equipment, as well as the transfers to provisions, were discussed in connection with the respective balance sheet items.

Pension payments in respect of Reichsbank

The payments to members of the former Deutsche Reichsbank and other persons to whom the Act concerning Section 131 of the Basic Law applies, and for whom the Bank is required to provide in accordance with section 41, Bundesbank Act, amounted in the year under review to DM 35.3 million (1971: DM 35.4 million).

Other expenditure

"Other expenditure" is shown at DM 17.9 million (1971: DM 17.4 million).

Annual surplus

The annual surplus of DM 2,950.4 million was used for redeeming part of the compensatory amount required for the new valuation of foreign currency assets and liabilities carried over from 1971, totalling DM 3,101.1 million.

Revaluation loss 1971

	DM million
The new valuation of assets and liabilities in foreign currency due to the fixing of central rates in December 1971 resulted in a compensatory amount of	5,996.3
being required, which was shown in the profit and loss account for the year 1971. The new valuation of gold, drawing rights within the gold tranche and special drawing rights after the fixing of the new gold parity of the U.S. dollar brought about a further depreciation of	1,074.0.
The resultant overall loss of	7,070.3
was offset by	
the net result for 1971	2,895.2
the annual surplus for 1972	2,950.4
withdrawals from	
provisions for other purposes	1,074.0
other reserves	150.7
	7,070.3.

Frankfurt am Main, April 1973

Deutsche Bundesbank
The Directorate
Dr. Klasen Dr. Emminger
Dr. Emde Dr. Gocht Dr. Irmler Lucht Dr. Schlesinger Tüngeler

Report of the Central Bank Council

The annual accounts of the Deutsche Bundesbank for 1972, the combined conversion account of the institutions amalgamated to form the Deutsche Bundesbank, as shown by the books at December 31, 1972, and the Report on the Fund for the Purchase of Equalisation Claims as at December 31, 1972, have been audited by the auditing companies Treuarbeit Aktiengesellschaft of Frankfurt am Main and Dr. Wollert – Dr. Elmendorff KG of Düsseldorf, whom the Central Bank Council had appointed to be auditors in accordance with section 26 of the Bundesbank Act.

In their notes of certification the auditors have unreservedly confirmed that the annual accounts for 1972, the bookkeeping and the conversion account as shown by the books at December 31, 1972, are in accordance with legal provisions and that the Fund for the Purchase of Equalisation Claims has been properly administered.

The Central Bank Council approved the annual accounts for 1972 on April 12, 1973. 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, 1972, and approved the Report on the Fund for the Purchase of Equalisation Claims as at December 31, 1972.

Since the publication of the Report for the Year 1971 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 June 30, 1972
the Member of the Directorate of the Deutsche Bundesbank
Dr. Erich Zachau,

as at the close of August 31, 1972
the Vice-President of the Land Central Bank in the Saarland
Herr Paul Paduch,

as at the close of September 30, 1972
the Member of the Directorate of the Deutsche Bundesbank
Dr. Bernhard Benning.

Reappointed

with effect from July 1, 1972
Herr Johannes Tüngeler
Member of the Directorate of the Deutsche Bundesbank,

with effect from October 1, 1972
Dr. Heinrich Irmler
Member of the Directorate of the Deutsche Bundesbank,

with effect from November 15, 1972
Herr Wilhelm Rahmsdorf
President of the Land Central Bank in Lower Saxony.

Newly appointed

with effect from April 24, 1972
Dr. Fritz Schiettinger
to be President of the Land Central Bank in Baden-Württemberg,

with effect from July 1, 1972
Dr. Helmut Schlesinger
to be Member of the Directorate of the Deutsche Bundesbank,

with effect from September 1, 1972
Herr Georg Lippert
to be Vice-President of the Land Central Bank in the Saarland,

with effect from January 1, 1973
Dr. Hans Georg Emde
to be Member of the Directorate of the Deutsche Bundesbank.

The Central Bank Council, acting also on behalf of the Directorate and of the Boards of Management of the Land Central Banks, expresses to the entire staff of the Deutsche Bundesbank its thanks for their loyal and understanding co-operation during the year 1972. The Council likewise wishes to record its appreciation of the excellent collaboration with the staff representative committees.

Frankfurt am Main, April 1973

Dr. Karl Klasen
President of the Deutsche Bundesbank

Appendix to Part B

Balance sheet of the Deutsche Bundesbank as at December 31, 1972

Assets

	DM	DM
1. Gold		13,970,911,560.42
2. Balances with foreign banks and money market investment abroad		52,221,028,588.59
3. Other investment abroad		1,992,977,696.18
4. Reserve position in the International Monetary Fund and special drawing rights		
4.1. Drawing rights within gold tranche	3,899,587,201.92	
4.2. Loans under General Arrangements to Borrow	—	
4.3. Special drawing rights	2,812,563,331.38	6,712,150,533.30
5. Loans and other claims on the rest of the world		
5.1. Loans to World Bank	2,465,125,118.75	
5.2. Other claims	21,727,260.—	2,486,852,378.75
6. Foreign notes and coins		3,595,608.02
7. Foreign bills of exchange		1,185,192,087.—
8. Domestic bills of exchange		17,846,982,940.27
9. Lombard loans (advances against securities)		1,145,850,200.—
10. Cash advances (book credit)		
10.1. Federal Government	320,300,000.—	
10.2. Equalisation of Burdens Fund	47,900,000.—	
10.3. Länder Governments	71,336,000.—	439,536,000.—
11. Treasury bills and discountable Treasury bonds		
11.1. Federal Government	—	
11.2. Länder Governments	—	—
12. Equalisation claims on Federal Government and non-interest-bearing debt certificate in respect of Berlin		
12.1. Equalisation claims	8,135,849,143.40	
12.2. Non-interest-bearing debt certificate	547,168,481.20	8,683,017,624.60
13. Loans to Federal Railways and Federal Post Office		
13.1. Cash advances (book credit)	—	
13.2. Treasury bills and discountable Treasury bonds	317,600,000.—	317,600,000.—
14. Securities		52,807,259.35
15. German coins		344,330,630.69
16. Balances on postal giro account		525,366,027.90
17. Other claims		641,327,891.02
18. Land and buildings		478,987,340.41
19. Equipment		24,815,543.—
20. Items in course of settlement		2,777,234,990.99
21. Other assets		743,932,229.90
22. Prepaid expenses and deferred income		20,136,042.89
Right of recourse in respect of contingent liabilities	1,244,538.03	
		112,614,633,173.28

	DM	DM	DM
1. Bank notes in circulation			44,503,530,740.—
2. Deposits of banks			
2.1. on giro account		46,364,399,232.05	
2.2. Other		23,948,895.94	46,388,348,127.99
3. Deposits of public authorities			
3.1. Federal Government		96,549,935.91	
3.2. Equalisation of Burdens Fund and ERP Special Fund		197,250,710.29	
3.3. Länder Governments		2,543,163,823.19	
3.4. Other public depositors		58,343,815.97	
3.5. Special deposits			
3.5.1. Anticyclical reserves			
3.5.1.1. of Federal Government	2,500,000,000.—		
3.5.1.2. of Länder Governments	1,436,486,130.—		
	3,936,486,130.—		
3.5.2. Anticyclical surcharge on income taxes	251,381,480.05	4,187,867,610.05	7,083,175,895.41
4. Deposits of other German depositors			
4.1. Federal Railways		5,026,868.23	
4.2. Federal Post Office (incl. postal giro and postal savings bank offices)		2,703,288,472.78	
4.3. Other depositors		505,440,966.16	3,213,756,307.17
5. Balances on cash deposit special accounts			1,336,011,273.—
6. Liabilities for mobilisation and liquidity paper sold			4,464,770,000.—
7. Liabilities in respect of foreign business			
7.1. Deposits of foreign depositors		898,247,253.17	
7.2. Other		17,523,733.70	915,770,986.87
8. Contra-entry to special drawing rights allocated			1,855,008,000.—
9. Provisions for			
9.1. Pension liabilities		1,020,000,000.—	
9.2. Other purposes		275,960,254.21	1,295,960,254.21
10. Other liabilities			52,182,663.05
11. Deferred expenses and accrued income			286,901,125.27
12. Capital			290,000,000.—
13. Reserves			
13.1. Legal reserve		847,300,000.—	
13.2. Other reserves		81,917,800.31	929,217,800.31
Contingent liabilities		1,244,538.03	
			112,614,633,173.28

Profit and loss account of the Deutsche Bundesbank for the year 1972

Expenditure

	DM	DM
1. Administrative costs		
1.1. Personnel	375,319,604.30	
1.2. Materials	71,262,155.35	446,581,759.65
2. Note printing		51,098,679.66
3. Depreciation		
3.1. on land and buildings	15,894,523.79	
3.2. on equipment	14,363,974.60	30,258,498.39
4. Transfer to provisions for pension liabilities		62,858,655.19
5. Pension payments in respect of Reichsbank		35,283,378.02
6. Other expenditure		17,929,747.87
7. Annual surplus		2,950,414,578.40
		3,594,425,297.18

Receipts

	DM
1. Interest	3,554,408,032.81
2. Fees	6,483,605.58
3. Other receipts	33,533,658.79
	3,594,425,297.18

Annex to the profit and loss account

	DM
1. Annual surplus	2,950,414,578.40
2. Compensatory amount in respect of new valuation of foreign currency assets and liabilities in 1971 — loss carried over —	3,101,096,778.09
	150,682,199.69
3. Amount withdrawn from other reserves	150,682,199.69
	—

The new valuation of the U.S. dollar position of the Bundesbank as at February 13, 1973 due to the devaluation of the U.S. dollar resulted in a depreciation of DM 7.2 billion, as explained in the Report for the Year 1972.

Deutsche Bundesbank
The Directorate
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Our audit, which was duly carried out, shows the bookkeeping and the annual accounts to be in accordance with the law and the Bank's by-laws.

Frankfurt am Main, February 28, 1973

Treuarbeit Aktiengesellschaft
Wirtschaftsprüfungsgesellschaft
Steuerberatungsgesellschaft

Dr. Merckens (Certified Auditor) per pro Dr. Haufschild (Certified Auditor)

D. Wollert — Dr. Elmendorff KG
Wirtschaftsprüfungsgesellschaft

Dr. Bargmann (Certified Auditor) Thoennes (Certified Auditor)