Report of the Deutsche Bundesbank

for the Year 1990



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# Contents

Part A General part	The	e currency and the economy in 1990	
deneral part	i.	The economic and political unification	
		of Germany	1
	н.	International trends	3
	1	The global economic setting	3
	2	European monetary integration	6
	3	Reform efforts in central and east	_
	J	European countries	11
	III.	Economic trends in the Federal Republic	
		of Germany and central bank policy	14
	1	Divergent developments in Germany	14
	2	Highly expansionary fiscal policy	26
	3	Foreign trade and payments at a time of adjustment	32
	4	Monetary policy faced with new challenges .	40
		(a) Basic monetary policy stance substantially unchanged during the year .	40
		(b) Monetary growth in western Germany on	44
		target	44
		(c) Increased expansionary pressures in the extended currency area	46
	-		40
	5	The capabilities of the financial system	E 4
		at a testing time	51
		(a) Trends in the aggregate acquisition	E 4
		of financial assets and its funding	51
		(b) Bullish bond market, and major financing	E0
		challenges in eastern Germany	53
		(c) Ups and downs in the share market	57
		<ul><li>(d) Innovations in the German capital market</li><li>(e) Trends in the banking sector</li></ul>	59 60
		(e) Herida in the banking acctor	00
	IV.	International monetary trends and policy .	62
	1	Exchange rates and exchange rate policy	62
	2	International financial markets	67
	3	International debt situation of the	
		developing countries and eastern Europe	70
	4	Trends in the IMF and among the international	
		development banks	74
	Do.		
		nking supervision, monetary policy regulations, ue of foreign Deutsche Mark bonds and	
		netary legislation	
	I.	Amendments to banking law and participation of the Deutsche Bundesbank in banking	
		supervision	78
	II.	The current monetary policy regulations of the	00
		Deutsche Bundesbank	98
	1	Rediscount credit	98
		(a) Rediscount quotas for banks	98
		(b) Bills of exchange eligible for rediscount	
	_	at the Bundesbank	99
	2	Lombard loans	101
	3	Open market operations	101

	4	Minimum reserve regulations The Deutsche Bundesbank's Minimum Re-	102
	5	serves Order	102
	3	Interest rates and minimum reserve ratios of the Deutsche Bundesbank	109
	Ш	Statement by the Deutsche Bundesbank concerning foreign Deutsche Mark issues	112
	IV	Authorisations under monetary law	114
		ected aspects of the monetary, economic social union with the former GDR	115
	1.	Banking law, banking supervision and the statistical reporting system	116
	II.	Cash and cashless payments	119
	III.	Monetary policy regulations	123
	1		123
	2	Lombard loans	124
	3	Open market operations	124
	4	Minimum reserve regulations	124
	IV.	Regulations governing intra-German	
		payments until June 30, 1990	126
	1	Commercial payments	126
	2	· ·	126
	3	Travel payments	127
Part B	Anr	nual accounts for 1990	
Notes on	1	Balance sheet	130
the Deutsche Bundesbank's annual accounts	2	Profit and loss account	147
Part D	Rep	port of the Central Bank Council	150
Appendix to Part B	as a Bala		154 156
		- <b>,</b>	<del>-</del>
		German original of this Report went to press on il 19, 1991	
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Part A: General part

The currency and the economy in 1990

## I. The economic and political unification of Germany

From the point of view of the central bank, too, the unification of the two parts of Germany after more than 40 years of enforced separation was the outstanding event of 1990. This profound change is without parallel in terms of its political and economic implications. The entry into force on July 1, 1990 of the State Treaty establishing a monetary, economic and social union between the Federal Republic of Germany and the then German Democratic Republic made the Deutsche Mark the sole legal tender in both German states, and transferred the responsibility for domestic and external monetary policy in the extended Deutsche Mark currency area to the Deutsche Bundesbank. At the same time, the former GDR adopted all the major economic legislation of the Federal Republic or amended its own legislation accordingly; moreover, it introduced - with a number of transitional arrangements - a social system modelled on western lines. Simultaneously, the monetary, economic and social union was a major step towards the political unification of Germany. The accession of the former GDR to the Federal Republic took place on October 3. 1990; on December 2, 1990 free elections could be held in the whole of Germany, for the first time for almost six decades.

The political unification of Germany via the monetary, economic and social union

The radical changes which occurred within only a few months confronted the east German economy with deep-seated adjustment problems. In its monetary policy, the Bundesbank had to ensure that the currency conversion and its consequences did not pose any incalculable risks to the stability of the Deutsche Mark. The experience gained so far suggests that the change of system in the monetary sphere was well-managed in technical terms, despite some transitional difficulties. From the outset, however, the real economic problems were far harder to handle than the monetary integration. The scale of the competitive weaknesses of east German enterprises, as compared with their western competitors on national and international markets, was underestimated in some quarters. The enormous adverse heritage in the shape of structural deficiencies (particularly the poor state of the capital stock, ownership problems and environmental pollution at the start of the new monetary. economic and social system) is an unwelcome legacy of the socialist regime that must now be rectified. Although social hardship in the new Länder can be mitigated by government transfers from western Germany and although the regeneration can be facilitated by means of public economic assistance, while western know-how can considerably foster the adjustment process in the private and public sectors, the decisive point is that the transition from a more or less self-contained socialist centrally planned economy with a completely obsolete economic structure and government price-fixing to an open market economy should be accomplished in eastern Germany itself. However, the creation of favourable underlying conditions for investment, the training of enterprises, public authorities and employees in market economy behaviour patterns and the emergence of competitive structures all take time. The disastrous results of decades of misdirected policies can only be overcome in an operation of fairly long duration.

Deep-seated adjustment problems in the new Länder

The unification of Germany was not an isolated national process, but rather one which took place in the context of profound changes in the international environment. Politically, it was possible in the final analysis only as a result of the upheavals in the countries of central and eastern Europe. These upheavals, in turn, must be viewed against the background of the inefficiency of socialist centrally planned economies, which is becoming ever more manifest. In view of their residents' already low standard of living, increasing supply bottlenecks forced the former Eastern Bloc countries to contemplate radical changes in their economic system. For obvious reasons, the only way of achieving this in the former GDR was an orientation towards the west German economic system, the adoption of which was ultimately regarded by the population as the only way out of the crisis. At the same time, the unification of Germany is also

The unification of Germany as part of a pan-European process embedded in increased west European integration efforts, which were given additional impetus in December 1990 by the convening of two intergovernmental conferences on the amendment of the EC treaties. In the longer run, the ever-closer economic links between the west European countries are expected to develop into an economic and monetary union, and to be underpinned by a political union. The now larger Germany is therefore being confronted with increased responsibility towards its neighbours in both eastern and western Europe.

#### 1. The global economic setting

In the first half of 1990 the global economic setting was still marked by very dynamic growth. The expansionary forces were initially fuelled by optimistic expectations with respect to both progressive European integration and a restructuring of the central and east European countries, and by hopes of a "peace dividend" as a result of the resolution of the east-west conflict. Gradually, however, tensions in the growth process in a number of industrial countries became more evident. The persistence of current account deficits. budget imbalances, speculatively inflated prices of real estate and financial assets, increasing bankruptcies and rising inflationary pressures made corrective action imperative. The required stabilisation measures, some of which had been initiated in earlier years, began to take effect. The occupation of Kuwait by Iraqi troops in August 1990 and the resulting upsurge in oil prices caused business conditions to deteriorate further. In many countries the increasing gravity of the Gulf conflict, which culminated in its escalation to a war in January 1991, increased the uncertainty felt by consumers and investors. In the meantime, however, oil prices have declined perceptibly again, and an armistice has been agreed in the Gulf. Although the real gross national product in the industrial countries still rose distinctly in 1990 as a whole, at 2.6%, the pace of growth in those countries slowed down markedly in the second half of the year, when the rate of expansion dropped to 11/20%. World trade, too, lost momentum accordingly; adjusted for price movements and exchange rate variations, it expanded by 4½ % in 1990 and thus by 2½ and almost 5 percentage points less than in 1989 and 1988, respectively. Even so, viewed as a whole, there is still no sign of the slowdown in business activity developing into a recession.

Slowdown of global business activity in the course of 1990

In addition, the year 1990 was characterised by the fact that the years of more or less parallel trends in business activity in the major industrial countries came to an end and that pronounced growth differentials evolved between the individual nations. The business setbacks were particularly marked in the United States, the United Kingdom, Canada and Sweden. Recessionary trends even emerged there. Inflationary pressures had also been especially strong in those countries, however, so that the fight against inflation made losses of growth seem most likely. Another significant factor in the United States was that the fragile nature of the financial sector probably contributed to lending restraint on the part of banks. The slowdown in the countries of continental Europe, by contrast, was not by any means as marked as in the United States or the United Kingdom. In most west European countries, the close external economic ties and the preparations for the single EC market after 1992, the reduced need for adjustment as a result of more balanced supply-side policies and economic trends in the preceding years of growth and the strong demand emanating from the Federal Republic mitigated the cyclical downturn. Nevertheless, here, too, a moderation of both the propensity to invest and the demand for consumer goods was unmistakable. Japan and western Germany. by contrast, have temporarily decoupled themselves from the global trend in economic activity. The increased risks in the Japanese financial system connected with the marked drop in share prices and the associated erosion of the banks' capital base have not had an impact on the real economy. In view of the high degree of capacity utilisation and the largely exhausted labour market, above all, corporate investment continued to rise very rapidly. The special cyclical role played by western Germany, which will be analysed in more detail below, is linked closely to the expansionary effects of German unification.

Pronounced growth differentials between the industrial countries

## Key macroeconomic variables in selected industrial countries

		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Real dor demand	Real domestic demand			r	Balance on current account		
	1989	199	90 p	1989	1990 <b>p</b>		1989	1990 p	1989	1990 p	
Country	Change	from	previo	us year in	0/0				US\$ billio	n	
Industrial countries 3	+ 3.	3	+ 2.6	+ 3.4	+ 2	.5	+ 4.3	+ 5.0	4 - 78.5	4 — 105.0	
of which											
European industrial countries	+ 3.	4	+ 2.8	+ 3.4	+ 3	3.0	+ 4.8	+ 5.4	+ 5.6	- 16.0	
of which											
Germany	+ 3.	8	+ 4.5	+ 2.	7 + 5	5.1	+ 2.8	+ 2.7	+ 57.2 °(+107.6	+ 47.8 (+ 77.4)	
France	+ 3.	7	+ 2.8	+ 3.	ı	.1	+ 3.5	+ 3.4	- 4.3	- 7.8	
Italy	+ 3.	2	+ 2.0	+ 3.3	3   + 2	.5	+ 6.3	+ 6.5	- 10.7	- 15.7	
United Kingdom	+ 1.	9	+ 0.7	+ 2.9	9 + 0	.6	+ 7.8	+ 9.5	- 32.0	- 21.8	
United States	+ 2.	5	+ 0.9	+ 1.9	9 + 0	.5	+ 4.8	+ 5.4	- 110.0	- 99.3	
Japan	+ 4.	7	+ 5.6	+ 5.7	7   + 5	.9	+ 2.3	+ 3.2	+ 57.2	+ 35.8	
Canada	+ 3.	) (	+ 0.9	+ 4.	ı   0	)	+ 5.0	+ 4.8	- 14.5	- 13.7	

<sup>1</sup> Real GNP/GDP. — 2 Cost of living index. — 3 OECD countries excluding Turkey. — 4 The statistically recorded current account deficit of the industrial countries is not accompanied by corresponding surpluses on the part of other groups of countries; in fact, owing to statistical errors and omissions (= missing surpluses or overly large deficits) the aggregated "global balance on current account" shows a distinct deficit, which, according to IMF calculations, amounted to roughly US\$ 140 billion in 1990. — p Provisional. — ° Calculated in DM billion; from July 1990 including the external transactions of the former GDR.

Differing orientations of monetary policy in the industrial countries

In view of these discrepancies, it was not surprising that the monetary and economic policy makers in the industrial countries saw themselves faced with different challenges. Countries experiencing growth losses or even recessionary trends attempted to create a counterweight, above all by lowering interest rates. Several steps to cut interest rates caused monetary policy in the United States and Canada, in particular, to be substantially eased. In Europe, too, a number of countries were inclined to reduce the, in their view, high level of interest rates, as, in the current cyclical situation, they attached more importance to growth risks than to dangers to price stability. Japan and Germany, by contrast, retained their tight monetary policy, so as to prevent the pressures exerted by strong domestic demand from exacerbating the already visible price risks.

Noticeable relaxation of the linkages between interest rates worldwide The linkages between international interest rates relaxed noticeably in 1990. The interest rate differential between the United States and Germany has actually reversed in the meantime. The return on investments in the German money and capital markets, particularly in the case of the shorter maturities, is higher than that on corresponding investments in the United States, after a reduction of the high interest rate level in the United States and an increase in German interest rates had caused the interest rate differential in favour of the United States to narrow markedly back in 1989. The interest rate and yield differentials between Japan and the United States, too, declined in the course of 1990, and short-term yen interest rates at the end of the period under review were actually higher than the corresponding dollar interest rates. In the European Monetary System (EMS) our partner countries took advantage of some scope for lowering interest rates, even though orientation towards the anchor currency, the Deutsche Mark, continues to be of paramount importance. In some major EMS partner countries the interest rate advantage that is deemed to be necessary over Deutsche Mark assets contracted perceptibly in connection with the stabilisation of exchange rate expectations. After the Bundesbank had raised its discount and lombard rates with effect from February 1, 1991, the United Kingdom and Spain actually lowered their money market rates slightly, while, within the EMS, the Netherlands followed on in Germany's footsteps.

Considering that business activity varies from country to country, there is still room for divergent interest rate movements, although the fact must not be overlooked that inflationary pressures have remained high worldwide. Despite the slowdown in business activity, the rates of price increases in the major industrial countries towards the end of the period under review were higher than in 1989. In view of the persistently high public sector deficits or structural rigidities on the goods and labour markets of a number of economies, it would be premature to sound the "all clear" on the inflation front. Central banks' credibility benefited considerably from their reduction of the upward movement of prices at the beginning of the eighties; this is a stock of capital that should not be put at risk. A lasting decline in interest rates can be achieved only on the basis of monetary policies geared to stability, as was expressly acknowledged, for instance, in the communiqué issued by the finance ministers and central bank governors of the seven largest industrial countries after their meeting in New York in January 1991. Closer international coordination of monetary policies - also within the context of the EMS - must not mean that emerging inflationary risks are not met appropriately. In the longer run, any softening of the stability standard in individual major industrial countries would not be in the interests either of the revival of global business activity or of further monetary integration in Europe.

Persistent risks to stability throughout the world

Monetary policy would, however, be overtaxed if it alone had to ensure that price stability is maintained. Inflationary pressures in a number of countries are being exacerbated by steep wage increases which are far in excess of the growth in productivity. The possible resurgence of the notion that the acceptance of higher rates of price increases might "buy" more employment must be countered at an early stage. Past experience over many years has shown that this is a misconception. Instead, monetary stability must be regarded as a major prerequisite of sound and lasting economic growth. The burden on monetary policy would, moreover, be eased if the public sector budget deficits were to be curtailed in a number of industrial countries. Although progress in this field has become more difficult as a result of the slowdown in business activity, the financial burdens due to the Gulf war and the restructuring of central and eastern Europe, it is important that there should be no wavering in the endeavours to reduce the structural part of the budget deficits, so as to attain a more balanced fiscal and monetary policy mix worldwide.

Need for wage and fiscal policy to contribute to stabilisation policy

International cooperation among the three largest industrial countries has adjusted to the changed environment to an ever-increasing extent. In view of the divergences in levels of business activity and the resulting differences in interest rate policies, any attempts to stabilise the US dollar exchange rate, for instance, by means of intervention contrary to market trends would have little chance of success, even though central bank intervention in the exchange market can sometimes help to stabilise and smooth out rates. The US dollar declined perceptibly in value in 1990, while the Deutsche Mark and the Japanese yen appreciated. These interest-rate and cyclically-induced exchange rate corrections supported the external adjustment of the major industrial countries. In the case of Germany, this contributed to a lasting reduction in the previously very high current account surpluses. In Japan, too, the surpluses are declining perceptibly, and the deficit on the US current account is tending to fall. Incidentally, international cooperation will probably have to be viewed increasingly in terms of broader global economic interrelationships. The market economy restructuring of countries in central and eastern Europe, the requisite reform of the Soviet economy, the response of western Europe to these challenges and the additional tasks perhaps required in the Middle East entail, not least, financial burdens that go far beyond the capabilities of individual countries. The basic prerequisites for giving these countries and regions

International cooperation in a changed environment

substantial help to help themselves are, however, efficient economies in the western world and open international markets. This is why tackling home-made problems resolutely within the group of the industrial countries and containing protectionist tendencies will remain a lasting challenge. A successful conclusion of the Uruguay round would set an important signal in this respect. The European Community, which intends to implement the single European market by the end of 1992, has a key role to play here, in cooperation with the United States and Japan.

#### 2. European monetary integration

First stage on the way to a European economic and monetary union comes into force

Economic and monetary policy cooperation within the European Community continued to become closer and closer in 1990. Apart from the fact that the United Kingdom joined the exchange rate mechanism of the European Monetary System (EMS), and that Italy dispensed with a wider margin of fluctuation for the lira relative to other EMS currencies, the outstanding event was the commencement of the first stage on the road to an economic and monetary union on July 1, 1990. Governments and central banks agreed to improve coordination between their economic and monetary policies, so as to avoid inconsistencies and the consequent disruptions in the financial and exchange markets. What is needed in this phase is to practise the behaviour patterns that are absolutely essential for the transition to the higher stages of integration. In particular, economic and monetary policies throughout the Community need to be geared more strongly to monetary stability and budgetary discipline. Binding decisions, however, are not envisaged as yet; economic and monetary policies will remain matters of national responsibility. A constant exchange of views - also in the form of institutionalised multilateral surveillance - is intended to ensure that unwelcome developments on the road towards a community of stability are recognised, and corrected, at an early date.

Need for a consistent stabilisation policy stance in the member states Given the decisions taken by the European Council in Rome in October 1990 and the convening of two intergovernmental conferences with the mandate of preparing the amendments to the EC Treaties required for implementing an economic and monetary union and a political union, the Community has expressed its political will to push ahead rapidly with the integration process. Accordingly, further progress along the road towards economic and monetary union beyond the first stage will depend, above all, on the willingness and ability of member states to create the necessary economic and economic policy conditions. The primary objective of economic, fiscal and monetary policy in each member state must be to achieve the degree of cost and price stability needed for a durable fixing of exchange rates and the later replacement of national currencies by a single Community currency, and for safeguarding this stability against relapses into undesirable inflationary trends. This can only be accomplished through appropriate national efforts which take due account of the different starting points and structural circumstances. The orientation of national monetary and economic policies towards the exigencies of exchange rate cohesion with other partners, such as exists within the EMS between most of the Community currencies, can help to enhance the credibility of a country's own stabilisation policy. However, the essential prerequisites for an economic and monetary union do not only comprise the economic, fiscal and monetary policies of the individual member states. The behaviour of the other major groups involved in economic activity, and especially that of management and labour - behaviour which is often still characterised by very disparate experience in grappling with inflationary tendencies - must likewise be taken into consideration. The ultimate result of economic, fiscal and monetary policies geared to the goal of stability should be (also with due regard to the behaviour of all the parties participating in business activity) to

Conv	ergenc	e indic	cators	in the	Europ	ean C	ommui	nities					
in %	in %												
Period	Germany	Belgium	Den- mark	France	Ireland	Italy	Nether- lands	United King- dom	Spain	Greece	Portugal		
	Consum	er price	movemer	ts (Chan	ge from p	revious y	rear)		_				
1974-78 1979-83 1984-88 1989 1990	4.7 4.9 1.2 2.8 2.7	9.2 7.0 3.0 3.1 3.5	11.0 10.1 4.6 4.8 2.6	10.7 11.8 4.4 3.5 3.4	15.3 15.9 4.6 4.0 3.3	16.7 17.3 7.1 6.3 6.5	7.9 5.2 1.1 1.1 2.5	16.1 11.2 4.7 7.8 9.5	18.9 14.5 7.8 6.8 6.7	15.5 21.9 18.1 13.8 20.4	23.8 21.6 15.6 12.6 13.4		
	Balance	s on curr	ent acco	unt 1 (Sh	are in GN	IP/GDP)							
1974-78 1979-83 1984-88 1989 1990 <b>p</b>	1.4 - 0.3 3.4 4.8 3.0	0.1 - 2.9 1.5 2.2 2.1	- 3.1 - 3.5 - 3.5 - 0.8 1.2	- 0.1 - 0.7 - 0.2 - 0.4 - 0.7	- 5.6 - 11.4 - 2.0 1.5	- 0.5 - 0.8 - 0.4 - 1.2 - 1.1	1.5 0.9 2.9 3.4 3.5	- 1.1 1.3 - 0.5 - 3.8 - 2.3	- 2.3 - 1.7 0.7 - 2.9 - 3.4	- 4.4 - 5.4 - 5.0 - 4.8 - 5.4	- 5.6 - 6.4 0.7 - 1.2 - 2.0		
	Public s	ector fina	ancial bal	ances 2	(Share in	GNP/GD	P)			-			
1974-78 1979-83 1984-88 1989 1990 <b>p</b>	- 3.0 - 3.0 - 1.7 0.2 - 3.1	- 5.4 10.5 - 8.0 6.3 5.9	0.1 5.6 0.0 0.6 1.3	- 1.1 - 1.7 - 2.4 - 1.5 - 1.2	- 8.1 12.5 - 9.6 - 3.0 - 1.7	- 9.9 - 10.5 - 11.6 - 10.2 - 10.0	- 2.1 - 5.3 - 5.8 - 5.2 - 5.5	- 4.1 - 3.0 - 1.8 0.9 0.1	- 1.2 - 3.8 - 5.0 - 2.6 - 3.2	- 2.4 - 6.4 - 12.3 - 18.4 - 18.3	- - 9.2 - 4.3 - 7.5		
	Trends i	n the bro	ad mone	y stock 3	(Change	from pre	vious yea	ir)					
1974-78 1979-83 1984-88 1989 1990 <b>p</b>	9.0 6.8 5.6 5.7 4.6	12.4 7.9 8.6 8.7 <b>4</b> 10.0	12.4 11.8 12.2 4.2 9.3	- 11.7 7.7 7.5 5.3	- 17.5 6.3 5.4 11.1	22.0 18.5 12.1 13.6 11.0	13.0 6.7 7.2 12.8 11.1	 14.8 18.3 16.5	19.7 17.5 13.4 13.0 9.4	23.5 25.3 24.8 23.2 <b>4</b> 19.3	22.9 11.9 12.6		
	Trends i	n unit lab	our cost	s 1, 5 (Ch	ange fror	n previou	s year)						
1974-78 1979-83 1984-88 1989 1990 <b>p</b>	4.7 3.5 1.4 0.9 2.8	10.6 4.8 2.3 1.2 3.6	11.3 8.1 4.8 1.7 2.2	12.7 11.2 3.1 2.4 4.1	14.1 14.6 3.0 – 2.3 1.4	17.7 17.4 7.1 6.0 7.1	8.2 3.4 0.2 – 1.9 2.9	16.1 10.8 4.8 9.4 10.9	19.4 12.9 6.0 5.0 7.3	18.2 22.2 15.9 16.3 17.3	23.7 18.7 15.1 9.1 12.9		

1 Belgium including Luxembourg. — 2 On the basis of the national accounts. — 3 M2 for Belgium, Denmark and the Netherlands; M3 for France, Germany, Greece, Ireland and Italy. M4 for the United Kingdom, ALP for Spain, L — for Portugal. In the case of Belgium, the first figures relate to the period 1976-78. — 4 Average of the period Jan.-Nov. 1990 against the previous year. — 5 Calculated from index figures on the basis of national currencies. — p Provisional.

Sources: OECD, BIS, EC and national statistics.

achieve a high degree of price stability in all member states over a prolonged period, so as to ensure that the process of convergence is truly both durable and credible.

It was not without reason that the European Council linked the timetable approved in October 1990 for further steps towards an economic and monetary union to a number of conditions which are meant to give due consideration to the requirements mentioned above, thereby taking account of some of the concerns which, after intensive discussions, had been mentioned by the Deutsche Bundesbank in a statement issued in September 1990. In that statement the Bundesbank had underlined that ultimately a monetary union is an irrevocable mutual benefit association in which the participating economies are interlinked in the monetary sphere for better or worse. The still existing, in part even increasing divergences (which are reflected particularly clearly in cost and price movements, the sometimes very high budget deficits in individual countries and substantial external disequilibria) are incompatible with a monetary union. In most cases their causes are to be found not so much in temporary factors as primarily in considerable differences in institutional structures, the underlying thrust of economic policies and the behaviour patterns of management and labour. In these circumstances the early, irrevocable fixing of exchange rates and the transfer of monetary policy powers to

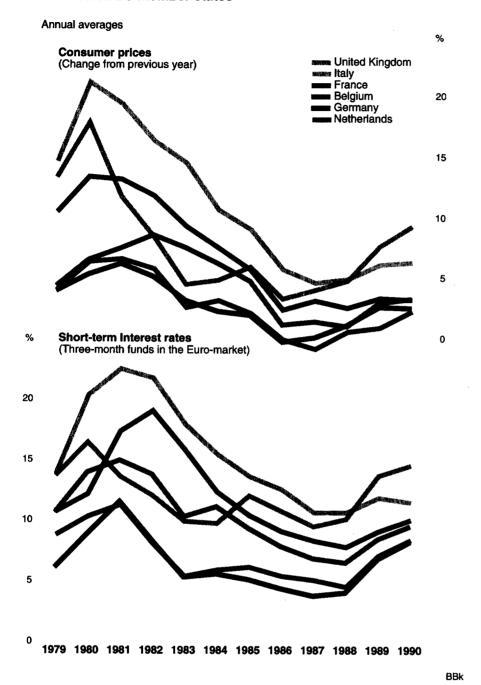
Persistent divergences in economic trends the Community level would involve significant risks to stability, particularly for Germany. The concrete design of the next stages of development and the definition of the institutional structures for the final stage of the European economic and monetary union must therefore take due account of the needs of stabilisation policy, and must ensure that in future it will be possible to achieve at the Community level the same degree of stability as has so far been reached in Germany.

Convergence towards a de facto monetary union by individual EMS countries A number of member states of the EMS have certainly been successful in their stabilisation policy endeavours since the beginning of the eighties; they now form a kind of "stability nucleus" in the Community. Hence several EMS currencies, in conjunction with the Deutsche Mark, have already come closer to achieving the situation that characterises a monetary union. This is indicated not least by the now only minor interest rate differences between these currencies. This criterion, however, leaves unanswered the question as to how far the markets' verdict is determined by the view that political considerations alone more or less preclude exchange rate adjustments. Any sustained attempt to allow national monetary policy to be guided by requirements that are difficult, or impossible, to reconcile with the basic orientation of the system would, however, be bound to result sooner or later in tensions in the exchange rate system. Precisely in 1990 and at the beginning of 1991, when business trends started to diverge markedly again, it became evident what potential for conflict may arise even among those member states of the EMS which have already achieved a relatively advanced degree of convergence.

Shortfalls in convergence in other countries

Very much more marked discrepancies are still to be found between this group of countries and the other member states of the Community, some of which still have good reason for not as yet participating in the exchange rate mechanism of the EMS, or for participating only within extended margins of fluctuation of  $\pm$  6%. The countries involved are ones in which inflation rates are for various reasons considerably higher than those in the system's "stability nucleus", and in which the level of interest rates is likewise substantially higher. The gap between the highest and the lowest rate of inflation (measured in terms of consumer prices), for instance, widened to some 18 percentage points; in the year before it had been barely 13 percentage points. The inflation differentials increased again even among the countries participating in the exchange rate mechanism of the EMS. In the case of Italy and Spain, extensive interest-rate-induced inflows of capital - in the expectation that central rates would not be changed for the time being - caused the currencies concerned to tend to strengthen on the exchange markets for a long time. In a period of marked upswing in business activity it evidently proved possible to accept the associated real appreciation of the lira and the peseta in spite of the longer-term implications for competitiveness; it was even welcome as a means of combating inflation. The cyclical slowdown which has occurred in the meantime, however, has brought out more clearly the dilemma with which the economic and monetary policy makers look likely to be confronted, the longer the high inflation rates are accompanied by a fixed exchange rate vis-à-vis the currencies of countries with lower rates of price rises. Now that the pound sterling has joined the exchange rate mechanism, the United Kingdom is likewise faced with economic and monetary policy problems with deep-seated causes. It remains to be hoped that costs and prices will in future exhibit a degree of stability that is consistent with fixed exchange rates. Only then would the prerequisites for entry into an economic and monetary union be satisfied in this area as well. This, of course, also holds true of those member states which are only at the start of a process that is intended to enable them gradually to achieve a degree of stability warranting participation in the exchange rate mechanism and in a monetary union.

# Movements in consumer prices and interest rates in selected EC member states



In quite a number of the member states of the Community the budget situation, too, continued to cause concern. The magnitude of the tasks confronting the policy makers in this context is indicated by peak values of some 18% in Greece or about 10% in Italy for the budget deficit as a percentage of gross domestic product, and by ratios of public debt to gross domestic product of roughly 100%. In some cases, a lasting improvement, such as is indispensable for participation in an economic and monetary union, apparently presupposes institutional reforms in the field of public budgetary policy.

Budget deficits give cause for concern

Through its draft statute of a European central bank system, the Committee of EC Central Bank Governors made a major contribution to the negotiations which have now commenced under the aegis of the two intergovernmental conferences on economic and monetary union and on political union. This draft shows how a European central bank system which promises to give due

Statute of a European central bank system consideration to the common goal of monetary stability, and thus to the interests of all participants, should be designed. Agreement was greatly facilitated by the fact that acceptance of the key role of monetary stability, also with respect to the attainment of other economic and social policy goals, increased considerably during the eighties. The draft submitted by the central bank governors takes account of German interests in the items relating to the independent status of the European central bank system, the primary orientation of monetary policy towards the goal of price stability and the ban on the central bank financing public sector deficits. In the meantime, various countries have submitted drafts of amendments to the EEC Treaty. This shows that agreement still has to be reached at the political level on a number of issues that are of importance for the successful pursuit of a monetary policy geared to stability. This holds true, above all, of the provisions on exchange rate policy, which must not be at variance with monetary policy requirements, as well as of the nature and extent of the future European central bank system's accountability and its relations with the bodies bearing political responsibility. It is obvious that the requisite and, in principle, already widely accepted independence of the system and its room for manoeuvre in the field of monetary policy must not be lessened again by other provisions. The Federal Government and the Bundesbank base their views regarding the institutional shape of the European central bank system on ideas deriving from experience in Germany, which has been favourable overall, also in the opinion of other countries.

Dispensing prematurely with exchange rate changes would be a major cost factor

The desire to establish an economic and monetary union in Europe as rapidly as possible should not obscure our view of the manifold difficulties that still have to be overcome on the road towards the goal envisaged by the great majority. Dispensing with exchange rate adjustments as a means of coping with divergent trends and of cushioning external "shocks", which affect individual member states to differing degrees has rightly been designated by the EC Commission as a significant "cost factor" in macroeconomic terms. It is, indeed, not impossible that forgoing this use of an external adjustment instrument will for some time to come have a much greater impact — at least for some countries — than the counterbalancing advantages of the elimination of certain transaction costs and other burdens which still arise under conditions of coexisting national currencies, even in the exchange rate mechanism of the EMS.

Balance between progress towards convergence and the institutional development of the Community

Undue haste in the stabilisation of exchange rates would be bound to lead to disappointment later on if the high expectations could not be met. It is not least for this reason that the process of European unification is geared to a parallel advance of economic and monetary policies. Monetary policy would be overtaxed if it were expected to ensure both stable prices and stable exchange rates solely with its own instruments. In particular, this would involve national inflation rates settling down at a European average level, which would be unacceptable to the hard-currency countries. There should, moreover, be a balance between progress towards convergence in economic performance and policy, on the one hand, and the institutional development of the Community, on the other. Fixed timetables may increase the pressures fostering convergence, but cannot by any means be a substitute for it. At all events, the creation of a sound economic basis for the economic and monetary union must be given precedence over the desire to establish a European central bank system as soon as possible and thus create an institutional "fait accompli".

Proposal to harden the basket ECU

The Bundesbank has submitted for discussion in the appropriate advisory bodies a proposal to the effect that the ECU should be given a guaranteed value by means of adjustments to the basket amounts of appreciating currencies; this might improve the ECU's chances of performing the role of a single European currency in the third stage. On the other hand, the establish-

ment of the European central bank system already at the beginning of the second stage or the creation of a European Fund with the right to issue a parallel ECU currency would in the view of the Bundesbank lead to a blurring of monetary policy responsibilities, which would contribute neither to price stability in the Community nor to the reputation of the future European central bank system. The relinquishment or curtailment of national monetary policy sovereignty is justifiable only if, at the same time, all other prerequisites for a lasting transfer of monetary policy powers to the Community level are satisfied. With respect to the United Kingdom's plan for a "hard ECU", the Bundesbank stands by the consensus reached in the Delors Report, namely that all parallel currency concepts would merely make monetary management in the Community more difficult, without offering the advantages of a single currency. On the other hand, additional monetary policy discipline could hardly be expected to result from the implementation of any parallel currency concept.

#### 3. Reform efforts in central and east European countries

German unification must be seen in close connection with the endeavours to achieve reforms in numerous central and east European countries. The tendencies towards political liberalisation in the Soviet Union were what first created the conditions for social and economic change in other countries in that region, with the goals and courses of the reform efforts in the individual countries differing quite markedly; a break-through has not been achieved as yet. Apart from the former GDR, which was prepared, after the elections of March 1990, to enter into a monetary, economic and social union with the Federal Republic, and thereby to integrate itself in a tried and tested overall economic and social system, it has not always been clear in other countries whether the goal is a final break with dirigiste central economic planning or whether the reforms are aimed merely at a limited incorporation of some market economy elements. But past experience of hybrid economic systems confirms that centrally planned bureaucracies and free market economies are mutually incompatible, so that attempts to reconcile the two economic systems and pursue a "third path" would ultimately be doomed to failure. To date the clearest signs of a basic policy decision in favour of a transformation in the direction of a market economy system have been seen in Hungary, Poland and the CSFR, i.e. in the central European member countries of the Council for Mutual Economic Assistance (CMEA).

German unification associated with reform efforts in central and east European countries

As a result of changes in foreign trade and payments terms, since the beginning of this year the European member states of the CMEA have been subject to increased pressures to adjust to conditions on the world market. For a long time special trading arrangements had largely insulated this group of countries from global economic influences. These arrangements included government supply agreements, controlled prices and a system of clearing accounts denominated in transferable roubles. The governments of the countries pursuing reforms increasingly called in question these regulations, which stood in the way of the free development of trading relations on the basis of comparative cost advantages, and thus of integration in the global market. Ultimately the CMEA member states agreed to convert their reciprocal trade to convertible currencies and world market prices in principle from the beginning of 1991.

Change-over to trading against convertible currencies

Since as early as the middle of 1990, trade in goods between the central and east European reform countries has been showing a tendency to decline markedly, which has been exacerbated further by the cuts in Soviet oil exports. The energy-importing countries are having to rely more and more on the international oil market, where the impact of the Gulf crisis caused prices to sky-rocket at times. Only Poland and Hungary, the two countries which have

Declining trade in goods between the CMEA countries

Key external e	economic varia	ables in co	entral and	eastern l	Europe*	
US\$ billion						
	Balance on current acco	unt	Monetary reserves		Gross indebtedness	s
			Level at the e	end of the year	•	
Country	1989	1990 p	1989	1990 p	1989	1990 pe
Bulgaria CSFR Hungary Poland Romania Soviet Union	- 1.3 0.4 - 1.4 - 1.8 2.9 - 4.0	- 1.0 - 0.6 0.1 0.7 - 1.5 - 11.2	1.4 2.6 1.7 2.5 2.0 <b>1</b> 14.7	0.5 1.4 1.0 5.4 0.3 <b>1, 2</b> 7.8	9.2 7.9 20.4 40.6 0.6 54.0	10.0 8.1 21.2 48.5 1 60

BBk Sources: IMF, EC, OECD, BIS and national statistics.

now largely liberalised their trade, were able to respond to these challenges by stepping up their exports to the west, including a disproportionately steep rise in their sales to the Federal Republic of Germany. By contrast, all other countries of this group and the Soviet Union recorded significant deficits in current transactions in convertible currencies. On account of their already high level of foreign debt and the domestic structural adjustment initially required, some countries regard the financing of the necessary imports on market terms as being possible to only a limited extent, with the result that substantial aid from the west is now called for in some cases.

Structural weaknesses and increased inflationary pressures

The relaxation of government planning and control methods brought to light, in the economies of the central and east European reform states, a mass of structural dislocations which must be rectified in the course of the current phase of reorientation. Output in all countries of that region declined as long ago as 1990, with relatively the largest falls being recorded in Romania, Poland and Bulgaria. At the same time, the monetary order was shaken by inflationary processes, which had become manifest in the context of the decontrol of prices and the reduction of subsidies, and which - in part - accelerated rapidly, given the existing excess liquidity and the persistent central bank direct lending to the public sector. Overcoming inflation and the burgeoning of market economy expansionary forces will, however, only be possible in places where the liberalisation and opening-up of the economy are accompanied by a consistent stabilisation policy.

Progress towards reform in Poland

For instance, Poland made significant progress when, at the beginning of 1990, a reform programme entered into force in which a far-reaching decontrol of prices, drastic cuts in subsidies and the elimination of import restrictions were accompanied by supporting measures of stabilisation policy. These decisions led not only to an improvement in the allocation of macroeconomic resources, but initially also to some curbing of the general monetary erosion, so that the zloty could be made convertible for residents. Hungary and the CSFR likewise took first steps along the road towards making their currencies convertible; it will, however, be a long time before the respective national currencies can be used generally for international transactions, and before the envisaged integration of all the countries of central and eastern Europe in the world economy has been completed.

Reform of banks and enterprises

However, the free burgeoning of market forces and a consistent policy of stabilisation also entail an efficient allocation of scarce financial resources. Although some countries embarked on reforms of the banking system years ago, the progress achieved and the competition between the individual banks still remain limited, especially since lending is often beset by system-related

problems, and since an adjustment of bank balance sheets for government-induced but economically unacceptable loans is still outstanding. There is also a need to take action in respect of the breaking-up, divestiture and privatisation of state-owned enterprises, even though the restructuring of the corporate sector has already been started in some countries. Moreover, selling operations have not always yielded appropriate prices to date, especially in cases where only domestic buyers were permitted to submit bids, as their disposable financial assets are often relatively low in real terms as a result of inflation.

Germany (and especially the new Länder), as the most important western trading partner of the European member states of the CMEA, has a particular interest in the success of the reform endeavours there. The Federal Republic has therefore participated from the outset in the European task of reintegrating the former Eastern Bloc states by providing extensive technical and financial assistance. With regard to the volume of assistance provided, the Federal Republic by far tops the list of the 24 industrial countries which, with the participation of the EC and other international organisations, adopted a multi-year programme of action in mid-1989 in support of the east European reforms. In addition, the Soviet Union moved to the forefront as a recipient of western financial aid in 1990. Besides, the Federal Government supported the close trading relations between the former GDR and both the Soviet Union and other reform states by generously making available its full range of guarantee facilities.

Reform endeavours supported by the Federal Republic of Germany

Further responsibility was assumed through participation in international organisations. These include the "European Bank for Reconstruction and Development", which started operation in April 1991 and which is to contribute to the restructuring of the economies of the former socialist countries in Europe. With all the reform states in central and eastern Europe the European Community has concluded agreements on trade and economic cooperation with a view to dismantling the Community's quantitative import restrictions. At the end of 1990 the EC Commission entered into negotiations with Hungary, Poland and the CSFR on "European agreements", which are expected to lead to a further extension of relations. The financial and technical assistance of the International Monetary Fund – of which all the central and east European reform states other than the Soviet Union have meanwhile become members - is of particular significance. Ultimately, however, the reform processes will be successful only if the underlying social and economic conditions enable competition to develop freely, and consequently trigger off a growing inflow of goods, private capital and know-how. Although ancillary financial support from the west will continue to be necessary to cope with the outstanding problems. this support can only be a limited attempt to "help those countries to help themselves".

Participation in international organisations

#### 1. Divergent developments in Germany

Profound economic differences between the old Länder and the new

Upon the entry into force of the monetary, economic and social union in the middle of 1990 and the political unification on October 3, the two parts of Germany first became a common economic area and then merged into a single nation. There are, however, profound differences between the old Länder and the new, not only with respect to the starting conditions, but also in their economic trends. In its eighth year of upswing, the west German economy grew more strongly than ever — not least as a result of the considerable stimuli to demand and supply emanating from eastern Germany. By contrast, towards the end of 1989 (if not before) a downswing started in the former GDR and accelerated very sharply when, on the introduction of the Deutsche Mark and the transition to a social market economy, the structural weaknesses inherent in the old system and in its associated insulation from the outside world emerged more and more clearly.

Special role of the west German economy in international business activity The west German economy played a special role in international business activity in 1990. Whereas economic growth slowed down in major partner countries, the increase in the real gross national product in western Germany, at 41/20%, was stronger than at any time since the middle of the seventies. The slowdown in international business activity, which was aggravated by the rise in oil prices in the second half of 1990, and the declining dollar rate did, however, have an impact on export-oriented west German enterprises. The export orders received by the manufacturing sector stagnated at a high level well into the autumn, and then dropped distinctly towards the end of 1990. In the course of last year the propensity to invest declined markedly in the countries of continental Europe, too, which hit German exporters, who focus on this area, particularly hard. By contrast, there was an increasing expansion in the domestic economy. As a result of "home-made" factors alone, a considerable growth of the demand for consumer and capital goods was to be expected in western Germany. This was joined by the stimulating effects of the economic unification of the two German states, which, according to rough estimates, were equivalent to some 11/2 percentage points of the national product of the old Länder over the whole of the year. As a result, domestic business activity increasingly assumed all the features of a boom.

Exceptionally high level of consumption

The third stage of the tax reform, which came into effect at the beginning of 1990, afforded households tax relief of an order estimated at 2% of their disposable income. Their income scope also expanded as a result of the fact that - besides the adjustments stemming from earlier pay agreements much higher wage increases than before were agreed for some major sectors of the economy, and that employment grew more strongly than at any time since the fifties. Not least owing to the exceptional inflow of immigrants, the current transfers accruing from public authorities also went up considerably. All in all, the disposable income of west German households rose by almost 8% in 1990 and thus, even after adjustment for inflation, more than in any of the seven preceding years of upswing. These were unusually favourable conditions for a sharp expansion of private consumption, although its increase, at a nominal 7% (and a real 41/2%), did not quite reach the growth rate of disposable income - as it usually does in years when incomes surge ahead as a result of, say, tax reductions - because, judging from past experience, households fully adjust their consumption expenditure to their higher income only with a certain time-lag. These figures are, however, only an inadequate reflection of the momentum of west German consumption and the stimuli it imparted to overall economic activity. In addition to the consumption expenditure of west German households, there were in the course of the year, particularly after the introduction of the Deutsche Mark in eastern Germany, rapidly rising direct purchases by east German consumers in western Germany

## Key economic variables in western Germany

	1	1	1	<u> </u>	<u> </u>		T		1
						1987	1988	1989	1990
Item	Unit	1987	1988	1989	1990	Change fro	m previous	year in %	
Aggregate demand (real)									
Private consumption	DM billion	1,106.9	1,137.4	1,154.3	1,204.2	+ 3.3	+ 2.8	+ 1.5	+ 4.3
Public consumption	DM billion	380.9	389.1	382.7	393.9	+ 1.5	+ 2.2	- 1.6	+ 2.9
Fixed capital formation	DM billion	376.2	393.7	422.1	459.1	+ 2.1	+ 4.6	+ 7.2	+ 8.8
Machinery and equipment	DM billion	167.3	178.3	195.7	220.9	+ 4.9	+ 6.6	+ 9.8	+ 12.9
Construction	DM billion	209.0	215.4	226.4	238.1	- 0.0	+ 3.1	+ 5.1	+ 5.2
Increase in stocks	DM billion	+ 1.0	+ 11.4	+ 24.7	+ 27.4				
Domestic expenditure	DM billion	1,865.0	1,931.5	1,983.7	2,084.5	+ 2.6	+ 3.6	+ 2.7	+ 5.1
Foreign balance 1	DM billion	+ 37.4	+ 40.3	+ 63.1	+ 54.2			. [	
Exports	DM billion	651.3	689.3	766.0	840.2	+ 0.9	+ 5.8	+ 11.1	+ 9.7
Imports	DM billion	614.0	649.0	702.9	786.0	+ 4.2	+ 5.7	+ 8.3	+ 11.8
GNP at 1985 prices	DM billion	1,902.3	1,971.8	2,046.8	2,138.7	+ 1.5	+ 3.7	+ 3.8	+ 4.5
Memorandum items		•	,	_,	_,		,	, 0.0	1 4.0
Orders received (volume) by the									
manufacturing sector 2	1985 = 100	100.5	107.8	116.5	122.0	- 0.0	+ 7.3	+ 8.1	+ 4.7
Domestic orders	1985 = 100	101.6	107.6	116.0	125.6	- 0.8	+ 5.9	+ 7.8	+ 8.3
Foreign orders	1985 = 100	98.8	108.2	117.4	116.3	+ 1.4	+ 9.6	+ 8.5	- 0.9
Orders received (volume) by the	1005 100	400.0					į		
construction sector 2	1985 = 100	102.8	110.5	122.5	132.8	- 4.3	+ 7.4	+ 10.9	+ 8.4
Distribution of income									
Wage and salary income	DM billion	1,124,7	1,169.2	1,221.5	1,312.6	. 40			, 75
do. as a percentage of national	Din Dimon	1,127./	1,103.2	1,221.0	1,312.0	+ 4.2	+ 4.0	+ 4.5	+ 7.5
income	9/0	72.6	71.5	70.4	70.2				
Entrepreneurial and property	]					•	•	•	
income	DM billion	425.3	466.4	512.8	557.1	+ 1.7	+ 9.7	+ 9.9	+ 8.7
Memorandum items									
Gross income of producing	D. 4 5 707	2000							
enterprises	DM billion	332.3	368.9	396.2	426.1	+ 3.9	+ 11.0	+ 7.4	+ 7.6
do, as a percentage of national income	0/0	21.4	22.6	22.8	22.8				
National income	DM billion								· ·
Tuttorial modifie	DIVI DIMOTI	1,550.0	1,635.5	1,734.2	1,869.7	+ 3.5	+ 5.5	+ 6.0	+ 7.8
Output									
Output in the producing sector			ļ				- 1		
(excluding construction) 2, 3	1985 = 100	102.5	106.2	111.5	117.2	+ 0.4	+ 3.6	+ 5.0	+ 5.1
Construction output 2, 3	1985 = 100	105.8	110.3	117.6	124.1	- 0.5	+ 4.3	+ 6.6	+ 5.5
E									
Employed		27.0							
Employed	Millions	27.2	27.4	27.7	28.4	+ 0.7	+ 0.8	+ 1.4	+ 2.5
Wage and salary earners Memorandum items	Millions	24.1	24.4	24.8	25.5	+ 1.0	+ 0.9	+ 1.6	+ 2.9
Total number of man-hours worked 4	1985 = 100	100.1	400.4	400 7					
Unemployed	Thousands	100.1	100.1	100.7	102.5	- 0.4	+ 0.0	+ 0.6	+ 1.8
do. as a percentage of the total	mousands	2,228.8	2,241.6	2,037.8	1,883.1	+ 0.0	+ 0.6	- 9.1	- 7.6
labour force	0/0	7.9	7.7	7.1	6.4				
					5.,	.		•	•
Prices and wages								1	
Cost of living index for all households	1005 100	400.	44						
	1985 = 100	100.1	101.4	104.2	107.0	+ 0.2	+ 1.3	+ 2.8	+ 2.7
Producer price index of industrial products 5	1985 = 100	95.1	96.3	99.3	101.0	2.5			
Overall construction price level	1985 = 100	103.7	105.7	109.3	101.0 116.0	- 2.5	+ 1.3	+ 3.1	+ 1.7
Index of import prices	1985 = 100	79.8	80.8	84.4	82.5	+ 1.9	+ 1.9	+ 3.4	+ 6.1
GNP deflator	1985 = 100	105.3	106.9	109.7		- 5.4	+ 1.2	+ 4.5	- 2.2
Unit labour costs in the	.555 = 155	103.5	100.9	109.7	113.4	+ 1.9	+ 1.5	+ 2.6	+ 3.4
economy as a whole 6	1985 = 100	105.3	105.5	105.9	108.5	+ 2.4	+ 0.1	+ 0.4	+ 2.5
Memorandum item						. 2.7	' "	1 0.4	т 2.3
Productivity 7	1985 = 100	103.6	107.3	110.8	113.7	+ 1.9	+ 3.6	+ 3.2	+ 2.6
Overall negotiated wage and							. 0.0	. 0.2	, 2.0
salary level	4005 405	40- 0			[	1			
on a monthly basis on an hourly basis	1985 = 100 1985 = 100	107.0 108.1	110.0 111.7	112.9 115.9	118.0	+ 3.4	+ 2.7	+ 2.7	+ 4.6
Balance of transactions in goods and sary	L		111.7	115.8	122.5	+ 3.8	+ 3.3	+ 3.7	+ 5.7

<sup>1</sup> Balance of transactions in goods and services with the rest of the world; deliveries to and supplies from eastern Germany (including direct purchases of households in western or eastern Germany) are, in contrast to the balance of payments statistics, included in imports or exports. — 2 Adjusted for working-day variations. — 3 Results for kinds of activity units. — 4 Calculated by the Bundesbank. — 5 Domestic sales. — 6 Index of gross

wages and salaries per employee divided by index of real GNP per employed person. — **7** GNP at 1985 prices per man-hour worked; calculated by the Bundesbank.

The figures from the national accounts are provisional from 1988 onwards. Discrepancies in the totals are due to rounding.

(and considerably higher deliveries of consumer goods to the former GDR). A better reflection of the strength of consumption is provided by the trend in retail turnover, which was a nominal 101/2 % and a real 8 % higher in 1990, and 13% and 10%, respectively, higher than a year before in the second half of the year. The new residents of the Federal Republic started to satisfy their pent-up demand with a spate of purchases of western goods. The scope for doing so was opened up to them by the favourable conversion rate for their savings deposits, by exceptionally sharp wage and salary increases and not least by sizeable west German transfer payments. Under the impact of these purchases by east German consumers, the turnover of the west German specialist trade in electrical and electronic consumer goods, for example, shot up. The motor industry was given a considerable boost not only by direct purchases of new cars; an even more important factor was that western used cars were in particularly heavy demand in the former GDR, and that the resulting price increases prompted many west German car owners to sell their used car and buy a new one.

Sharp rise in the demand for housing

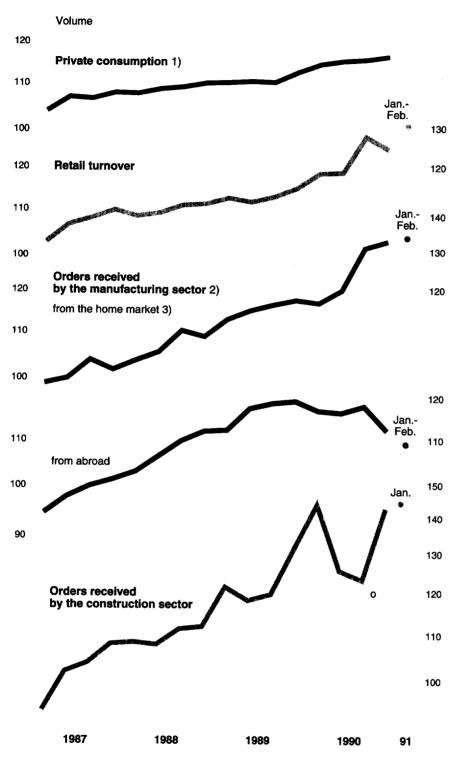
A strong impetus to overall economic activity was also imparted by housing construction in 1990. In view of the sustained heavy inflow of immigrants from the GDR and ethnic German resettlers from eastern Europe, in particular, the demand for housing once again increased exceptionally fast. In addition, the effects were felt of the government measures adopted a year earlier to promote new housing construction and to enlarge the supply of existing housing units. Especially in the field of apartment house construction, demand soared again. The considerable construction price increases resulting, inter alia, from this heavier demand and the higher interest rates were probably one of the major reasons why the momentum of the construction of owneroccupied homes slackened distinctly in the course of 1990. Construction output was again unable to keep pace with the expansion of demand. This can be seen, for instance, from the fact that as early as 1989 about 276,000 permits for the construction of housing units were accompanied by 239,000 completed dwellings. Even though the weather at the beginning of 1990 was again favourable, this backlog increased further in the course of last year as permits were granted for about 390,000 housing units (+40% compared with the previous year), while an estimated 270,000 dwellings (+ 15%) were completed.

Strong propensity to invest on the part of enterprises The momentum of domestic business activity was influenced, in part, by self-perpetuating forces. Private demand for consumer goods and the pressing need for housing supported the propensity to invest and thus masked the moderating effects emanating from the sluggishness of exports and the rise in energy, labour and interest costs. Corporate capacity was being utilised so heavily that, in view of the sustained expansion of demand, more and more enterprises were forced to increase their fixed assets. Given the current profitability and future prospects, the conditions for this, as well as for investment in rationalisation measures, were exceptionally favourable. Moreover, enterprises had substantial own funds at their disposal in 1990, and the return on fixed capital remained extremely high. Hence the rise in interest rates did not induce them to cut back the funding of their capital formation to any appreciable extent or prompt them to divert funds to financial assets. A clear indication of the general willingness to expand capacity is the sharp increase in orders in the field of industrial construction; they were a nominal 161/20/0 and a real 91/20/0 higher than in 1989. However, capacity bottlenecks in the construction industry set limits to any such strong expansion of industrial construction investment, which grew by  $10\frac{1}{2}$ % in value and  $4\frac{1}{2}$ % in volume. Not least

<sup>1</sup> in the national accounts, which show the west German and the east German gross national products separately, these deliveries and direct purchases are treated as exports.

## Trends in demand

1985=100, quarterly, seasonally adjusted, log. scale



Also adjusted for working-day variations.- 2) Excluding food, drink and tobacco industry. All the time including orders from eastern Germany.- o As from October 1990 including orders from the new Länder and (east) Berlin to west German construction enterprises.

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thanks to the greater recourse to imports, industrial investment in machinery and equipment rose much more sharply (by  $14\frac{1}{2}\%$  and 13%, respectively). In all, corporate investment exceeded its 1989 level by  $13\frac{1}{2}\%$  in value and  $10\frac{1}{2}\%$  in real terms, and thus to an extent not witnessed since the end of the sixties.

Expansion of output fostered by corporate investment and greater elasticity on the labour market

In the wake of the upswing, west German enterprises' fixed assets were utilised increasingly in 1990. Given the high degree of capacity utilisation reached as early as 1989, the lack of production capacity threatened more and more to become a bottleneck hampering smooth economic growth. This is why the faster expansion of corporate investment, which at the same time implied a sharper increase in enterprises' capital stock and thus in potential supply, was desirable from the point of view of stabilisation policy as well. In addition, the rise in production was fostered by greater elasticity on the labour market. Even prior to 1990 there was a growing shortage of qualified labour, which gradually became a considerable impediment to production. However, from the end of 1989 this had been counteracted by, in particular, the heavy inflow of immigrants from the GDR, many of whom were well-trained and mobile, and whose integration in the labour force was consequently effected without significant friction. According to rough calculations, between the autumn of 1989 and the autumn of 1990 300,000 vacancies in the old Länder were filled by persons from the former GDR; this was equivalent to over 1% of the total labour force in western Germany. Over and above this considerable expansion, the overall supply potential was additionally enlarged by the fact that, with the recruitment of qualified labour, employment opportunities arose in many cases for less qualified personnel, apparently including a considerable number of persons who had previously been unemployed; this is suggested by the results of a study of the pattern of unemployment carried out by the Federal Labour Office. Under the favourable labour market conditions of 1990, many ethnic German resettlers from eastern Europe, who as a rule initially attended language and qualification courses after their arrival, also found a job. Overall, last year employment increased to an extent which was reminiscent of the fifties, namely by almost 700,000 or 21/2 %, and the number of employed, at 28.4 million, reached a level unprecedented in the history of western Germany. This did not, however, by any means fully satisfy enterprises' demand for labour. On an average some 315,000 vacancies (over 60,000 more than a year earlier) were registered in 1990 at the labour exchanges, whose researches suggest that only about one unfilled vacancy in three is reported to them. The massive demand for labour also led to a renewed substantial decline in unemployment. On an annual average, the number of unemployed members of the labour force (excluding ethnic German resettlers and immigrants from the former GDR) came to 1.64 million, which was about 260,000 fewer than in 1989. As a result of the considerable increase in unemployment, particularly among the ethnic German resettlers, the total number of unemployed did not fall as sharply, namely by only 155,000 to 1.88 million.

Heavy utilisation of productive resources

In spite of the strong growth of the supply possibilities (i.e. of the production potential) the utilisation of productive resources rose once again in 1990 under the impact of the boom-like expansion of demand. It is no doubt true that productive resources can be adjusted to more stringent requirements more flexibly today (not least through the use of microelectronic control modules) than was possible at the beginning of the seventies — a fact which ultimately helps (in macroeconomic terms) to avoid or mitigate bottlenecks on the goods and factor markets, and thus cyclical tensions. Even so, developments in 1990, particularly in industry, showed that there are limits to this flexibility. According to the Ifo Business Survey, for instance, the degree of capacity utilisation in the manufacturing sector could be raised only a little compared with 1989. The sharp increase of 5% in industrial output was due mainly to the growth of employment and fixed capacity, and only to a lesser extent to a higher degree of technical plant utilisation. This must probably be seen as an indication of the almost complete exhaustion of spare capacity in the capital stock.

## Conditions on the labour market in western Germany

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	1987	1988	1989	1990	1989	1990
Item	Annual ave	rage			Change fro	
Employment						
Employed <b>p</b>	27,157	27,369	27,741	28,440	+ 372	+ 69
of whom						
Employed subject to social	04.045	04.005				
security contributions 1	21,045	21,265	21,619	22,368	+ 354	+ 74
Manufacturing	8,186	8,188	8,329	8,553	+ 141	+ 22
Construction	1,425	1,412	1,406	1,468	- 6	+ 6
Distribution, transportation,						
telecommunications	3,822	3,907	3,979	4,151	+ 72	+ 17
Banks, insurance sector	845	856	870	891	+ 14	+ 2
Other services	6,061	6,204	6,359	6,637	+ 155	+ 27
Short-time workers	278	208	108	56	- 100	- 5
Vacancies	171	189	251	314	+ 62	+ 6
Unemployed	2,229	2,242	2,038	1,883	- 204	- 15
Memorandum item Unemployment rate in % 2	7.9	7.7	7.1	6.4		
Pattern of unemployment	End-Septer	mber				
Unemployed, total	2,107	2,100	1,881	1.728	<b>– 219</b>	- 15
by sex				,		
male	1,082	1,074	951	870	- 123	- 8 <sup>-</sup>
female	1,025	1,026	930	858	- 96	- 7
by nationality		, i				•
Germans	1,843	1,837	1,663	1,536	- 174	- 12
of whom	1,	1,001	1,000	1,000	_ ,, _	- 12
resettlers from eastern Europe	37	73	106	155	+ 33	+ 49
immigrants from the former GDR	6	10	45	75	+ 35	+ 30
foreigners	264	262	218	192	- 44	- 20
by vocational qualification		i	-		1	
unqualified qualified	1,065 1,042	1,024	887	808	- 137	- <u>7</u>
quanneu	1,042	1,075	993	920	- 82	- 7

In 1990 a shortage of resources was likewise felt in the construction sector, which was confronted with a sustained expansion of demand in all areas of construction. Although the mild weather at the beginning of last year again had a favourable effect on construction output, the sector, which raised its production by 5½%, was unable to keep pace with the expansion of demand although the heavily utilised stock of fixed assets was apparently increased sharply and although the sector succeeded in recruiting substantial numbers of new staff. As a result of this wide gap between demand and supply, the reach of order backlogs in the construction industry lengthened significantly in the course of the year. After seasonal adjustment, it reached a level last seen in 1979, a boom year in construction, which was marked by corresponding adverse effects in terms of stabilisation policy.

Tensions in the construction sector

In spite of unmistakable cyclical tensions, the price climate in western Germany remained relatively temperate on the whole in 1990. At just over  $2\frac{1}{2}0$ , the increase in consumer prices remained limited. The same is true of the rise in the producer prices of industrial products, which amounted to  $1\frac{1}{2}0$  (for domestic sales). In view of the situation in the domestic economy last year, there was no doubt considerable latitude for price increases. The reason why this latitude was not exploited to a much greater extent for actually raising prices is presumably to be sought inter alia in the growth of foreign competition, which increased its share in the German domestic market, partly by lowering Deutsche Mark prices (including those of end-products), as may be seen from the disproportionately steep rise in imports. In addition, the comparatively favourable price situation owed much to the fact that the cost increases remained relatively limited. The dollar prices of raw materials

Temperate price climate

## **Output** Quarterly, seasonally adjusted DM billion log. scale 540 **Gross national product 1)** 525 at 1985 prices Jan.-Feb. 122 510 495 118 480 114 465 110 **Output in the** manufacturing 106 sector 1985=100 110 Jan.-Feb. 102 106 100 **Employed persons** 1985=100 102 % lin. scale 92 Capacity utilisation in the manufacturing sector 2) Average 1980-90 88 84 80 0 1990 1989 1988 1987

(including energy) on international markets were appreciably higher than in 1989 on an annual average; this was predominantly due to the temporary oil price surge in the second half of the year. But owing to the decline of the dollar on the foreign exchange markets, average Deutsche Mark prices remained almost unchanged.

BBk

1) Also adjusted for working-day variations.- 2) Results of the Ifo Business Survey.

The wage cost pressure was moderated by the fact that the rates of pay increases in major areas of the economy were relatively low on account of the medium-term pay agreements concluded in the preceding years. By contrast, in a number of economic sectors the pay rate increases agreed in the 1990 wage round were far higher than in 1989, so that the overall rise in wages and salaries per employee and per man-hour worked accelerated distinctly. An early steep upturn in unit labour costs was, however, prevented by a further unexpectedly strong increase in labour productivity. The dangers to stabilisation policy posed by sustained heavy demand pressure and a considerable upsurge in costs - which is partly dependent thereon - were revealed in 1990 by developments in the construction sector. Owing to the previously agreed reduction in working hours from the beginning of the year and the results of the pay negotiations, which were appreciably above the average. since April 1, 1990 the cost of one man-hour worked in the construction sector has been 101/20% higher than a year earlier, and the average annual prices of construction work have been 6% up on the year.

This picture of the west German economy running at full steam contrasted sharply with developments in eastern Germany. A painful process of adjustment to the conditions of a market economy came under way in the new Länder. The influx of immigrants to the old Länder had started even before the borders were opened; in the last five months of 1989 290,000 of its residents left the then GDR. This marked the beginning of a downturn in the GDR economy which was equivalent to 3% of total economic output as early as the last quarter of 1989, compared with the corresponding period of 1988 (and compared with close on +4% in the preceding nine months). In view of the sustained strength of emigration, the decline in production speeded up significantly in the first half of 1990. At the same time, the wave of immigrants and major political factors were the main reasons why the Federal Chancellor offered the GDR Government a monetary, economic and social union at the beginning of February 1990. Up to the first free elections in the GDR on March 18, 1990, however, the east German legislative and executive authorities took virtually no steps in the direction of the requisite basic reforms, and even afterwards only very hesitant ones. It was only under the impact of the negotiations on the State Treaty that key measures were adopted.

Painful adjustment process in eastern Germany

With the introduction of the Deutsche Mark in the middle of 1990 and the associated abrupt transition to a market economy, the old burdens deriving from the former command economy became more and more evident. Not only did the degree of environmental pollution gradually emerge, it also progressively became manifest that - after decades of insulation from international competition and from the resulting need to adjust - many enterprises and products were uncompetitive on domestic and international markets. This was particularly apparent from the fact that, upon the inception of the monetary, economic and social union, residents of the then GDR generally preferred western products (which they were able to buy unrestrictedly for the first time and which, as a result of the conversion rate, had moreover become cheaper for them than in the days of the GDR Mark) to home-produced goods. In many cases the latter were consequently crowded out of the market. This crowdingout and the low demand for exports were the major reasons for the accelerated downturn in industrial production, which in the second half of 1990 was almost 50% lower than a year before (against -7% in the first half of the year). This slowdown was accompanied by a massive shedding of labour from many industrial enterprises, as well as in other sectors which were heavily overmanned.

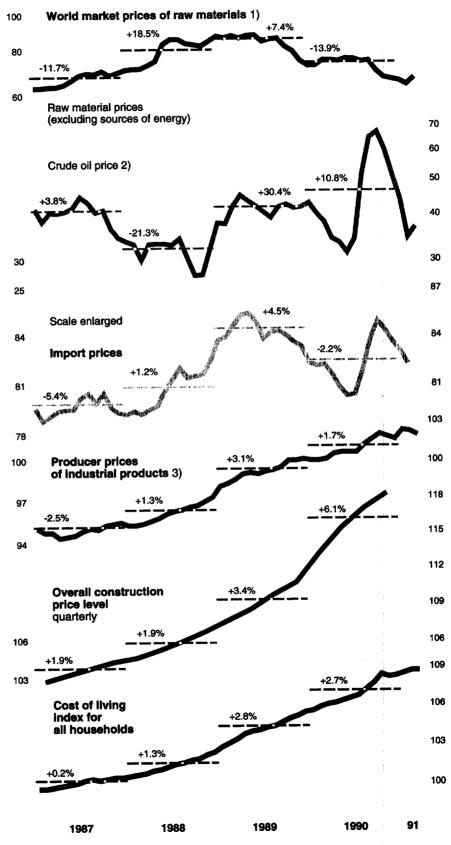
Accelerated downturn from the middle of 1990

This painful adjustment is as unavoidable as it is necessary to bring about or safeguard the competitiveness of the jobs that do remain. Throughout the east

## **Prices**

1985=100, seasonally adjusted, log. scale

— - Annual average with change from previous year in %



1) HWWA index of raw material prices; DM basis.- 2) Not seasonally adjusted.- 3) Domestic sales.

German economy, in which unemployment had been officially unknown up to the end of 1989, but had actually existed in a concealed form on a large scale, the number of unemployed at the end of December 1990 was roughly 640,000 (or 7.3% of the total labour force); the number of short-time workers, who in the new Länder include persons attending retraining and further training courses, was 1.79 million. By the end of March 1991 unemployment had risen to 810,000, and short-time working to 2 million. Around the turn of 1990-1 there were initial glimmers of hope of an end to the downward slide in individual areas of the manufacturing sector; at the least, the inflow of orders there increased noticeably. Similar signs are discernible in the construction sector, where, moreover, the trend in turnover is pointing upwards. All this does not, however, imply a basic change to a broadly-based upswing in the new Länder; such an upswing has recently been additionally impeded by the slump in exports to the CMEA countries.

The wage policy which has been pursued in the former GDR since the spring of 1990, and which has taken no account of the initially very low level of productivity in eastern Germany, has not been very conducive to a change for the better. Industrial enterprises raised wages and salaries sharply as early as April-May. In addition, sizeable payments from company bonus funds were apparently brought forward. These "advance increases" in the spring were joined in the second half of 1990 by the results of the first pay agreements freely negotiated between management and labour, under which negotiated wages and salaries, which were converted from GDR Mark into Deutsche Mark on July 1 at the rate of 1:1, were raised by between 25% and 60%. Since independent enterprises were only gradually emerging, the necessary counterweight in this process on the management side existed to only a limited extent, even though new employer organisations were participating in the negotiations. On account of the normally short life of these agreements, a number of follow-up agreements were already concluded towards the end of last year and in the first few months of 1991; they include the adoption of the pay patterns obtaining in the old Federal Republic. Unlike the situation in 1990, this represents a necessary step towards a stronger orientation to the differing qualifications of employees. Furthermore, the new agreements provide for an increase in the east German pay level to a specific percentage (between 55%) and 65%, depending on the pay agreement) of west German negotiated wages and salaries in 1991; the ultimate aim is a relatively rapid complete adjustment to the pay rates prevailing in the old Länder. In the current year the first adjustment step in most cases implies a renewed sharp increase in wages, which, owing to the fixed adjustment rate, will be followed by automatic "additional benefits" after the conclusion of a corresponding pay agreement in western Germany. The steep wage rises in 1990, together with the sizeable transfer payments to households (pensioners and the unemployed, for instance), mainly from west German sources, contributed materially to the high level of consumer demand in the five new Länder. As outlined above, this demand focused mainly on western goods, with the result that, in the former GDR, income and demand, on the one hand, and output, on the other, have become independent of one another - a gap which must be closed again by structural adjustments over the longer term.

The sharp wage increases of April-May 1990, and to some extent also the first freely negotiated pay settlements, owed a great deal to the expectation that, mainly as a result of the abolition of the subsidies for food (which was accompanied by the abolition of the levies on many industrial products), the Deutsche Mark price level for private consumers would be higher than the price level in GDR Mark from the middle of the year. In actual fact, the cost of living index for all households throughout the second half of last year was lower than in 1989 — on average over 3% lower. There were admittedly significant

Steep wage increases

Consumer price level in Deutsche Mark initially lower than that in GDR Mark

## Selected economic data for eastern Germany\*

		1990				1991
Item	Unit	1st qtr	2nd qtr	3rd qtr 1	4th qtr	1st qtr
Producing sector						
Industry						
Orders received 2	DM billion			10.2	9.0	
Turnover	DM billion			17.1	17.2	
Output 3	1985 = 100 Change from previous	107.6	102.6	56.9	54.4	
	year in %	- 4.5	- 9.5	-48.1	-50.9	
Construction						
Orders received 4	DM billion			1.1	1.1	
Turnover 4, 5	DM billion			2.1	3.0	
Memorandum item Housing units built	Number Change from	4,324	5,616	5,334	5,549	
	previous year in %	36.2	- 33.3	- 40.7	- 15.8	
Retail trade						
Turnover	GDR Mark billion or DM billion Change from previous year in %	10.8	10.7 — 0.6	6.0 - 45.0		
Labour market						
Employed 6			ļ			
Industry	Thousands	3,086	2,961	2,690	7 2,420	
Construction	Thousands	439	371	359	7 340	
Transportation, Post Office and telecommunications	Thousands	613	580	554	7 519	,
Distribution	Thousands	760	722	1	1	l:
Unemployed	Thousands		83.3	1		756.5
Unemployment rate 8	0/0		1.0	3.5		8.6
Short-time workers 9	Thousands			1,295.0	1,735.9	1,929.8
Prices						
Cost of living index 10	1989 = 100		11 93.1	95.3	98.5	12 106.6

<sup>\*</sup> Unadjusted figures; quarterly figures: monthly averages. — 1 Inception of the monetary, economic and social union on July 1. — 2 Excluding energy and water supply. — 3 Calculation method not comparable with that of west German figures; adjusted for working-day variations. — 4 Construction enterprises with 20 or more employees. — 5 On the domestic market. — 6 Wage and salary earners, excluding trainees. — 7 Average October-November. — 8 Unemployed as a percentage of the total labour force; up to May 1990 calculated by the Bundesbank. — 9 Short-time working also includes retraining and further training. — 10 All households. — 11 Average May-June. — 12 Average January-February.

price increases during the second half of 1990, partly because of the steep wage rises. However, households' real income in that period was higher than their nominal disposable income in the wake of the currency conversion. But as a result of, above all, the adjustment of certain energy prices and some insurance premiums to free market conditions, the consumer price level in the former GDR went up strongly for its residents after the turn of the year; in February 1991 it was 8% above the level of end-1990 and thus 7% above the average of 1989. However, since the nominal income of employees and pensioners rose much more sharply, the standard of living improved for that reason alone. In addition, following the introduction of the Deutsche Mark, residents of the former GDR now have the wide range of western products at their disposal, so that the level of demand satisfaction has greatly improved.

Retardation of the economic upswing

In spite of some glimmers of hope in individual areas, such as the construction sector, it cannot yet be expected, viewed as a whole, that the downward slide of the east German economy has come to an end. In particular, manufacturing enterprises, which are subject to the strongest adjustment pressures, have not so far succeeded on a broad front in holding their own with competitive

products on the domestic market, let alone international markets. One of the main reasons for this is basically the fact that the goal of creating favourable underlying conditions for investment, and thus for an upswing in the territory of the former GDR, has been achieved only in part to date, even though generous assistance is being granted in the form of sizeable loans, government subsidies and tax relief.

One of the significant impediments to investment is the great number of unclarified ownership rights, particularly to land and buildings; this is among the major reasons for the shortage of industrial estates and premises. Since the land registers were sometimes kept only inadequately, and sometimes not kept at all, the clarification of ownership issues generally absorbs a lot of time, and the administration (which is still being set up) is overtaxed. This serious problem could be eased by the investment proviso which has now been introduced. This proviso gives local authorities the option of releasing land for investment purposes, while a right to indemnification is maintained. The inadequate public infrastructure is likewise proving to be a barrier to private investment. Inter alia, there are marked shortcomings in the rail and road networks, and modern communications facilities are often not available. To set up an efficient public infrastructure, including public administration, additional qualified personnel is required in the public sector. Since there is no supply of such staff in eastern Germany, it seems that - at least for a transitional period - specialised staff from western Germany will have to be recruited in many cases. Accelerated privatisation - say, by way of public tender - might enhance the propensity to invest. Overtaxing Treuhandanstalt (the privatisation agency) by assigning it structural policy tasks would, however, certainly be counter-productive. Profitable and thus durable jobs are created mainly by private enterprise, with rapid privatisation possibly serving as a catalyst. A basic change in the former GDR necessitates not least better adjustment by the labour force to market economy behaviour patterns. This applies not only to the management level in the private and public sectors but also to the subordinate levels. In the short run, opportunities for retraining and further training and an institutional reform of the entire education system are required to this end. It is to be regarded as a favourable sign that - judging by the 255,000 new businesses registered on balance in 1990 - the establishment of enterprises has come under way, particularly in the services sector, whose development was more or less deliberately obstructed under the old regime.

Diverse impediments to investment

In view of the sluggishness of exports, demand pressures decreased in the west German economy after the turn of 1990-1. A flattening of demand growth is certainly desirable for stabilisation policy reasons. In the west of the Federal Republic, after all, the supply reserves are virtually exhausted at present, not least because of the lack of competitiveness of east German industry. Hence an expansion of aggregate production seems possible only on a small scale, at best, by means of heavier utilisation of the existing productive resources, particularly the capital stock. As a result, the west German economy's scope for growth is limited to the increase in production potential, which, according to rough estimates, will amount to approximately  $2\frac{1}{2}0$ 0 in 1991.

More limited scope for growth in western Germany

Even in the manufacturing sector, which, owing to its relatively strong dependence on exports, has in the past always been hit particularly hard by any external adjustment process, the decline in export orders was accompanied by a sustained sharp increase in domestic orders, which offset the drop in demand for exports. Thus the aggregate orders received from the home market and abroad in January and February 1991 exceeded the level of the comparable period of the preceding year by 9% in value and 6½% in volume. The high level of orders received from domestic customers and, quite generally, of domestic business activity is due not least to the persistently

Sluggish exports offset by buoyant domestic business activity strong demand stimuli emanating from the new Länder. Since the second half of 1990 these stimuli have been financed largely by west German transfer payments from the public sector. The resulting demand may focus more than before on capital goods in 1991, which would be fully in line with economic policy objectives. Demand may be dampened by the tax increases which will become effective in the middle of the year, but there will still be a high level of self-perpetuating investment and particularly self-perpetuating private consumption in western Germany. In the near future the macroeconomic situation will probably be marked less by a lack of demand than by a lack of domestic supply potential. The risks to stability associated therewith will be compounded by the danger of a considerable surge in labour costs if the policy pursued in the first agreements of this year's wage round, with pay rate increases far in excess of the expected growth in productivity, is continued, especially since the effects of these wage rises on costs are being exacerbated by the increase in social security contributions from April 1, 1991.

## 2. Highly expansionary fiscal policy

Expansionary impact of fiscal policy on business activity

In 1990 fiscal policy had a highly expansionary impact on business activity in western Germany. For one thing, the tax cuts which came into force at the beginning of the year had a stimulating effect. For another, substantial public transfers were made to assist the adjustment process in eastern Germany, and most of them resulted in additional demand for goods in the original Federal territory. On account of the shortfalls in revenue due to the third stage of the tax reform, but mainly as a result of the financial requirements emerging as part of the German unification process, the public sector deficit increased sharply. The burdens associated with German unification were imposed on the original Federal Republic in a situation which, thanks to the fiscal policy makers' earlier efforts at consolidation and to the sustained economic growth, provided relatively favourable conditions for coping with the calls on the public sector, which have actually increased in the meantime. However, it should not be inferred from this that the financial resources of the public sector are virtually unlimited; any such misconception would inevitably lead to an overstraining of western Germany's economic potential, which will constitute the foundation of prosperity in the whole of Germany for a long time to come.

Sharp increase in the budget deficit

The deficit in the budgets of the central, regional and local authorities (including eastern Germany since the implementation of the monetary, economic and social union in mid-1990) came to approximately DM 90 billion last year, compared with DM 21.5 billion in 1989. The Federal Government, whose third supplementary budget of October 1990 included the state budget of the former GDR for the second half of 1990, recorded a deficit of DM 45 billion. 1 In addition, the "German Unity" Fund, which was set up by the Federal and west German Länder Governments as a joint instrument for financing public spending in eastern Germany, ran a deficit of almost DM 20 billion. Moreover, the ERP Special Fund, which was put in charge of new lending schemes to foster economic activity in eastern Germany, registered a deficit of DM 2 billion. But the west German Länder Governments, which, all in all, probably benefited somewhat in financial terms in 1990 from the process of unification and the associated additional tax receipts, likewise showed a far bigger deficit, at DM 19.5 billion, than in 1989, and in the case of the west German local authorities the surplus which had been recorded in 1989 gave way to a deficit of DM 3.5 billion. By contrast, the surpluses of the west German social security funds actually increased somewhat in 1990 over the previous year (from DM 13.5

<sup>1</sup> After inclusion of the Bundesbank's profit, which (at DM 3 billion) was larger than had been budgeted for and which, in budgetary terms, was used directly to repay due debt.

## Finances of the public authorities\*

Item	1988	1989 <b>pe</b>	1990 <b>pe</b> Old Länder	1990 <b>1, pe</b> Eastern Germany	1988	1989	1990 <b>pe</b> Old Länder
	DM billion		1		Change from	previous year	in %
A. Budgetary trend							
Central, regional and local authorities							
Expenditure							
Personnel expenditure	216.5	222	234.5		+ 2.5	+ 2.5	+ 5.5
Other operating expenditure	105.0	111	119.5		+ 1.5	+ 5.5	+ 8
Transfers 2	192.6	202	214		+ 5.6	+ 5	+ 6
Interest	60.4	61	65		+ 3.2	+ 1	+ 6
Fixed capital expenditure	58.2	62	66.5		+ 1.8	+ 6.5	+ 7.5
Financial aid 3	40.4	41	47.5		+ 1.4	+ 2	+ 15.5
Total expenditure 4 of which	673.6	700	748.5	72	+ 3.1	+ 4	+ 7
Federal Government	278.2	293	6 311	72	+ 2.5	+ 5.5	+ 6
Länder Governments	270.1	283	300		+ 2.3	+ 4.5	+ 6
Local authorities	184.4	194.5	209.5		+ 2.9	+ 5.5	+ 7.5
EC 5	25.3	24.5	23		+ 25.5	- 3.5	6.5
Receipts Tax revenue	488.1	535.5	549.5	17	+ 4.1	+ 9.5	+ 2.5
Other receipts	132.9	146.5	155	11	- 1.4	+ 10	+ 6
Total receipts 4	620.3	679	702	28	+ 3.0	+ 9.5	+ 3.5
of which							
Federal Government	242.2	<b>7</b> 278	7 290	48	- 0.6	+ 14.5	+ 4.5
Länder Governments	253.7	275	280.5		+ 3.8	+ 8.5	+ 2
Local authorities	185.1	196.5	206		+ 4.8	+ 6	+ 4.5
EC	25.3	24.5	23	•	+ 25.5	- 3.5	- 6.5
Surplus (+) or deficit (-) of which	- 53.3	- 21.5	- 46.5	- 44			
Federal Government	- 36.0	<b>7</b> — 15	7 - 21	- 24			
Länder Governments	- 16.3	- 7.5	- 19.5				
Local authorities	+ 0.6	+ 2	- 3.5				
"German Unity" Fund	_	_	_	20	•		
Social security funds					:		
Expenditure	394.8	400	424.5		+ 6.5	+ 1.5	+ 6
Receipts	393.3	413.5	441		+ 5.1	+ 5	+ 6.5
Surplus (+) or deficit (-)	- 1.5	+ 13.5	+ 16.5				
Public authorities, total							
Expenditure	1 021.7	1 050.5	1 121		+ 4.1	+ 3	+ 7
Receipts	966.9	1 043	1 091		+ 3.6	+ 8	+ 4.5
Deficit ( – )	- 54.8	- 8	- 30				
	Level at end	of year in DM	billion 8		Change from	m previous yea n <b>8</b>	ir
B. Indebtedness of the central, regional and local authorities							
Borrowers' note loans	502.7	496.0	517		+ 12.9	- 6.7	+ 21
Securities	382.0	414.9	518.5		+ 42.1	+ 32.9	+ 103.5
Other debt	18.3	17.9	17.5		- 0.9	- 0.3	- 0.5
Total indebtedness of which	903.0	928.8	1052.5		+ 54.2	+ 25.8	+ 123.5
Federal Government	475.2	490.5	542		+ 34.7	+ 15.4	+ 51.5
Länder Governments	302.6	309.9	328.5		+ 18.0	+ 7.3	+ 18.5
Local authorities	111.3	112.9	116		+ 1.4	+ 1.6	+ 3

<sup>\*</sup>Including hospitals keeping commercial accounts and other special accounts. Receipts and expenditure are shown here under the period for which they are intended, in accordance with budgetary practice. —

1 Section B of the Federal budget and "German Unity" Fund; only 2nd half of 1990. — 2 Mainly social expenditure and current grants to the enterprise sector. — 3 Expenditure on investment grants and loans to third parties, plus the acquisition of participating interests. — 4 This aggregate — unlike the figures below for the Federal and Länder Governments and local authorities — does not include transfers between the various levels of government (apart from differences in clearing operations). — 5 EC

expenditure financed out of EC revenue in Germany. — 6 Including transfers from the Federal Government to the "German Unity" Fund and the social security funds in eastern Germany. — 7 The Bundesbank profit transfer is included in full in the figure as Federal Government revenue. — 8 In 1990 including the debt of the "German Unity" Fund and the indebtedness to date of the Debt Processing Fund, which takes over the debt of the former GDR. The figure for new borrowing mentioned in the article differs from the change in indebtedness owing to the take-over of old debt. — pe Partly estimated.

pe Partly estimated.
Discrepancies in the totals are due to rounding.

billion to DM 16.5 billion), mainly as a result of the strong growth in employment.

Steep rise in expenditure

The expenditure of the central, regional and local authorities rose steeply in 1990, to a total of DM 820 billion. More than DM 70 billion of this sum was accounted for by spending in eastern Germany after the middle of the year. For one thing, most public services there had to be continued; for another, substantial subsidies still had to be granted to the housing, energy and transportation sectors, to farmers and for exports to central and east European countries. Moreover, in the social security funds it was necessary to meet deficits which had opened up not least because contribution receipts had been slow to start flowing in after the reforms in the middle of the year to bring the east German social security system into line with that in western Germany. But in 1990 the central, regional and local authorities stepped up their spending in the original Federal territory, too, to a greater extent than before. Total expenditure there went up by 7%, and thus more than twice as fast as would have been consistent with the recommendation of the Financial Planning Council (representing the Federal and Länder Governments and the local authorities) to the effect that the growth rate of spending should be limited to 3% over the medium term. Particularly in view of the pressures discernible in business activity in western Germany and of the necessity of releasing more resources for eastern Germany, restraint would have been desirable. The steepest rise - of just under 8% - was registered by the expenditure of west German local authorities. Overall spending by west German Länder Governments increased by 6% in 1990 against the previous year (with expenditure on eastern Germany being of little significance). In section A of its budget, the Federal Government spent 6% more than a year before.

Faster growth of personnel spending and other operating expenses in western Germany Among the major types of expenditure of the central, regional and local authorities in western Germany, personnel spending went up by 5½ % in 1990, and thus distinctly faster than a year earlier, mainly because bonus payments were agreed upon for public sector employees from the beginning of 1990, on top of the rise in wages and salaries in accordance with the final stage of the three-year wage settlement concluded in 1988. This had a particularly strong impact on Länder Government budgets, which account for the highest ratio of personnel costs. The other operating expenditure of the central, regional and local authorities likewise grew vigorously (+8%). Transfer payments increased by 6%, with mixed trends at the various levels of government. Capital expenditure rose comparatively sharply (+71/20%), including a growth of just under 8% in construction spending. Public capital formation had been picking up strongly since as long ago as 1989, mainly because the local authorities, as the biggest public investors, again had more room for financial manoeuvre and, in addition, had been offered low-interest loans on a considerable scale under government-funded promotional schemes. In view of the capacity bottlenecks and steep price increases in the construction sector, however, a slower pace of public construction activity would have been desirable, particularly in the light of the vigorous growth of demand in the housing sector, which was stimulated not least by greater government promotion.

Expansion of tax revenue moderated by tax cuts

West German tax revenue was reduced by the tax reform, which seems to have resulted in larger shortfalls in receipts than had originally been envisaged. However, this reduction was accompanied by the beneficial effects of the sustained boom; in particular, the demand surge from eastern Germany generated substantial additional revenue from turnover tax and specific excise taxes. At DM 550 billion, total tax revenue in western Germany in 1990 exceeded the level of the previous year by  $2\frac{1}{2}\%$ ; it turned out to be DM 13 billion higher than had been foreseen in the official tax estimate of November 1989, on which the budgets were largely based. In eastern Germany, by

contrast, tax revenue was relatively low owing to the sluggishness of economic activity and, in particular, the heavy buying in western Germany. In addition, some major taxes did not yield any revenue until August; moreover, administrative teething troubles had to be overcome. At DM 17 billion, the tax receipts in eastern Germany in the second half of 1990 were equivalent to barely 6% of revenue in the west.

Given the deficits in the public sector budgets, government borrowing soared in 1990. By raising its interest rates soon after the beginning of the year, the capital market adjusted itself to the much heavier burden to be expected. The central, regional and local authorities (including the GDR state budget in the period between July 1 and October 2 and including the "German Unity" Fund) raised DM 111 billion net in the credit markets in 1990 as a whole (against as little as DM 26 billion in the preceding year). DM 95 billion of this sum was taken up in the second half of the year. Overall, net public sector borrowing in 1990 was higher than would have been necessary to finance the deficit. This was because the finances of the Federal Government developed more favourably than had been expected towards the end of the year, and also because the Federal Government received relatively substantial amounts in December from sales of tap issues. Hence it held considerable balances at the Bundesbank (over DM 15 billion) at the end of 1990, which it can draw upon in the current year.

High level of new borrowing

The central, regional and local authorities raised funds worth DM 91 billion net in 1990 by selling securities. However, taking up loans against borrowers' notes (at DM 21 billion net) increased in significance owing to the very large borrowing requirements; in this connection, the terms were in some cases made more flexible than before to include, for instance, a right for the creditor to terminate the agreement, as well as floating interest rates. Quite apart from the fact that the west German Länder Governments continued to show a predilection for loans against borrowers' notes, the "German Unity" Fund and the GDR state budget, too, met a large part of their borrowing requirements by means of this debt instrument; the Federal Government, by contrast, once again markedly reduced its liabilities of this kind.

Nature of the borrowing

When drawing up the budgets for 1991 and the medium-term financial plan, the fiscal policy makers were faced with the undoubtedly difficult task of fostering the structural economic changes and the restructuring of the east German Länder as far as possible and cushioning the adjustment process in social terms for east German residents. At the same time, public sector debt had to be prevented from getting out of hand as a result of the massive new requirements, and the burden of debt service had to be prevented from largely obstructing the public authorities' future room for manoeuvre in the field of fiscal policy. From a macroeconomic point of view, too, the substantial transfers to eastern Germany necessitate strict restraint with respect to western calls on public sector budgets, so as not to overstrain the currently heavily utilised west German production potential and to avert the risk of a stronger upturn in prices, which, in the final analysis, would also adversely affect economic growth.

Fiscal policy implications of the transfer of resources to eastern Germany

In the process of budgetary planning, major efforts were therefore required to contain the expansion of the public sector deficit in 1991, which is prefigured if only because the financial burdens associated with unification now have to be borne for a full year. Moreover, the way had to be paved for returning to a consolidatory stance of public finance once the current strong pressures have eased. This is why the Federal Government, in November 1990, adopted some budgetary benchmark figures which take due account of these necessities. According to these figures, the deficit in the 1991 Federal budget is to be

Budgetary benchmark figures limited to DM 70 billion, and that in the budgets of all the central, regional and local authorities to a maximum of DM 140 billion; by 1994 the deficit is to have been reduced to DM 30 billion for the Federal Government and to distinctly less than DM 100 billion for the central, regional and local authorities as a whole.

Draft Federal budget for 1991

In their agreement of January 1991, the parties to the coalition government adopted a number of measures to ease the pressure on the 1991 Federal budget by a total of about DM 35 billion relative to the status quo (in accordance with the decision on benchmark figures). A significant item in this connection, in addition to expenditure cuts (which, in the light of stabilisation policy requirements, could have been made more drastic, especially in the case of subsidies in the old Länder), is the increase in social security contributions. which will reduce the Federal Labour Office's need for Federal grants. After the outbreak of hostilities in the Gulf, German payments to the United States, the United Kingdom and France (totalling about DM 9.5 billion in the aggregate) and aid to other states imposed an additional burden on the Federal budget. Even so, owing to expenditure reductions and additional receipts to be expected (particularly from taxes), the authorities succeeded in limiting the deficit in the 1991 draft Federal budget, which was approved by the Federal Cabinet on February 20, 1991, to about DM 70 billion, as had been envisaged.

Additional budgetary burdens

When the draft Federal budget was approved, however, additional grave budgetary burdens were already looming. For instance, a means had to be found of improving the financial position of the east German Länder Governments and local authorities over and above the provisions made in 1990; in view of the large budget deficits that had emerged there, this appeared to be an urgent matter. Hence the Federal and Länder Governments agreed on February 28 that the Federal Government would forgo, in favour of the east German Länder Governments and local authorities, its share of the resources of the "German Unity" Fund (to which it is entitled under the Unification Treaty as a contribution towards the funding of its expenditure in eastern Germany); this will amount to over DM 5 billion in 1991. Moreover, the east German Länder are now participating fully, in accordance with the number of their inhabitants, in the Länder share in all-German turnover tax revenue; this means that, compared with the original arrangement, the west German Länder Governments are forgoing tax revenue to the extent of about DM 5 billion in 1991. To enable the difficulties which have come to light in connection with the restructuring of the east German economy to be overcome more quickly, the coalition government also considered it necessary to make even more funds available for eastern Germany in its 1991 Federal budget. Finally, the financial risks associated with the Gulf region also had to be taken into account.

Tax increases approved

In order to make provision for all these additional burdens on the Federal budget, on February 25, 1991 the coalition government approved some tax increases which are expected to yield additional revenue totalling about DM 17 billion for the Federal Government in the current year (and about DM 27 billion in 1992). An income and corporation tax surcharge of 7.5% of the tax liability will be levied for one year (from mid-1991 to mid-1992). In addition, mineral oil tax will be raised markedly in mid-1991; higher taxes will also have to be paid on property insurance and — from the beginning of 1992 — tobacco. These tax increases will prevent the deficit from rising even further as a result of the above-mentioned additional spending requirements. The expansionary impact of public finance on the demand for goods and the pressures on the credit markets will thus be kept within bounds (even though it has to be borne in mind that higher taxes will probably operate quite significantly to the detriment of private saving). From the point of view of stabilisation policy, however, it is

essential for the reduction of real net income associated with the tax increases to be accepted, in the interests of releasing resources for the new tasks, and for no cumulative process of wage and price rises to be triggered which would have to be restrained by means of monetary policy action.

At the beginning of March 1991 the coalition government decided to amalgamate the additional measures for eastern Germany that are to be funded out of the tax increases in what is known as a "Gemeinschaftswerk Aufschwung-Ost" (joint programme for the economic recovery of the new Länder), which is to have a financial volume of DM 12 billion in the current year. DM 5 billion of this sum is earmarked for municipal spending on the maintenance, in particular, of hospitals, schools and old people's homes. Additional funds are also envisaged for public sector capital spending in other areas, for the promotion of corporate investment and for job creation measures. All in all, the funds for eastern Germany have been increased in such a way that adequate financial resources are now available for measures to improve the substandard public infrastructure. However, the ampler financial provision of the east German Länder Governments and local authorities should not result in necessary adjustment processes (e.g. the reduction of the unduly high staff levels and the progressive dismantling of any remaining consumer subsidies) being deferred. It must be ensured that the additional spending in the new Länder which is causing the current increase in the public sector deficit is devoted primarily to capital investment, i.e. to purposes serving the enhancement of production potential.

"Gemeinschaftswerk Aufschwung-Ost" (joint programme for the economic recovery of the new Länder)

On the basis of the figures so far available, the deficit of the public authorities. including the social security funds, throughout Germany will probably reach a level of just over 5% of GNP in 1991 (against as little as barely ½% of GNP in 1989, when the deficit in the old Federal Republic reached an all-time low). By international standards, a deficit of this magnitude may not seem overly high at first glance, particularly if the present exceptional burden associated with German unification is taken into account. Convincing though this argument may be for the first two years of German unity, it is not very persuasive for the more distant future, when the Federal Republic should not get accustomed to public deficit "standards" which would dangerously narrow the room for manoeuvre of future fiscal policy makers and impose an excessive burden on the stabilisation function of monetary policy. In the medium-term financial plan for the years up to 1994, which was presented together with the draft Federal budget for 1991, the Federal Cabinet reaffirmed its determination to reduce the Federal deficit substantially again in the years ahead by means of strict restraint in spending. Federal expenditure is planned to increase by barely 1% in 1992 and by just over 2% in the subsequent two years. As planning parameters, which are to be realised systematically, these benchmark figures take due account of macroeconomic requirements. However, the west German Länder Governments and local authorities are likewise faced with the task of keeping the rise in spending down to a minimum. The Federal Cabinet intends to elaborate shortly a concrete approach to the dismantling of subsidies, including tax concessions (over and above the envisaged reductions in aid to Berlin, aid to the area along the former intra-German border and general regional aid). Another reason why efforts to achieve further cuts are imperative is that an improvement in child allowances is envisaged for 1992.

Return to budgetary consolidation in the medium term

The prospect of a renewed decline in the deficits is based not least on the fact that government receipts will flow in more vigorously in eastern Germany as the economic recovery there gets under way. If noticeable headway is made in the consolidation of the public sector budgets, this will also ease the pressures on monetary policy, which would otherwise be overtaxed if it were expected to

Pressures on monetary policy eased by budgetary consolidation

keep the value of money stable under conditions of sustained, highly expansionary fiscal policy.

### 3. Foreign trade and payments at a time of adjustment

Reduction of the current account surpluses owing to rapid economic growth in Germany After Germany's external surpluses had risen consistently during the eighties, a turning point was reached in 1990. The current account surplus, which had amounted to as much as DM 108 billion in 1989, declined to DM 77 billion in 1990 - even though the former GDR, whose external transactions have been included in the Federal Republic's balance of payments since July 1990, contributed external surpluses totalling DM 13 billion to the monetary union in the second half of 1990 (this figure is, however, distorted by sizeable subsidies). As a percentage of GNP, the reduction in the surpluses is equivalent to a decline of 1.8 percentage points (from 4.8% to 3.0%). This trend accelerated markedly towards the end of last year, and it is likely that the surplus on current account will continue to decrease sharply in 1991. The main reason for the rapid adjustment of the surpluses, which had often been criticised abroad for being too high, was that the growth differential, which had shifted in Germany's favour as early as 1989, widened considerably in 1990. While economic activity abroad slackened and demand from major customer countries weakened accordingly, domestic demand in Germany grew at an above-average rate. With capacity in western Germany being almost fully utilised - and output dropping in eastern Germany - the gap between supply and demand could be filled only by stepping up imports. The consequent reduction in the current account surplus helped to ensure that the necessary resources could be transferred to the former GDR without unduly exacerbating the cyclical tensions in western Germany. At the same time, this fostered the return to a more balanced current account pattern among the major industrial countries - an objective which had not been achieved in previous years despite closer cooperation in economic policy worldwide.

Vigorous surge in imports because of a sharp expansion in domestic demand

In 1990 the Federal Republic, as formerly defined, recorded by far the largest real increase in exports since 1976, at 111/2 %. This surge in imports was mainly due to the heavy demand for western goods emanating from the former GDR, which could not be met by western Germany alone; instead, it had to be satisfied to a considerable extent through foreign supplies. At the same time, however, the demand for imports generated within the old Federal Republic likewise increased significantly as a result of the healthy economic situation and the marked rise in disposable income. Exchange rate movements further enhanced this strong propensity to import. It was not least the sharp appreciation of the Deutsche Mark against the US dollar that resulted in a distinct decline in most import prices in Deutsche Mark terms; this applied not only to basic and producer goods but also to finished products. The only imports to become more expensive were those in the energy sector. The rise in world market prices of crude oil more than offset the intrinsic price-lowering effect of the depreciation of the US dollar, with the result that energy imports ultimately cost 17% more in 1990 than in the previous year, despite only a slight increase in the volume of imports. It was the west European industrial countries, with which Germany had run rapidly increasing surpluses in previous years, that were the main beneficiaries of the surge in imports in 1990. As demand from Germany is relatively important for the exports of most of these countries, the massive increase in German imports helped to counteract the spreading cyclical slowdown almost everywhere. It also provided a perceptible counterbalance to the interest rate rises which accompanied the massive German budget deficits and which spread to some of the other EMS countries as a result of the exchange rate system.

### Major items of the balance of payments<sup>o</sup>

DM	hill	llon

em	1983	1984	1985	1986	1987	1988	1989	1990
. Current account								
1. Foreign trade								
Exports (f.o.b.) 1	432.3	488.2	537.2	526.4	527.4	567.7	641.0	66
Imports (f.o.b.) 1	378.5	421.4	451.1	403.0	399.5	428.4	493.4	54
Balance	<del>                                     </del>	·					-	
	+ 53.8	+ 66.8	+ 86.0	+ 123.4	+ 127.9	+ 139.2	+ 147.6	+11
Supplementary trade items     and merchanting trade 2	+ 3.3	- 1.1	- 1.3	- 1.5	- 1.1	+ 1.2	- 1.1	_
Balance of trade	+ 57.0	+ 65.8	+ 84.7	+ 121.9	+ 126.8	+ 140.4	+ 146.5	+11
3. Services								
Receipts	118.8	133.5	142.5	142.0	145.1	151.6	186.3	21
Expenditure	137.1	141.6	149.7	151.1	160.3	171.3	191.2	21
Balance	- 18.3	- 8.1	- 7.3	- 9.1	- 15.2	- 19.7	- 4.9	_
of which								
Investment income (net)	+ 4.2	+ 10.3	+ 9.3	+ 9.0	+ 7.1	+ 9.1	+ 21.8	+ 2
Foreign travel (net)	- 23.2	- 23.1	- 23.7	- 25.4	- 27.9	- 28.7	- 28.1	_ 3
4. Transfer payments	- 25.2	- 29.7	- 29.1	- 27.1	- 29.1	- 32.0	- 34.0	- 3
of which	-							`
Net contributions to the EC budget	- 6.0	- 7.3	- 8.3	- 8.2	- 10.4	- 13.0	- 13.4	_ 1
Other official payments to non-residents (net)	- 7.5	- 10.5	- 9.4	- 7.6	- 7.8	- 6.8	- 8.8	
Balance on current account	+ 13.5	+ 27.9	+ 48.3	+ 85.8	+ 82.5	+ 88.7	+ 107.6	+ 7
Capital account								
Long-term capital transactions								
(a) German investment abroad (increase: -)	- 36.5	- 45.0	- 61.7	- 55.4	- 62.2	- 97.9	- 94.1	_ 10
Direct investment	- 8.1	- 12.5	- 14.1	- 20.9	- 16.4	- 20.1	- 26.5	- (
Foreign securities	- 10.4	- 15.7	- 31.5	- 20.3 - 21.3	- 10.4 - 24.5	- 72.6	- 50.2	- 2
Lending to non-residents	- 14.7	- 14.2	- 13.1	- 10.3	- 24.5 - 18.6	- 72.6 - 2.5	- 30.2 - 14.2	4
Other investment abroad	- 3.3	- 2.6	- 13.1 - 3.0	- 10.3 - 3.0	- 18.6 - 2.7			
		l				- 2.8		<del>-</del>
(b) Foreign investment in Germany (increase: +) Direct investment	+ 29.5 + 4.5	+ 25.2 + 1.6	+ 48.8 + 1.7	+ 88.9 + 2.6	+ 40.2 + 3.4	+ 11.1 + 2.0	+ 70.9 + 12.6	+ 3
Domestic securities and official								
domestic borrowers' notes	+ 25.5	+ 21.7	+ 36.3	+ 69.1	+ 22.0	- 3.2	+ 39.9	+ 1
Securities	+ 13.6	+ 17.4	+ 38.3	+ 74.1	+ 33.9	+ 7.7	+ 45.0	+ 1
Borrowers' notes	+ 11.9	+ 4.3	- 2.0	- 5.0	- 12.0	- 10.8	- 5.1	
Lending to residents 3	- 0.3	+ 1.9	+ 10.9	+ 17.3	+ 14.9	+ 12.5	+ 18.5	+ 1
Other investment in Germany	- 0.2	- 0.0	- 0.1	0.1	- 0.1	- 0.2	- 0.1	_
Balance of long-term capital transactions	- 7.0	- 19.8	- 12.9	+ 33.4	- 22.0	- 86.8	- 23.3	- 6
2. Short-term capital transactions (net capital exports: -)								
(a) Banks	+ 1.8	+ 0.1	- 27.7	- 59.0	- 6.6	- 20.2	- 56.7	+
Assets	+ 5.3	- 17.8	- 33.4	<b>– 65.8</b>	- 15.4	- 30.1	- 81.0	- 2
Liabilities	3.6	+ 17.8	+ 5.7	+ 6.8	+ 8.9	+ 9.9	+ 24.3	+ 2
(b) Enterprises and individuals	- 8.9	- 16.1	- 14.1	- 56.7	- 11.5	- 21.4	- 51.6	- 2
Financial relations with foreign banks	- 2.5	- 3.3	- 13.5	- 49.3	- 10.8	- 10.6	- 38.1	- 2
Financial relations with foreign non-banks	0.6	- 4.0	+ 2.8	- 2.2	- 2.6	- 2.3	- 3.3	+
Trade credits	- 5.9	- 8.7	- 3.5	- 5.2	+ 1.9	- 8.4	- 10.3	_
(c) Official	- 4.3	- 1.6	+ 0.1	- 0.3	+ 1.0	+ 0.8	- 4.6	_
Balance of short-term capital transactions	- 11.5	- 17.7	- 41.7	- 116.0	- 17.0	- 40.8	- 112.9	- 2
Balance on capital account	- 18.4	- 37.5	- 54.6	- 82.6	- 39.0	<b>– 127.6</b>	- 136.2	_ 9
Balance of unclassifiable transactions (balancing Item)	+ 0.8	+ 6.5	+ 8.1	+ 2.7	- 2.2	+ 4.2	+ 9.5	+ 2
Balancing item in respect of the Bundesbank's external position 4	+ 2.4	+ 2.1	- 3,1	- 3.2	- 9.3	+ 2.2	- 2.6	_
Change in the Bundesbank's net external assets 5 [A plus B plus C plus D] (increase: +)	- 1.6	- 1.0	- 1.3	+ 2.8	+ 31.9	- 32.5	- 21.6 l	+

O From July 1990 including the external transactions of the former GDR. —

1 Special trade. — 2 Mainly warehouse transactions for account of residents and deduction of goods returned and of processing. — 3 Excluding official domestic borrowers' notes. — 4 Counterpart of changes in the Bundesbank's external position which are not caused by external current and capital transactions: changes in the Deutsche Mark value of the

Bundesbank's assets and liabilities denominated in foreign currencies owing to the revaluation at the end of the year and differences between the transaction values of the Bundesbank's foreign exchange transactions and the changes in the external position shown at balance sheet rates. — 5 Valued at balance sheet rates.

Discrepancies in the totals are due to rounding.

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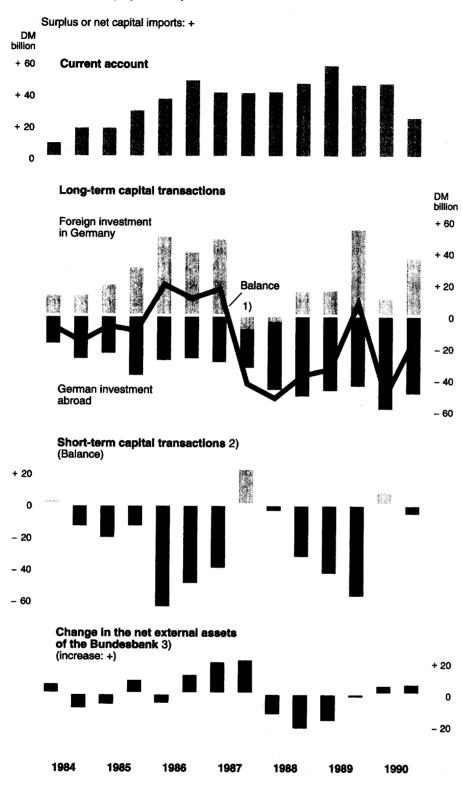
Faltering exports on account of sluggish economic activity abroad

Unlike imports, German exports scarcely increased at all in 1990. In the course of the year they were influenced more and more by the cyclical slowdown abroad and competing domestic demand. Exports were probably also adversely affected by the appreciation of the Deutsche Mark. Firstly, German products became disproportionately more expensive on major foreign markets. Secondly, goods sold abroad often fetched lower prices — in Deutsche Mark terms - than goods sold at home, with the result that enterprises concentrated more on the domestic market. The average annual rise in west German exports was consequently no more than 1½ % in real terms in 1990. Even so, there can be no question of a general decline in the competitiveness of German products or of a slump in exports. This assessment is substantiated by the fact that exports to a number of countries maintained their position; this is true, for example, of sales to Japan and other east Asian countries. It was primarily exports to some EC countries that were sluggish. A further decline in eastern Germany's exports to countries belonging to the Council for Mutual Economic Assistance (CMEA) has been emerging since the beginning of 1991, as the old contracts, which were protected under the treaty on monetary, economic and social union, are now expiring and new business has become more difficult owing to the termination of settlement in transferable roubles and the discontinuance of export subsidies.

Little change in the deficits on invisibles Compared with the pronounced shifts in foreign trade, hardly any significant changes occurred in the services and transfer payments accounts in 1990. At just under DM 5 billion, the deficit on services transactions (which include the freight and insurance costs payable on imports) was roughly the same as a year before. On the one hand, the deficit trends continued in many areas. The further rise of almost DM 3 billion in net expenditure on foreign travel, to a total of DM 31 billion, is a case in point, although the foreign travel of residents of the former GDR was a contributory factor here. On the other hand, net investment income went up by DM 5.5 billion to just over DM 27 billion. This rise was largely due to the further increase in Germany's net external assets, which more than made up for the adverse effects on gross receipts of the depreciation of the US dollar and for the additional costs arising from the increase in interest rates on liabilities, most of which are denominated in Deutsche Mark. At DM 35.5 billion, the deficit on unilateral transfers in 1990 was only slightly higher than a year before. Although Germany's net contribution to the EC budget has declined (no doubt only temporarily), its international commitments are having an increasing impact. In 1990, for instance, Poland and some developing countries had their debts cancelled. In addition, a number of financial and material transactions connected with the Gulf crisis were booked in the transfer payments account towards the end of 1990; however, the major part of Germany's considerable contributions will not appear in that account until 1991.

Large capital exports owing to bank lending and direct investment Under the impact of changes in market conditions, there was a significant shift in the financial structure of Germany's balance of payments in 1990. Whereas in 1989 the current account surplus went hand in hand with large exports of short-term funds, in 1990 the surplus was accompanied by almost equally large net outflows of long-term capital from the Deutsche Mark currency area. Although the public sector drew more heavily on domestic savings, German investment abroad rose to a record DM 107 billion in 1990. It was the banks' highly expansionary external lending that was primarily responsible for the heavier outflows of funds. After having shown great reluctance to lend to non-residents in previous years, banks extended long-term external loans amounting to DM 37 billion net in the course of 1990. About one-quarter of these funds went to centrally planned economies (notably the Soviet Union), with public sector guarantees playing a crucial role. However, most of these loans flowed to EC countries or other western industrial nations. Moreover, an

### **Balance of payments pattern**



unusually large amount of capital (DM 36 billion) was exported last year through direct investment by German firms. In connection with preparations for the single European market, enterprises stepped up their investment in EC countries, while the United States, which is a traditional target for German direct investment, once again decreased in significance. In contrast to these largely autonomous capital exports, German investment in foreign securities

1) Liquidation of foreign assets in Germany.- 2) Including the balancing item of the balance

BBk

of payments.- 3) Resulting from transactions.

(excluding direct investment) in 1990, at DM 24 billion, was only one-half as high as in the previous year.

Growing interest in Deutsche Mark bonds during the year

At DM 38 billion, non-residents' long-term investment in Germany in 1990 was almost 50% lower than in 1989. Against the background of a clouding of the stock market climate worldwide in the course of 1990, non-residents invested no additional resources in German shares, in contrast to 1989, when substantial foreign funds had flowed into the German share market in the light of the "eastern euphoria". As far as the bond market was concerned, the announcement of a monetary union with the then GDR initially produced a state of confusion among foreign investors. On account of exaggerated fears of inflation, the threat of a sharp rise in the public sector deficits and corresponding interest rate expectations, non-residents temporarily sold German bonds. However, foreign interest picked up again in the course of the year, when Deutsche Mark assets became more attractive (partly as a result of the credible monetary policy stance). The growing nominal and real interest rate advantage of the Deutsche Mark and its tendency to appreciate against the US dollar were mainly responsible for the renewed increase in non-residents' purchases in the German capital market towards the end of the year. This demonstrated yet again how important it is for monetary policy to retain both residents' and non-residents' confidence in the Deutsche Mark if disruptions of the foreign exchange and capital markets are to be avoided.

Sustained increase in Euro-market balances

The outflows of short-term funds from the non-bank sector persisted in 1990, even though these net capital exports, at DM 27 billion, were only half what they had been in 1989. Enterprises and individuals, in particular, once again added considerably to their balances with banks abroad (DM 30 billion). In addition, public authorities (especially the social security funds) invested short-term funds in the Euro-markets. In the case of the banks, on the other hand, short-term external assets and liabilities each rose by about DM 25 billion, with the result that their net position vis-à-vis non-residents remained practically unchanged. The assets of banks in the former GDR denominated in so-called transferable roubles and stemming from clearing transactions within the Council for Mutual Economic Assistance accounted for almost 40% of the growth in short-term external assets. These involve considerable exchange rate risks, which are ultimately the responsibility of the public sector.

Deutsche Mark stable within the EMS, appreciates against the US dollar The exchange rate trends of the Deutsche Mark continued to diverge in 1990. On the one hand, the rate of the Deutsche Mark against the other currencies participating in the exchange rate mechanism of the EMS changed but little during 1990, not least because the partner central banks either kept their short-term interest rates at a relatively high level or were very cautious about the extent to which they took advantage of their scope for reducing interest rates in order not to jeopardise the exchange rate linkage. If, however, it is borne in mind that prices in the partner countries - with a few exceptions continued to rise more rapidly than those in Germany, it turns out that, in real terms, the external value of the Deutsche Mark within the EMS declined again somewhat; at the end of the period under review it was being quoted approximately 6% below the level of the beginning of 1987, when a general realignment of exchange rates within the EMS was last undertaken. On the other hand, the Deutsche Mark appreciated significantly against the generally declining US dollar during 1990. The divergence between the United States and Germany in levels of economic activity became more and more pronounced, especially during the second half of the year, and the various monetary policy measures gave Deutsche Mark assets a growing interest rate advantage, which put the US currency under heavy pressure. But after the US dollar had fallen to an all-time low in February 1991, a more favourable assessment of economic trends in the United States prevailed, with the result that expectations of

### Changes in the net external position of the Bundesbank\*

DM	hillion:	increase	in foreign	evchenge:	_

DMD	illion; increase in foreigr	exchange:	<del> </del>				
	,		Operations	in the foreig	arket 1		
				EMS			
Period		Net external position, total	Deutsche Mark - dollar market	Total	Inter- vention	Debt settle- ment 2	Other foreign exchange movements
1989	January February March	- 4.2 - 0.7 - 4.1	- 4.4 - 1.9 - 2.6	-	-	- - -	+ 0.1 + 1.2 - 1.5
	April May June	- 0.1 - 5.9 - 2.0	- 0.9 - 8.4 - 3.0			_ 	+ 0.9 + 2.6 + 1.0
	July August September	- 0.8 + 0.9 - 2.7	- 0.4 - 1.0 - 3.6	 	_ 		- 0.3 + 2.0 + 0.9
	October November December	+ 1.9 - 0.6 - 0.8	- 2.4 - 0.0	+ 3.0 - 3.0 -		- 3.0 -	+ 1.3 + 2.4 - 0.8
	Total	- 19.0	- 28.7	_	+ 3.0	- 3.0	+ 9.7
1990	January February March	+ 1.0 + 1.8 - 1.3	- 0.1 - - 1.5		_ _ _	_ 	+ 1.1 + 1.8 + 0.2
	April May June	+ 1.1 + 1.2 + 1.3	- - -	_ 	_ _ _	_ _ _	+ 1.1 + 1.2 + 1.3
	July August September	+ 0.6 + 0.4 + 0.5	_ _	- 1.5 - 0.5 + 0.3	- 0.5	- - -	+ 2.2 + 0.9 + 0.2
	October November December	+ 1.8 + 1.6 + 0.9	- - -	+ 0.1  -	+ 0.1	_ _ _	+ 1.7 + 1.6 + 0.9
	Total	+ 11.0	- 1.6	- 1.6	- 1.6	_	+ 14.1
1991	January February March	+ 0.5 + 1.1 - 8.8	+ 1.2 - 2.2	- - -	_ _ _	_ _ _	+ 0.5 - 0.1 - 6.6
	1st quarter	- 7.2	- 1.1	_	_		- 6.1

<sup>\*</sup> Excluding liquidity swaps. Transactions recorded according to the date of entry. — 1 Including operations by other central banks, where they affect the external position of the Bundesbank. — 2 Deutsche Mark repayments to the Bundesbank by EMS partners.

Discrepancies in the totals are due to rounding.

further falls in interest rates receded. Moreover, on account of the large budget deficits, the sharp rises in wages and the deterioration in the current account, the risks posed by investing funds in Deutsche Mark were accentuated for a time. The rate for the dollar thereupon went up significantly. In the aggregate, i.e. in relation to the average of the currencies of 18 industrial countries, the Deutsche Mark thus rose on average by only 1% in the first quarter of 1991, compared with the corresponding period a year earlier. This was more or less consistent with the price differential vis-à-vis this group of countries. Hence the real external value of the Deutsche Mark has recently been approximately as high as it was at the beginning of 1990.

In 1990 the monetary reserves of the Bundesbank — calculated at transaction rates — went up by approximately DM 11 billion. This increase was due to regular inflows of dollars from interest income and dollar receipts from foreign troops stationed in Germany. These "autonomous" foreign exchange inflows were accompanied by relatively minor foreign exchange outflows due to the Bundesbank's occasional intervention in favour of the Deutsche Mark. Although the Deutsche Mark was supported at times within the EMS by substantial intramarginal Deutsche Mark purchases on the part of Germany's EMS partners (see page 64 f.), this intervention was not reflected in the external position of the Bundesbank because, as usual, the Deutsche Mark amounts taken out of the market were invested outside the Bundesbank. In view of the lower exchange rate of the dollar, the revaluation of the monetary

Increase in the monetary reserves as a result of "autonomous" US dollar inflows

### Record of economic policy measures

### 1990

#### January 8

March 12

April 19

July 1

October 1

October 8

October 27-28

November 1

November 29

December 13

December 14

### I. Domestic and external monetary policy

In the twelfth exchange rate realignment within the EMS, the Italian lira is devalued by about 3.7%, and at the same time the margin of fluctuation for the lira within the EMS is narrowed to ± 2.25%.

The Council of EC Economic and Finance Ministers adopts a "decision on the attainment of progressive convergence in economic policies and performance during stage one of the economic and monetary union" and a decision putting cooperation between the central banks of the EC member states on a new basis.

The Bundesbank approves its annual accounts for the financial year 1989; DM 10.0 billion of its net profit is transferred to the Federal Government.

Upon the entry into force of the State Treaty between the Federal Republic of Germany and the GDR Establishing a Monetary, Economic and Social Union, the responsibility for domestic and external monetary policy in the GDR is transferred to the Bundesbank and the Deutsche Mark is introduced as the sole legal tender. In this context, banks in the GDR are granted refinancing quotas totalling DM 25 billion which initially may be fully utilised for discounting bank promissory notes. Minimum reserve requirements are introduced in August (with some extended transitional arrangements).

Stage one of the European economic and monetary union (EMU) begins. The goal of stage one of EMU is to gear national economic and monetary policies in the Community more closely to the requirements of monetary stability and budgetary discipline, and to develop the EC into a community of stability.

The Bundesbank starts issuing a new series of banknotes. After the introduction of the new banknotes, the notes currently in circulation will remain full legal tender until further notice.

The amendment of Principles I and I a Concerning the Capital of Banks pursuant to sections 10 and 10a of the Banking Act comes into force. By this means innovative off-balance-sheet risk-carrying transactions are included in the banking supervision regulations.

The United Kingdom joins the exchange rate mechanism of the EMS. For a transitional period the margin of fluctuation in the EMS for the pound sterling is set at  $\pm$  6%.

changes to the Treaty that are necessary to implement the economic and monetary union. At the same time a second intergovernmental conference starts work on the development of the Community into a political union.

The Bundesbank raises the discount rate from 6.0% to 6.5% and the lombard rate from 8.5% to

9.0% with effect from February 1. Moreover, it switches to fixed-rate tenders for one-month securities repurchase agreements until further notice (at a rate of 8.5%). By means of these

measures it regains scope for a tighter liquidity policy in the money market.

#### 1991

January 31

The European Council of the Heads of State and Government of the EC member states decides that stage two of the economic and monetary union is to begin on January 1, 1994, provided that a number of conditions have been met. The Bundesbank raises the lombard rate from 8.0% to 8.5% with effect from November 2. This measure is intended to restore the gap (which had been eroded) between the lombard rate and the rates applied in the Bundesbank's open market operations. The Bundesbank adopts some initial measures to bring east German banks' funding techniques into line with the arrangements applying to west German banks. These measures provide that, with effect from February 1, 1991, east German banks may not use more than two-thirds of their refinancing quotas for discounting bank promissory notes, while the remaining one-third may be utilised only for discounting trade bills. At the same time, these banks are allowed to participate in securities repurchase agreements. The Bundesbank announces its monetary target for 1991. This provides that in 1991 the Bank will conduct its monetary policy in such a way as to strictly limit the dangers posed to price stability, while ensuring at the same time that the monetary conditions permitting steady economic growth remain in place. To this end, the Bank regards it as appropriate for the money stock M3 throughout the Deutsche Mark currency area to increase by 4 % to 6 % between the fourth quarter of 1990 and the fourth quarter of 1991. An intergovernmental conference of the EC member states is convened in Rome to discuss the

#### 1990

January 1

January 22

The 1990 Tax Reform Act, as the final stage of a three-part tax reduction programme, enters into

II. General economic policy and financial policy

effect. The centrepiece of this Act is the reform of the income tax system, with the introduction of a "linear-progressive" tax scale.

In its 1990 Annual Economic Report, the Federal Cabinet expects real GNP in the west German economy to rise at a rate of 3% or more, with a simultaneously stronger growth in domestic demand. Employment, it believes, could increase by more than 1% and the rise in consumer prices could be limited to 2%%.

The German Council of Economic Experts submits to the Federal Cabinet a special report on the prerequisites for and possibilities of economic reform in the GDR. The implementation of a market economy is, it believes, the only chance for a successful reform process.

The Bundestag approves the first supplement to the 1990 Federal budget, involving additional expenditure totalling just under DM 7 billion net (mostly assistance payments to the GDR). This increases the Federal budget deficit from just under DM 28 billion to 34.5 billion.

The State Treaty establishing a monetary, economic and social union, which is signed on May 18, provides for far-reaching financial assistance to the GDR in the area of financial policy. To this end the "German Unity" Fund is set up, which is to disburse a total of DM 115 billion to the GDR by the end of 1994.

The Financial Planning Council recommends keeping expenditure growth in the next few years below the rate of increase of nominal GNP, with the objective of reducing it to about 3% again in the medium term.

The Bundestag approves the second supplement to the 1990 Federal budget. It provides, on the one hand, for additional spending, mainly on financial assistance to the GDR, in the amount of DM 4.9 billion and, on the other, for additional tax receipts, to be expected as a result of the favourable trends in business activity, totalling DM 6.8 billion. Accordingly, the deficit declines from DM 34.5 billion to DM 32.5 billion.

The entry into force of the State Treaty establishing a monetary, economic and social union initiates the process of economic unification between the Federal Republic of Germany and the German Democratic Republic, and lays the foundations for the implementation of a market economy.

German unity is completed with the accession of the German Democratic Republic.

The Bundestag approves the third supplement to the 1990 Federal budget, which draws the logical budgetary conclusions from German unification. Section B of the supplement comprises the previous GDR state budget and appropriations for additional expenditure on behalf of the new Länder. Total spending in the third supplement is put at DM 396 billion, and the deficit at DM 68.5 billion.

The Federal Cabinet adopts benchmark figures for the 1991 budget and the financial plan for the period from 1990 to 1994. According to these figures, net borrowing by the Federal Government is to be limited to DM 70 billion in 1991, which entails budget cuts of DM 35 billion relative to the status quo. Net borrowing by the Federal Government is to be reduced to DM 30 billion by 1994, with a rise in expenditure averaging 2% p.a. Net borrowing by all central, regional and local authorities is to be restricted to DM 140 billion in 1991 and lowered to distinctly less than DM 100 billion by 1994.

In its Annual Report, the German Council of Economic Experts expects the upswing in western Germany to continue in 1991, with a 3% growth in GNP; in the eastern part of Germany, it believes, the downswing could bottom out in mid-1991, and demand and production could pick up noticeably from the late summer onwards.

1991

January 1

January 10

Pursuant to the Act to Improve the Underlying Conditions in the Financial Markets, which was passed at the beginning of 1990, securities transfer tax is abolished.

The coalition parties specify the budget cuts of DM 35 billion envisaged in the decision on benchmark figures, with the increase of 2½ percentage points in the contribution rate to the Federal Labour Office from April 1, 1991 being a particularly significant factor.

The Federal Cabinet approves the draft Federal budget for 1991 and the financial plan for the years from 1990 to 1994. The 1991 expenditure volume is put at just under DM 400 billion. The deficit comes to DM 70.5 billion, and is thus consistent with the decision on benchmark figures.

The Federal Cabinet adopts the "Gemeinschaftswerk Aufschwung-Ost" (joint programme for the economic recovery of the new Länder), involving additional expenditure on behalf of the new Länder of DM 12 billion in 1991 and 1992 alike. A surcharge of 7½% will be levied on income tax and corporation tax between July 1, 1991 and June 30, 1992, and mineral oil tax, insurance tax and tobacco tax will be raised for an unlimited period (additional revenue totalling about DM 17 billion in 1991 and DM 27 billion in 1992).

In its 1991 Annual Economic Report, the Federal Cabinet notes that economic activity in unified Germany is marked by utterly disparate trends. In the old Federal territory it expects real GNP to rise by an annual average of between  $2\frac{1}{2}$ % and  $3\frac{1}{2}$ %, and consumer prices to go up by about  $3\frac{1}{2}$ % in 1991. In the new Länder, it believes, the inescapable adjustments in production and employment will continue in the current year.

February 20

March 8

March 11

January 24

March 30

May 18

May 30

June 21

July 1

October 3
October 25

November 14

November 15

reserves at the end of 1990 led to a reduction of approximately DM 5 billion in those reserves due to value adjustments. This means that, with only slight changes in the Bundesbank's external liabilities, its net external assets at the end of 1990 — calculated at current balance sheet rates — were DM 6 billion higher than at the beginning of the year. During the first three months of 1991, the autonomous inflows of dollars to the Bundesbank were offset by fairly large dollar payments by the Federal Government to the US Treasury (in connection with the Gulf war). In addition, intervention in the US dollar-Deutsche Mark market led to net outflows of dollars. As a result, the net external assets of the Bundesbank had declined by just over DM 7 billion by the end of March 1991.

### 4. Monetary policy faced with new challenges

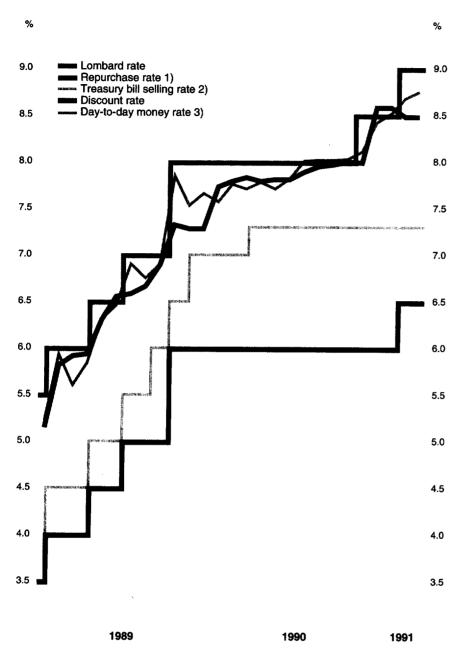
(a) Basic monetary policy stance substantially unchanged during the year

"Holding course"
against the
backdrop of
tightening market
rates in the first
half of the year

Despite the challenges associated with the extension of the area of validity of the Deutsche Mark to include the territory of the former GDR, the Bundesbank was able to maintain its monetary policy stance virtually unchanged in 1990. It had tightened its policy appreciably, however, since mid-1988 so as to ward off latent threats to price stability. Moreover, a number of factors made it easier for the Bundesbank to "hold its course". Thus, conditions in the financial markets tightened appreciably around the turn of 1989-90 (without the Bundesbank having taken any action), primarily in connection with the economic imponderables of the German unification process. In the spring of 1990, the consolidation of market rates at the prevailing higher level significantly curtailed monetary expansion (see page 44ff.). At the same time, as mentioned before, overall price movements remained moderate well into the summer because of a fall in the prices of imported products and fairly stable unit labour costs. Against this background, money market rates, which are more under the control of the Bundesbank, remained virtually unchanged in the first half of the year, as did the allotment rates applied to securities repurchase agreements, all of which took the form of interest rate tenders. During this period the Bundesbank continued to use the renewal of such open market transactions with the banking system as the main instrument of its liquidity management. The banks' lombard borrowing from the Bundesbank was effectively confined to frictional basic amounts.

Inclusion of east German banks in interest rate and liquidity policy Since the intra-German monetary union came into force on July 1, 1990, the Bundesbank has been performing its monetary policy functions in the territory of the former GDR as well. As the introduction of the Deutsche Mark as the sole legal tender in eastern Germany was effected fairly smoothly, and as monetary and price trends there hardly caused any serious problems (the "jump in the money stock level" will be discussed below), the Bundesbank was able substantially to maintain its basic monetary policy stance in the second half of 1990. To bring east German banks under the Bundesbank's interest rate and liquidity control, they were granted, from July onwards, individual refinancing quotas totalling DM 25 billion for funding currency in circulation and minimum reserve holdings. In view of the lack of traditional trade bills and securities, the banks were initially allowed to fully utilise these quotas - like the lombard loan facility made available at the same time - for discounting bank promissory notes at the discount rate (see pages 44 and 123f.). Since the August reserve period, east German banks have been required to hold minimum reserves at the Bundesbank. At the same time, they were granted extended transitional periods for savings deposits (held on giro accounts or evidenced by passbooks), which in eastern Germany also served payment purposes and thus were actually sight deposits, which are subject to higher minimum reserve ratios.

### Interest rates of the Bundesbank and day-to-day money rate



1) Average monthly interest rate for one-month securities repurchase agreements; uniform allotment rate (volume tenders, "Dutch" interest rate tenders) or weighted allotment rate ("US-style" interest rate tenders).- 2) Normally for 3 days.- 3) Monthly averages.

BBk

Since at first east German banks were not familiar with the Bundesbank's monetary policy instruments, it was hard to predict their response to the Bank's monetary control signals in the first few months of the monetary union. In particular, their liquidity management was difficult to foresee. Given increasing withdrawals of cash and long delays in cashless payments, the banks at first accumulated large excess reserves at the Bundesbank, which responded to the resulting uncertainty by tending to "feel its way" in its money market management. Thus, securities repurchase agreements were supplemented to a greater extent than usual by shorter-term assistance measures. Above all, the Bundesbank allowed the banks to meet a comparatively large proportion of their short-term borrowing requirements by means of lombard borrowing. This

Money market management temporarily "feeling its way" from mid-year enabled the implications of monetary union for the money market and its management to be handled fairly smoothly.

Lombard rate increase and "normalisation" of money market management towards the end of the vear

However, this control method resulted in a virtually permanent, more or less uniform level for the lombard and day-to-day money rates and for the (marginal) allotment rates applied to securities repurchase agreements, which continued to take the form of interest rate tenders. When east German banks' liquidity management operations had stabilised somewhat, the Bundesbank tried to "unlock" the rates and to leave room flexibly for market forces to take a hand in shaping interest rates in the money market. It raised the lombard rate from 8 % to 8.5% with effect from November 2, 1990 and, in the case of one-month securities repurchase agreements, it replaced the 8% volume tenders offered in November by interest rate tenders again. Against the background of the boom in economic activity and the massive budget deficits, this led to a slight increase in money market rates.

Tightening of stabilisation policy at the beginning of 1991

After the turn of 1990-1, short-term market rates continued to rise even though the usual end-of-year premiums ceased to be paid, with the result that the day-to-day money rate and securities repurchase rates again reached or exceeded the level of the lombard rate and banks increasingly took up central bank money in unlimited amounts at the lombard rate of 8.5%. In order to retain control over the central bank money supply and regain scope for more flexible money market management, the Bundesbank raised the lombard rate to 9% with effect from February 1, 1991 and at the same time switched to offering its one-month securities repurchase agreements in the form of volume tenders (initially at a rate of 8.5%). It also raised the discount rate by  $\frac{1}{2}$ percentage point (to 6.5%) so as to prevent its gap vis-à-vis the lombard rate, and thus the "subsidy nature" of the rediscount credit facility, from increasing further. What made the renewed adjustment of the Bundesbank's interest rates to market trends and the associated tightening of liquidity policy in the money market seem appropriate, apart from the risks to stability inherent in the course of fiscal and wage policies, was in particular the distinct acceleration of monetary growth in western Germany in the second half of 1990 (see page 46 ff.). In the capital market the Bundesbank's interest rate decisions triggered a fall in interest rates, obviously reflecting the fact that these decisions restored confidence in the stability of the Deutsche Mark. It was only in the day-to-day money market that short-term disruptions occurred; the Bundesbank responded by providing ample liquidity.

Structural adjustment of central bank refinancing facilities in 1991 As long ago as September 1989 the Central Bank Council decided to phase out, for the sake of structural adjustment, some special facilities available to the banks for foreign trade financing purposes. In this connection, cuts of DM 1 billion each in limit B of the Export Credit Company (AKA Ausfuhrkredit-Gesellschaft mbH) and the refinancing line granted to the Prime Acceptance Company (Privatdiskont AG) became effective on January 1, 1991 (see pages 99f. and 102). To compensate for these cuts, the "normal" rediscount quotas were increased as early as November 1989. Further structural adjustments which will become effective in 1991 relate to the refinancing facilities for east German banks at the Bundesbank. These are to be gradually brought into line with the arrangements applying to west German banks. Specifically, the refinancing quotas are to be transformed, in terms of their utilisation, their calculation and their total volume, into rediscount quotas. As a first step, a provision came into force on February 1, 1991 to the effect that - for the purposes of "qualified utilisation" - not more than two-thirds of the refinancing quotas may be used for discounting pure bank promissory notes; the remaining one-third may be used for rediscounting trade bills only. At the same time, east German banks were allowed to participate in securities repurchase agreements.

### Monetary developments\*

			vear	

Change during year 1		T-				1	
Item	1984	1985	1986	1987	1988	1989	1990
	DM billion						
A. Central bank money requirements of banks and liquidity policy measures by the Bundesbank 2							
1. Provision (+) or absorption (-) of central bank balances by:							
Rise in central bank money 3 (increase: —)	- 7.1	- 6.6	- 13.1	- 15.5	- 18.6	- 9.4	- 29.6
Foreign exchange movements (excluding foreign exchange swaps and repurchase agreements)	- 3.9	- 0.7	+ 8.7	+ 38.7	- 30.6	- 20.0	+ 9.9
Cash transactions of the central and regional authorities (including shifts of Federal balances under section 17 of the Bundesbank Act)	+ 1.3	- 4.2	- 0.2	+ 1.8	+ 2.3	- 2.2	<b>– 16.2</b>
Transfer of the Bundesbank's profit to the Federal Govern- ment	+ 11.4	+ 12.9	+ 12.7	+ 7.3	+ 0.2	+ 10.0	+ 10.0
Other factors	- 12.1	- 14.0	- 8.0	- 8.9	- 8.3	- 11.4	- 15.0
Total 1	- 10.6	- 12.5	+ 0.0	+ 23.3	- 54.9	- 32.9	- 40.8
2. Liquidity policy measures							
Change in minimum reserves 4	- 0.4	+ 0.1	+ 7.4	- 6.1	+ 0.2	- 0.1	- 0.2
Change in refinancing facilities	+ 7.8	+ 3.3	- 5.6	- 7.6	+ 0.4	+ 7.5	+ 25.2
Open market operations (with non-banks, in "N paper" — excluding short-term sales of Treasury bills — and in long-term securities)	- 3.9	+ 0.1	+ 1.4	- 1.0	+ 0.4	- 0.4	- 0.3
Securities repurchase agreements	+ 7.7	+ 16.5	- 9.5	- 5.5	+ 50.4	+ 26.7	+ 13.3
Other assistance measures in the money market 5	± 0.0	+ 0.6	+ 1.5	- 2.3	+ 0.4	+ 0.2	+ 1.0
Total 2	+ 11.3	+ 20.6	- 4.8	- 22.5	+ 51.8	+ 33.9	+ 39.0
3. Remaining deficit (-) or surplus (+) [1 plus 2]	+ 0.7	+ 8.1	<b>– 4.8</b>	+ 0.8	- 3.1	+ 1.0	- 1.8
covered or absorbed by:							
Recourse to unused refinancing facilities (reduction: +)	- 1.0	- 3.1	+ 4.2	+ 0.1	+ 0.9	- 0.5	- 0.5
Raising $(+)$ or repayment $(-)$ of lombard or special lombard loans	+ 0.3	- 5.0	+ 0.6	- 0.9	+ 2.2	- 0.6	+ 2.3
	0/0	·············					
B. Key monetary indicators							
Money stock M3 6	+ 4.5	+ 5.2	+ 7.2	+ 6.4	+ 7.0	+ 4.6	+ 5.5
Money stock M3 extended 7	+ 4.0	+ 4.8	+ 7.2	+ 6.2	+ 7.5	+ 8.5	+ 7.8
Lending by banks and the Bundesbank to non-banks in western Germany	+ 6.0	+ 5.2	+ 4.0	+ 4.2	+ 6.3	+ 5.8	+ 7.4
	DM billion						
C.The money stock and its counterparts							
Money stock M3 [= 1 plus 2 less 3 less 4 less 5] Counterparts in the balance sheet	+ 41.3	+ 45.4	+ 65.7	+ 62.6	+ 76.1	+ 66.4	+ 75.8
Volume of credit 8     of which	+ 108.1	+ 98.1	+ 81.7	+ 87.0	+ 138.2	+ 135.8	+ 182.8
Bank lending to non-banks in western Germany	+ 110.0	+ 100.6	+ 77.8	+ 89.8	+ 137.6	+ 136.3	+ 183.0
<ul> <li>to enterprises and individuals 9</li> </ul>	+ 47.4	+ 48.5	+ 39.9	+ 38.6	+ 69.5	+ 92.2	+ 116.0
<ul> <li>to the housing sector 10</li> </ul>	+ 43.5	+ 33.2	+ 33.7	+ 22.6	+ 26.6	+ 37.1	+ 34.4
<ul> <li>to public authorities</li> </ul>	+ 19.1	+ 18.9	+ 4.2	+ 28.6	+ 41.5	+ 7.0	+ 32.6
Net claims on parties outside     western Germany 11	+ 0.8	+ 30.0	+ 55.9	+ 53.2	- 5.2	+ 36.2	+ 76.7
3. Monetary capital	+ 69.7	+ 75.0	+ 69.8	+ 70.7	+ 42.8	+ 36.2	+ 76.7 + 144.0
of which		. , 5.5	, 55.5	, , , , , ,	, 42.0	, 110.2	1 144.0
Savings deposits at agreed notice	+ 6.0	+ 11.2	+ 15.3	+ 9.7	- 5.7	- 7.9	+ 5.2
Bank savings bonds	+ 16.3	+ 10.4	+ 9.9	+ 9.8	- 0.2	+ 14.2	+ 18.9
Time deposits and funds borrowed for four years and over	+ 26.3	+ 34.5	+ 37.6	+ 43.1	+ 46.4	+ 38.7	+ 32.2
Bank bonds outstanding 12	+ 13.2	+ 9.3	- 4.7	- 2.0	- 5.8	+ 48.6	+ 74.0
Central bank deposits of public authorities	+ 1.2	+ 1.3	- 1.1	+ 3.5	- 1.1	+ 3.3	+ 7.0
5. Other factors	- 1.0	+ 6.5	+ 3.2	+ 3.4	+ 15.3	8.0	+ 32.7

\* Item A from July 1990 overall Deutsche Mark currency area, items B and C former area of the Federal Republic. — 1 Unless otherwise indicated, based on end-of-month figures. — 2 Based on daily averages of the last month of the period or the last month of the previous period, respectively. — 3 Currency in circulation (excluding banks' holdings of domestic notes and coins, which are deductible from the required minimum reserves) and required reserves on banks' domestic liabilities at current reserve ratios; changes in the required reserves resulting from changes in the reserve ratios are shown in item A.2. — 4 Including changes in minimum reserves due to growth in reserve-carrying foreign liabilities. — 5 Bill-based repurchase agreements, short-term sales of Treasury bills, foreign exchange swaps and repurchase agreements, quick tenders and shifts of Federal

balances under section 17 of the Bundesbank Act. — 6 Currency in circulation and sight deposits, time deposits for less than four years and savings deposits at statutory notice held at banks in western Germany, from 1986 as a monthly average (of five bank-week return days, end-of-month levels included with a weight of 50%). — 7 Money stock M3 extended to include Euro-deposits and short-term bank bonds held by non-banks in western Germany. — 8 Banks and the Bundesbank; including lending against securities. — 9 Excluding housing. — 10 Excluding lending against securities. — 11 Banks and the Bundesbank. — 12 Excluding banks' portfolios.

Monetary target for 1990

For 1990 the Bundesbank retained its practice of announcing the prospective stance of monetary policy to the general public in advance by setting a monetary target. In December 1989 it announced its intention of keeping the expansion of the money stock M3 between the fourth quarter of 1989 and the fourth quarter of 1990 within a range of 4% to 6%. In this way, it hoped to safeguard monetary stability from the monetary angle and to facilitate noninflationary economic growth. In the circumstances, an ambitious monetary target seemed imperative to provide guidance for stabilisation expectations. Given the strength of economic growth, the acceleration of domestic monetary expansion towards the end of 1989 and the upsurge in the volume of liquid funds placed with banks abroad by domestic enterprises, the risks to monetary stability had been increasing. The changed political and economic situation in Germany after the breaching of the Berlin wall and the nervousness with which the international financial markets responded to these developments likewise called for a particularly high degree of vigilance by the monetary policy makers.

Slackening of monetary expansion in the first half of 1990 Under the impact of the considerable increase in market rates at the end of 1989 and the beginning of 1990 (caused mainly by the imponderables of the German unification process), monetary expansion slackened during the first half of 1990. The money stock M3, which in January was still running near the top edge of the target corridor (of 4% to 6%), was generally moving close to the bottom edge between the spring and the late summer. In June, i.e. immediately before the extension of the Deutsche Mark currency area to include the former GDR, it exceeded its average level of the fourth quarter of 1989 by a seasonally adjusted annual rate of 4.2%. The growth of the non-interest or low-interest-bearing components of the money stock, in particular, was fairly subdued in the first half of 1990, after seasonal adjustment. Currency in circulation and sight deposits remained virtually unchanged, savings deposits at statutory notice actually fell sharply. Shorter-term time deposits and borrowed funds, by contrast, continued to rise steeply.

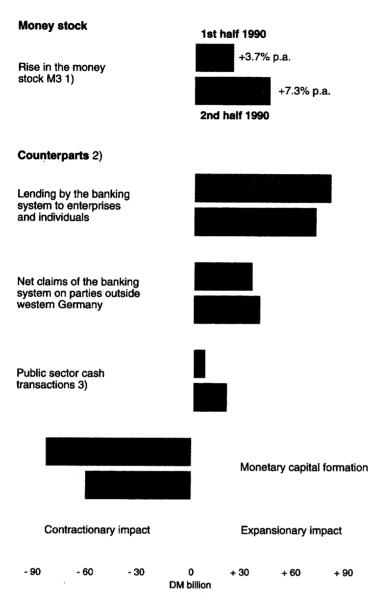
Slight "moderation" of the growth of Euro-deposits Domestic non-banks further stepped up their short-term, high-yielding investments of funds in foreign countries, too, last year. After the conspicuously sharp rise in money holdings with banks abroad in 1989, which the Bundesbank had to regard as a serious potential source of monetary disruption, the pace of expansion slackened appreciably in the first half of 1990. At the end of June the money stock M3, extended to include domestic non-banks' short-term deposits abroad and portfolios of short-dated bank bonds, was 6% up on the year, compared with 8½% at the end of 1989. Even inclusive of the money balances held abroad, the overall monetary picture at the time of the extension of the currency area was thus not unfavourable.

High level of monetary capital formation

The comparatively moderate pace of monetary expansion in the first half of 1990 was primarily due to the high level of monetary capital formation by non-banks. In the light of the rise in capital market rates, they invested large sums in long-term financial assets, especially in the first few months of the year. Bank bonds, which bore the most attractive yields, were in the forefront, though the demand for bank savings bonds and long-term time deposits was likewise strong. Altogether, DM 84 billion of long-term funds accrued to the banks from domestic sources in the first half of 1990. Seasonally adjusted and expressed as an annual rate, this was an increase of just over  $11\frac{1}{2}$ %.

# The money stock and its principal counterparts in western Germany

Change in DM billion or %, seasonally adjusted



1) Money stock M3 as a monthly average.- 2) The change in the counterparts as shown reflects their expansionary (+) or contractionary (-) impact on the money stock.- 3) Lending by the banking system to public authorities less public sector deposits at the Bundesbank.

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Bank lending, by contrast, continued to impart a strong stimulus to the money creation process in the first half of 1990. This applies in particular to lending to trade and industry and to retail banking customers. In the further course of the year, another expansionary influence was the major inflows of funds deriving from non-banks' external payments. Between January and June bank lending to enterprises and individuals went up at a seasonally adjusted annual rate of 8½%. Against the backdrop of the rise in interest rates and the cyclical increase in enterprises' needs of working funds, demand for short-term credit was particularly heavy; in the first half of 1990 such lending rose at a seasonally adjusted annual rate of 13½%. By contrast, public sector cash transactions had only a moderate expansionary impact on monetary growth during that period. Some of the public sector borrowing was ascribable to the "advance funding" of expenditure not incurred until after the transition to German

Buoyant demand for credit

monetary union. Accordingly, the funds were lodged with the Bundesbank and thus temporarily demonetised.

(c) Increased expansionary pressures in the extended currency area

After the transition to monetary union, initially further gearing to the west German monetary target

Since mid-1990 the basic monetary situation has changed in several respects. With the entry into force of the first State Treaty on July 1, the Bundesbank was faced with the task of keeping the money stock throughout the area of the monetary union at a level which did not jeopardise price stability. However, no reliable banking statistics were available at first for the former GDR. Furthermore, the interpretation of the monetary and credit expansion there was complicated by a number of adjustment processes. Hence the Bundesbank continued to gear the conduct of its policy primarily to the monetary target set for the territory of the old Federal Republic. In addition, it tried to monitor - in an "auxiliary calculation" - the monetary adjustment processes in the territory of the acceding Länder as well, and to gain some initial experience of an "all-German" money stock. Owing to the growing financial integration of the two parts of the extended currency area, this procedure could, of course, be little but a makeshift. Even so, it became evident that monetary developments after the implementation of the monetary union were less favourable than before. In western Germany monetary growth accelerated noticeably in the second half of 1990. In eastern Germany, by contrast, the money stock decreased; at the same time, the "cross-border" holding of money balances by west German non-banks in the east and east German non-banks in the west expanded. Throughout the Deutsche Mark currency area the pace of monetary growth was somewhat slower, in purely statistical terms, than in the west. It should be borne in mind, however, in this context that some of the fall in the money stock in the east merely reflected the adjustment of stocks, which was indispensable on stabilisation policy grounds, to the excessive increase in liquid Deutsche Mark holdings in the wake of the currency conversion. This fall, which had already been discounted in the conversion computations, cannot be equated with a slowdown in monetary expansion induced by monetary policy action.

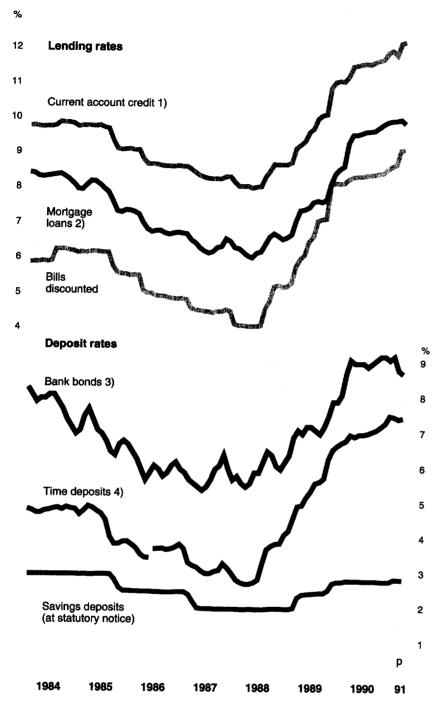
"Jump in the money stock level" as a consequence of the currency conversion An upshot of the currency conversion was the creation of Deutsche Mark balances (in the broad definition M3) amounting to DM 180 billion in eastern Germany at the beginning of July 1990; at the time, this represented almost 15% of the west German money stock M3. This was the outcome of the arrangements embodied in the State Treaty, under which basically all money claims and liabilities denominated in GDR Mark were converted into Deutsche Mark in the ratio of 2:1, private savings, however, up to specified fixed amounts graduated according to the age of the beneficiary, in a preferential ratio of 1:1. The rise in the money stock in eastern Germany caused by the conversion was thus initially steeper than would appear to be consistent with stability in the long run. Of course, only a rough estimate of what would be an adequate provision of money in eastern Germany could be made as the production potential in the former GDR and its trend after the currency conversion were not known, nor was the general public's money demand pattern.

Monetary adjustments in the east

It was to be expected from the outset, however, that this relatively sharp "jump in the money stock level" due to the currency conversion would to a certain extent be reversed quasi-automatically over time. This was because, under the former financial system of the GDR, financial assets could be held almost only

<sup>1</sup> For details of the conversion see Monthly Report of the Deutsche Bundesbank, Vol. 42, no. 6, June 1990, page 40 ff. and no. 7, July 1990, page 13 ff. and page 24 ff.

### Movements in selected bank interest rates \*



<sup>\*</sup> Since January 1991, including the rates in the new Länder.- 1) Under DM 1 million.- 2) Effective average rate for floating-rate mortgage loans secured by residential real estate.- 3) Yield on bonds outstanding.- 4) With agreed maturities of 1 month to 3 months inclusive and sums of DM 100,000 and over but less than DM 1 million; up to and including May 1986 under DM 1 million and maturities of 3 months.- p Provisional.

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in liquid form, especially in the shape of savings deposits, which were subject to daily call and formed the basis for individuals' entire cashless payments. Some of these money holdings were expected to flow into other, higher-yielding types of assets "outside" M3. As early as the second half of 1990 a

<sup>1</sup> Financial claims on life insurance enterprises were an exception, although these accounted for a relatively small part of the total financial assets of the residents of the former GDR.

# The money stock in the overall Deutsche Mark currency area in the second half of 1990

DM billion; change during period

Item	Overall Deutsche Mark currency area 1	Former area of the Federal Republic	Former GDR
Lending to domestic non-banks 2 of which     Lending by banks to enterprises and individuals	+ 153.6 + 112.6	+ 114.0 + 82.4	+ 18.5 + 22.0
Net claims on parties outside the respective areas 3 of which: on the respective other area	+ 31.8	+ 60.9 + 33.1	- 43.7 - 47.8
III. Monetary capital formation	+ 78.0	+ 60.3	+ 12.9
IV. Central bank deposits of public authorities	+ 7.5	+ 2.3	+ 5.2
V. Other factors	+ 1.6	+ 4.8	- 26.9
VI. Money stock M3 4 (Balance: I plus il less III less IV less V)	+ 98.3	+ 107.5	- 16.5

1 Includes, in addition to the data for the two respective areas, borrowing from and deposits of non-banks from and in the respective other part of the currency area. — 2 Including lending against Treasury bills and against securities. — 3 Banks and the Bundesbank. — 4 Currency in circulation (breakdown by respective area estimated) and sight deposits, time deposits for less than four years and savings deposits at statutory notice of domestic non-banks.

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significant amount of liquidity was in fact shifted into long-term forms of assets. Adjustment processes in the enterprise sector operated in the same direction. Thus foreign trade firms undergoing liquidation withdrew their converted sight deposits in favour of their foreign creditors. At the same time, sizeable amounts of funds flowed to western Germany as part of non-banks' intra-German payments — above all for purchases of consumer goods. The outflows were particularly heavy in the first four months after the implementation of the monetary union, and tailed off towards the end of the year. This drain of liquidity (totalling DM 48 billion) was not offset by the ongoing credit expansion in eastern Germany. While enterprises' recourse to liquidity assistance credits guaranteed by Treuhandanstalt was relatively heavy in the first quarter after the transition to monetary union, the demand for credit was fairly moderate in the ensuing period, with "excessive" borrowing being repaid on a major scale to reduce current interest costs. Overall, the money stock in the eastern part of the extended Deutsche Mark currency area fell by DM 16.5 billion to DM 163.5 billion in the second half of 1990. That was equivalent to 121/2 % of the west German money stock.

Accelerated monetary growth in the west

However, the marked fall in the ratio of the east German to the west German money stock reflects not only the adjustment process in the east but also the acceleration of monetary growth in the west. Against the background of the boom and the rapid economic integration of the two parts of Germany, the pace of monetary expansion in western Germany has accelerated considerably since the summer of last year. In the fourth quarter of 1990 the money stock M3 exceeded its level in the fourth quarter of 1989 by 5.6%. While it was thus still running in the upper part of last year's target range, ongoing monetary growth in the second half of 1990 was distinctly faster, at a seasonally adjusted annual rate of almost 71/20%. This rapid pace of monetary expansion is unlikely to be consistent with the requirements of stabilisation policy over the longer term. This is all the truer since domestic non-banks considerably stepped up their short-term financial assets abroad, too, towards the end of the year. Over 1990 as a whole, the growth of the extended money stock M3, at 7¾ 0/0, was thus stronger than that of the comparable domestic aggregate. Even after allowing for the fact that the extended money stock tends to expand rather more rapidly than traditional M3 and that the "monetary character" of Eurodeposits does not fully match that of domestic money holdings, liquidity in the The accelerated monetary growth in western Germany in the second half of 1990 was very largely due to the aforementioned inflows of funds from the east, which, viewed in isolation, curbed monetary growth there accordingly. Despite this sizeable "external" supply of funds, private sector borrowing remained at a high level. In view of the boom, it was not noticeably curtailed by the fact that interest rates kept on rising on a broad front during the year. In particular, bank lending to enterprises and employees continued to soar (at a seasonally adjusted annual rate of some 9%). Lending to the housing sector, by contrast, grew fairly moderately. In contrast to the situation in the first half of the year, public sector borrowing likewise had a marked expansionary impact on monetary growth; Federal Government debt to the banking system, in particular, rose steeply on account of the expanding financial requirements for the new Länder.

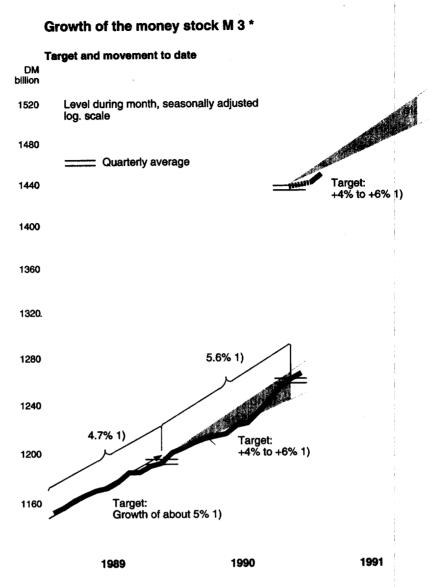
High level of private and public sector borrowing

While the driving forces behind the money creation process in western Germany gathered momentum in the second half of 1990, monetary capital formation, which has a contractionary impact on monetary growth, slackened somewhat. This applies particularly to the third quarter, when a degree of uncertainty spread among investors in connection with the Gulf crisis and the rising cost of financing in eastern Germany. Throughout the second half of the year, the inflows of longer-term funds to the banks went up at a seasonally adjusted annual rate of 80%. Impressive though this result is by historical standards, in view of the enormous volume of the public and private sector borrowing requirements, a further increase in the long-term investment propensity seems indispensable in order to safeguard a rate of monetary growth which is consistent with maintaining monetary stability.

Increased long-term propensity to invest indispensable

In order to strictly limit the threats to price stability that were emerging towards the end of 1990 while ensuring at the same time that the monetary conditions permitting steady economic growth remained in place, the Bundesbank adopted in December 1990 a monetary target for 1991 which provided for the money stock M3 throughout the currency area of the Deutsche Mark to increase by 4% to 6% between the fourth quarter of 1990 and the fourth quarter of 1991. Through this target, which remained unchanged from that for 1990, the Bundesbank underlined its determination, particularly in the light of wage and fiscal policy exigencies, to continue its existing tight monetary policy stance in the extended currency area. In addition, its intention was to signal, in the area of international monetary relations, that the stability of the Deutsche Mark and its function as an anchor in the European Monetary System are not in jeopardy, even under the more difficult conditions. The derivation of the new monetary target was based on an estimated increase of about 21/2 % in all-German real production potential, a normative rise of 2% in the price level and a long-term slowdown of ½ percentage point in the "velocity of circulation". The normative price target, which is fairly "ambitious" in the circumstances. demonstrates that the Bundesbank means to adhere to its present longer-term stability standard. With the monetary target for 1991 and its proven approach to monetary management, the Bundesbank is not unaware of the difficulties presented by the integration of the east German part of the present Federal Republic. Given the fact that the adjustment problems in the real sector in eastern Germany are much larger than those in the monetary sector, the alternative of policies geared primarily to interest rates seemed even less appropriate.

Monetary target for 1991



\* Average of five bank-week return days; end-of-month levels included with a weight of 50%. As from the 1991 monetary target, all-German definition (previously, western Germany only).- 1) Between the 4th quarter of the preceding year and the 4th quarter of the current year.

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Approach to the monetary target for 1991

The monetary target for 1991 was the first one to apply to the extended currency area of the Deutsche Mark. From the beginning of 1991 the Bundesbank changed its monetary statistics to the all-German definition. Data for the two areas of the old Länder and the new Länder, such as were published in the transitional period up to the end of 1990, are no longer available. In February 1991 the all-German money stock M3 exceeded the average level of the fourth quarter of 1990 by a seasonally adjusted annual rate of 31/2 %. It was thus running slightly below the 4 % to 6 % target range. This result must not be overrated, however, if only because of the uncertainty involved in the seasonal adjustment of the all-German money stock and the brevity of the period monitored since the fourth quarter of 1990. Besides, a further significant factor was that, according to incomplete data, the money stock in eastern Germany fell sharply around the turn of the year, while in the west it went on rising rapidly. As mentioned, the decline in the east is not representative of the monetary developments that are relevant to stabilisation policy, insofar as it mirrors in part the adjustment of the excessive Deutsche Mark money balances created in the wake of the currency conversion of July 1, 1990. Even now, after the adjustment process has come under way in the new

Länder, the money stock there is still larger than seems acceptable in the longer run. In February, the all-German money stock M3 was about 20% above its west German level a year before. After deduction of the potential growth rate (of some 5% in nominal terms) and of an "appropriate" jump (of about 10%) in the money stock level resulting from the enlargement of the currency area in mid-1990, there is thus still a considerable "liquidity overhang". This overhang is likely to dwindle further in the course of sustained portfolio adjustments in the east and as the economy grows into the bigger "monetary cloak". In macroeconomic terms it would obviously not be advisable to seek to enforce the adjustment of the remaining excess supply of money by means of a policy aimed at an absolute reduction of the money stock. The central bank must, however, seek to contain the associated inflationary risks by means of a moderate rate of monetary expansion. A pace of monetary growth in the lower part of this year's target corridor of 4% to 6% would be quite consistent with this aim.

### 5. The capabilities of the financial system at a testing time

### (a) Trends in the aggregate acquisition of financial assets and its funding

In 1990 the capabilities of the German capital market were put to a severe test, notably because of the surge in public sector borrowing due to German unification. However, it coped well with the situation. Against the background of attractive interest rates, higher incomes and a marked appreciation of the Deutsche Mark on the foreign exchange markets in the second half of the year, record amounts of funds were raised. This was mainly because of the pronounced propensity to invest of the domestic non-financial sectors, which — at an estimated DM 430 billion — acquired about DM 100 billion more financial assets than in 1989.

Steep rise in the acquisition of financial assets

Compared with 1989, it was especially the acquisition of long-term financial assets that greatly expanded. It focused increasingly on the securities markets, whose share in the overall financing cycle rose from roughly one-fifth to about one-third in 1990. Much as in earlier periods of high capital market rates, the domestic non-financial sectors bought exceptionally large quantities of domestic bonds (DM 110 billion against DM 28 billion in 1989). On the other hand, they built up their holdings of bonds issued by non-residents comparatively little (DM 13 billion). These were almost all Deutsche Mark bonds, while foreign currency bonds were of virtually no significance in view of interest and exchange rate movements. The domestic non-financial sectors' demand for equities was also brisk — in contrast to the situation in the previous year, when they were on balance on the sellers' side of the market. In addition to foreign equities (DM 18 billion) — mostly direct investments in the respective countries — they purchased domestic shares totalling DM 10 billion.

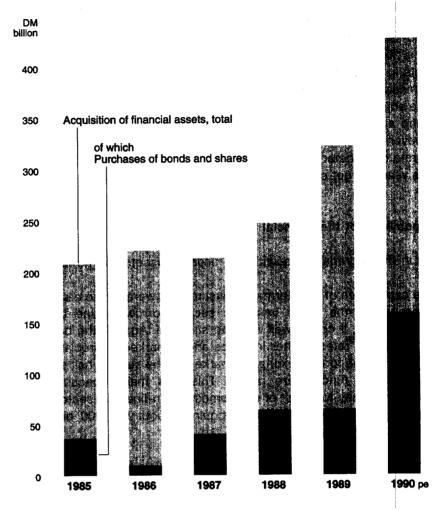
Growing significance of the securities markets

Although foreign investors placed DM 20.5 billion net in the German bond market in 1990, which was almost as much as a year before (DM 23.5 billion), they responded rather sensitively to changes of sentiment in the domestic bond market, thus contrasting with the high and relatively continuous purchases by domestic private investors. Thus, at the beginning of the year they sold large amounts of bonds, under the impact of the onrush of events in the former GDR and their expected implications for the future interest and exchange rate movements of the Deutsche Mark. After a period of fluctuating commitments in the following months, non-residents' interest in domestic bonds increased

Fluctuations in foreign investors' interest

<sup>1</sup> The (mostly estimated) figures on the acquisition of financial assets and funding of the non-financial sectors analysed in section (a) are confined to western Germany; corresponding figures for the new Länder are not yet available.

# Acquisition of financial assets by the domestic non-financial sectors \*



\* Households, enterprises (including the housing sector), public authorities (including social security funds) in western Germany.- pe Parity estimated.

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distinctly in the fourth quarter, when expectations of an appreciation of the Deutsche Mark were gaining ground. In the share market, foreign investors sold small amounts of German equities (including direct investments) on balance, after they had invested a record sum of DM 24.5 billion in such paper one year previously.

Liquidity holdings at a high level

The domestic non-financial sectors continued to build up their liquid financial assets strongly in 1990. They added DM 62 billion to domestic short-term time deposits — the same order of magnitude as in 1989. Sight deposits also grew considerably (DM 33 billion). By contrast, savings deposits at statutory notice — the interest rates on which lagged distinctly behind those on alternative forms of investment — were run down even more strongly than a year before (DM 19 billion). Besides bank deposits in Germany, the non-financial sectors — in particular, enterprises — once again strongly increased their short-term financial investments with foreign banks (see page 34f.).

Shifts of emphasis in borrowing

In 1990 the domestic non-financial sectors' borrowing grew even faster than their acquisition of financial assets; at an estimated DM 370 billion, it was about 50% higher than a year before. This was mainly because of the surge in the public sector borrowing requirement and enterprises' cyclically-induced strong

demand for equity capital and borrowed funds. The volume of newly granted bank loans increased by one-sixth to DM 155 billion. In view of the higher interest rates, it was mainly short-term credits (DM 48 billion) that were much more in demand than in 1989. In the aggregate, the domestic non-financial sectors raised DM 106 billion in 1990 through sales of bonds and shares, compared with DM 40 billion in the previous year. This mainly reflects the securitised borrowing of the public sector, which in the course of the eighties raised the ratio of securitised liabilities to total debt from about one-quarter to almost one-half.

(b) Bullish bond market, and major financing challenges in eastern Germany

In 1990 the interest rate trend in the German capital market was marked by fluctuating intra-German and global policy influences and by increasing cyclical tensions. On the other hand, monetary policy, the stance of which remained largely unchanged throughout the year, was relegated into the background. At the very beginning of the year the yield on domestic bonds went up by leaps and bounds, and in the second half of February — at distinctly over 9% — it reached a level which had not been seen since the early eighties. This owed something not only to rising international interest rate trends but also to the persistent momentum of growth in Germany, which warranted expectations of a deterioration of the price climate. The wage claims in connection with the impending wage round operated in the same direction. In the main, however, it was the largely unpredictable effects of the monetary, economic and social union with the former GDR (which was proposed in February) in terms of growth, stabilisation and capital market policy that led to hectic reactions and sharp falls in prices in the bond market.

Precipitous rise in capital market rates

In the ensuing months German bond rates ranged around the 9% mark, within a comparatively narrow band of about ½ percentage point. Budding expectations of a decline in interest rates in foreign bond markets, the generally smooth introduction of the Deutsche Mark in the former GDR on July 1, 1990 and the failure of a widely-expected surge in inflation to materialise actually led to a temporary relaxation of the market in the middle of the year. Upon the eruption of the Gulf crisis, however, new fears of inflation arose worldwide. At the same time, the volume of public sector financial resources required for the restructuring of eastern Germany grew steadily. Against this background, capital market yields in Germany rose again, in all maturity categories, in accordance with international interest rate trends. By the end of September 1990 they had reached 9.2%, the peak interest rate of the year. The subsequent "oscillation" of domestic bond yields around the 9% mark suggested that no radically new assessment of the capital market situation was associated with the tightening of interest rates in September. In the eyes of market participants, that interest rate level apparently included a sufficiently large risk premium to offset future imponderables, in particular those arising from the German unification process.

Stabilisation of interest rates at a high level

The maturity pattern of interest rates can be regarded as a further indication of this, because, after the interest rate jump at the beginning of 1990, the flat or at times slightly inverse form of the yield curve remained substantially unchanged during the further course of the year, i.e. short-dated securities yielded about as much as, or even slightly more than, long-dated ones. Thus, expectations of a sustained increase in interest rates, such as are typically reflected in a marked positive rise in the yield curve, failed to materialise in the final analysis. Conversely, in view of the above-mentioned domestic and global detrimental factors, no scope for a lasting decline in capital market rates emerged either.

Flat or slightly inverse interest rate patterns

## Interest rate movements in the bond market % **Long-term interest rates** Monthly averages 9.5 9.0 8.5 Yield on domestic bonds 1) 8.0 7.5 7.0 6.5 6.0 Per-5.5 cent-age points Scale reduced 5.0 Interest rate differential vis-à-vis the United States in the ten-year field 2) + 3.0 + 2.0 + 1.0 0 - 1.0 1991 1990 1988 1989 9.5 Yield structure 3) End-September 1990 9.0 Mid-April 1991 8.5 8.0 End-December 1989 7.5

Residual maturity in years

6

5

1

2

7

10

9

8

<sup>1)</sup> Yield on all bonds outstanding.- 2) Yields on ten-year Treasury bonds in the United States (calculated on a year-on-year basis) less yields on ten-year Federal bonds in Germany; values of a yield curve.- 3) Regression curves for Federal bonds, adjusted for coupon effects.

From investors' point of view, purchases of Deutsche Mark bonds were quite attractive in 1990, not least in the light of the rather high level of nominal interest rates relative to the moderate pace of inflation. On the one hand, this level mirrored a quite considerable premium — both historically and by international standards — for future price and interest rate risks. On the other hand, the relatively high interest rates also reflect the increased prospects of a return on investments — not least in connection with German unification — and the associated heavier demand for capital. The relative yield disadvantage of the Deutsche Mark vis-à-vis other major investment currencies progressively diminished in 1990. The traditional interest rate advantage of the US dollar disappeared at the beginning of 1990 — for the first time for 13 years. In the ensuing period, long-term US government bonds yielded up to ¾ percentage point less than comparable Federal bonds at times.

High "real" interest rates

In the first few months of 1991 the capital market climate brightened noticeably. Falling interest rates worldwide and the greater confidence in the stability of the Deutsche Mark and the policy of the Bundesbank as a result of the raising of the discount and lombard rates from February 1, 1991 made a sharp downturn in the yield on domestic bonds possible. Especially at the long end of the market, the rates fell slightly faster, so that the yield curve became distinctly inverse. In the wake of a slight tightening of interest rates in major foreign bond markets, the decline in interest rates in the German bond market came to halt in the second half of February; in mid-April 1991 the yield on bonds outstanding was  $8\frac{1}{2}$ %. At the same time the yield differential between the German and the US capital markets largely disappeared again.

Signs of a relaxation in the first few months of 1991

In 1990 domestic and foreign issuers took advantage of the strong propensity to invest in the German bond market to raise record amounts of funds. At DM 244 billion (net), they sold almost twice as many bonds as in 1989. Domestic borrowers accounted for the lion's share of this sum, foreign borrowers being responsible for only one-tenth. As the above-described interest rate trend shows, the capital market has so far coped rather well with the massive financing requirements which are mainly associated with the renewal of the market economy in the new Länder.

Record amounts of funds raised in the bond market

In contrast to the situation in 1989, when notable successes in the field of consolidating public finance were accompanied by comparatively low borrowing by the public sector, the latter incurred more debt in the bond market last year, at DM 83.5 billion (net). No less than DM 65 billion was accounted for by the Federal Government, which had to bear the major part of the burden of financing the new Länder. In the main, it launched traditional Federal bonds with ten-year maturities, in the fourth quarter of 1990 including an issue which. after an increase, had a volume of DM 17 billion. This stronger bunching of the borrowing is probably in line with institutional investors' wishes, because it increases the marketability of the issue in question. However, considerable redemptions will have to be effected on the maturity of these bonds; difficulties cannot be ruled out at that time if the capital market situation is unfavourable. The floating-rate notes which were issued for the first time by the Federal Government, and also by the Federal Railways and the Federal Post Office. constituted an additional extension of the range of public bonds last year; they were well received in the market. Current sales of five-year special Federal bonds raised DM 28.5 billion net. By contrast, Federal savings bonds, whose interest rates are distinctly below the level of capital market rates at the beginning of their maturity, were redeemed to the extent of DM 2.5 billion (net). or prematurely resold by savers after the expiry of the one-year blocking period.

Strong expansion of public sector bonded debt

### Sales and purchases of bonds\*

DM	B. 11	

DIVI DINION							
		Domestic bonds 1			Foreign bond	ls 2	
:			of which			of which	Memo item Balance of
Period	Sales, total	Total	Bank bonds	Public bonds	Total	Foreign Deutsche Mark bonds	transactions with non- residents 3
1980	52.5	45.2	41.5	4.9	7.3	5.9	7.0
1985	103.4	76.1	33.0	42.7	27.4	7.2	+ 4.1
1986	103.8	87.5	29.5	57.8	16.3	6.9	+ 42.8
1987	113.3	88.2	28.4	59.8	25.2	3.3	+ 9.8
1988	102.8	35.1	- 11.0	46.2	67.7	12.2	<b>– 65.7</b>
1989	125.5	78.4	52.4	25.6	47.1	14.3	- 24.3
1990	244.2	220.3	136.8	83.6	23.9	20.4	- 3,6
1st atr	54.2	45.1	38.0	7.1	9.1	7.9	- 20.7
2nd qtr	34.6	27.5	10.5	17.0	7.1	3.9	- 4.1
3rd qtr	59.3	53.5	31.8	21.7	5.8	4.5	- 4.9
4th qtr	96.2	94.2	56.4	37.8	1.9	4.2	+ 26.1
		Residents					
				Non-banks 5			
	Purchases, total	Total	Banks (incl. the Bundes- bank) <b>4</b>	Total	Domestic bonds	Foreign bonds	Non- residents 2
1980	52.5	19.1	52.2	4.0	33.1	29.1	0.3
1985	103.4	32.5	72.0	23.6	39.4	15.9	31.5
1986	103.8	32.4	44.7	12.6	12.3	- 0.3	59.1
1987	113.3	43.6	78.4	23.4	34.7	11.3	35.0
1988	102.8	34.6	100.8	63.4	66.3	2.9	2.0
1989	125.5	14.7	102.7	41.4	88.0	46.6	22.8
1990	244.2	89.1	224.0	11.9	134.9	123.0	20.3
1st qtr	54.2	18.3	65.8	4.7	47.5	42.8	- 11.6
2nd qtr	34.6	- 2.6	31.6	5.0	34.2	29.1	3.0
3rd qtr	59.3	26.7	58.4 68.2	3.1 - 1.0	31.7 21.5	28.7 22.4	0.9 28.0
4th qtr	96.2	46.7	08.2	_ 1.0	21.5	22.4	20.0

\* Including foreign investment fund units, which are included in foreign bonds. From July 1990 including eastern Germany. — 1 Net sales at market values plus/less changes in issuers' holdings of their own bonds. — 2 Transaction values. — 3 Purchases of domestic bonds by non-residents less sales of foreign bonds and investment fund units to residents; — = capital exports, + = capital imports. — 4 Book values; statistically adjusted. — 5 Residual.

Discrepancies in the totals are due to rounding.

Sales of bank bonds remain buoyant

Banks, too, considerably expanded their issuing activity in the domestic bond market in 1990. Net sales of bank bonds totalled DM 137 billion, against DM 52.5 billion in 1989. However, this figure includes the bonds of an east German bank amounting to almost DM 60 billion which served only to reschedule interbank liabilities, so that the bank did not receive any new funds on balance. But even if this special development (in the field of specialised banks) is disregarded, banks' "securitised" borrowing remained relatively high. Overall, this was entirely due to "other" bank bonds (DM 70.5 billion), which were used as a general refinancing instrument by a great number of banks. In the case of mortgage bond sales, by contrast, redemptions predominated (— DM 4 billion), despite the strong demand for construction work. In view of the high level of mortgage rates, there seem to have been shifts within housing finance towards loans with lower or more flexible interest rates (from which other categories of banks profited more strongly).

Foreign Deutsche Mark bonds with diverse terms of issue In 1990 foreign Deutsche Mark bonds were sold to the nominal value of DM 21.5 billion net, and thus on a similar scale to the previous year (DM 23 billion). A particularly striking feature in this context was the diversity of the terms of issue. Above all, floating-rate issues came more to the fore. In addition, securities were issued which were associated with an option warrant or were subject to special arrangements with respect to repayment.

Among the German investment funds (those open to the general public), trends were rather heterogeneous in 1990. In the case of bond-based funds, the inflow of resources slowed down sharply (DM 4.5 billion, against DM 16 billion in 1989). This trend is fairly typical of periods of high interest rates. The declining interest in foreign bonds, in which such funds are mainly invested, may also have contributed to this trend. On the other hand, share-based funds recorded the heaviest inflow of resources in their history (DM 3.5 billion). This reflects the stronger interest in equities, especially on the part of households. Specialised funds, which are used preferably by institutional investors for investing and administering financial assets, increased their receipts to DM 19 billion in 1990.

Heterogeneous trends among the investment funds

### (c) Ups and downs in the share market

For the German share market, 1990 started under auspicious omens. The political and economic upheavals in east European countries, and especially in the eastern part of Germany, led both at home and abroad to optimistic assessments of future earnings prospects for German firms. With the strong participation of foreign investors, share prices repeatedly reached historic peaks up to the summer, while turnover was exceptionally heavy. In mid-July share prices were on average almost one-third above the level of November 1989, when a basic reappraisal of the German share market began, following the breaching of the Berlin wall.

Successful start to the stock market year 1990

Upon the outbreak of the Gulf crisis at the beginning of August, the situation changed. The soaring of share prices was followed by a pronounced nosedive. By the end of September German shares had on average lost almost 30 % of their market value. Domestic non-banks took advantage of this fall in share prices to make extensive purchases, while at the same time foreign investors increasingly switched to the sellers' side of the market. It remains to be seen, however, whether domestic investors' purchases in the German share market are a reflection of a lasting propensity to invest, which would be desirable in macroeconomic terms. In view of the strong demand for option warrants, which are offered in a wide variety of forms, with speculative motives often playing a major role in such purchases, certain doubts appear to be warranted in this context.

Slump in share prices in the late summer

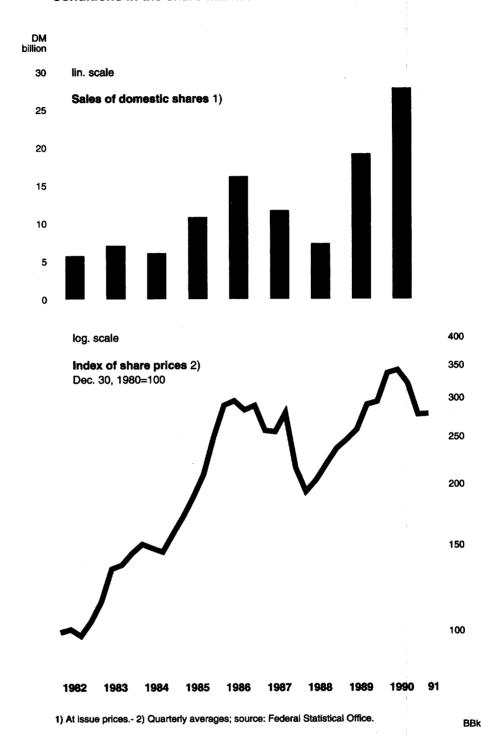
Since autumn last year the movement of share prices has been determined by sharp short-term fluctuations. They are primarily a reflection of the uncertainties emanating from the global policy environment. Thus, in the wake of the escalating Gulf crisis and of developments in the Soviet Union, share prices had fallen to their lowest level for  $1\frac{1}{2}$  years by mid-January 1991; by mid-April they had risen again by  $18\frac{9}{0}$ .

Pronounced share price fluctuations since autumn 1990

The higher cost of financing from outside sources and the unusually favourable stock market climate in the first half of 1990 increased the attractiveness of shares in the context of corporate financing. Moreover, many listed enterprises, especially ones from the area of financial services, made efforts to adjust their equity base to the expansionary trends in business. Finally, the influx of new, mostly small and medium-sized enterprises to the stock exchange continued; in 1990 almost two dozen names appeared for the first time on the stock price lists of official trading or the regulated market. In 1990 domestic enterprises issued new shares to the market value of DM 28 billion, the major part of them in the first half of the year. This was almost 50 % above the record level of 1989. However, this gratifying development must not obscure the fact that, judged by international standards, the German share market is still playing a comparatively subordinate role in corporate financing.

Another record level of share issues

### Conditions in the share market



At the end of 1990, for instance, the market value of domestic listed enterprises was equivalent to about one-quarter of the (west German) gross national product, whereas this ratio was roughly twice as high in the United States and more than three times as high in the United Kingdom and in Japan.

Future outlook

In view of the immense tasks which will have to be performed in connection with the restructuring of the economy of the new Länder, a great deal is going to be expected of the capabilities of the German share market in the future, too. In the years ahead west German enterprises will have to raise equity capital on a larger scale in order to take advantage of the investment

opportunities arising in eastern Germany and to bear the associated risks. Moreover, it would be desirable from the point of view of regulatory policy for suitable enterprises from eastern Germany to have an opportunity as soon as possible of exploiting the extensive potential of the markets for investment capital, and of facing up to valuation by the market in the competition for scarce capital.

### (d) Innovations in the German capital market

After a lengthy period of planning and preparation, the German Financial Futures Exchange started trading in options on selected shares in January 1990. Not least because of the above-mentioned great volatility of share prices last year, this offer met with a good response. In March 1991 over 40,000 contracts were traded on average every business day. Thus, share options trading on the German Financial Futures Exchange far outstripped "traditional" options trading, which never assumed any major significance owing to unattractive regulations and a somewhat underdeveloped secondary market. At the end of November 1990 the German Financial Futures Exchange extended its range of products to include financial futures contracts on the DAX share index and on a fictitious bond issue by the Federal Government. To date, however, trading in what are known as "bund futures", which were very successful when introduced to the London Financial Futures Exchange as long ago as September 1988, has lagged far behind the corresponding trading volumes in London. This illustrates how difficult it is to find acceptance for new market segments in the international competition obtaining between financial centres.

German Financial Futures Exchange opened

Issuing and trading in securities in Germany were facilitated last year by a number of measures. Since January 1990 the Bundesbank has not objected any more to the issuing in Germany, or by residents, of bonds and borrowers' note loans denominated in foreign currencies or ECUs. Moreover, since that date the use of special drawing rights has been permissible to the same exent as the private use of ECUs. Up to the present, however, very little use has been made of these additional options, not least because the issuers are reluctant to assume an exchange rate risk. Indirectly, this no doubt also mirrors the particular esteem enjoyed by the Deutsche Mark in Germany as an issuing and investment currency. Since the abolition of the issue authorisation procedure pursuant to sections 795 and 808a of the German Civil Code, and since the abolition of securities transfer tax from January 1, 1991, a market in so-called "commercial paper" has been coming into existence in Germany; in addition, there is a chance that the market in industrial bonds, which was neglected for a long period, might pick up again.

Increased scope for issuing bonds

During the eighties the popularity of Federal bonds among domestic and foreign investors increased considerably. To streamline the issuing procedure in this major market segment, and thus to bring it more into line with international practice, a combined syndicate and tender procedure was introduced in July 1990. In this way more room was given to competition in shaping the terms of issue. At the same time, better account can be taken of the syndicate banks' placement prospects, which vary over time. In addition, a provision was repealed whereby the banks represented in the Federal Bond Consortium had to refund part of the selling commission they received, if amounts of bonds were withdrawn from the market at the issue price or below by the Bundesbank during what is known as the "blocking year". Viewed as a whole, the German capital market seems to be well equipped for integration in the single European financial market that is in the process of coming into being.

Modified issuing procedure for Federal bonds

Commercial banks gain further market shares in lending business In 1990 the commercial banks - especially the big banks - gained further market shares in lending business with west German non-banks. Their lending to west German borrowers rose distinctly more (by 9.8% and 12.2%, respectively) than did that of all banks (+ 7.3%). The commercial banks profited mainly from enterprises' heavy demand for short-term credits, although they also greatly increased their longer-term direct lending to the private sector. On the other hand, they reduced their lending to the public sector. Credit cooperatives (+ 8%) and savings banks (+ 7.7%) also achieved above-average increases in lending business. This was chiefly because of sizeable loans to the public sector. Among the smaller categories of banks, the strong growth of lending by banks with special functions (+ 11.2%) is especially striking; it seems to have owed a great deal to reconstruction financing in the new Länder. Regional giro institutions (+ 4.5%) and regional institutions of credit cooperatives (+ 6.4%), by contrast, lagged behind the general market trends. The same applies to mortgage banks (+ 3.7%). These categories of institutions were faced with a weak demand for long-term (fixed-rate) loans on the part of enterprises and the housing sector, which could not be offset in full even by the heavier granting of short-term loans and increased lending to the public sector.

Bank profitability affected by write-downs of securities Bank profitability in 1990 was marked by a fairly favourable trend in interest and commission business and some perceptible burdens in the field of "Other expenses". The declines in securities prices will probably entail considerable write-downs of bond and share portfolios — where they cannot be counterbalanced by releasing undisclosed reserves. However, their impact varied, depending on the category of banks concerned. In the context of "ordinary" business, administrative expenses may have increased significantly on account of the establishment and improvement of branch offices in the new Länder and the support of partner institutions. The profit for the year as a percentage of the average volume of business probably declined further.

East German banks' increasing integration in the financial system Since the implementation of the monetary union in mid-1990, the integration of east German banks in the financial system of the Federal Republic of Germany has made good headway. This has owed a great deal to the immense efforts of the west German banks and their associations in eastern Germany. They have performed a major catalyst function through their branches and joint ventures and through their advisory activities in the new Länder. Considerable amounts of know-how have been transferred through them. Moreover, it was due to their active cooperation that the embryonic east German banking system was stabilised quickly after the transition to the monetary union and integrated in the west German money market. Progress was likewise made in the adjustment of refinancing facilities at the Bundesbank. Since February 1991, for instance, a number of east German banks have been participating in the Bundesbank's securities repurchase agreements. In liabilities-side business, bank customers in the new Länder are now being offered a wide range of investment opportunities; the supply of other financial services has improved as well. East German banks are continuing to show restraint in their lending business with non-banks; this owes something both to a degree of inexperience and to the lack of facilities for providing mortgage-type security and the lack of suitable loan documents among enterprises. The granting of credit quarantees through Treuhandanstalt was to be understood as a stopgap, but not as a long-term solution; after all, measures of this kind dilute the economic selective function of interest rates, banks' earnings-oriented credit supply behaviour and thus also monetary management by the central bank. The processing of cashless payments, with its comparatively long processing periods, was rather unsatisfactory for a long time. However, given all parties' sustained efforts to remedy the causes of a technical nature, including the incompatibility of the payment systems, as soon as possible, a distinct acceleration has occurred in the meantime (see also page 121f.).

### 1. Exchange rates and exchange rate policy

Global exchange rate developments determined by strength of the Deutsche Mark, stability of the EMS, weakening of the US dollar and fluctuations of the yen

The key features of events on the foreign exchange markets in 1990 were the greater strength of the Deutsche Mark already dealt with above (and hence also of the other EMS currencies), a weakening of the US dollar, a differing valuation of the yen over the course of the year and continuing remarkably stable developments of exchange rates within the EMS. The loss in the value of the dollar revealed itself above all in its decline vis-à-vis the currencies of western Europe. By contrast, the dollar strengthened against the yen initially but then fell again markedly to a level even lower than that registered at the end of 1989. On balance, however, the decline in the rate of the dollar against the yen was decidedly less than vis-à-vis the Deutsche Mark, implying at the same time that the value of the Japanese currency fell against the currencies of western Europe. The cohesion of the currencies belonging to the EMS was hardly affected by the movements of the dollar. In recent years Europe has thus increasingly developed into a zone of fixed exchange rates, particularly in view of the fact that there has been a growing trend also in the non-EMS countries to keep their currencies as stable as possible vis-à-vis the currencies within the EMS.

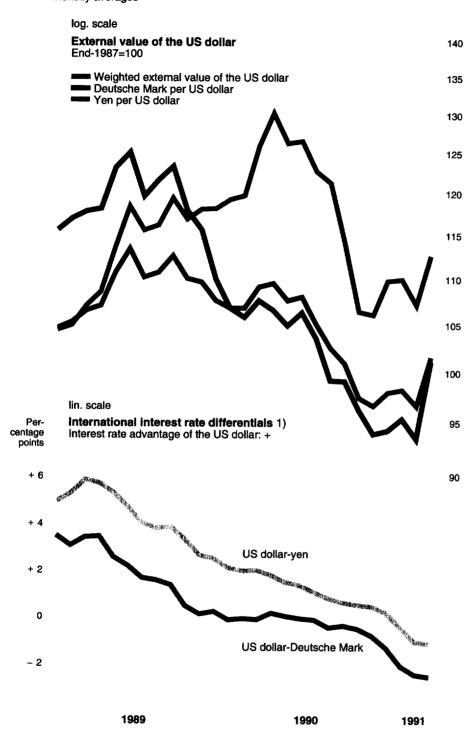
US dollar burdened
by pattern of
interest rates,
reduced role as a
"safe haven"
currency, and
domestic economic
factors

The tendency for the dollar to weaken began in September 1989. From September 1989 to March 1991 the dollar lost about 18% of its value (calculated on the basis of monthly averages) against the Deutsche Mark as its main counterpart in Europe. With a simultaneous loss in value of 6% vis-à-vis the yen, the decline in the weighted external value of the dollar amounted to 10%, according to the method of calculation used by the Deutsche Bundesbank. The weakening of the dollar was primarily due to the growing differential in the level of economic activity between the United States, on the one hand, and the Federal Republic of Germany and Japan, on the other, together with the associated changes in interest rate levels. In interest rate terms, investments in dollar-denominated assets constantly lost in attractiveness in comparison with the major investment alternatives. The traditional interest rate advantage enjoyed by the dollar vis-à-vis the Deutsche Mark was gradually replaced across the entire range of maturities by a yield advantage in favour of the German currency. This was compounded by the fact that the increasing resolution of the east-west conflict evidently led to the dollar moving into the background as a "safe haven" currency in favour of other currencies that are used internationally. This became especially clear with the outbreak of the Gulf crisis when, in contrast to global political crises in the past, the demand for dollars picked up only insignificantly. In addition to this, domestic economic factors - especially the recent resurgence of budget deficits, wide-scale bankruptcies in the non-banking sector as well as appreciable price rises have continued to burden the dollar. Seen in this light, the period in which the currency of the United States has been weakening can be seen as a correction which by and large reflects recent developments. At all events, it has helped to bring about further progress in the international adjustment process.

Not possible to correct, from Europe, the yen's weakness against European currencies A wide variety of reasons lay behind the weakening of the Japanese currency that became evident towards the end of 1989. Political factors played just as much a role as the sudden decline in the prices of shares and bonds that began at the turn of 1989-90 as well as the initial hesitancy in the eyes of market participants on the part of the monetary authorities to raise money market interest rates in line with the needs of the domestic economy. Given this situation, large-scale operations were launched to support the yen. No change in developments on the foreign exchange market occurred, however, until the Bank of Japan increased the money market rates in March-April 1990 to a greater degree than previously. This change in sentiment was strengthened by joint public statements on the part of the G-7 countries pointing out

# External value of the US dollar and international interest rate differentials





1) As measured by the money market rates. USA: certificates of deposit with maturities of three months; Japan: securities repurchase transactions with maturities of three months; Federal Republic of Germany: three-month funds.

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the undesirable consequences for the global adjustment process that the weakness of the yen would have. Even though the yen appreciated considerably vis-à-vis the dollar in the interim, in comparison with the rate it registered in September 1989 — as has already been mentioned above — it strengthened to a much lesser degree than the Deutsche Mark and other currencies of western Europe with the result that it depreciated against these currencies. In

the meantime, this trend has partly reversed again, however. Problems would arise if in its trade relationships with Europe Japan were to find a compensation for the reduction in the surplus on current account that it is running with the United States. There is less concern in this context about a possible further increase in Germany's trade deficit vis-à-vis Japan which in the current situation could even help to counteract the inflationary risks accompanying the high level of economic activity in Germany. Instead, it would be a setback for the global adjustment process if other countries in Europe which are now benefiting from the distinct reduction in Germany's surplus on current account were at the same time to lose ground in competition with Japan owing to exchange rate developments. Problems of this nature can hardly be solved by the countries of Europe, however, seeing that the exchange rates of the yen vis-à-vis the European currencies are primarily the outcome of the movement of the exchange rate of the dollar against the yen, on the one hand, and the dollar and the currencies of Europe, on the other. To strengthen the cross rates of the Japanese currency further, the external value of the yen would have gained in strength in relation to the dollar.

Floating exchange rates still indispensable at the global level In the light of the considerable shifts in exchange rates between the world's three key currencies, ideas were mooted again last year about possibilities of bringing about stronger links between exchange rates or even of setting up a new fixed-rate system. However, initiatives of this kind are almost certain to quickly betray their limits when marked disparities in the level of economic activity arise between the United States, on the one hand, and the Federal Republic of Germany as well as other major industrial countries, on the other, accompanied by differing influences of monetary policy, in particular, on exchange rates. To a large extent, the corrections in exchange rate relationships that have occurred can be seen as a welcome contribution towards coping with the adjustment processes that have become necessary. Incidentally, they will help to support economic activity where it is weak and to dampen price risks where demand is growing particularly strongly. In addition to this, more stable exchange rates presuppose that non-cyclical influences, including, in particular, differences in the trend of prices and costs as well as large structural budget deficits are eliminated.

No major tensions within the EMS

In contrast to what was expected in many quarters, the strength of the Deutsche Mark vis-à-vis the dollar did not give rise to any major tensions between the currencies participating in the exchange rate mechanism of the EMS. This is partly connected with the fact that a smaller group of countries has meanwhile crystalised in which economic developments and economic policies are increasingly converging. Besides Germany, they include the Benelux countries as well as France and Denmark. The interest rate differentials that existed in the past within this group of countries have also become noticeably smaller. Belgium's decision to seek even closer links between its currency and the Deutsche Mark, has strengthened the latter's anchor function in addition. The exchange rate ties within the EMS also had a distinct effect last year on the Italian lira and the Spanish peseta, particularly in the light of the fact that, owing to the persistently high rates of inflation in these countries, interest rates in Italy and Spain are still considerably above the level of rates in the group of countries mentioned first. However, in the context of the reduction of its band of fluctuation to the normal width of 21/40%, the central rate of the lira was slightly devalued at the beginning of January 1990 (by 3.7%). As a consequence, the market rates of the Deutsche Mark initially declined vis-à-vis most partner currencies from its basically strong position (probably partly also owing to the burdens associated with the unification of western and eastern Germany and their assessment by the markets) before the German currency appreciated again from November 1990 onwards. In connection with the temporary weakening of the Deutsche Mark, large-scale official purchases of

## Deutsche Mark interventions in the EMS\*

DM billion

DM billio	ın	<del></del>	1	1 7	
Period		Compulsory	Intra- marginal	Total	Memo item Affecting liquidity in Germany 1
1979 <b>2</b>	Purchases Sales	3.6	2.7 8.1	2.7 11.7	- 2.4 + 11.7
1980	Balance	- 3.6	- 5.4	- 9.0	+ 9.2
1980	Purchases Sales Balance	5.9 - + 5.9	5.9 1.0 + 4.9	11.8 1.0 + 10.8	- 11.1 + 0.6 - 10.5
1981	Purchases Sales	2.3 17.3	8.1 12.8	10.4 30.1	- 11.6 + 25.3
1000	Balance	- 15.0	- 4.7	19.7	+ 13.7
1982	Purchases Sales Balance	3.0 - 3.0	9.4 12.8 - 3.4	9.4 15.8 — 6.4	- 2.5 + 6.1 + 3.6
1983	Purchases Sales Balance	16.7 8.3	19.1 12.9	35.8 21.2	-20.4 +12.6
1984	Purchases Sales	+ 8.4 - 4.7	+ 6.2 28.9 7.6	+ 14.5 28.9 12.3	- 7.8 - 3.0 + 4.4
	Balance	- 4.7	+21.4	+ 16.6	+ 1.4
1985	Purchases Sales	0.4	29.1 30.8	29.1 31.1	- 0.2 -
1006	Balance	- 0.4	- 1.6	- 2.0	- 0.2
1986	Purchases Sales Balance	19.0 4.1 + 14.8	33.6 74.0 - 40.4	52.6 78.1 25.5	- 12.2 + 3.8 - 8.4
1987	Purchases Sales Balance	15.0 - 15.0	47.8 61.7 – 13.9	47.8 76.8	- 7.3 +25.4
1988	Purchases Sales	— 15.0 — —	26.8 16.3	- 28.9 26.8 16.3	+ 18.1 - 6.1
1989	Balance Purchases	-	+ 10.5	+ 10.5	- 6.1
1303	Sales Balance	5.0 - 5.0	20.4 8.6 + 11.8	20.4 13.6 + 6.8	- 3.0 + 3.0 0.0
1990	Purchases Sales	1.5	32.5 12.3	34.1 12.3	- 1.6 -
	Balance	+ 1.5	+ 20.2	+21.8	- 1.6
Septer Doll	l periods, net mber 16, 1989 to January 11, 1990 ar falling sharply against the Deutsche Mark; tsche Mark firm in the EMS	2.4		44.5	
Januar	y 12, 1990 to June 26, 1990 ar relatively stable against the	- 3.4	- 8.2	11.5	
Deu	tsche Mark; tsche Mark weaker in the EMS	_	+ 27.5	+27.5	_
Doll: Deu	7, 1990 to November 1, 1990 ar again falling sharply against the tsche Mark; tsche Mark temporarily weak against				
the	peseta and the lira ber 2, 1990 to February 12, 1991	+ 1.5	+ 2.9	+ 4.4	- 1.6
Dolla	ar continuing to be weak; tsche Mark firmer in the EMS	_	- 10.5	<b>– 10.5</b>	_
Rec	ry 13, 1991 to end of March 1991 overy of the dollar after historical low; tsche Mark weaker in the EMS	_	+ 2.0	+ 2.0	
-	es and sales of Deutsche Mark (against partn				

<sup>\*</sup> Purchases and sales of Deutsche Mark (against partner currencies) by the central banks participating in the exchange rate mechanism, including the Bundesbank; classified by date of transaction. Including Spain as from June 19, 1989 and the United Kingdom as from October 8, 1990. — 1 Indicates the extent to which Deutsche Mark interventions in the EMS and the settlement of creditor and debtor positions in the EMCF affected the net external position of the Bundesbank and thus the banks' provision with central bank money; — = contractionary liquidity effect through purchases of Deutsche Mark, + = expansionary liquidity effect through sales of Deutsche Mark. — 2 From the beginning of the EMS on March 13, 1979.

Discrepancies in the totals are due to rounding.

Deutsche Mark occurred which were replaced again, however, by sales of Deutsche Mark towards the end of the year. In net terms, the purchases of Deutsche Mark totalled DM 21.8 billion in 1990. Of this total, DM 1.6 billion was accounted for in the main by "compulsory" interventions by the Bundesbank and the rest by "intramarginal" purchases of Deutsche Mark by Germany's partner countries.

Changes in EMS central rates not to be excluded prematurely

To the extent that the stability of exchange rates or even the pronounced strength of a number of partner currencies that do not belong to the "hard core" of the EMS can be explained essentially by inflation-induced higher rates of interest, it can basically be justified only if it is consolidated by a domestic economic policy that is durably geared to stability. If success is not achieved in coping with the structural causes of inflation within a reasonable period of time, it will probably become increasingly difficult over the long term to avoid having recourse to exchange rate adjustments. It is obvious that, in making their decisions, operators on the foreign exchange markets take account of prospective further developments. This explains why a currency union that is not based on durable progress in the direction of convergence will remain under the threat of tensions. For this reason, changes in central rates within the EMS should not be excluded in principle during the transitional stages towards bringing about economic and monetary union. If the urgently needed progress in the field of convergence is delayed, this may also give rise to serious setbacks along the road to economic and monetary union in Europe.

Accession of the United Kingdom to the EMS exchange rate mechanism With effect from October 8, 1990 the United Kingdom joined the exchange rate mechanism of the EMS. At the request of the United Kingdom, the central rates vis-à-vis the individual partner currencies were laid down on the basis of a relationship of DM 2.95 to the pound sterling, corresponding to the level of market rates at the time. It was agreed in this context that the United Kingdom would initially avail itself of a wider margin of fluctuation of 6%. After the preceding statements by the British Government to the effect that a favourable date from the point of view of the United Kingdom should be waited for before it joined the exchange rate system, this decision came as a surprise. In September 1990 the rate of inflation in the United Kingdom was by far the highest among the participating countries; it was between 7 and 8 percentage points above the rates of price increase in the countries that at present constitute the "hard core" of the EMS. Moreover, the United Kingdom was running large deficits on current account. Owing to the determination to pursue its anti-inflationary policy reflected in its decision, the step taken by the United Kingdom was nevertheless welcomed unanimously.

Linking of the Norwegian krone to the EMS

The monetary authorities of Norway took the unilateral decision to peg the Norwegian krone to the other currencies participating in the exchange rate mechanism of the EMS through a central rate expressed in terms of the ECU and with a normal fluctuation band of  $2\frac{1}{4}$ % with effect from October 22, 1990. In doing so, Norway emphasised its interest in taking part in the establishment of a zone of monetary stability in Europe. In order to support this policy all the member central banks of the EC granted the Norwegian central bank bilateral swap facilities to the total amount of ECU 2 billion as from January 1991 onwards.

Further increase in the role of the Deutsche Mark as a reserve currency The international confidence shown in the Deutsche Mark led to a further increase in its role as a reserve currency in 1990. Particularly in Europe where the Deutsche Mark serves as an anchor and intervention currency, temporary periods of weakness of the Deutsche Mark led to an increase in official holdings of Deutsche Mark. In addition to this, the Central Bank of Taiwan considerably increased its investments in Deutsche Mark assets at the expense of the dollar. According to information stemming primarily from the

## Components of global monetary reserves\* .

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				Change					
	Level at end of year		Total		due to trans- actions 1		due to valuation adjustments 2		
Type of reserves	1988	1989	1990 p	1989	1990 p	1989	1990 p	1989	1990 <b>p</b>
Gold 3	40.0	39.8	39.7	- 0.2	- 0.1	- 0.2	- 0.1		_
Special drawing rights	27.1	26.9	29.0	- 0.2	+ 2.0	+ 0.4	- 0.2	- 0.6	+ 2.2
Reserve positions in the IMF	38.0	33.5	33.8	- 4.6	+ 0.3	- 3.7	- 2.4	- 0.8	+ 2.7
Official ECU balances	63.6	62.0	64.1	- 1.6	+ 2.1	+ 0.0	+ 3.3	- 1.6	- 1.2
<ul> <li>against gold</li> </ul>	39.8	37.5	37.8	- 2.3	+ 0.3	- 0.0	- 0.0	- 2.3	+ 0.3
<ul> <li>against US dollars</li> </ul>	23.8	24.5	26.3	+ 0.7	+ 1.7	+ 0.1	+ 3.3	+ 0.7	- 1.5
arising from very short- term financing	<b>–</b> i	_	_	_	_	_	_	_	
Foreign exchange 4	601.7	654.0	772.7	+52.2	+ 118.7	+54.6	+84.1	- 2.4	+34.7
US dollar 5	381.2	386.2	426.8	+ 5.0	+ 40.7	+ 5.0	+40.7	_	_
Deutsche Mark 5	98.4	127.8	160.9	+ 29.4	+ 33.1	+24.0	+ 14.7	+ 5.4	+ 18.4
Japanese yen 5	48.9	53.8	75.0	+ 4.9	+ 21.2	+11.6	+ 17.0	- 6.6	+ 4.1
Private ECU balances	12.8	20.4	36.9	+ 7.6	+ 16.5	+ 7.3	+ 12.9	+ 0.3	+ 3.7
Pound sterling 5	16.5	16.7	24.3	+ 0.3	+ 7.6	+ 2.2	+ 3.9	1.8	+ 3.7
French franc	5.7	8.8	15.4	+ 3.1	+ 6.7	+ 2.7	+ 5.2	+ 0.3	+ 1.5
Swiss franc 5	11.8	11.3	14.5	- 0.5	+ 3.2	- 0.3	+ 0.9	- 0.2	+ 2.2
Dutch guilder	6.0	7.0	8.5	+ 1.0	+ 1.5	+ 0.7	+ 0.5	+ 0.3	+ 1.0
Other and unidentified assets	20.5	22.0	10.3	+ 1.4	- 11.7	+ 1.4	- 11.7	_ i	_
Total reserves	770.4	816.1	939.2	+ 45.7	+ 123.0	+51.1	+84.7	- 5.5	+38.4

<sup>\*</sup> Gross monetary reserves of all IMF member countries plus Switzerland and Taiwan. — 1 Where the monetary reserves are not denominated in gold and dollars, the changes in units of the reserve asset concerned have been converted into dollars at average rates based on the rates on the relevant reference dates. In the case of the other and unidentified assets, the changes due to transactions have been equated with the changes in levels. In the case of official ECU balances the change in the gold and dollar holdings on which they are based is shown. — 2 Difference between the change in levels and the change due to transactions; also includes the gold-price-induced change in the ECU balances based on the contribution of gold to the EMCF as well as the exchange-rate-induced change in levels. — 3 Valued at US\$ 42.22 per ounce of fine gold. — 4 Including private ECU balances. — 5 Including partly estimated assets of Taiwan. — p Provisional.

Discrepancies in the totals are due to rounding.

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IMF, global reserves in Deutsche Mark rose in 1990 by DM 23 billion to DM 240 billion. Comparing reserve holdings on a dollar basis, official Deutsche Mark reserves went up between the end of 1989 and the end of 1990 also as a result of shifts in exchange rates. At the same time, with a rise in holdings of US\$ 33 billion to US\$ 161 billion, the Deutsche Mark also accounted for a major share in the further increase in global monetary reserves, which went up by US\$ 123 billion to US\$ 939 billion. Of the other investments, the largest increases were accounted for by the dollar (+ US\$ 41 billion), the yen (+ US\$ 21 billion) and by investments in private ECUs (+ US\$ 17 billion). In this process, the share of the Deutsche Mark in global foreign exchange reserves (including the dollar holdings contributed to the EMCF by the EC member countries) rose further to a good 20%. For Germany, the growing function of the Deutsche Mark as an anchor, intervention and reserve currency implies an additional obligation to resolutely pursue a policy geared to stability. Already in the past, the international role played by the Deutsche Mark and German monetary policy have made a considerable contribution towards strengthening the forces geared to stability both in Europe and in the world economy as a whole.

#### 2. International financial markets

In 1990 the national and international financial markets were burdened by a number of mutually reinforcing negative factors. Thus, for example, several major industrial countries experienced radical corrections in some cases in the level of securities prices as well as the prices of fixed assets that were further magnified by the slowdown in growth especially in the Anglo-Saxon countries. Whereas with the differing extent of the fall in share prices and real estate

International financial markets resistant despite negative influences prices structural weaknesses in their financial system became evident in Japan, the United States and the United Kingdom, the financial markets of continental Europe, and especially in Germany, benefited from the moderate rate of monetary growth in the preceding years, their generally more balanced market structures also for this reason, as well as the more favourable expectations relating to the level of their economic activity. However, despite the burdens mentioned above, the international banking and securities markets have coped surprisingly well with the Gulf crisis and its consequences for the real economy (temporary rise in the price of oil).

Crises regionally limited

In the end, the extent of the financial crises that occurred in various countries remained regionally limited and thus did not seriously jeopardise the stability of the international financial system. Although on the basis of the data available for the first three quarters of 1990 the gross volume of lending by international banks was smaller than last year, an important role was played here by changes in interest rate patterns as well as certain shifts to the national markets. On the international markets, for example, as domestic interest rates in Japan approached the international level, Japanese banks, which dominate these markets, reduced their activities on the interbank market on which they had successfully conducted interest rate arbitrage operations in recent years. However, on a net basis, i.e. after eliminating double-counting in interbank transactions, the volume of fresh international bank lending in the first three quarters of 1990 exceeded the rate of growth in the comparable period of the preceding year. The net financing volume on the international financial markets taken together, i.e. bank lending, bond issues and other financing facilities, remained at about the same level as in the previous year. In this process, international bank lending gained ground once again over securitised forms of financing because capital-related financial instruments, in particular, were less in demand owing to the weakness of the share markets (especially in Japan). Moreover, the mounting number of failed corporate take-overs in the United States had negative repercussions on international issuing activity and sales of junk bonds.

Structural weakness of the US financial markets The structural weaknesses of the financial markets in the United States have occurred not only among the country's savings and loan associations but in the meantime are affecting a number of large US banks that operate internationally as well. In many cases the decline in share prices last year, the collapse of prices on the real estate markets and the burdens that continue to exist in connection with loans granted to problem countries in the past have forced US banks to undertake write-downs or form provisions. In addition, competition from insurance enterprises and securities houses had obliged US banks to engage in risky transactions such as participating in corporate take-over operations, which in some cases also engendered losses. A little belatedly, credit institutions in the United States have now reacted to these undesirable developments by being reticent to lend especially vis-à-vis borrowers whose credit standing is not beyond reproach. The argument, however, that a real credit crunch has developed, which is compounding the slowdown in economic activity in the United States and the world generally and which is also affecting the stability of the financial markets, is not unambiguously borne out by the available facts.

Adaptation of general operating conditions and of supervisory rules needed The lower level of activity in a number of segments of the financial markets in the United States and some other countries does not signal a collapse of the markets but a radical structural change. The answer to the problems on the respective sub-markets is therefore not to be seen in hasty monetary policy reactions or the selective relaxation of supervisory rules especially since the current reticence to lend is also to be seen as a response to the willingness to take risks that had increased in the preceding period of growth and thus in part

#### Net lending on the international financial markets

1	100	hillia	

				1989	1990
Item	1987	1988	1989	January to S	eptember
A. International bond markets					
1. Gross issues	181	220	261	199	171
2. Redemptions and repurchases	71	82	89	65	78
3. Net issues	110	138	172	134	93
B. Net placements of Euro-notes	23	20	7	10	31
C.Net bank lending 1	300	225	390	270	295
D.Financing facilities, total  1. Total net financing in the market segments (A3 plus B plus C)	433	383	569	414	419
<ol><li>Double-counting among the above market segments 2</li></ol>	53	68	69	54	64
Total financing facilities, after adjustment for double-counting	380	315	500	360	355

<sup>1</sup> Change in the cross-border claims on final borrowers of the banks reporting to the BIS, adjusted for exchange-rate-induced and statistical influences. — 2 Banks' bond purchases, as well as bonds and Euro-notes issued by banks to fund their lending.

Source: BIS.

BBk

as a cyclical phenomenon. However, it is urgently necessary to radically adapt the current general statutory conditions and supervisory rules that apply to the financial markets to the changed environment, especially in the United States but elsewhere as well. In this way the requisite general operating conditions have to be created for banks and other financial institutions to be able to spread their commercial risks better and carry out the full range of their functions for the economy as a whole again. The US Administration has drawn consequences from this situation and is endeavouring to reform the US banking system. In the interests of improved international competitiveness, the system of specialised banks and the ban on interstate banking (i.e. the restriction of the domestic activities of US banks to individual Federal states), in particular, are to be further deregulated or abolished altogether.

After the drop in share prices and the simultaneous rise in interest rates, Japan's banks have also come under pressure to adjust. The undisclosed reserves in the traditionally large shareholdings of Japanese banks, 45% of which is counted as capital and which served in recent years as a basis for the enormous growth in the volume of their international lending, melted away drastically as share prices fell. As a result, the capital ratios of a large number of Japanese banks fell at times below the internationally agreed standard while at the same time the fall in share prices made it more difficult and more expensive to raise new capital resources. This reveals the risks involved in a concept of capital that is interpreted generously and which, in the view of Germany's supervisory authorities, should only cover funds that - irrespective of market fluctuations - actually are available in case of need. As experience in Japan and the United States makes clear, the recognition of capital components related to prices on the market has a pro-cyclical effect since in periods of an upswing it broadens a bank's capital base for what is as a rule an undesirable creation of credit, and reduces it in periods of a downswing. The smaller scope for lending on the part of many internationally operating banks has had its effects not only in the industrial countries but, above all, in the developing countries and the countries of central and eastern Europe with their thirst for capital, particularly as the credit standing of this latter group of countries deteriorated.

Pressure to adjust also in Japan

Problem of competition between banks and securities houses still unresolved

The increasing volatility and pressures on margins on the internationally integrated financial markets with their larger risks of losses being incurred through novel financing and speculating techniques underline how important capital adequacy standards are that are satisfactory in both qualitative and quantitative terms. Regrettably, no international consensus has yet been reached on the issue of according equality of treatment to securities houses and universal banks. For Germany's part, the necessity was emphasised from the outset that as a matter of principle comparable capital adequacy and supervisory rules must apply to like transactions involving like risks. In this respect, the stability of the international financial system requires as uniform competitive conditions as possible as well as arrangements that apply globally to the extent possible, since otherwise the threat will arise that risks will shift to financial institutions that have to meet less strict conditions ("regulatory arbitrage"). This cannot, however, be compatible with a confidence-inspiring and efficient international financial system. Although developments in recent years have confirmed that the growth of world trade is being fostered by the liberalisation and deregulation of the financial markets in the industrial countries, the large losses suffered by the savings and loan associations in the United States in the train of deregulation at the national level illustrate in an exemplary manner that, if it is to have a positive effect, liberalisation must not be a halfway house but needs to encompass the whole environment that it affects. Moreover, the market risks associated with liberalisation and deregulation require improvements in the banks' internal risk control and auditing systems that are harmonised with those of a strictly organised external supervisory body.

Growing tasks of financing require larger volume of savings The new financing tasks that will arise in the nineties both in eastern Europe and in the developing countries are naturally difficult to bring into line with the reduced financial scope of the countries of the west. Although the last decade has witnessed an extraordinary rate of growth in the financing capacity of the financial markets, the financial flows themselves have largely remained particularly in recent years - within a closed circuit within the western industrial countries. In the light of world political events what is now needed is to find ways and means to make a larger proportion of the savings of the western world available for the groups of countries mentioned above. In this context, especially those countries are called upon with a low saving ratio whose expenditure in the private and public sector absorbed a large proportion of global savings in the past. A generous money supply policy on the part of central banks would not be an appropriate answer to these financing problems, seeing that capital can be formed only on the basis of adequate savings but not by increasing the supply of money. At all events, with an inflationary monetary policy the unstable structure of the financial markets in a number of countries would completely lose its hold over the longer term.

# 3. International debt situation of the developing countries and eastern Europe

Slight easing of the debt situation of the developing countries

Whereas the situation of the heavily indebted developing countries shows initial signs of consolidation, the debt situation in the central and eastern European countries has, if anything, become more intractable. Although calculated in terms of the dollar, the external debt of the developing countries went up by about 6% to over US\$ 1,300 billion, when exchange rate influences — especially the depreciation of the dollar — are eliminated and the debt figures in nominal terms are seen in relation to macroeconomic variables, the slight easing of the international debt situation that had begun in the preceding years also continued in the year under review. Thus, for example, the ratio of debt to exports of the developing countries has declined since 1986 not least owing to debt forgiveness on a considerable scale by the creditors from 241% (the

#### External debt of the developing countries

US\$ b	illion

ltem	1986	1987	1988	1989	1990 <b>p</b>	Change in 1990 from 1989 <b>p</b>
External debt of all developing countries						
Long-term	867	980	960	959	1,015	+56
Official creditors	357	433	437	454	521	+67
Private creditors	511	547	523	505	494	-11
Short-term	118	128	142	156	169	+ 13
Total 1	1,127	1,268	1,265	1,261	1,341	+80
of which						
Heavily indebted middle-income countries	531	587	568	566	588	+22
Heavily indebted low-income countries	86	104	106	108	116	+ 8
Memorandum items						
Debt service payments on	110	119	130	115	120	+ 5
long-term debt Interest	51	52	59	52	52	
	59	67	71	63	52 67	0 + 4
Repayments  Debt service as a percentage of receipts from exports of goods and services	59	67	71	63	67	+ 4
All developing countries	30.4	28.2	26.8	22.1	21.1	- 1.0
of which						
Heavily indebted middle-income countries	41.5	35.7	36.2	28.6	26.1	- 2.5
Heavily indebted low-income countries	31.0	21.6	26.9	22.8	28.4	+ 5.6

1 Including debt to the IMF not included above and unclassifiable debt. -  ${\bf p}$  Provisional. Source: World Bank.

BBk

peak since the outbreak of the debt crisis in 1982) to 183% in 1990. The ratio of debt service payments to exports has decreased from a good 30% in 1986 to 21% in 1990. However, this overall development must not conceal the fact that for a large number of developing countries, including some that are among the most heavily indebted ones, the debt crisis is still acute and has not been overcome by any means. All in all, the situation has improved particularly among the heavily indebted middle-income countries, but has hardly done so among the poor countries (see the above table). At the same time, the growing arrears in interest payments in a number of debtor countries is a sign of the fact that the ability or willingness of many borrowers to make payments is still lacking. After all, there has been a deterioration again in recent times in the underlying conditions in the world economy as regards solving the debt problems of these countries (uncertain outcome of the Uruguay round, slacker growth in the industrial countries, rechannelling of official bilateral and multilateral funds to eastern Europe and the countries bordering on the Gulf region).

The improvement among the heavily indebted middle-income countries is partly due to the concerted reduction in their commercial debts under what is known as the "Brady initiative" (see the Report of the Deutsche Bundesbank for the Year 1989, page 61 ff.). Under this plan success has been achieved in reducing the debts owed to banks by five countries up to now, namely Mexico, Costa Rica, the Philippines, Venezuela, and Uruguay, through the use of various market-related instruments (debt-to-bond swaps, buy-backs, etc.) by a total of approximately US\$ 12 billion and in achieving an additional easing of debt service payments and an improvement in the overall "cash flow" of the countries concerned in addition. As a result, the debt overhang of these countries was reduced to a considerable extent and their credit standing

Progress through the "Brady initiative"

improved again, with the result that Mexico and Venezuela, for instance, were able to register a return of flight capital and to also raise capital again on the international financial markets after a longish break. Several other countries are currently still negotiating possibilities of easing their debt burden with their respective creditor banks. In addition to this, a noticeable reduction in the external debts and debt service payments has been accomplished by a number of other countries not covered by the Brady initiative, particularly through debt conversion operations and buy-backs. The scope for reducing debt in this way has probably not yet been exhausted by any means. Despite initial successes and considerable financial support from the IMF and World Bank, up to the present the Brady initiative has had only a limited overall effect. The chief reason for this is that a large number of developing countries with debt problems, including such major debtor countries as Brazil and Argentina, have not yet undertaken sufficient efforts to stabilise their economic and financial situation to such an extent that they meet the conditions laid down for IMF and World Bank adjustment programmes and hence for agreements with commercial banks on reducing the burden of their debt. This is because, as a rule, these banks are only prepared to forgo their claims if the development prospects of the debtor countries improve on a lasting basis and, as a result, the probability is drastically reduced that further rescheduling operations will become necessary in the future. This is also the reason why hardly any rescheduling agreements have materialised between the banks and the heavily indebted low-income countries.

Problematic shift in the pattern of creditors

Even before the Brady initiative came into effect the proportion of debt service payments by many heavily indebted developing countries to official creditors began to rise. At the same time, debt service payments to private creditors declined in relative terms, mainly owing to reluctance on the part of banks to grant fresh loans. This trend has strengthened further as a result of the operations supported by IMF and World Bank resources to reduce the level of debts and debt service payments under the Brady initiative. Whereas in 1988 the heavily indebted middle-income countries had to pay about three-quarters of their total debt service to private creditors, primarily banks, the proportion was only approximately two-thirds in 1990. In the meantime, several middle-income debtor countries have larger liabilities to official creditors than they have to private creditors. This shift in the pattern of creditors will not be without problems in the long run because a growing proportion of the external financing needs of the developing countries is no longer subject to the mechanism of the market, i.e. the market discipline, in particular.

Further concessions by official creditors

Since both the least developed countries and the heavily indebted low-income countries have debts primarily vis-à-vis official creditors, any approach to solve the debt problems must also include debts to official creditors. This is why not only banks but also the governments of the creditor countries made further concessions last year vis-à-vis the heavily indebted countries. The governments of the creditor countries that are members of the Paris Club have already rescheduled liabilities totalling almost US\$ 120 billion since the outbreak of the debt crisis in 1982. In addition, the governments of the industrial countries waived a total of about US\$ 11 billion at the bilateral level in development aid liabilities of individual low-income countries up to the end of 1990. At present, deliberations are being made among the member governments of the Paris Club as to the extent to which the "Toronto conditions" applied since 1988 with respect to the rescheduling of the debts of the poorest countries can also be applied to other countries.

Gross external deb eastern Europe in o			and		
US\$ billion					
Country	1986	1987	1988	1989	1990 p
USSR	31	39	43	54	6
Poland	34	39	38	41	41
Hungary	17	20	20	20	2
Bulgaria	5	6	8	9	1
CSFR	6	7	7	8	
Romania	7	7	3	1	
Total	99	117	118	133	14

In contrast to the initial signs of positive developments that can be discerned among the heavily indebted developing countries, the debt situation in eastern Europe has deteriorated. The external debt of the Soviet Union and of the five CMEA member countries in central and eastern Europe continued to rise sharply in the year under review, namely from a total of US\$ 133 billion to about US\$ 148 billion. Moreover, a number of countries in eastern Europe such as the CSFR and Romania, for example, cannot be described as having an excessively high level of external debt. However, the uncertainties that arose after the collapse of the centrally planned socialist economies have led to a reassessment on the international financial markets of the external debt situation of these countries.

Process of reform accentuates debt problems of the eastern European countries

The factors inhibiting the solvency of the central and eastern European countries include the time-lag between the adoption of reforms and the economic results which they will engender only later on. It is not least due to this fact that last year witnessed a decline in the national income of almost every country in central and eastern Europe. Other factors that impair their credit standing are the frequently insufficient coherence and lack of transparency with respect to the individual steps of reform, the disintegration of the system of central planning as well as the decentralisation of foreign trade and the way it is financed which, taken together, are engendering problems of responsibility and coordination, especially in the period of transition to a new economic and social system. The dissolution of the CMEA that has been decided on in principle and the transition to clearing in convertible currencies have led to additional uncertainties and distortions in trade relations and payments among the former CMEA member countries. Up to now, these unfavourable domestic and external influences have attenuated or even completely absorbed the positive effects the reforms had. This is why a number of countries, including, in particular, the Soviet Union, encountered payment difficulties at times last year, and other countries, such as Poland, applied for the renewed rescheduling of their external liabilities or debt forgiveness, whereby Poland has meanwhile been granted a waiver of a considerable amount of its debt by official creditors belonging to the Paris Club. As a result, some banks in the west which had initially supported the process of reform in eastern Europe have become more cautious in their lending behaviour. According to BIS data, there was even a dramatic decline of US\$ 6 billion in outstanding bank loans to eastern Europe which was largely financed by the withdrawal of deposits from western banks in the first nine months of last year. Without the accumulation of payment arrears on the part of the Soviet Union, Poland and Bulgaria, the decline would have been considerably greater.

Change in the banks' lending behaviour . . .

All the countries of central and eastern Europe need financial resources in hard currency in order to push ahead with the process of structural reform. Seeing that the sources of private finance are drying up, a central role is played in this

... increases pressure on official lenders

context by assistance from official — bilateral and multilateral — donors to cover their need for outside finance. Thus, a development is evolving with respect to the countries of eastern Europe similar to that in the developing countries, namely their increasing dependence on western governments and multilateral organisations. Although the fresh lending commitments given by the industrial countries in the "Group of 24" as well as the multilateral financial institutions are of considerable size, they will not even suffice to offset the impact the higher price of oil imports from the Soviet Union has on the balances of payments of the other central and east European countries. Official loans from the west are needed above all as a catalyst for a renewed greater commitment on the part of private investors and lenders. However, the countries of central and eastern Europe must create the prerequisites for inflows of private capital themselves, namely comprehensive and coherent structural reforms, macroeconomic stability and political cohesion.

# 4. Trends in the IMF and among the international development banks

Slight rise in purchases and distinct increase in loan commitments At SDR 4.8 billion, the volume of new loans extended by the IMF in 1990 was a little larger than in the preceding year. Since, however, the volume of repurchases continued to be relatively high as a result of the high level of lending between 1981 and 1984 the volume of the Fund's loans outstanding declined once again by SDR 1.1 billion to SDR 23.0 billion. However, in the period under review the Fund greatly increased its loan commitments — inter alia, as a consequence of its decisions to support debt reduction measures. Provided that the approved loans are disbursed on schedule, the Fund's loans outstanding will probably increase again noticeably in the years ahead.

Policy on Enlarged Access continued with unchanged ceilings In the light of the persistent payment problems of a large number of developing countries, the Fund has decided to continue its Policy on Enlarged Access with unchanged ceilings for purchases until the forthcoming increase in quotas enters into force. This Enlarged Access has been partly financed by considerable additional borrowing from individual member countries. Since it cannot be expected that such credits will be available also in the future to a sufficient extent, there will be a basic need to review the Policy on Enlarged Access after the increase in quotas has entered into effect.

Additional assistance for countries affected by the Gulf crisis

As a complement to other measures of support taken by the international community, the Fund adopted additional assistance measures in the late autumn of 1990 for a limited period up to the end of 1991 in favour of the countries particularly affected by the Gulf crisis. In this context, there was agreement that the instruments of the Fund are, in principle, sufficient to be able to react to the current situation in an appropriate manner and that the main point was to use these instruments flexibly. On the basis of the decisions adopted by the Fund, existing credit arrangements can be increased and/or disbursed more quickly, taking the current ceilings for purchases into account. The ceilings for purchases that apply to the Fund's regular facilities for "standard cases" under the Policy on Enlarged Access have been suspended with the result that greater recourse to the Fund's resources can be had in a number of cases. In addition to this, loans under the Enhanced Structural Adjustment Facility (ESAF) can now be increased as well when the mid-year review of the respective programme is conducted. It is also possible to prolong such loan agreements that expire before November 1992 by a fourth programme year if the borrowing country demonstrates that it is conducting a convincing policy of adjustment. The Compensatory and Contingency Financing Facility (CCFF) is to be extended by the end of 1991 by an oil import element through which the higher cost of imported oil can be offset within certain limits. Finally, the Fund is preparing itself for greater recourse to

### Purchases and repurchases under IMF credit facilities

#### SDR billion

Item	1986	1987	1988	1989	1990
Credit tranches	3.0	1.9	1.7	1.5	1.2
Extended Fund Facility	0.3	0.2	0.2	1.2	3.0
Compensatory and Contingency Financing Facility 1 Buffer Stock Facility	0.6	1.2	0.7	0.8	0.1
Structural Adjustment Facility 2	0.1	0.4	0.4	1.0	0.5
Total purchases	3.9				
Total repurchases	5.7	3.7 7.9	3.1 6.7	4.5 5.9	4.8 5.9
Net purchases (net repurchases: -)	- 1.8	- 4.2	- 3.6	- 1.4	- 1.1

<sup>1</sup> Comprising only the Compensatory Financing Facility up to August 1988. — 2 Including both the Structural Adjustment Facility (SAF) and the Enhanced Structural Adjustment Facility (ESAF); both facilities are financed out of special accounts administered by the Fund and are available only to countries whose per capita income is particularly low.
Discrepancies in the totals are due to rounding.

Sources: IMF and Bundesbank calculations

contingency finance under the CCFF. Such drawings under the CCFF serve to shield IMF-supported adjustment programmes from unexpected burdens on a country's balance of payments such as, for example, price rises for major imported goods. These loans can now also be arranged when a programme is reviewed in the middle of a year if the programme as a whole is still scheduled to last for at least six months.

The political and economic changes in central and eastern Europe have not left the IMF unaffected. Nearly all the former centrally planned economies have meanwhile joined the Fund (and the World Bank Group) or have applied for membership; the USSR still has to join. The membership of these countries does not mean that the volume of business conducted by the Fund will tend to rise only in quantitative terms but will also involve a new "quality" of the conditionality associated with IMF lending programmes and, in addition, of advice on economic policy as such. The task of the IMF is to help the countries of central and eastern Europe within the context of its mandate to cope with the process of reforming their economic policies without, however, violating its tried and tested principles. Poland, the CSFR, Hungary, Romania, and Bulgaria have drawn on the Fund in recent months, in some cases in a considerable amount.

Additional tasks in central and eastern Europe

After protracted negotiations, the member countries agreed in spring 1990 in the context of the Ninth General Review of Quotas to increase the size of the Fund by 50%, implying a rise in quotas from their current level of about SDR 91.1 billion to approximately SDR 136.7 billion. After this adjustment, Germany's quota will amount to around SDR 8.2 billion, corresponding to a share of some 6.0%. Like Japan, Germany - whose weight in the world economy has grown even further through the unification - will have the second largest quota after the United States; the United Kingdom and France follow in third place. Endeavours are being made for the increase in quotas to enter into effect before December 31, 1991. The prerequisite for this is that, on the one hand, members accounting for at least 85% of the sum total of quotas have agreed to the increase by then. (After December 31, 1991 a majority of 70% of total quotas will be sufficient.) On the other hand, the members of the Fund have agreed that the planned third amendment to the IMF Articles of Agreement must have become effective, i.e. there is a junctim between the quota increase and the third amendment to the IMF Agreement. With this amendment it is intended to make it possible to suspend the voting and other rights of membership of members that do not meet especially their repurchase obligations vis-à-vis the IMF.

Ninth General Review of Quotas concluded

Greater efforts to reduce payment arrears to the IMF

Although there was a further rise in payment arrears to the Fund last year, progress was achieved under the "strengthened cooperative strategy", which also provides for sanctions vis-à-vis debtor countries that are unwilling to cooperate, in coping with this problem. Of special importance was the fact that a number of countries with payment arrears initiated or continued measures to restore a sustainable balance of payments position in collaboration with the IMF. As a result, it was possible to reduce the number of countries with chronic payment arrears by two. In addition, most of the other countries with overdue debts to the Fund paid at least part of them. As additional assistance for the eleven countries at the time with chronic payment arrears vis-à-vis the Fund, it was decided in the summer of 1990 that these defaulters can acquire rights to draw on the Fund through the successful implementation of an IMF-monitored adjustment programme which they can use after having settled their arrears in the context of a loan agreement with the Fund, and which could then be concluded. Creditor and debtor countries are to provide an amount of SDR 1 billion in the ratio of 3:1 in about five years (what is known as Enhanced Burden Sharing).

Revision of the SDR basket

In the context of the review of the SDR currency basket, which is conducted every five years, the weights of the five currencies were adjusted to reflect their current significance as at January 1, 1991 (previous weights in brackets): US dollar 40% (42%), Deutsche Mark 21% (19%), yen 17% (15%), French franc and pound sterling 11% each (12% each).

Noteworthy contribution of the development banks towards inflows of resources into the developing countries

The increase in the proportion of official development assistance in net inflows into developing countries that could be observed last year is due largely to loans from multilateral donors. The World Bank Group, in particular, as well as the major regional development banks for Latin America, Africa, and Asia contributed to this outcome. The loan commitments of these development banks totalling US\$ 32.8 billion in the 1990 fiscal year meant an increase over the preceding year of US\$ 1.2 billion. The actual disbursements by these donors to developing countries amounting to US\$ 26.1 billion were even significantly (US\$ 4 billion) higher than in the preceding year.

Considerable rise in their borrowings

This growth in the lending operations of the development banks was accompanied by an increased recourse to the international financial markets. In the 1990 fiscal year the amount of medium and long-term loans they raised increased by US\$ 2.7 billion to US\$ 15.8 billion, underlining their important role as financial intermediaries in the development process. Via comparatively low refinancing costs, the sound credit standing of the international development banks on the capital markets contributed towards their borrowers benefiting from relatively low interest rates on their loans; in the last half of 1990, for example, they amounted to only 7.72% p.a. at the IBRD, and only 6.36% at the Asian Development Bank. However, this is also due to the fact that these banks borrowed, in part through the aid of swap operations, preferably in hard currencies at comparatively low rates of interest, with the result that the borrowers are in some cases exposed to an exchange rate risk that ought not to be underestimated. The importance of Germany's capital market and the Deutsche Mark for the refinancing operations of the development banks, and particularly the IBRD, is evident in the share of somewhat over 23% of the Deutsche Mark in the total medium and long-term borrowings by these financial institutions in the 1990 fiscal year.

Banking supervision, monetary policy regulations, issue of foreign Deutsche Mark bonds and monetary legislation Basle Committee on Banking Supervision The work of the Basle Committee on Banking Supervision to supplement the Capital Accord of July 1988 (see German version of the Report of the Deutsche Bundesbank for the Year 1988, page 82) so as to take account of *market risks* brought a first interim result in July 1990. The central bank governors of the Group of Ten¹ adopted an interim report in which the principles for assessing the share price risk as well as the foreign currency and interest rate risks are outlined. Where securities transactions are concerned, the report moreover calls for banks to be accorded the same treatment as independent securities houses on grounds of competition. For this purpose the Committee also held meetings with representatives of offices supervising securities firms. Apart from the envisaged equality of the assessment systems, future discussions must take care to ensure that the banks are not placed at a disadvantage as a result of too generous a definition of securities firms' capital. In the first half of 1991 an attempt is to be made to reach a decision on the amendment of the Basle Capital Accord.

In February 1991 the Basle Committee on Banking Supervision published proposals to amend the Capital Accord of July 1988. These proposals entail a more precise definition of certain capital components, and are to improve the quality of the capital of internationally operating banks further. It is found, inter alia, that only such amounts of general provisions or general reserves count as capital that do not serve as value adjustments for an evident deterioration of certain assets and that can therefore be used to cover any losses. Attention is moreover drawn expressly to the fact that value adjustments for country risks as well as value adjustments to cover losses incurred in the field of real estate loans or other problem areas are not elements of capital. The banking sector has initially been given an opportunity to state its views on the proposals, the final version of which is then to be published in the second half of 1991. In respect of its specific implications for banking supervision, the fact must be taken into consideration that under EC legislation it will anyway, as from January 1, 1993, at the latest, no longer be possible to include value adjustments as capital.

On account of the banking supervision implications of cross-border "netting systems", the Basle Committee also participated in the work of the Committee on Interbank Netting Systems of the Bank for International Settlements. This Committee's report was approved by the central bank governors in November 1990. It provides for minimum requirements for cross-border netting or settlement systems which encompass several currencies and underlines the need for a cooperative monitoring and supervision of such systems by the central banks. At the EC level an ad hoc working group of the governors of the EC central banks is dealing with the risks of payment systems.

From October 10 to 12, 1990 the Federal Banking Supervisory Office and the Deutsche Bundesbank hosted the "6th International Conference of Banking Supervisors" (ICBS) in Frankfurt am Main. This Conference takes place every two years and serves both to discuss the work of the Basle Committee on Banking Supervision with banking supervisors from countries outside the Group of Ten and to intensify contacts between banking supervisors. Of the work undertaken by the Committee, the 250 participants from almost 100 countries discussed the central subjects "Financial conglomerates — a challenge for supervisors" and "Risk concentration" in the field of large loan and market risks. In the meantime, the Committee has used the discussions at the Conference as a basis to issue a recommendation on "Measuring and controlling large credit exposures" to the national supervisory bodies; a

Belgium, Canada, France, Germany, Italy, Japan, Netherlands, Sweden, Switzerland, United Kingdom, United States of America.

dialogue has moreover commenced with insurance supervisors to discuss jointly the problems of supervising financial conglomerates.

The Own Funds Directive and the Second Banking Coordination Directive, both of which were adopted by the EC Council of Ministers in 1989, are to be translated into national law within the framework of an amendment to the Banking Act, which is currently being formulated in the Federal Ministry of Finance, by January 1, 1993. In addition, the Solvency Ratio Directive, which was likewise adopted in 1989, requires a modification of Principle I in agreement between the Federal Banking Supervisory Office and the Deutsche Bundesbank. In this context, however, major changes have already been anticipated in the amendment of Principle I effected in May 1990.

Current status of banking law coordination in the EC

As the definition of banks used in the Second Banking Directive is very narrow, independent securities houses do not automatically have the right to establish themselves freely in other EC countries. The *Investment Services Directive* is to provide them, too, with an EC-wide freedom of establishment on the basis of both a minimum degree of harmonisation and reciprocity. From the German point of view, it is particularly vital that the Investment Services Directive be adopted only after agreement has been reached on substantially similar arrangements regarding the capital requirements for securities transactions by banks and securities firms.

The capital requirements for securities transactions are to be regulated in the *Capital Adequacy Directive*, for which the EC Commission has submitted a proposal in 1990. This Directive is the EC equivalent of the Basle work on market risks. It will apply not only to securities houses but also to the securities transactions of banks. Accordingly, banks' securities trading portfolios will not be subject to the Solvency Ratio Directive.

At the end of 1990 the Commission submitted a proposal for a *Directive on the Supervision of Credit Institutions on a Consolidated Basis*, which is to replace a corresponding Directive of 1983, to the Council of Ministers. It should extend the consolidation procedure so as to cover, in particular, also financial holding companies which have at least one credit institution among their subsidiaries. In the case of majority participations the rule envisaged is moreover full consolidation. From the German point of view, it is absolutely imperative here that also those securities houses which are subsidiaries of a bank be incorporated into the consolidation which must encompass both the market and the credit risks.

The EC Commission has in the meantime submitted a draft of a *Directive on Large Exposures* for discussion in the competent EC bodies. Much as in the case of the recommendation of the Basle Committee, a lending ceiling of 25% of the liable capital is envisaged. A large exposure is to be deemed given already as from 10% of the own funds.

In March 1990 the Commission reported on the application of its *Recommendation 87/63/EEC of December 22, 1986 Concerning the Introduction of Deposit-Guarantee Schemes in the Community.* According to that report, such systems have not yet been set up in all member states. In several countries protection is not accorded to depositors of all credit institutions, and no country provides for a comprehensive protection of all deposits. At the same time, the Commission indicated that it wishes to convert this Recommendation into a Directive so as to achieve a certain degree of harmonisation also in this field which is of significance for a smoothly functioning credit system. From the German point of view, it is crucial here to ensure that the system of voluntary self-help institutions set up by the associations, a system which provides

depositors with comprehensive protection and which has proved to be a stabilising factor in the banking sector which is particularly sensitive to changes in confidence, can be retained largely unchanged. It remains to be seen what further steps the Commission, which has not as yet submitted a draft Directive, will undertake.

Amendment of the
Act on Building
and Loan
Associations, and
of the relevant
ordinance

The amendment of the Act on Building and Loan Associations demanded by the building and loan associations was adopted under a great pressure of time prior to the end of the previous legislative period so that it could enter into force, together with the correspondingly amended Building and Loan Association Ordinance, on January 1, 1991. On the one hand, it allows the building and loan associations to extend their business opportunities both at home and abroad and, on the other, it provides for safeguards to steady the waiting periods up to the allocation of building and loan association contracts. The catalogue of uses for building and loan association loans, for instance, was extended, the use of real estate abroad as collateral was allowed, and the granting of loans was simplified because collateral will in future no longer be required for small loans. Fluctuations in waiting periods are to be curbed by provisions stating that the funds received in times of particularly brisk new business should not be paid out in the form of building and loan association loans at the earliest time possible. The additional revenue generated through interim investment should then be used to reduce the market interest rate of funds borrowed in times of declining new business.

Amendment of the Mortgage Bank Act

The Mortgage Bank Act, too, was once more amended just before the end of the previous legislative period. Involved was again primarily the extension of business opportunities at home and abroad. In future, for instance, communal loans may also be granted to borrowers below the level of the central governments in EC countries. In the field of mortgage loans secured by real estate, the extent to which real estate abroad can be used as collateral was increased, and the loans secured in this way may in certain circumstances also be used to cover mortgage bonds. The possibilities for taking over participating interests were also extended, as was the possibility of issuing uncovered bonds — in conjunction with the abolition of the issue authorisations required under the provisions of section 795 or section 808a of the Civil Code.

Amendment of the Mortgage Bond Act The Mortgage Bond Act, too, was amended effective from January 1, 1991. Public sector banks are now allowed to grant foreign communal loans to the same group of borrowers as the private mortgage banks, and also to use these claims to cover their communal bonds.

Accounting rules for banks

On November 30, 1990 the Bundestag adopted the *Act to Implement the Council Directive on the Annual Accounts and the Consolidated Accounts of Banks and Other Financial Institutions (Act Concerning the EC Annual Accounts Directive)* with the approval of the Bundesrat. The Act entered into force on January 1, 1991. The new provisions are to be applied for the first time to the financial year starting after December 31, 1992. The introduction of the breakdown of claims and liabilities by residual maturity, a breakdown which is to provide a better insight into the liquidity position of banks than the still applicable breakdown by original maturity, was postponed to January 1, 1998.

The work in the Federal Ministry of Justice on the *Bank Accounting Ordinance*, which is closely associated with the Act Concerning the EC Annual Accounts Directive, has not as yet been completed.

The Principles I and I a pursuant to sections 10 and 10 a of the Banking Act, on the basis of which the adequacy of banks' capital is assessed as a rule, have been amended, effective from October 1, 1990, by the Federal Banking Supervisory Office in agreement with the Deutsche Bundesbank.

Principles
Concerning the
Capital and
Liquidity of Banks

Apart from the loans and participating interests which had previously already been deemed to be risk assets, *Principle I* in future also includes the risks of counterparty failures (potential replacement risks) arising from

financial swaps, forward contracts and option rights.

In addition, borrowers' repurchase agreements will be deemed to be risk assets if the securities involved have been deducted from the stock. The ceiling on all risk assets has remained unchanged at 18 times the liable capital.

Through the deletion of the previous nos. 2 and 3, *Principle Ia* has been revised more extensively and now limits price risks, in particular those resulting from off-balance-sheet financial instruments, to a total of 60% of the liable capital:

Limits provided for in Principle Ia	
Risk area	Limit in % of the liable capital
Foreign currency risks arising from balance sheet items, financial swaps, forward exchange transactions and contracts as well as from currency options	30
Interest rate risks arising from interest-rate forward contracts and interest-rate options in so far as they raise the risk of other open positions (in particular in the balance sheet area)	20
Other price risks arising from forward contracts and options with other price risks (in particular share and index-linked contracts)	10

The revised version of the above-mentioned Principles Concerning the Capital and Liquidity of Banks was published in the Federal Gazette on May 17, 1990. The Announcement of the Federal Banking Supervisory Office includes extensive notes and an annex, all of which were published as Deutsche Bundesbank Special Series No. 2a. In this respect, it supplements the Deutsche Bundesbank Special Series No. 2 "Banking Act of the Federal Republic of Germany".

Principles II and III pursuant to section 11 of the Banking Act, the Principles used as a rule to assess the adequacy of banks' liquidity, were not changed last year.

The currently applicable Principles read as follows:

Principles of January 20, 1969 Concerning the Capital and Liquidity of Banks, as last amended by the Announcement of May 15, 1990.

#### **Preamble**

- (1) The Federal Banking Supervisory Office, acting in accordance with section 10 (1) sentence 3, section 10 a (1) sentence 2 and section 11 sentence 3 of the Banking Act in the wording of the Announcement of July 11, 1985 (Federal Law Gazette I, page 1472), hereby announces the Principles, drawn up in agreement with the Deutsche Bundesbank and after consultation of the central associations representing the banks, according to which it will as a rule assess whether a bank's capital and the capital of a banking group, taken as a whole, are adequate (section 10 (1) and section 10 a (1) of the Banking Act) and whether a bank's liquidity is adequate (section 11 of the Banking Act).
- (2) If a bank exceeds the upper limits laid down in the Principles by more than an insignificant amount, or repeatedly, then there is normally reason to suppose that the bank does not possess the necessary capital (Principle I and Principle Ia) or that its liquidity is insufficient (Principles II and III). If a banking group exceeds the upper limits set by Principle I, sentence 1 applies as appropriate. When assessing the adequacy of a bank's or banking group's capital or a bank's liquidity, special conditions which, depending on the circumstances, warrant lower or higher requirements may be taken into consideration.
- (3) Only Principles I and Ia apply to private mortgage banks which do not exercise their right to conduct extended business in accordance with section 46 (1) of the Mortgage Bank Act, building and loan associations (including those operated as units of dependent legal status), public mortgage banks, instalment sales financing institutions and banks exclusively conducting banking business within the meaning of section 1 (1) sentence 2 nos. 7 and 8 of the Banking Act.
- (4) Only Principle Ia applies to ship mortgage banks and central securities depositories. If they belong to a banking group within the meaning of section 10a (2) of the Banking Act, they are to be included as part of the group when applying Principle I to a banking group; central securities depositories are included only if they are a parent bank within the meaning of section 10a (2) of the Banking Act.
- (5) The Principles do not apply to investment companies.
- (6) The Principles in the wording of January 20, 1969 will first be applied for the month of January 1969. Announcement no. 1/62 of the Federal Banking Supervisory Office of March 8, 1962 (Federal Gazette no. 53 of March 16, 1962), as amended by Announcement no. 1/64 of August 25, 1964 (Federal Gazette no. 161 of September 1, 1964), is hereby revoked.

### Principle I

(1) The risk assets of a bank (including a building and loan association operated as a unit of dependent legal status) shall not exceed eighteen times its liable capital. The following shall be regarded as risk assets:

- 1. participating interests,
- 2. loans.
- 3. financial swaps,
- forward contracts and option rights involving fungible underlying instruments
- (2) In the case of banking groups (section 10a (2) of the Banking Act (Kreditwesengesetz)), the ceiling pursuant to subsection (1) sentence 1 above applies as appropriate to the ratio of total liable capital to total risk assets (other than participating interests in enterprises belonging to the group), as calculated by the pro rata consolidation method (section 10a (3) of the Banking Act), and to asset-side balancing items resulting from the consolidation of capital in accordance with section 10a (3) sentence 4 of the Banking Act.
- (3) The following shall be regarded as loans within the meaning of subsection (1) sentence 2 no. 2 above:
- 1. bills of exchange in the bank's portfolio and bills sent for collection from the bank's portfolio prior to maturity,
- 2. receivables from banks and customers (including the trade receivables of banks trading in goods),
- 3. risk assets which the borrower has sold to the lender, and which are transferred on condition that they must be retransferred or redeemed at the lender's request (sale and repurchase agreements).
- 4. assets in respect of which a bank or an enterprise within the meaning of section 10a (2) sentence 5 no. 1, no. 2 or no. 3 of the Banking Act has concluded leasing contracts as the lessor,
- 5. contingent claims in respect of
  - (a) bills of exchange in circulation drawn by the bank, discounted and credited to borrowers.
  - (b) endorsement liabilities on rediscounted bills,
  - (c) guarantees, guaranteed bills and cheques and other warranties, and in respect of the provision of collateral for third-party liabilities,
  - (d) unconditional commitments by building and loan associations to fund interim loans granted by third parties to savers with such associations.
- (4) The basis of assessment for counting the risk assets is,
- 1. in the case of participating interests: the book value, less loan-loss provisions,
- in the case of loans as defined in subsection (3) nos. 1 to 3 and no. 5 above (other than guarantees for forward contracts, option rights and financial swaps): the book value less loan-loss provisions and less fees booked but chargeable to subsequent accounting years,
- 3. in the case of assets leased in accordance with subsection (3) no. 4 above: the book value, less rentals paid by the lessee or a purchase of lease receivables, with the book value as a maximum deduction,

- 4. in the case of financial swaps and the guarantees assumed in connection therewith: the principal amount,
- 5. in the case of forward contracts, option rights and the guarantees assumed in connection therewith: the bank's claim to the delivery or purchase of the underlying instrument, on the assumption that the contracts are actually performed.

Where, in the case of forward contracts or financial swaps involving a swap of interest and principal, all claims and obligations between two parties denominated in the same currency and having the same value date are netted by novation under the terms of a contractual agreement, the claim arising from the remaining balance shall be regarded as the basis of assessment. Risk assets denominated in a foreign currency shall be converted into Deutsche Mark at the exchange rate ruling on the respective reporting date (reporting date rate); instead of the reporting date rate the bank, when converting those participating interests which it does not treat as an integral part of its foreign currency position, may use the exchange rate obtaining at the time such interests were first entered in its books. For the currencies officially quoted on the Frankfurt Currency Exchange, the spot middle rates of exchange shall be used and, for other currencies, the middle rates derived from the determinable buying and selling rates quoted on the respective reporting date shall be applied.

- (5) Financial swaps within the meaning of subsection (1) sentence 2 no. 3 above, forward contracts and option rights within the meaning of subsection (1) sentence 2 no. 4 above and guarantees assumed in connection with these risk assets shall be counted uniformly, at the bank's discretion, either by the original-exposure method or by the marking-to-market method; a bank may switch at any time from the original-exposure method to the marking-to-market method. If the original-exposure method is used, the risk assets enumerated in sentence 1 above shall be counted by applying "maturity-related" percentages to the relevant basis of assessment as defined in subsection (4) sentence 1 no. 4 or no. 5 above. If the marking-to-market method is employed, the risk assets enumerated in sentence 1 above shall be counted at the potential replacement cost which, according to the daily assessment, would arise if the counterparty were to fail, plus a factor (the "add-on") specified in subsection (6) sentence 2 below to reflect the potential future increase in risk; no add-on is applied to single-currency floating/floating interest-rate swaps. The amount of the potential replacement cost is determined by the level of the additional expenditure or of the lower earnings which would arise in the event of contracting an equivalent position.
- (6) The "maturity-related" percentages within the meaning of subsection (5) sentence 2 above are,
- 1. if the replacement cost is due entirely to changes in interest rates, given a residual maturity of

up to one year: 0.5%,

more than one year: 1.0% for each full and each incomplete year,

less 1%;

2. if the replacement cost is due entirely or partly to changes in exchange rates or other prices, given an original maturity of

up to one year: 2.0%,

more than one year: 3.0% for each full and each incomplete year,

less 1%.

The "add-on" within the meaning of subsection (5) sentence 3 clause 1 above, as a percentage of the basis of assessment as defined in subsection (4) sentence 1 no. 4 or no. 5 above, is,

 if the replacement cost is due entirely to changes in interest rates, given a residual maturity of

more than one year:

0.5%;

2. if the replacement cost is due entirely or partly to changes in exchange rates or other prices, given a residual maturity of

up to one year:

1.0%,

more than one year:

5.0%.

- (7) Of the loans included in subsection (3) above and granted by building and loan associations to savers with them who are neither banks within the meaning of subsection (8) no. 6 below or subsection (9) below nor public corporations within the meaning of subsection (10) no. 1 below, the following shall be counted at only 70% of their value:
- loans granted by building and loan associations under allocated savings contracts (including loans granted in accordance with subsection (8) no. 2 below),
- 2. interim and bridging loans granted by building and loan associations to savers with them pending receipt of a building loan,
- 3. contingent claims of building and loan associations in accordance with subsection (3) no. 5 (d) above.
- (8) Of the risk assets enumerated in subsection (1) sentence 2 above, the following shall be counted at only 50% of their value:
- 1. loans serving as cover for communal bonds or communal ship mortgage bonds,
- 2. loans satisfying the requirements of section 12 (1) and (2) of the Mortgage Bank Act (*Hypothekenbankgesetz*), to the extent that they do not exceed three-fifths of the value of the real estate.
- 3. loans with maturities not exceeding fifteen years secured by ship mort-gages satisfying the requirements of section 10 (1) and (4) sentence 2, section 11 (1) and (4), and section 12 (1) and (2) of the Ship Mortgage Bank Act (Schiffsbankgesetz), to the extent that they do not exceed three-fifths of the value of a ship or ship under construction,
- receivables from customers in accordance with subsection (3) no. 2, no. 3 or no. 4 above, to the extent that they are guaranteed or secured in some other way by public corporations domiciled in the area of validity of the Banking Act,
- 5. contingent claims on customers in accordance with subsection (3) no. 5 (c) above,
- 6. loans in accordance with subsection (3) above to banks domiciled outside the area of validity of the Banking Act,

- 7. risk assets in accordance with subsection (1) sentence 2 no. 3 or no. 4 above, where the claim to performance is directed against a bank which is domiciled outside the area of validity of the Banking Act and was licensed in a country other than those specified in subsection (9) no. 2 (a) below,
- 8. risk assets in accordance with subsection (1) sentence 2 no. 3 or no. 4 above, unless the preconditions for the application of lower weights are satisfied.
- (9) Of the risk assets enumerated in subsection (1) sentence 2 above, the following shall be counted at only 20% of their value:
- risk assets in accordance with subsection (1) sentence 2 no. 2, no. 3 or no. 4 above, where the claim to performance is directed against a bank which is domiciled in the area of validity of the Banking Act (including branches within the meaning of section 53 of the Banking Act, and including banks that are public corporations domiciled in the area of validity of the Banking Act),
- 2. risk assets in accordance with subsection (1) sentence 2 no. 3 or no. 4 above, where the claim to performance is directed
  - (a) against a bank which is domiciled outside the area of validity of the Banking Act and was licensed in a country that is a full member of the Organisation for Economic Cooperation and Development (OECD) or a country that has concluded special lending arrangements with the International Monetary Fund under the Fund's General Arrangements to Borrow, or
  - (b) against a multilateral development bank in which at least one of the major industrial countries that have concluded special lending arrangements with the International Monetary Fund under the Fund's General Arrangements to Borrow has a participating interest.
- (10) The following shall attract a zero weight:
- risk assets in accordance with subsection (1) sentence 2 no. 2, no. 3 or no. 4 above, where the claim to performance is directed against public corporations (other than banks) in the area of validity of the Banking Act or against a special fund of the Federal Government,
- 2. risk assets in accordance with subsection (1) sentence 2 no. 3 or no. 4 above, where the claim to performance is directed against
  - (a) a country that is a full member of the Organisation for Economic Cooperation and Development (OECD) or a country that has concluded special lending arrangements with the International Monetary Fund under the Fund's General Arrangements to Borrow, or
  - (b) the central bank of one of these countries,
- risk assets in accordance with subsection (1) sentence 2 no. 3 or no. 4 above, the replacement cost of which is due entirely or partly to changes in exchange rates, if the original maturity of the contract is less than fifteen calendar days,
- 4. risk assets in accordance with subsection (1) sentence 2 no. 4 above, the performance of which is owed or guaranteed by a stock exchange institution.

- (1) The total amount of certain positions of a bank involving price risks ("risk positions") shall not exceed 60% of the bank's liable capital at the close of business on any day.
- (2) The following are risk positions within the meaning of subsection (1) above:
- 1. the sum of the differences, as determined in accordance with subsections (3) and (4) below, between the bank's assets and liabilities denominated in foreign currency or in gold, silver or platinum (precious metals),
- 2. the sum of the risk coefficients, as determined in accordance with subsections (5) to (7) below, for counting the risk-enhancing positions arising under interest-rate forward and interest-rate option contracts (interest-rate contract positions),
- the sum of the differences, as determined in accordance with subsection
   below, between delivery claims and delivery obligations arising under forward and option contracts involving other price risks.

The risk positions as defined in sentence 1 above shall not exceed the following percentages of the bank's liable capital at the close of business on any day:

- 1. the risk position pursuant to no. 1 above: 30%,
- 2. the risk position pursuant to no. 2 above: 20%, and
- 3. the risk position pursuant to no. 3 above: 10%.
- (3) The following items constitute assets and liabilities within the meaning of subsection (2) sentence 1 no. 1 above if they are denominated in foreign currency or in gold, silver or platinum in an unprocessed state (i.e. excluding products made of these precious metals):

#### A. Assets

- 1. receivables from banks and customers, and balances in foreign currency accounts carried by the Deutsche Bundesbank,
- 2. bills of exchange,
- 3. Treasury bills and Treasury discount paper,
- 4. securities, other than shares and other participatory securities,
- 5. stocks of
  - (a) gold,
  - (b) silver,
  - (c) platinum,
- 6. delivery and payment claims arising under spot and forward contracts, and claims to the payment of principal amounts under financial swaps,

- 7. claims and contingent claims under sale and repurchase agreements to the redelivery of items listed under assets nos. 1 to 6 above, to the extent that such items are not included in these assets,
- 8. rights of the bank as an option writer, arising when third parties exercise option rights, to receive a purchase price represented by the strike price and to receive the underlying instrument,
- 9. rights of the bank, arising when exercising its own option rights, to receive the purchase price represented by the strike price and to receive the underlying instrument, to the extent that this reduces a difference which would otherwise exist and constitute a liability in accordance with subsection (4) sentence 1 clause 1 below.
- B. Liabilities
- 1. liabilities to banks and other creditors,
- 2. bonds,
- 3. own acceptances and promissory notes outstanding,
- 4. delivery and payment obligations arising under spot and forward contracts, and obligations to pay principal amounts under financial swaps,
- 5. obligations and contingent obligations under sale and repurchase agreements to redeliver items listed under assets nos. 1 to 6 above, to the extent that such items are included in these assets.
- 6. obligations of the bank as an option writer, arising when third parties exercise option rights, to pay the purchase price represented by the strike price and to deliver the underlying instrument,
- 7. obligations of the bank, arising when exercising its own option rights, to pay the purchase price represented by the strike price and to deliver the underlying instrument, to the extent that this reduces a difference which would otherwise exist and constitute an asset in accordance with subsection (4) sentence 1 clause 1 below.
- (4) The differences for determining the risk position pursuant to subsection (2) sentence 1 no. 1 above shall be calculated separately for each currency and each precious metal by ascertaining the balance in absolute terms deriving from the assets and liabilities computed in accordance with subsection (3) above. Regardless of how the specific loan-loss provisions in respect of assets in foreign currency or Deutsche Mark have been made, they must be deducted from these assets. When converting assets and liabilities denominated in a foreign currency into Deutsche Mark, spot middle rates shall be used for the currencies officially quoted on the Frankfurt Currency Exchange and middle rates derived from the determinable buying and selling rates shall be used for other currencies. Assets and liabilities in gold shall be converted into Deutsche Mark at the rate quoted on the Frankfurt Gold Exchange for 12.5 kg bars (1 kg = 32 fine ounces). Assets and liabilities in silver and platinum shall be converted at the rates per fine ounce quoted on the London Metal Exchange.

- (5) The risk coefficients for determining the risk position pursuant to subsection (2) sentence 1 no. 2 above shall be calculated separately for each currency, using a risk-recording system classified by time with four consecutive zones, each of which is subdivided into periods of calendar quarters or calendar years. The following are combined to form zones within the meaning of sentence 1 above:
- 1. all the calendar quarters specified in sentence 3 clause 2 below (the short-term zone),
- 2. the five calendar years following the short-term zone (the medium-term zone).
- 3. the five calendar years following the medium-term zone (the medium-to-long-term zone), and
- 4. the three calendar years following the medium-to-long-term zone (the long-term zone).

The extent of the short-term zone within the risk-recording system changes over time at the end of each quarter upon the compilation of the fixed-interest-rate balance sheet pursuant to subsection (7) sentence 2 clause 2 below; the short-term zone which starts in the second calendar quarter following the relevant reporting date within the meaning of clause 1 of this sentence comprises

as at March 31	the last two calendar quarters of the current year and all calendar quarters of the following year (six quarters),
as at June 30	the last calendar quarter of the current year and all calendar quarters of the following year (five quarters),
as at September 30	all calendar quarters of the following two years (eight quarters),
as at December 31	the last three calendar quarters of the following year and all calendar quarters of the next year but one (seven quarters).

(6) To determine the risk coefficient of each zone, asset-side and liability-side risk ratios and, to the extent specified in subsection (7) sentence 4 below, non-nettable add-ons shall be derived from the risk-enhancing elements of the interest-rate contract positions in the individual periods of each zone, and subsequently aggregated over all the periods. In the risk-recording system the interest-rate contract positions shall be computed as the balance of all the asset and liability components of interest-rate forward contracts and optionwriter positions arising from interest-rate option contracts that are attributed to the same period; the bank's own interest-rate option rights, which shall be recorded separately (classified by asset options and liability options), are included in the calculation of the interest-rate contract position in the individual periods with the differences (which shall be determined separately) between the asset and the liability components of each overall option contract, provided that their volume, as ascertained in accordance with clause 1 of this sentence, is reduced by netting against either of these differences. Interest-rate forward and interest-rate option contracts for the immediate hedging of individual fixed-interest-rate items within the meaning of subsection (7) sentence 2 below - which contracts have been entered into after the reporting date of the latest fixed-interest-rate balance sheet to be compiled - are left out of

account in the calculation of the interest-rate contract positions until the following fixed-interest-rate balance sheet is drawn up, provided that the express purpose of hedging was documented at the time the contracts were concluded. The interest-rate forward and interest-rate option contracts to be incorporated in the calculation of the interest-rate contract positions are included with all their asset and liability components, in line with the effect in terms of interest rates, and on the assumption that the contracts are actually performed. In the risk-recording system each asset and liability component shall be attributed to those periods which precede the period in which it matures; components which mature in a calendar year subsequent to the long-term zone within the meaning of subsection (5) sentence 2 no. 4 above shall be attributed to all periods of the recording system.

(7) In any period of the risk-recording system, the risk-enhancing element of an interest-rate contract position, as calculated in accordance with subsection (6) above, consists of the difference by which the absolute amount of the overall interest-rate position (which is composed of the interest-rate contract position plus the open fixed-interest-rate position) exceeds the absolute amount of the open fixed-interest-rate position; depending on the underlying interest-rate contract position, the risk-enhancing element is either an asset or a liability. The open fixed-interest-rate positions are determined in each case by computing the balance of the nominal amounts of all the on-balance-sheet and off-balance-sheet fixed-interest-rate items (other than the components of the interest-rate contracts specified in subsection (6) sentence 2 above) that are attributed to the same period; these positions are to be taken from the latest of the fixed-interest-rate balance sheets which the bank must compile within one month by a consistent method, at least as at the end of each calendar quarter, in line with the breakdown by period of the risk-recording system. In the fixed-interest-rate balance sheet every fixed-interest-rate item shall be attributed to those periods which precede the period in which its interest rate ceased to be fixed. To compute the risk ratios which are to be found in the periods of all the zones and the add-ons which are likewise to be taken into account in the first three quarters of the short-term zone, the risk-enhancing elements within the meaning of sentence 1 above are weighted with period-related percentages; these percentages are,

 if the risk ratios are derived for each quarter: for each year:

0.5%, 2.0%;

2. if the add-ons are derived for each quarter:

0.5%.

In each of the zones as defined in subsection (5) sentence 2 nos. 2 to 4 above, the risk coefficient is formed by the absolute amount of the balance of the asset-side and liability-side risk ratios of the respective periods, and in the zone as defined in subsection (5) sentence 2 no. 1 above it is formed by the sum of the absolute values of this balance and the add-ons in accordance with sentence 4 above.

(8) The differences for determining the risk position pursuant to subsection (2) sentence 1 no. 3 above shall be calculated separately, classified by the type of instrument posing a price risk underlying the forward and option contracts; in each case the differences are formed by the absolute amount of the balance computed in respect of all forward contracts and option-writer positions under option contracts (on the assumption that the contracts are actually performed) from the bank's delivery claims and delivery obligations, provided that these contracts do not hedge the price risk posed by a portfolio of instruments of the

same type. The bank's own option rights are included in the balance along with its aggregate delivery claims under call options and its aggregate delivery obligations under put options, provided that the level of the balance, as determined in accordance with sentence 1 clause 2 above, is reduced by netting against either of these aggregates.

- (9) The asset and liability components of option contracts shall be included in the calculation of the risk positions pursuant to subsection (2) sentence 1 above to the extent of the minimum percentages prescribed by sentence 5 below or of higher ratios deriving from a computer-assisted option-price model consistently used by the bank. The minimum percentages are determined by the value of the ratio (Anrechnungskoeffizient AK) which is to be calculated for every option contract at the close of business every day. This ratio shall be calculated,
- 1. in the case of contracts
  - (a) involving call options included in the risk positions pursuant to subsection (2) sentence 1 no. 1 or no. 3 above, and
  - (b) involving asset-side interest-rate options included in the risk position pursuant to subsection (2) sentence 1 no. 2 above,

by the formula 
$$\mathsf{AK} = \frac{\mathsf{FR} - \mathsf{SP}}{\mathsf{SP}} \times \frac{360}{\mathsf{RM}} \,,$$

- 2. in the case of contracts
  - (a) involving put options included in the risk positions pursuant to subsection (2) sentence 1 no. 1 or no. 3 above, and
  - (b) involving liability-side interest-rate options included in the risk position pursuant to subsection (2) sentence 1 no. 2 above,

by the formula 
$$AK = \frac{SP - FR}{SP} \times \frac{360}{RM}$$

where "FR" = the Forward Rate applying to the underlying instrument,

"SP" = the agreed Strike Price, and

"RM" = the Residual Maturity of the option in days.

Where the residual maturity is less than thirty days, the number "30" is to be inserted in place of "RM". The minimum percentage is as follows:

# for ratios (Anrechnungskoeffizienten)

of less than - 0.02	0%,
from $-$ 0.02 to less than $\pm$ 0	20%,
from $\pm$ 0 to less than $+$ 0.08	50%,
from $+$ 0.08 to less than $+$ 0.14	70%,
of + 0.14 and more	95 %.

#### Principle II

A bank's assets in the form of

- 1. receivables from banks and customers with agreed maturities or periods of notice of four years or over,
- 2. unlisted securities,
- 3. participating interests,
- 4. shares in a controlling company or a company holding a majority interest,
- 5. land and buildings, and
- 6. furniture and equipment,

less loan-loss provisions, shall not exceed the sum of the long-term financial resources specified below.

The following shall be regarded as long-term financial resources:

- 1. the capital and reserves,
- 2. the liabilities (other than savings deposits) to banks and customers with agreed maturities or periods of notice of four years or over,
- 3. 10% of the liabilities (other than savings deposits) to customers payable on demand and with agreed maturities or periods of notice of less than four years,
- 4. 60% of the savings deposits,
- 5. the bonds outstanding and bonds sold prior to issue with maturities of more than four years,
- 6. 60% of the bonds outstanding and bonds sold prior to issue with maturities of up to four years,
- 7. 60% of the provisions for pensions,
- 8. 20% of the liabilities to affiliated banks with agreed maturities or periods of notice of six months and over but less than four years (only for the regional institutions of savings banks and of credit cooperatives).

#### Principle III

- 1. 20% of the receivables from banks with agreed maturities or periods of notice of three months and over but less than four years,
- receivables from customers with agreed maturities or periods of notice of less than four years (including the trade receivables of banks trading in goods),

<sup>1</sup> Name changed to regional institutions of credit cooperatives (Genossenschaftliche Zentralbanken).

- 3. bills of exchange drawn by the bank, discounted and credited to borrowers, and promissory notes drawn by borrowers, discounted and credited to them, in the bank's portfolio (other than promissory notes of the Bank for International Settlements and the Import and Storage Agencies (Einfuhrund Vorratsstellen)<sup>1</sup> and promissory notes drawn for the purpose of taking up loans of the Export Credit Company (Ausfuhrkreditgesellschaft mbH) and the Industrial Plant Financing Company (Gesellschaft zur Finanzierung von Industrieanlagen mbH)), as well as contingent claims in respect of such bills and notes in circulation.
- 4. listed shares and investment fund units,
- 5. "other assets" (including stocks of goods held by banks trading in goods),

less loan-loss provisions, shall not exceed the sum of the financial resources specified below.

The following shall be regarded as financial resources:

- 1. 10% of the liabilities to banks payable on demand and with agreed maturities or periods of notice of less than three months, other than loans and advances to customers on behalf of the bank.
- 2. 50 % of the liabilities to banks with agreed maturities or periods of notice of three months and over but less than four years, other than loans and advances to customers on behalf of the bank.
- 3. 80% of the liabilities to banks in respect of loans and advances to customers on behalf of the bank,
- 4. 20% of the savings deposits,
- 5. 60% of the other liabilities to customers payable on demand and with agreed maturities or periods of notice of less than four years,
- 6. 80 % of the liabilities in respect of business in goods and trade payables, other than the liabilities of banks trading in goods included in no. 8 below,
- 20 % of the bonds outstanding and bonds sold prior to issue with maturities of up to four years,
- 8. 80% of the own acceptances and promissory notes in circulation and of the bills of exchange drawn by the bank, discounted and credited to borrowers, and of the promissory notes drawn by borrowers, discounted and credited to them, in circulation (other than promissory notes of the Bank for International Settlements and the Import and Storage Agencies¹ and promissory notes drawn for the purpose of taking up loans of the Export Credit Company and the Industrial Plant Financing Company)

plus the financial surplus or less the financial deficit in Principle II, as the case may be.

<sup>1</sup> Name changed to Federal Office for Agricultural Market Regulation (Bundesanstalt für landwirtschaftliche Marktordnung).

In view of the uncertainties involved in the banks' first reports, information on the positions and ratios regarding the new Principle Ia cannot as yet be provided. The figures on that version of Principle Ia which was in force until September 30, 1990 have therefore been taken into account in the tables below. The figures for the year 1990, by contrast, include the reports on Principle I, as amended.

Principles I, II and III had to be complied with by some 4,000 west German institutions. Since June 1987 reports on Principle Ia have to be submitted only by banks with asset and liability positions, as defined in Principle Ia, on the last day of the month which total DM 1 million (formerly DM 100,000) and more. At the end of September 1990 just under 840 banks submitted reports on Principle Ia.

In the last few years the cases in which the limits set in the individual Principles were exceeded in terms of the average of four quarterly reporting dates can be broken down as follows:

	of banks whi	ch exceede	d the limits	set in the	Principles '	*
Annual avera	iges	Principle Ia				
Year	Principle I	Subsection 1	Subsection 2	Subsection 3	Principle II	Principle III
1980	58	2	1	1	29	170
1981	41	2	1	2	47	118
1982	19	2	2	1	20	59
1983	17	3	0	1	10	42
1984	16	5	2	1	9	41
1985	10	6	1	1	8	30
1986	6	6	1	1	11	19
1987	3	2	1	1	7	12
1988	2	4	1	1	11	14
1989	3	3	1	0	25	15
1990 <b>1</b>	8	1	2	1	40	38

<sup>\*</sup> Excluding institutions in the new Länder and excluding branches of enterprises domiciled in another country, instalment sales financing institutions and public mortgage banks. — 1 Principle Ia: average of three quarterly reporting dates (excluding fourth quarter of 1990).

As in previous years, there were only few banks which did not comply with Principles I and Ia. Failures to meet the liquidity principles (Principles II and III), by contrast, rose more markedly than in the years before. The overstepping of the limits set in the Principles is predominantly due to special circumstances in the banks involved, and is in so far generally tolerated by banking supervision.

The trend in the average ratios of Principles I, Ia, II and III can be seen from the table on the following page.

# Average ratios of the Principles I, I a subsection (1), II and III pursuant to sections 10 and 11 of the Banking Act\*

An	nu	al a	ve	rac	es

Year	Total	Commercial banks	Regional giro institutions <b>1</b>	Regional institutions of credit co-operatives 1	Savings banks	Credit cooperatives
	Principle I (ceili	ng 18 times)				
1980	14.0	15.0	15.0	9.5	13.7	12.8
1981	14.3	15.1	15.9	10.1	13.9	13.2
1982	14.1	15.1	15.5	9.9	13.5	13.1
1983	13.7	14.7	14.9	9.4	13.0	12.9
1984	13.6	14.7	14.8	9.1	12.9	12.7
1985	13.4	14.6	14.9	8.5	12.6	12.3
1986	12.7	13.3	14.9	7.1	12.3	11.6
1987	12.3	12.7	14.6	6.7	12.0	11.2
1988	12.4	13.2	14.8	6.4	11.8	11.1
1989	12.6	13.3	14.8	6.2	12.1	11.3
1990	12.6	12.7	15.1	7.1	12.4	11.7
	Principle I a sub	section (1) (ceil	ng 30%)			
1980	8.9	13.6	5.6	7.1	1.1	2.0
1981	7.2	10.4	6.1	6.6	1,1	2.2
1982	6.6	9.5	5.9	7.2	1,1	2.4
1983	6.9	10.5	5.4	7.4	1.1	2.8
1984	6.7	10.8	5.1	5.4	0.9	2.9
1985	6.9	11.0	5.6	5.3	1.0	4.0
1986	6.8	10.1	5.7	7.1	1.2	4.4
1987	8.1	9.5	11.0	9.2	1.4	7.1
1988	9.7	12.1	10.3	12.9	1.4	8.7
1989	7.8	10.7	6.5	13.9	2.1	7.3
1990 2	7.4	10.1	5.8	12.8	3.2	6.2
	Principle II (ceili	ng 100%)				
			00.4			
1980	91.7	91.0	96.4	91.7	93.0	81.5
1980 1981	91.7 92.1	91.0 90.4	96.4 95.5			81.5 83.3
				91.7 91.8 91.5	93.0 94.5 92.7	83.3
1981	92.1	90.4	95.5	91.8	94.5	83.3 82.9
1981 1982 1983 1984	92.1 91.0	90.4 87.4	95.5 96.4	91.8 91.5	94.5 92.7 92.3	83.3 82.9 81.5
1981 1982 1983	92.1 91.0 90.1	90.4 87.4 85.0	95.5 96.4 96.6	91.8 91.5 90.2	94.5 92.7	83.3 82.9 81.5 82.8
1981 1982 1983 1984 1985 1986	92.1 91.0 90.1 89.9 90.2 87.9	90.4 87.4 85.0 83.8	95.5 96.4 96.6 96.0	91.8 91.5 90.2 90.0	94.5 92.7 92.3 92.9	83.3 82.9 81.5
1981 1982 1983 1984 1985 1986 1987	92.1 91.0 90.1 89.9 90.2 87.9 86.7	90.4 87.4 85.0 83.8 85.1	95.5 96.4 96.6 96.0 95.5	91.8 91.5 90.2 90.0 89.6	94.5 92.7 92.3 92.9 92.9	83.3 82.9 81.5 82.8 83.6
1981 1982 1983 1984 1985 1986 1987 1988	92.1 91.0 90.1 89.9 90.2 87.9 86.7 88.4	90.4 87.4 85.0 83.8 85.1 83.6	95.5 96.4 96.6 96.0 95.5 92.9	91.8 91.5 90.2 90.0 89.6 86.9	94.5 92.7 92.3 92.9 92.9 90.1	83.3 82.9 81.5 82.8 83.6 82.4
1981 1982 1983 1984 1985 1986 1987 1988 1989	92.1 91.0 90.1 89.9 90.2 87.9 86.7 88.4 89.5	90.4 87.4 85.0 83.8 85.1 83.6 84.1 87.6 87.5	95.5 96.4 96.6 96.0 95.5 92.9 91.7 93.4 92.7	91.8 91.5 90.2 90.0 89.6 86.9 83.2 85.5 86.9	94.5 92.7 92.3 92.9 92.9 90.1 87.7 88.0 90.1	83.3 82.9 81.5 82.8 83.6 82.4 81.6 83.2 86.6
1981 1982 1983 1984 1985 1986 1987 1988	92.1 91.0 90.1 89.9 90.2 87.9 86.7 88.4 89.5 88.8	90.4 87.4 85.0 83.8 85.1 83.6 84.1 87.6 87.5	95.5 96.4 96.6 96.0 95.5 92.9 91.7 93.4	91.8 91.5 90.2 90.0 89.6 86.9 83.2 85.5	94.5 92.7 92.3 92.9 92.9 90.1 87.7 88.0	83.3 82.9 81.5 82.8 83.6 82.4 81.6 83.2
1981 1982 1983 1984 1985 1986 1987 1988 1989 1990	92.1 91.0 90.1 89.9 90.2 87.9 86.7 88.4 89.5 88.8	90.4 87.4 85.0 83.8 85.1 83.6 84.1 87.6 87.5 85.5	95.5 96.4 96.6 96.0 95.5 92.9 91.7 93.4 92.7 89.4	91.8 91.5 90.2 90.0 89.6 86.9 83.2 85.5 86.9 86.9	94.5 92.7 92.3 92.9 92.9 90.1 87.7 88.0 90.1 91.6	83.3 82.9 81.5 82.8 83.6 82.4 81.6 83.2 86.6 88.9
1981 1982 1983 1984 1985 1986 1987 1988 1989 1990	92.1 91.0 90.1 89.9 90.2 87.9 86.7 88.4 89.5 88.8 Principle III (ceil	90.4 87.4 85.0 83.8 85.1 83.6 84.1 87.6 87.5 85.5 ing 100%)	95.5 96.4 96.6 96.0 95.5 92.9 91.7 93.4 92.7 89.4	91.8 91.5 90.2 90.0 89.6 86.9 83.2 85.5 86.9 86.9	94.5 92.7 92.3 92.9 92.9 90.1 87.7 88.0 90.1 91.6	83.3 82.9 81.5 82.8 83.6 82.4 81.6 83.2 86.6 88.9
1981 1982 1983 1984 1985 1986 1987 1988 1989 1990	92.1 91.0 90.1 89.9 90.2 87.9 86.7 88.4 89.5 88.8 Principle III (ceil	90.4 87.4 85.0 83.8 85.1 83.6 84.1 87.6 87.5 85.5 ing 100%)	95.5 96.4 96.6 96.0 95.5 92.9 91.7 93.4 92.7 89.4	91.8 91.5 90.2 90.0 89.6 86.9 83.2 85.5 86.9 86.9	94.5 92.7 92.3 92.9 92.9 90.1 87.7 88.0 90.1 91.6	83.3 82.9 81.5 82.8 83.6 82.4 81.6 83.2 86.6 88.9
1981 1982 1983 1984 1985 1986 1987 1988 1989 1990	92.1 91.0 90.1 89.9 90.2 87.9 86.7 88.4 89.5 88.8 Principle III (ceil	90.4 87.4 85.0 83.8 85.1 83.6 84.1 87.6 87.5 85.5 ing 100%)	95.5 96.4 96.6 96.0 95.5 92.9 91.7 93.4 92.7 89.4	91.8 91.5 90.2 90.0 89.6 86.9 83.2 85.5 86.9 86.9	94.5 92.7 92.3 92.9 92.9 90.1 87.7 88.0 90.1 91.6	83.3 82.9 81.5 82.8 83.6 82.4 81.6 83.2 86.6 88.9
1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1980 1980 1981 1982 1983	92.1 91.0 90.1 89.9 90.2 87.9 86.7 88.4 89.5 88.8 Principle III (ceil 82.9 85.1 83.4 80.9	90.4 87.4 85.0 83.8 85.1 83.6 84.1 87.6 87.5 85.5 ing 100%) 93.1 92.9 92.5 92.3	95.5 96.4 96.6 96.0 95.5 92.9 91.7 93.4 92.7 89.4	91.8 91.5 90.2 90.0 89.6 86.9 83.2 85.5 86.9 86.9	94.5 92.7 92.3 92.9 92.9 90.1 87.7 88.0 90.1 91.6	83.3 82.9 81.5 82.8 83.6 82.4 81.6 83.2 86.6 88.9
1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1980 1980 1981 1982 1983 1984	92.1 91.0 90.1 89.9 90.2 87.9 86.7 88.4 89.5 88.8 Principle III (ceil 82.9 85.1 83.4 80.9 80.4	90.4 87.4 85.0 83.8 85.1 83.6 84.1 87.6 87.5 85.5 ing 100%) 93.1 92.9 92.5 92.3 91.6	95.5 96.4 96.6 96.0 95.5 92.9 91.7 93.4 92.7 89.4 76.8 86.8 88.1 84.6 79.8	91.8 91.5 90.2 90.0 89.6 86.9 83.2 85.5 86.9 86.9 72.1 74.3 73.5 66.0 67.9	94.5 92.7 92.3 92.9 92.9 90.1 87.7 88.0 90.1 91.6	83.3 82.9 81.5 82.8 83.6 82.4 81.6 83.2 86.6 88.9
1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1980 1981 1982 1983 1984 1984	92.1 91.0 90.1 89.9 90.2 87.9 86.7 88.4 89.5 88.8 Principle III (ceil 82.9 85.1 83.4 80.9 80.4 78.2	90.4 87.4 85.0 83.8 85.1 83.6 84.1 87.6 87.5 85.5 ing 100%) 93.1 92.9 92.5 92.3 91.6 90.8	95.5 96.4 96.6 96.0 95.5 92.9 91.7 93.4 92.7 89.4 76.8 86.8 88.1 84.6 79.8 74.2	91.8 91.5 90.2 90.0 89.6 86.9 83.2 85.5 86.9 86.9 72.1 74.3 73.5 66.0 67.9 65.9	94.5 92.7 92.3 92.9 92.9 90.1 87.7 88.0 90.1 91.6	83.3 82.9 81.5 82.8 83.6 82.4 81.6 83.2 86.6 88.9 82.7 83.7 81.1 77.4 77.4 77.4
1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1980 1981 1982 1983 1984 1985 1986	92.1 91.0 90.1 89.9 90.2 87.9 86.7 88.4 89.5 88.8 Principle III (ceil 82.9 85.1 83.4 80.9 80.4 78.2 71.3	90.4 87.4 85.0 83.8 85.1 83.6 84.1 87.6 87.5 85.5 ing 100%) 93.1 92.9 92.5 92.3 91.6 90.8 87.5	95.5 96.4 96.6 96.0 95.5 92.9 91.7 93.4 92.7 89.4 76.8 86.8 88.1 84.6 79.8 74.2 61.8	91.8 91.5 90.2 90.0 89.6 86.9 83.2 85.5 86.9 86.9 72.1 74.3 73.5 66.0 67.9 65.9	94.5 92.7 92.3 92.9 92.9 90.1 87.7 88.0 90.1 91.6 72.2 75.2 71.6 68.0 68.3 66.0 58.3	83.3 82.9 81.5 82.8 83.6 82.4 81.6 83.2 86.6 88.9 82.7 83.7 81.1 77.4 77.4 77.4 75.2 67.7
1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1980 1981 1982 1983 1984 1985 1986 1986	92.1 91.0 90.1 89.9 90.2 87.9 86.7 88.4 89.5 88.8 Principle III (ceil 82.9 85.1 83.4 80.9 80.4 78.2 71.3 65.2	90.4 87.4 85.0 83.8 85.1 83.6 84.1 87.5 85.5 ing 100%) 93.1 92.9 92.5 92.3 91.6 90.8 87.5 83.2	95.5 96.4 96.6 96.0 95.5 92.9 91.7 93.4 92.7 89.4 76.8 86.8 88.1 84.6 79.8 74.2 61.8 55.2	91.8 91.5 90.2 90.0 89.6 86.9 83.2 85.5 86.9 86.9 72.1 74.3 73.5 66.0 67.9 65.9 48.8 47.6	94.5 92.7 92.3 92.9 92.9 90.1 87.7 88.0 90.1 91.6 72.2 75.2 71.6 68.0 68.3 66.0 58.3 52.1	83.3 82.9 81.5 82.8 83.6 82.4 81.6 83.2 86.6 88.9 82.7 83.7 81.1 77.4 77.8 75.2 67.7 61.1
1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1980 1981 1982 1983 1984 1985 1986	92.1 91.0 90.1 89.9 90.2 87.9 86.7 88.4 89.5 88.8 Principle III (ceil 82.9 85.1 83.4 80.9 80.4 78.2 71.3	90.4 87.4 85.0 83.8 85.1 83.6 84.1 87.6 87.5 85.5 ing 100%) 93.1 92.9 92.5 92.3 91.6 90.8 87.5	95.5 96.4 96.6 96.0 95.5 92.9 91.7 93.4 92.7 89.4 76.8 86.8 88.1 84.6 79.8 74.2 61.8	91.8 91.5 90.2 90.0 89.6 86.9 83.2 85.5 86.9 86.9 72.1 74.3 73.5 66.0 67.9 65.9	94.5 92.7 92.3 92.9 92.9 90.1 87.7 88.0 90.1 91.6 72.2 75.2 71.6 68.0 68.3 66.0 58.3	83.3 82.9 81.5 82.8 83.6 82.4 81.6 83.2 86.6 88.9 82.7 83.7 81.1 77.4 77.4 77.4 75.2 67.7

<sup>\*</sup> Excluding institutions in the new Länder and excluding branches of enterprises domiciled in another country, instalment sales financing institutions and public mortgage banks. — 1 Principles I, II and III excluding Deutsche Girozentrale and Deutsche Genossenschaftsbank. — 2 Average of three quarterly reporting dates (excluding fourth quarter of 1990).

Measured in terms of the average ratio of Principle I, the scope for lending remained unchanged against the preceding year. Whereas the commercial banks made less use of the margins provided for in Principle I than in the year before, there was a slight increase in the proportion used by the other categories of banks. The average ratio of Principle Ia declined slightly against the preceding year, in respect of practically all categories of banks.

Measured in terms of the ratio of Principle II, the overall average liquidity position of banks improved in the field of long-term transactions, with the trends in the average ratios of individual categories of banks differing. In the short and medium-term area (Principle III), by contrast, all categories of banks recorded predominantly a slight increase.

Pro rata consolidated Principle I

Since July 1, 1985, banking groups, too, have had to comply with Principle I. At that time 20 banking groups exceeded the ceiling of 18 times the liable capital so that they had to make use of the transitional arrangements provided for by the Federal Banking Supervisory Office to reduce the overstepping of the limits set in the Principle. By December 31, 1990 only one of the west German categories of banks considered here exceeded the pro rata consolidated Principle I.

The average ratios of the pro rata consolidated Principle I can be seen from the list below:

Ratio of the pro rata consolidated

As at December 1990

Principle I	
Total (82 banking groups)	15.9
of which	
41 commercial banks	16.1
10 regional giro institutions	16.3
15 instalment sales financing institutions	13.5

Participation in current banking supervision activities

At the end of 1990 a total of 4,217 west German banks were covered by banking supervision (including institutions under liquidation, and legally dependent building and loan associations). It thus covered 122 fewer banks than in the preceding year. It must be underlined that 16 new institutions were established in the regional banking sector. There were 181 mergers in the cooperative banking sector, and 10 mergers in the savings bank sector. On account of the 1990 Tax Reform Act, 47 housing enterprises with savings facilities had to be covered by banking supervision for the first time as from January 1, 1990, because the revocation of their non-profit status nullified the exemptions previously granted under the provisions of section 2 (1) nos. 6 and 7 of the Banking Act.

At the end of 1990 the number of east German institutions that have to be supervised since July 1, 1990 amounted to 541. This figure is still subject to significant changes as a result of, inter alia, mergers.

An overview of the transactions dealt with by the Land Central Banks within the scope of current banking supervision activities is given in the table below:

Current banking supervision activities  Number of transactions dealt with						
Individual reports pursuant to section 13 of the Banking Act	56,784	50,392	51,209	54,619	60,793	
Borrowers included in the lists submitted in accordance with section 13 of the Banking Act	87,725	74,391	62,035	69,354	70,411	
Reports on loans of DM 1 million or more pursuant to section 14 of the Banking Act	1,219,302	1,482,235	1,534,653	1,570,350	1,683,592	
Reports pursuant to section 16 of the Banking Act	25,549	17,049	8,452	8,949	10,068	
Reports pursuant to section 24 of the Banking Act	8,018	9,327	9,475	10,283	12,124	
Monthly returns pursuant to section 25 of the Banking Act	56,859	55,908	54,179	53,057	53,306	
Reports on the volume of external lending	746	780	796	894	953	
Annual accounts of banks	4,882	5,070	4,964	4,614	4,811	
Auditors' reports on the annual accounts	2,534	2,710	2,746	2,670	2,767	
Reports on the auditing of safe custody accounts	479	502	541	470	471	
Routine, special and deposit guarantee fund audit reports	407	423	457	510	693	
Audits commissioned by the Federal Banking Supervisory Office pursuant to section 44 (1) of the Banking Act section 44 (2) of the Banking Act	12 74	22 88	17 89	19 113	15 117	

The individual reports on large loans pursuant to section 13 of the Banking Act rose by 11% in the year under review. The reports required under the provisions of section 24 of the Banking Act increased by 18%, with the reports of banks in the new Länder contributing to this rise. The increase of 36% in the number of routine, special and deposit guarantee fund audit reports reviewed is due mainly to a change in the statistical data collection.

The credit information exchange for loans of DM 1 million or more reported the following on the reporting date December 31, 1990:

Credit information exchange for loans of DM 1 million or more

The volume of such loans rose by DM 240 billion or 14.2% to DM 1,927 billion against December 1989. The loans to domestic borrowers increased by DM 137 billion or 11.8% to DM 1,294 billion and those to non-resident borrowers by DM 104 billion or 19.6% to DM 634 billion. 83 subsidiaries of domestic banks reported loans of DM 1 million or more to the amount of DM 172 billion, i.e. about DM 30 billion or 21.1% more than on the reporting date of the preceding year.

All in all, the credit information exchange recorded 367,000 borrowers on this reporting date (as against 341,000 in the preceding year), 186,000 (172,000) of whom had been lumped together in 69,000 (63,000) borrower units pursuant to section 19 (2) of the Banking Act. In the case of 91 (88) borrower units the debt, as defined in section 14 of the Banking Act, was in excess of DM 1 billion; the total debt amounted to DM 224 billion.

The table below provides an overview of the trend in loans of DM 1 million or more since 1980:

# Credit information exchange for loans of DM 1 million or more\*

Year		Volume of loans of DM 1 million or more		Number of reported loans of DM 1 million or more		
	DM billion	Change in %	Number	Change in %	Number of the banks	reporting insurance enterprises
1980	684	+ 12.3	184,891	+ 12.6	2,660	46
1981	746	+ 9.1	206,667	+ 11.9	2,821	49
1982	786	+ 5.4	222,784	+ 7.8	2,887	50
1983	829	+ 5.5	239,098	+ 7.3	2,944	53
1984	889	+ 7.2	256,623	+ 7.3	3,051	54
1985	916	+ 3.0	277,281	+ 8.1	3,095	55
1986	1,339	+ 46.2	365,610	+ 31.9	3,280	50
1987	1,437	+ 7.3	380,537	+ 4.1	3,243	49
1988	1,533	+ 6.7	392,644	+ 3.2	3,264	49
1989	1,687	+ 10.0	417,801	+ 6.4	3,311	50
1990	1,927	+ 14.2	452,696	+ 8.4	3,280	52

The number of insolvencies of enterprises and individuals recorded by the credit information exchange, in respect of which loans, as defined in section 14 of the Banking Act, were reported at the time of the announcement of insolvency, dropped by 36 to 648 in 1990. The volume of the loans of DM 1 million or more raised by insolvent enterprises and individuals declined by DM 0.3 billion to DM 2.2 billion.

\* Including 1985, the data refer to the two-month reporting period October-November in each year; from 1986 the data are based on the three-month reporting period October-December. Banks domiciled in the new Länder were

not subject to the reporting requirements pursuant to section 14 of the Banking Act.

#### 1. Rediscount credit

#### (a) Rediscount quotas for banks

#### Calculation method

The banks' scope for recourse to the Bundesbank through the rediscounting of bills is limited by rediscount quotas, quite apart from any other central bank policy measures. The calculation of the standard quotas is based on a bank's liable capital; amounts of liable capital in excess of DM 200 million are included in the calculation on a diminishing scale. A participating interest of 25% and more in the capital of another bank for which a rediscount quota has been set normally results in a corresponding reduction in the standard quota. In addition, the particular business structure of a bank is taken into account by means of a structural component. This is derived primarily from the ratio of a bank's short and medium-term lending to non-banks to its volume of business, after adjustment for loans on a trust basis and a number of other items. The extent to which a bank has at its disposal bills which can be rediscounted under the rediscount quota is also taken into consideration. To eliminate short-term random fluctuations in the structural component and in acceptance and discount credit as far as possible, the calculation is based on several end-of-month levels. Finally, the calculation procedure includes a multiplier which is uniform for all banks and whose size is determined by the total amount of rediscount quotas set by the Central Bank Council in accordance with its current monetary policy intentions.

In principle, the quotas apply for one year; changes in a bank's capital, business structure and acceptance and discount credit are thus normally included in the next general recalculation. However, the Bundesbank reserves the right to raise or lower the total amount of rediscount quotas at any time, whenever and to whatever extent it deems this to be necessary for monetary policy reasons.

## Setting the rediscount quotas

A bank's rediscount quota is set individually on the basis of the standard quota. Due account is taken in this connection of whether the bank is complying with the Federal Banking Supervisory Office's Principles Concerning the Capital and Liquidity of Banks. Quotas below the standard level may also be warranted by other special circumstances affecting an individual bank. Rediscount quotas are set for newly-established banks and newly-opened branches of foreign banks not earlier than six months after the bank has been set up.

The rediscount quotas are set by the Managing Boards of the Land Central Banks for the banks in their area. The rediscount quota of a bank operating nation-wide is set by the Managing Board of the Land Central Bank in whose area the bank has its head office. The rediscount quotas of those banks which perform central functions throughout the Federal territory (section 7 (1) 2 of the Deutsche Bundesbank Act) are set by the Directorate of the Bundesbank.

The rediscount quota, once set, must not be exceeded, not even for a limited period. All bills rediscounted which are not yet due, other than the so-called Limit B bills of the Export Credit Company (AKA Ausfuhrkredit-Gesellschaft mbH) and the so-called Limit II bills of the Industrial Plant Financing Company (Gesellschaft zur Finanzierung von Industrieanlagen mbH) — which bills are dealt with in more detail below — are counted towards the rediscount quota.

The total amount of rediscount quotas set is published regularly in the Monthly Reports of the Deutsche Bundesbank (Statistical Section, Table II 1 (b)).

(b) Bills of exchange eligible for rediscount at the Bundesbank

Bills of exchange presented for purchase should be backed by three parties known to be solvent. The bills must fall due within three months of the date of purchase. They must be good trade bills (section 19 (1) 1 of the Deutsche Bundesbank Act).

General terms

For the rest, the granting of rediscount credit is governed by the "General terms and conditions of the Deutsche Bundesbank" (section V. Purchase of domestic bills; section XI. B. Purchase of foreign bills).

The Central Bank Council has laid down the following guidelines for assessing a signature: anybody who is liable on a bill presented to the Bundesbank for purchase or as collateral for a loan and who, in spite of being requested to disclose his financial circumstances, fails to produce sufficient (or any) information, and about whom no other records which would permit an adequate assessment of his financial position are on hand or obtainable, shall not be regarded as a party known to be solvent within the meaning of section 19 (1) 1 of the Deutsche Bundesbank Act. A bill may not be purchased or accepted as collateral if it is clear that the acceptor cannot be regarded as a party known to be solvent (decision of February 20, 1957).

Solvency of parties liable on bills

As trade bills within the meaning of section 19 (1) 1 of the Deutsche Bundesbank Act, the Bundesbank buys bills which have been drawn on the basis of goods or services supplied between enterprises and/or self-employed persons. Prolongations of trade bills can be accepted provided that they are not due to payment difficulties on the part of the parties liable on them (decision of March 3, 1977).

Trade bills

As banker's acceptances, when received, usually bear only two signatures, the statutory provision that the need for the third signature may be dispensed with only if the security of the bill is ensured in some other way (section 19 (1) 1 of the Deutsche Bundesbank Act) must be duly observed.

Banker's acceptances

Prime acceptances are banker's acceptances of a special type, i.e. Deutsche Mark acceptances of the banks admitted to the prime acceptance market; they serve the financing of import, export and merchanting transactions or cross-border processing transactions and they bear on the front, in the top margin, an indication of the transaction financed. They must not run for more than 90 days, must be for at least DM 100,000.00 and must not exceed DM 5 million, and the amount of the bill must be divisible by 5,000. They are accepted both in rediscount business (section 19 (1) 1 of the Deutsche Bundesbank Act), where they are counted towards the rediscount quotas, and in open market operations (section 21 (1) of the Deutsche Bundesbank Act) (decisions of December 18, 1958, August 30, 1962 and May 6, 1965; see the section "Open market operations" below).

Prime acceptances

Other items which are eligible for rediscount at the Bundesbank are the promissory notes of German exporters, endorsed by the exporter's bank and the Export Credit Company, and their contractually agreed prolongations, as issued in order to finance medium and long-term supply and service transactions under a rediscount line granted to the Export Credit Company (decision of March 5-6, 1952). This rediscount line (known as Limit B of the Export Credit Company) amounted to DM 3 billion from January 1, 1990; it was raised to DM 3.25 billion from August 1, 1990 in connection with the cancellation of the

Bills to finance export orders

rediscount line (Limit II) of the Industrial Plant Financing Company. Since January 1, 1991 it has amounted to DM 2.25 billion (decisions of September 7, 1989 and July 12, 1990).

This rediscount line may be used only to fund lending with a term of not less than one year and not more than four years. Generally, the exporter's own share must be 30% of the contract value (decisions of October 6, 1954 and July 14, 1966); for the credits which the Export Credit Company extends at fixed interest rates, the exporter's own share is 20% of the contract value, after adjustment for advance payments and interim payments (decision of November 18, 1976). Only individual transactions can be financed. The financial assistance should generally bridge the period from the start of production to the receipt of the export proceeds. With respect to exports of mass-produced and serially-produced goods manufactured as part of a producer's normal production programme or sold from stock, the duration of the production and storage may not be included in the term of the financial assistance. For this type of export transaction, the Bundesbank's assistance is granted only to bridge the period between the shipment of the goods and the receipt of the export proceeds (decisions of May 18, 1956, July 25, 1956 and February 6, 1957). The rediscount line may not be used to provide capital or working funds for exporters' general export operations.

The Bundesbank grants the financial assistance subject to the condition that the rates applied must not be below specific minimum interest rates for export credit. The Federal Government set these rates as a contribution to international discipline in government-sponsored export credit. The key factor in complying with these minimum rates is the exporter's refinancing rate, which arises from the total interest burden of refinancing his supplier's credit.

Bills to finance transactions in intra-German trade

The DM 250 million rediscount line (Limit II) granted to the Industrial Plant Financing Company was cancelled with effect from August 1, 1990 upon the inception of the monetary, economic and social union between the Federal Republic of Germany and the German Democratic Republic. At the same time, east German exporters were granted access to Limit B of the Export Credit Company, which was raised by DM 250 million (decision of July 12, 1990). Promissory notes issued under lending commitments for supply and service transactions made before August 1, 1990 continue to be purchased.

Foreign bills of exchange

Foreign bills are purchased only if they have been issued on the basis of foreign trade transactions by domestic enterprises. In addition to the discounting party, at least one other domestic party (non-bank) must be liable on such bills — for drafts, as the drawer; for promissory notes, as the payee.

Pursuant to section 19 (1) 8, read in conjunction with section 22, of the Deutsche Bundesbank Act, the Bundesbank is entitled to purchase bills denominated in foreign currencies from anyone. At present, the Bank takes advantage of this right only vis-à-vis banks and public authorities.

Bills denominated in foreign currencies are purchased at the Bundesbank's discount rate (decisions of May 18, 1956 and January 22, 1958.) The purchase rates are set in keeping with the ruling forward rates.

2. Lombard loans

Lombard loans (loans at interest against the collateral of securities) to banks are granted only in accordance with the general monetary policy situation and in line with the individual circumstances of the bank requesting the loan. In principle, a lombard loan is to be granted only if the short-term bridging of a temporary liquidity need is involved and if the lombard loan appears to be appropriate and justifiable in terms of both scale and duration (decision of December 17-18, 1952). The granting of lombard loans at the lombard rate can be generally restricted or discontinued altogether for monetary policy reasons.

General terms

During a six-month start-up period, newly established banks and newly-opened branches of foreign banks are granted lombard loans for settling debit balances only; the loans must be repaid on the following business day.

For the rest, the granting of lombard loans is governed by the "General terms and conditions of the Deutsche Bundesbank" (section VI. Lombard transactions).

The Bundesbank reserves the right to grant lombard loans at a special lombard rate ("special lombard loans"), after prior announcement, where this appears desirable in the light of monetary policy conditions. The special lombard rate can be changed daily and the decision to grant such special lombard loans at all can be revoked daily (decision of September 6, 1973).

Special lombard loans

Lombard loans to banks may be granted against the collateral of the securities and Debt Register claims (including zero bonds and floating-rate notes) listed in section 19 (1) 3 of the Deutsche Bundesbank Act. Particulars of the eligible securities and the relevant lending limits are set out in the "List of securities eligible as collateral for loans from the Deutsche Bundesbank (lombard list)" as published in the Federal Gazette and the Bundesbank's Notices.

Collateral for lombard loans

The inclusion of a security in the lombard list does not oblige the Bundesbank to grant lombard loans, nor does it restrict the Bundesbank's right to specify the collateral which the borrower is to provide.

In principle, bills which cannot be purchased under the current provisions may not be used as collateral for lombard loans either (decision of May 10, 1949). The promissory notes issued under Limit A of the Export Credit Company and Limit I of the Industrial Plant Financing Company are an exception to this rule: while they can be used as collateral for lombard loans, they cannot be purchased (decisions of December 5-6, 1951 and June 1, 1967).

# 3. Open market operations

In order to regulate the money market, the Bundesbank buys and sells the following securities in the open market from time to time (section 21 of the Deutsche Bundesbank Act), in keeping with the varying requirements of monetary policy:

General terms

It buys and sells for its own account Treasury bills and Treasury discount paper which the Federal Government supplies to it on request pursuant to sections 42 and 42a of the Deutsche Bundesbank Act (so-called mobilisation and liquidity paper). Generally, the Treasury discount paper cannot be returned before maturity (so-called "N paper"; decision of March 31, 1971). To fine-tune the money market, the Bundesbank offers — subject to change — Treasury bills usually running for three days.

Mobilisation and liquidity paper

Prime acceptances

The Bundesbank trades prime acceptances in the money market. In this context, however, it deals direct only with the Prime Acceptance Company (*Privatdiskont-Aktiengesellschaft*). The ceiling for purchases of prime acceptances in open market operations has been DM 1 billion since January 1, 1991. It will be abolished altogether at the end of 1991 (decision of September 7, 1989).

Bonds

If and to the extent that it seems appropriate and justifiable for liquidity policy reasons, the Bundesbank buys and sells for its own account bonds issued by the Federal Government, the "German Unity" Fund, the Federal Railways and the Federal Post Office. In order to regulate the government bond market — i.e. not as open market operations within the meaning of section 21 of the Deutsche Bundesbank Act — it buys and sells these bonds for the account of the issuers.

Open market transactions under repurchase agreements in securities

In addition, in the context of open market operations, the Bundesbank buys from banks subject to minimum reserve requirements (excluding the Federal Post Office) officially listed bonds (including zero bonds and floating-rate notes) eligible as collateral for lombard loans and bonds listed in the regulated market and issued by the Federal Government, the "German Unity" Fund, the Debt Processing Fund, the Federal Railways, the East German Railways (*Reichsbahn*), the Federal Post Office, the Länder Governments and the German Democratic Republic as well as Treasury discount paper issued by the said borrowers with a residual maturity of up to one year, subject to the condition that the seller simultaneously repurchases the securities forward ("securities repurchase agreements"). These transactions are usually offered by tender (decisions of May 31, 1979, November 18, 1982, June 1, 1983, July 26, 1990, September 6, 1990 and October 4, 1990).

Open market transactions under repurchase agreements in bills of exchange The Bundesbank reserves the right to purchase domestic bills of exchange eligible for rediscount at the Bundesbank outside the rediscount quotas in the open market subject to the condition that the seller simultaneously repurchases the bills forward ("bill-based repurchase agreements"). Only those banks to which rediscount quotas have been granted may be counterparties (decision of April 12, 1973).

### 4. Minimum reserve regulations

A table showing trends in the minimum reserve ratios, which have remained unchanged since February 1987, is reproduced on page 110f. of this Report. The Deutsche Bundesbank's Minimum Reserves Order has also remained unchanged, and now reads as follows:

The Deutsche Bundesbank's Minimum Reserves Order *(Anweisung über Mindestreserven – AMR)* of January 20, 1983, as amended up to January 5, 1990

The Deutsche Bundesbank, acting in accordance with section 16 of the Deutsche Bundesbank Act (Gesetz über die Deutsche Bundesbank) of July 26, 1957 (Federal Law Gazette I, page 745) — as last amended by article 10 (17) of the Act Concerning the Fourth, Seventh and Eighth EC Council Directives on the Annual Accounts of Certain Types of Companies (Bilanzrichtlinien-Gesetz) of December 19, 1985 (Federal Law Gazette I, page 2355) — hereby issues the following Minimum Reserves Order:

Section 1 I. General 103 provisions

Minimum reserves are required of all banks as defined in section 1 (1) and section 53 (1) of the Banking Act (Gesetz über das Kreditwesen — KWG) in the revised text of July 11, 1985 (Federal Law Gazette I, page 1472), as last amended by article 23 of the 1990 Tax Reform Act (Steuerreformgesetz 1990) of July 25, 1988 (Federal Law Gazette I, page 1093), with the exception of

- (a) the enterprises specified in section 2 (1) 4, 5, 8 and 9 of the Banking Act.<sup>1</sup>
- (b) investment companies in accordance with the Act on Investment Companies (Gesetz über Kapitalanlagegesellschaften) in the text of the Announcement of January 14, 1970 (Federal Law Gazette I, page 127), as last amended by article 9 of the 1990 Tax Reform Act of July 25, 1988 (Federal Law Gazette I, page 1093),
- (c) central securities depositories (Wertpapiersammelbanken),
- (d) banks in liquidation, other banks whose operations are confined to winding up their business, and dormant banks,
- (e) enterprises which the Federal Banking Supervisory Office, acting in accordance with section 2 (4) of the Banking Act, has ruled not to be subject to the provisions of the Banking Act specified therein,
- (f) enterprises recognised under the Non-Profit Housing Act (Wohnungsge-meinnützigkeitsgesetz), as revised and published in the Federal Law Gazette III, number 2330-8, and as last amended by article 2 (7) of the Act of December 8, 1986 (Federal Law Gazette I, page 2191),
- 1. as non-profit housing enterprises (gemeinnützige Wohnungsunternehmen), or
- 2. as organs of government housing policy not predominantly conducting banking business.

The exemption from minimum reserve requirements applies to enterprises offering savings facilities until December 31, 1994.

### Section 2

- (1) Minimum reserves shall be held in respect of liabilities arising from deposits and borrowed funds, viz.
  - (a) book liabilities, including liabilities arising from registered bonds, or from order bonds not forming part of a total issue, with maturities of less than four years,
  - (b) liabilities arising from bearer bonds, or from order bonds forming part of a total issue, with maturities of less than two years,

other than liabilities to banks which themselves are required to hold minimum reserves (liabilities subject to reserve requirements).

<sup>1</sup> In accordance with the provisions of section 2 (1) 4, 5, 8 and 9 of the Banking Act, these comprise: the social security funds and the Federal Labour Office, private and public insurance enterprises, enterprises engaged in pawnbroking, risk-capital investment companies.

- (2) Liabilities subject to reserve requirements as defined in subsection (1) above also include
  - (a) a debit balance on the inter-branch settlement account of a bank within the meaning of section 53 of the Banking Act,
  - (b) liabilities arising from transactions under repurchase agreements (*Pensionsgeschäfte*) whereby the creditor is required to return the asset transferred to him and the asset continues to be included among the debtor bank's assets.
- (3) When determining the liabilities subject to reserve requirements, liabilities to an account holder which are payable on demand and which are free of all obligations may be offset against
  - (a) claims payable on demand,
  - (b) claims in special loan accounts ("English accounting method")

on the same account holder, provided that it can be proved that these claims and liabilities are treated as a unit when calculating interest and commission. Such offsetting is not permissible if the account holder is an association under civil law or an association of which corporations or partnerships are members, or if sub-accounts on behalf of third parties are carried for an account holder. Liabilities and claims in different currencies may not be so offset.

- (4) The following liabilities are exempt from reserve requirements:
  - (a) liabilities to the Bundesbank,
  - (b) liabilities to residents arising from earmarked funds which have already been passed on to the recipients or to an intermediary bank. For the purposes of this provision, earmarked funds are funds to be lent in accordance with instructions given beforehand by the lender (particularly with respect to the terms of the credit) to borrowers named by the lender or, where a public or publicly-assisted credit operation is concerned, to borrowers who satisfy the requirements for participating in the operation; the agreed maturity or period of notice of both the earmarked funds and the loans granted or to be granted out of these funds must be at least one year, unless a public or publicly-assisted credit operation is involved,
  - (c) (repealed)
  - (d) liabilities arising from deposits with building and loan associations in accordance with section 1 (1) of the Act on Building and Loan Associations (Gesetz über Bausparkassen) of November 16, 1972 (Federal Law Gazette I, page 2097), as last amended by article 2 (22) of the Act of March 29, 1983 (Federal Law Gazette I, page 377), which deposits the saver may not withdraw until he is awarded a loan, without prejudice to his right to terminate his contract with the building and loan association,
  - (e) liabilities as defined in section 2 (1) (a) above to non-residents expressed in foreign currencies (including the foreign currency share of liabilities denominated in the European currency unit ECU or in the special drawing right of the International Monetary Fund SDR), to the extent of the book claims on non-residents expressed in foreign currencies

(including the foreign currency share of the book claims denominated in the European currency unit — ECU — or the special drawing right of the International Monetary Fund — SDR), with maturities of less than four years,

- (f) liabilities arising from loans taken up from banks abroad on behalf of resident customers, provided that the proceeds are used directly and without delay to make payments to non-residents and to discharge the resident customers' payment obligations in respect of goods or services which, as can be proved in detail, have been or will be supplied to them across national frontiers by non-residents. This exemption is subject to the condition that the bank has thereby become, simultaneously and with the same maturity, both the debtor of the bank abroad and the creditor of the customers, and that the liabilities and claims in question are denominated in the same currency. This exemption does not apply to liabilities which are payable on demand, in respect of which a period of notice has been agreed or which have been prolonged,
- (g) liabilities to banks in the customs enclaves of Kleines Walsertal (municipality of Mittelberg) and Jungholz.
- (5) For minimum reserve purposes, branches of foreign banks (section 53 of the Banking Act) may deduct from a debit balance on inter-branch settlement account those liabilities to their own enterprise which, in the case of a bank of independent legal status, would constitute liabilities in accordance with subsection (4) (e) or (f) above.
- (6) If a liability is exempted or offset under the minimum reserve regulations to the extent of a particular asset, that asset may not be used again to exempt or offset liabilities. In the case of the branches of foreign banks (section 53 of the Banking Act), this also applies to the assets used for determining a debit balance on inter-branch settlement account.

# Section 3

- (1) Liabilities payable on demand, liabilities in respect of which a period of notice or a maturity of less than one month has been agreed and, in the case of a bank within the meaning of section 53 of the Banking Act, a debit balance on inter-branch settlement account are deemed to be sight liabilities.
- (2) Liabilities in respect of which a period of notice or a maturity of at least one month has been agreed are deemed to be time liabilities.
- (3) Savings deposits are deposits within the meaning of sections 21 and 22 of the Banking Act.

Section 4

II. Holding minimum reserves

Minimum reserves shall be held at the Bundesbank as balances on giro accounts. Agricultural credit cooperatives not having a giro account at the Bundesbank shall hold their minimum reserves as balances payable on demand in a special account at their regional institution (Genossenschaft-liche Zentralbank); the regional institution shall hold at the Bundesbank balances identical in amount with the balances in these accounts.

III. Calculation of required reserves and actual reserves

#### Section 5

- (1) The required reserves are determined by multiplying the monthly average of a bank's liabilities subject to reserve requirements (section 2 above), as calculated in accordance with section 6 below, by the percentages (reserve ratios) stipulated by the Bundesbank.
- (2) Banks may deduct from the amount calculated in accordance with subsection (1) above their average holding of domestic legal tender at the close of business on all days from the first day to the last of the current month. The deduction of the average holding of domestic legal tender may not exceed 50% of the amount calculated in accordance with subsection (1) above. Credit cooperatives which hold their minimum reserves in accordance with section 4 sentence 2 above may deduct their average holding in the period from the first day to the last of the previous month.
- (3) To facilitate minimum reserve arrangements at the end of a month, the calculation of the deductible average holding in accordance with subsection (2) above may be based not on the actual daily holding on the last two business days but rather on the average of the holdings on the corresponding business days of the preceding twelve months. Banks must decide at the beginning of each calendar year to adopt either this method of calculation or that in accordance with subsection (2) above. The method adopted shall be employed throughout the calendar year.

### Section 6

(1) Subject to the provisions of subsection (2) below, the monthly average of a bank's liabilities subject to reserve requirements shall be calculated from the levels at the close of the business and non-business days in the period from the sixteenth of the previous month to the fifteenth of the current month (daily calculation method), or from the levels at the close of the following four reporting days:

> twenty-third day of the previous month, last day of the previous month, seventh day of the current month, fifteenth day of the current month.

- (2) The daily calculation method may be wholly or partly prescribed for particular banks if
  - (a) there is reason to believe that the bank has influenced the level of liabilities subject to reserve requirements on the four reporting days in order to reduce it below the level which would result from use of the daily calculation method.
  - (b) the level of liabilities subject to reserve requirements determined on the basis of reporting days is in other than exceptional cases considerably below the monthly average calculated by the daily method.
- (3) Banks whose liabilities subject to reserve requirements amount to less than DM 10 million may, in place of the monthly average, use the level of liabilities subject to reserve requirements at the close of the last day of the previous month. Subsection (2) above applies as appropriate.

Section 7 107

The monthly average of the balances held in accordance with section 4 above is deemed to constitute the actual reserves. It is calculated from the levels at the close of all days in the month and is communicated to the bank by the Bundesbank (or the regional institution) at the end of the month.

Section 8 IV. Special interest

If in any month a bank's actual reserves fall short of its required reserves, the bank shall pay special interest on the deficiency for thirty days at the rate currently stipulated by the Bundesbank. The special interest payable on the deficiencies of credit cooperatives which hold minimum reserves in accordance with section 4 sentence 2 above shall be paid to the Bundesbank by the regional institution.

Section 9 V. Reserve reports

- (1) Not later than the fifth business day after the fifteenth of each month except as otherwise provided in subsections (2) and (3) below each bank subject to reserve requirements shall communicate the data needed for calculating the required reserves in accordance with section 5 (1) above to the office of the Bundesbank which carries its account, using form 1500 (individual report).
- (2) (a) Where banks have more than one branch, each branch shall in principle submit an individual report. However, a combined individual report indicating the number of branches included may be submitted for several branches, provided that the bank's records enable the liabilities to be classified by individual branches at any time. At the request of the Land Central Bank, such a classification shall be made for any period it specifies.

Banks with branches in more than one Land Central Bank area shall classify the liabilities recorded in the combined individual reports by the individual branches, as at September 30, broken down by Land Central Bank area. Form 1500 (d) shall be used for this purpose, and shall be submitted to the office of the Bundesbank which carries the account of the bank's head office not later than October 31 of each year.

- (b) If several individual reports are submitted by one bank, its head office shall in addition submit a collective report using form 1500.
- (c) Likewise not later than the fifth business day after the fifteenth of each month, the collective report, together with the individual reports, shall be submitted to the office of the Bundesbank which carries the account of the bank's head office.
- (d) In exceptional cases, the responsible Land Central Bank may permit banks with numerous branches to submit the reports (form 1500) up to two business days later. This permission is subject to the condition that the banks communicate provisional figures on the level of their required reserves, classified by liabilities to residents and liabilities to non-residents, to the Land Central Bank by telephone or telex on the fifth business day after the fifteenth of each month.

- (3) Credit cooperatives which hold minimum reserves in accordance with section 4 sentence 2 above shall communicate the data needed for calculating the required reserves, as requested in the individual report, to their regional institution. Not later than the fifth business day of each month, with respect to the previous month, the regional institution shall submit to the responsible office of the Bundesbank a special collective report covering the credit cooperatives which hold reserves at it; in an annex, the regional institution shall indicate the monthly averages (section 6 above) of the liabilities subject to reserve requirements (showing each type separately and classified by stages on the progressive scale), the required reserves and the actual reserves, for each of the credit cooperatives included in the collective report.
- (4) Moreover, not later than the fifth business day of each month, with respect to the previous month, each bank subject to reserve requirements other than the credit cooperatives which hold minimum reserves in accordance with section 4 sentence 2 above shall submit a compliance report (form 1501) to the office of the Bundesbank which carries its account or to the office of the Bundesbank which carries the account of its head office. The regional institutions to which credit cooperatives holding minimum reserves in accordance with section 4 sentence 2 above are affiliated shall indicate separately in their compliance report the actual reserves of these credit cooperatives in a single sum.
- (5) The Bundesbank may require the calculation of the liabilities subject to reserve requirements to be explained in the reserve report or in an annex thereto. It reserves the right to satisfy itself that the calculation is in order. The documents on which the calculation of the required reserves is based (e.g. balance ledgers, records of cash holdings, work sheets) should therefore be preserved for at least four years.

# VI. Entry into force Section 10

- (1) This Order comes into force with effect from April 1, 1983. On the same date the Deutsche Bundesbank's Minimum Reserves Order of November 11, 1968 (Notice no. 5008/68 Federal Gazette no. 215 of November 15, 1968), as last amended by the Announcement of December 18, 1980 (Notice no. 5014/80 Federal Gazette no. 240 of December 24, 1980) ceases to be effective.
- (2) (repealed)

# Discount and lombard rates, and special rate of interest charged for failing to comply with the minimum reserve requirements

		1	ı	1	,					
		Discount rate 1	Lombard rate	Special interest rate charged for falling to comply with the minimum reserve requirements	,			Discount rate 1	Lombard rate 2	Special interest rate charged for failing to comply with the minimum reserve requirements
Applicable fr	om	⁰⁄o p. a.	% p. a.	% p. a. above the lombard rate	App	licable fr	om	0/o p. a.	% p. a.	% p. a. above the lombard rate
1948 July Dec.	1 1	5 5	6 6	1 3	1973	3 Jan. May	12 4	5	7 8	3 3
1949 May July	27 14	4 <sup>1</sup> / <sub>2</sub> 4	5 <sup>1</sup> / <sub>2</sub> 5	3 3	1974	June 4 Oct.	1 25	7 6 <sup>1</sup> /2	4 9 8 <sup>1</sup> /2	3
1950 Oct. Nov.	27 1	6	7 7	3 1	107	Dec. 5 Feb.	20 7	6	8 7 <sup>1</sup> /2	3
1951 Jan. 1952 May Aug.	1 29 21	6 5 4 <sup>1</sup> / <sub>2</sub>	7 6 5 <sup>1</sup> /2	3 3 3	1973	March April	7 25	5 <sup>1</sup> /2 5 5	6 <sup>1</sup> /2 6	3 3 3 3 3
1953 Jan. June	8 11	4 31/2	5 4 <sup>1</sup> / <sub>2</sub>	3 3		May Aug. Sep.	23 15 12	4 <sup>1</sup> / <sub>2</sub> 4 3 <sup>1</sup> / <sub>2</sub>	5 <sup>1</sup> /2 5 4 <sup>1</sup> /2	3 3
1954 May 1955 Aug.	20 4	3 3 <sup>1</sup> /2	4 4 <sup>1</sup> / <sub>2</sub>	3	1977	7 July	15	31/2	4	3
1956 March May	8 19	4 <sup>1</sup> / <sub>2</sub> 5 <sup>1</sup> / <sub>2</sub>	5 <sup>1</sup> / <sub>2</sub> 6 <sup>1</sup> / <sub>2</sub>	3 3	1979	Dec. Jan.	16 19	3	3 <sup>1</sup> /2 4	3
Sep. 1957 Jan.	6 11	5 4 <sup>1</sup> /2	6 5 <sup>1</sup> /2	3		March June July	30 1 13	4 4 5	5 51/ <sub>2</sub> 6	3 3 3 3
Sep. 1958 Jan. June	19 17 27	4 3 <sup>1</sup> /2 3	5 4 <sup>1</sup> /2 4	3 3 3	1980	Nov.	1 29	6	7 8 <sup>1</sup> /2	3
1959 Jan. Sep.	10 4	2 <sup>3</sup> /4 3	3 <sup>3</sup> /4 4	3 3	1000	May Sep.	2 19	7 <sup>1</sup> /2 7 <sup>1</sup> /2	91/2 <b>4</b> 9	3
Oct. 1960 June Nov.	23 3 11	4 5 4	5 6 5	3 3 3	1982	Aug. Oct. Dec.	27 22 3	7 6 5	8 7 6	3 3 3
1961 Jan. May	20 5	3 <sup>1</sup> /2 3	4 <sup>1</sup> /2 <b>3</b> 4	3 3	1983	March	18	4	5	3
1965 Jan. Aug.	22 13	3 <sup>1</sup> /2 4	4 <sup>1</sup> / <sub>2</sub> 5	3 3	1984	Sep. June	9 29	4 41/2	5 <sup>1</sup> /2 5 <sup>1</sup> /2	3
1966 May 1967 Jan. Feb.	27 6 17	5 4 <sup>1</sup> / <sub>2</sub> 4	6 <sup>1</sup> /4 5 <sup>1</sup> /2 5	3 3 3	1985	Feb.	1 16	4 <sup>1</sup> /2	6 5 <sup>1</sup> /2	3 3
April May	14 12	3 <sup>1</sup> / <sub>2</sub> 3 3	4 <sup>1</sup> /2 4	3 3	1986	March	7	31/2	5 <sup>1</sup> /2	3
Aug. 1969 March April June	11 21 18 20	3 4 5	3 <sup>1</sup> /2 4 5 6	3 3 3 3	1987	' Jan. Nov. Dec.	23 6 4	3 3 2 <sup>1</sup> / <sub>2</sub>	5 4 <sup>1</sup> /2 4 <sup>1</sup> /2	3 3
Sep. Dec. 1970 March	11 5 9	6 6 7 <sup>1</sup> /2	7 <sup>1</sup> /2 9 9 <sup>1</sup> /2	3	1988	July July Aug.	1 29 26	3 3 3 <sup>1</sup> / <sub>2</sub>	4 <sup>1</sup> /2 5 5	3 3
July Nov. Dec.	16 18 3	7 6 <sup>1</sup> /2 6	9 8 7 <sup>1</sup> /2	3 3 3 3	4000	Dec.	16	31/2	51/2	3
1971 April Oct. Dec.	1 14 23	5 4 <sup>1</sup> /2 4	6 <sup>1</sup> /2 5 <sup>1</sup> /2 5	3 3 3	1989	Jan. April June Oct.	20 21 30 6	4 4 <sup>1</sup> /2 5 6	6 6 <sup>1</sup> / <sub>2</sub> 7 8	3 3 3 3
1972 Feb. Oct. Nov.	25 9 3	3 3 <sup>1</sup> /2 4	4 5 6	3 3 3	1990	Nov.	2	6	81/2	3
Dec.	1	4 4 <sup>1</sup> /2	6 <sup>1</sup> /2	3	1991	Feb.	1	6 <sup>1</sup> /2	9	3

1 Until July 31, 1990 this was also the rate for cash advances. Until May 1956 lower rates, too, applied to foreign bills and export drafts; fixed special rates were charged for certain credits which had been granted to the Reconstruction Loan Corporation and which expired at the end of 1958 (for details see footnotes to the same table in the Report of the Deutsche Bundesbank for the Year 1961, page 91). —  $2\,{\rm From}$  August 1, 1990 this also has been the rate for

cash advances. — **3** An allowance of  $^3/4\,\%$  p. a. was granted to banks in respect of the lombard loans taken up between December 10 and December 31, 1964. — **4** Lombard loans were generally not granted to banks at the lombard rate during the following periods: from June 1, 1973 to July 3, 1974 and from February 20, 1981 to May 6, 1982.

### Reserve ratios

# (a) July 1973 to February 1977

% of reserve-carrying liabilities

Sight liabilities Places without a Bundesbank office Time liabilities Places with a Bundesbank office Reserve class 1 Applicable from: Reserve-carrying liabilities to residents 16.55 17.05 15.05 15.5 1973 July 1 19.55 18.05 15.05 15.5 13.55 13.95 12 12.4 10.5 10.85 13.55 12 12.4 10.5 13.95 10.85 9.3 18.55 Nov. 1 20.1 13.25 14.7 14.7 11.75 10.3 13.25 11.75 10.3 8.8 17.65 16.2 1974 Jan. 1 19.1 7.95 7.3 14.55 13.25 13.25 10.6 9.25 Sep. 1 Oct. 1 15.9 15.85 14.6 13.4 12.2 12.2 10.95 9.75 8.5 10.95 9.75 8.5 15.05 13.9 12.7 11.55 10.4 9.25 8.1 10.4 9.25 8.1 7.3 6.95 1975 June 1 8.35 6.25 July 1 13.55 12.5 11.45 10.4 10.4 9.35 8.35 7.3 9.35 8.75 7.65 1976 May 1 14.2 13.1 12 12.65 10.95 10.95 9.85 8.75 7.65 9.85 6.55 10.35 10.35 13.75 11.5 June 1 Reserve-carrying liabilities to non-redidents 35 35 35 35 40 40 40 40 40 40 1973 July 1 40 40

40

35 32.2

29 13.55

14.2

40

35 32.2

13.55

14.2

14.9

40

35 32.2

13.55

14.2

14.9

40

32.2

29 13.55 35

30 27.6

24.85

9.85

10.35

35

30 27.6

24.85

9.35

9.85

10.35

35

30 27.6

24.85

9.85

10.35

35

30

27.6

24.85

9.85

10.35

# (b) as from March 1977

40

35 32 2

29 13.55

14.2

Oct. 1

Oct. 1

Aug. 1

June 1

1974 Jan. 1

1975 July 1

1976 May 1

40

35 32 2

29 13.55

14.2

40

35 32.2

29 13.55 40

35 32.2

29 13.55

0/0	of	reserve-carrying	liabilities
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	Reserve-carr	ying liabilities	to residents				r		
	Sight liabilitie	s		Time liabilities	3		Savings depo	sits	
	Stage on the	progressive so	ale 3	Stage on the	progressive so	cale 3	Stage on the	progressive so	ale 3
	1	2	3	1	2	3	1	2	3
Applicable from:	DM 10 mn and under	DM 100 mn and under, but more than DM 10 mn	more than DM 100 mn	DM 10 mn and under	DM 100 mn and under, but more than DM 10 mn	more than DM 100 mn	DM 10 mm and under	DM 100 mn and under, but more than DM 10 mn	more than DM 100 mn
1977 March 1 4 June 1 4 Sep. 1 4	9.35 8.9 8	12.7 12.05 10.85	14.9 14.15 12.75	6.6 6.3 5.65	8.8 8.4 7.55	10.45 9.95 8.95	6.15 5.85 5.3		6.6 6.3 5.65
1978 Jan. 1 <b>4</b> March 1	8 8.65	10.85 11.7	12.75 13.75	5.65 6.1	7.55 8.15	8.95 9.65	5.3 5.7	5.45 5.9	5.65 6.1
June 1 Nov. 1	8.05 8.75	10.9 11.85	12.8 13.95	5.7 6.2	7.55 8.25	9 9.8	5.3 5.8	5.5 6	5.7 6.2
1979 Feb. 1	9.2	12.45	14.65	6.5	8.65	10.3	6.05	6.3	6.5
1980 May 1. Sep. 1.	8.45 7.65	11.45 10.3	13.45 12.1	6 5.4	8 7.2	9.45 8.5	5.6 5	5.8 5.2	6 5.4
1981 Feb. 1	7.1	9.6	11.25	5	6.7	7.95	4.65	4.85	5
1982 Oct. 1	6.4	8.65	10.15	4.5	6	7.15	4.2	4.35	4.5
1986 May 1 <b>5</b>	6	9	11		4.5			3.75	
1987 Feb. 1	6.6	9.9	12.1		4.95		[	4.15	

<sup>1</sup> Classification based on the level of total reserve-carrying liabilities: reserve class 1: DM 1,000 million and over; reserve class 2: DM 100 million to less than DM 1,000 million; reserve class 3: DM 10 million to less than DM 100 million; reserve class 4: less than DM 10 million. — 2 Notwithstanding the ratios shown here, between July 1, 1972 and October 31, 1973 the ratio applied to

the savings deposits of residents with banks in reserve class 4 in places with a Bundesbank office was the current reserve ratio for time liabilities. Between November 1 and December 31, 1973 the reserve ratio for these savings deposits was 9%. — 3 The ratio of stage 1 on the progressive scale applies to the first DM 10 million of reserve-carrying liabilities, the ratio of stage 2 to

Savings d	eposits Places	Growth of	f liabilities	1			
with a Bundes- bank office 2	without	Sight liabilities	Time liabilities	Savings deposits	Explanatory notes on the growth reserve regulations	Applicab	le from
9.25 9.25	7.75 7.75		1000			1973 Jul No	
8.8 7.95 7.3	7.35 6.6 6.1	no spec	cial ratios			1974 Jar Sej Oc	p. 1
6.95 6.25	5.8 5.2					1975 Jur Jul	
6.55 6.9	5.45 5.75	J				1976 Ma Jur	y 1 ne 1
30	30		60		Additional reserve ratio for growth over 75% of the average level of the return dates October 23 and 31, and November 7 and 15, 1971 or over 60% of the average level of the corresponding return dates of 1970	1973 Jul	y 1
30	30		60		Additional reserve ratio for growth over 63.75% of the average level of the return dates October 23 and 31, and November 7 and 15, 1971 or over 51% of the average level of the corresponding return dates of 1970	Oct	t. 1
25 23	25 23					1974 Jan Oct	
20.7 6.25	20.7 6.25	no spec	ial ratios			1975 July Aug	
6.55 6.9	6.55 6.9	]		4.,		1976 May Jun	

Reserve-c	arrying liabi	lities to nor	-residents					
			Growth of	liabilities				
Sight liabilities	Time liabilities	Savings deposits	Sight liabilities	Time liabilities	Savings deposits	Explanatory notes on the growth reserve regulations	Appli	cable from
14.9 14.15 12.75	10.45 9.95 8.95	6.6 6.3 5.65	} no spec	ial ratios			1977	March 1 June 1 Sep. 1
20 20	15 15	10 10		80 80		Additional reserve ratio for growth over the average level during the period from September 16 to December 15, 1977	1978	Jan. 1 March 1
12.8 13.95	9 9.8	5.7 6.2						June 1 Nov. 1
14.65	10.3	6.5					1979	Feb. 1
13.45 12.1	9.45 8.5	6 5.4	no speci	al ratios			1980	May 1 Sep. 1
11.25	7.95	5					1981	Feb. 1
10.15	7.15	4.5					1982	Oct. 1
11	4.5	3.75					1986	May 1
12.1	4.95	4.15	J				1987	Feb. 1

the next DM 90 million, and the ratio of stage 3 to liabilities exceeding DM 100 million. — 4 Between March 1, 1977 and February 28, 1978 the following discounts were in force for liabilities to residents in places without a Bundesbank office: 1 percentage point for sight liabilities, 0.5 percentage point for savings deposits. — 5 From May 1, 1986 the differen-

tiation of the reserve ratios by stages on the progressive scale is no longer applicable to time liabilities and savings deposits.

# III. Statement by the Deutsche Bundesbank concerning foreign Deutsche Mark issues

In a "Statement concerning foreign Deutsche Mark issues" of June 20, 1989 the Deutsche Bundesbank set out the principles governing the issuing of Deutsche Mark securities by non-residents. This statement, which entered into force on July 1, 1989, superseded the "Statement on issues of foreign Deutsche Mark bonds" of April 12, 1985 (as amended up to February 20, 1986). The key principle of the "Statement" is that the market for Deutsche Mark issues should remain based in Germany and thus that the syndicate should be lead-managed by a German bank — which may also be foreign-owned — of independent legal status. In the case of tap issues, the arrangers and dealers must likewise be German banks. The "Statement" reads as follows:

# Statement by the Deutsche Bundesbank concerning foreign Deutsche Mark issues

- 1. The Deutsche Bundesbank attaches importance to the market for Deutsche Mark issues continuing to be based in the Federal Republic of Germany. Deutsche Mark securities launched by foreigners ("foreign Deutsche Mark issues") are to be issued only under the lead management of a German bank (bank of independent legal status domiciled in the territory of the Federal Republic of Germany, including Berlin (west)). In the case of securities which are not underwritten by a syndicate (e.g. tap issues), this applies as appropriate to the bank commissioned by the issuer to act as arranger and dealer. In the case of issues of foreign currency bonds with a Deutsche Mark option and of dual currency bonds with interest or redemption payments in Deutsche Mark, it is sufficient if a German bank is the joint lead-manager of the syndicate.
- 2. If the syndicate is lead-managed by a foreign-owned German bank, the same options are to be available to German-owned banks in the home country of the bank in question.
- DM-denominated bonds and notes issued by foreigners are to have a
  maturity of not less than two years. This minimum maturity also applies to
  foreign currency bonds with interest or redemption payments in Deutsche
  Mark.
  - Shares in Deutsche Mark money market funds are not to be issued by foreign or domestic institutions.
- 4. Lead-managers are requested to notify the Deutsche Bundesbank by telex on the date of issue of the following particulars about the issue: issuer, amount, date, terms, type of placement.
  - In the case of tap issues, the corresponding particulars about placement are to be communicated monthly in retrospect; any new issue programmes being arranged are to be reported without delay by the arranging bank.
- 5. New financial products involving a Deutsche Mark element are to be submitted to the Deutsche Bundesbank early enough for it to be able to express its opinion before the issue is launched.
- 6. In addition, the following specific requirements apply to foreign Deutsche Mark issues:
  - (a) Lead management comprises the handling of all syndicate business, especially negotiations with the issuer, the invitation to underwrite the issue, transactions with the underwriters, the allocation of underwriting shares, the bookkeeping for the issue, the monitoring of payments, etc.

- (b) In the case of a public offering, the securities are to be officially listed on a German stock exchange. In the case of private placements, the lead-manager has to arrange for a listing in the regulated market on a German stock exchange or for a price quotation in the domestic market by some other means. If it is planned to have the securities listed on a foreign stock exchange, this is not to be done until after they have been listed on a German stock exchange.
- (c) German law is to be applied. The principal paying agent for interest and redemptions must be located in Germany. The securities are to be included in the German securities clearing system.

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Decisions on the authorisation of value guarantee clauses are taken by the Deutsche Bundesbank in accordance with its "Principles governing decisions on applications for authorisations pursuant to section 3 of the Currency Act (no. 2(c) of the Currency Ordinance for Berlin)".<sup>1</sup>

Under article 3 of Annex 1 to the Treaty of May 18, 1990 between the Federal Republic of Germany and the German Democratic Republic Establishing the Monetary, Economic and Social Union, the authorisation requirement of section 3 of the Currency Act was extended to cover the territory of the acceding new Länder; the general authorisations and authorisation principles under section 3 of the Currency Act were put into effect for the territory of the acceding new Länder by Notice no. 1006/90.<sup>2</sup>

A record of the authorisation applications and the decisions taken is given below:

Applications for authorisation pursant to section 3 sentence 2 of the
Currency Act, and the decisions taken

Year	Applications	Authorisations	Certificate of non-applicability of authorisation requirement	Applications rejected
1960	10,485	7,122	1,840	1,523
1961	12,482	9,293	1,738	1,458
1962	14,913	11,333	2,010	1,570
1963	16,588	12,903	2,205	1,480
1964	21,012	16,322	2,837	1,853
1965	23,822	17,497	3,686	2,639
1966	26,415	20,321	3,734	2,360
1967	24,261	19,026	3,614	1,621
1968	25,595	20,324	3,943	1,328
1969	29,363	22,776	5,127	1,460
1970	33,796	24,999	6,585	2,212
1971	40,884	31,189	7,554	2,141
1972	42,964	33,254	7,583	2,127
1973	49,033	36,747	10,045	2,241
1974	44,975	33,830	8,813	2,332
1975	39,686	29,712	7,778	2,196
1976	38,529	29,189	7,494	1,846
1977	39,344	30,145	7,323	1,876
1978	40,002	30,617	7,555	1,830
1979	41,761	32,231	7,632	1,898
1980	43,375	33,237	8,032	2,106
1981	43,375	35,129	7,960	2,286
1982	44,036	34,096	7,798	2,142
1983	43,078	33,654	7,293	2,131
1984	42,526	32,997	7,416	2,113
1985	46,629	37,343	7,312	1,974
1986	40,064	30,998	7,367	1,699
1987	37,083	28,069	7,523	1,491
1988	37,812	29,899	6,313	1,600
1989	38,633	30,349	6,448	1,836
1990	42,552	33,232	7,123	2,197

<sup>1</sup> Deutsche Bundesbank Notice no. 1015/78 of June 9, 1978, published in Federal Gazette no. 109 of June 15, 1978; for the Bundesbank's policy in granting authorisations, see also the article "Value guarantee clauses — synopsis of the Bundesbank's policy in granting permits" in Monthly Report of the Deutsche Bundesbank, Vol. 23, no. 4, April 1971, page 24f.; regarding the incurrence of liabilities denominated in the European currency unit ECU or the special drawing right of the International Monetary Fund (SDR), see Deutsche Bundesbank Notice no. 1002/90 of January 5, 1990, published in Federal Gazette no. 3/90, page 54. — 2 Deutsche Bundesbank Notice no. 1006/90 of June 13, 1990, published in Federal Gazette no. 114/90, page 3215.

# Selected aspects of the monetary, economic and social union with the former GDR

The implementation of the monetary, economic and social union between the Federal Republic of Germany and the former GDR confronted the two governments and the Bundesbank with a number of difficult tasks which had to be performed within a short period and without it being possible to refer to historical precedents. Among other things, it was important to ensure a smooth transformation and integration of the east German banking system, whose room for manoeuvre was drastically curtailed, into an efficient monetary system organised along market economy lines as soon as possible. In spite of an inevitable period of transition and transformation, the Bundesbank had to be enabled from the outset to discharge its internal and external monetary policy functions. To this end, many special provisions and procedures had to be devised in the areas of banking law, banking supervision and statistical reporting, in cash and cashless payments, and in the monetary policy regulations of the Bundesbank; they are described in the following sections.

Development of the banking system

Until the end of March 1990, the banking system of the former GDR consisted essentially of the State Bank of the GDR and its branch offices plus a small number of centrally controlled institutions with special functions (German Foreign Trade Bank, German Trade Bank, Bank for Agriculture and the Food Industry (merged with the DG Bank)). In addition, there were some savings and cooperative banks and the (east) German Post Office which primarily had to accept deposits from individuals and pass them on to the State Bank as well as rural trade cooperatives which passed on their deposits to the Bank for Agriculture and the Food Industry. Virtually all financial ties with nationalised enterprises were reserved for the State Bank. All banks were integrated in a centralised allocation, ceiling control and clearing system which left no room for such autonomous banking activities as are customary under market economy systems.

Through the restriction of the State Bank to its central bank function and the establishment of a two-tier GDR banking system at the beginning of April 1990, the State Bank's transactions with enterprises were transferred to the newly established German Credit Bank. Upon application, foreign banks and west German banks were granted licences to establish representative offices in the GDR or to set up joint ventures.

With the entry into force of the State Treaty on the establishment of a monetary, economic and social union between the Federal Republic of Germany and the German Democratic Republic on July 1, 1990, the Deutsche Mark was introduced in the GDR as the sole legal tender, and responsibility for domestic and external monetary policy was transferred to the Deutsche Bundesbank. The State Bank of the GDR lost its central bank function. The GDR adopted the most important economic laws of the Federal Republic, or adapted its own legislation accordingly. The banks were subjected to the provisions of the Banking Act and to supervision by the Federal Banking Supervisory Office and the Bundesbank. Owing to a great number of adverse factors, however, they are facing special adjustment problems, particularly in lending business. The restructuring and privatisation of the east German economy are being hampered by unresolved ownership problems, old debt issues, the breakdown of CMEA trade and long-standing environmental damage. There is a shortage of strong borrowers with appropriate collateral. Most banks, moreover, lack experience of lending business.

Conversion accounts, capital base

In accordance with the State Treaty, banks in the new Länder have to draw up special conversion accounts showing all DM-denominated assets and liabilities arising from the currency conversion. The conversion accounts are to be drawn up as at July 1, 1990, and are deemed to be the Deutsche Mark opening balance sheets. If the assets valued in line with the principles of commercial law do not suffice to cover the liabilities arising from the currency conversion, the banks will be granted claims on the Currency Conversion Equalisation Fund, on which market interest rates must be paid. The equalisation claim is to be calculated in such a way that the banks can show a capital base of at least 4% of the balance sheet total and that Principle I pursuant to section 10 of the Banking Act is utilised to the extent of not more than 13 times the liable capital. This arrangement was chosen in order to safeguard the existence of the banks and to give them the scope for growth necessary for them to hold their own in the market. Besides, the Deutsche Bundesbank needs a smoothly functioning and well-balanced banking system for conducting its domestic and external monetary policy.

The details are spelled out in several Acts, including the Act Concerning the Opening Balance Sheet Denominated in Deutsche Mark and the Recalculation of the Capital Base (Deutsche Mark Balance Sheet Act) (Gesetz über die

Eröffnungsbilanz in Deutscher Mark und die Kapitalneufestsetzung (D-Mark-Bilanz-Gesetz)) of September 23, 1990 (Federal Law Gazette 1990 II, page 885). In accordance with that Act, the banks had to draw up their opening balance sheet by the end of October 1990. The audited balance sheets had to be approved by the end of February 1991 and submitted to the Federal Banking Supervisory Office and the Deutsche Bundesbank by March 15, 1991. The Federal Banking Supervisory Office has to confirm the conversion accounts and to allocate the equalisation claims. The option of converting the equalisation claims into bearer bonds has been envisaged, so as to provide the banks on a major scale with securities which can form the basis for lombard loans from and securities repurchase agreements with the Deutsche Bundesbank.

By virtue of the Act Concerning the State Treaty (Gesetz zum Staatsvertrag) of June 25, 1990 (Federal Law Gazette 1990 II, page 518), the Banking Act was supplemented by the provisions of section 63a. These include a few adjustment regulations and the authorisation of the Federal Banking Supervisory Office to grant exemptions from the statutory obligations for special reasons. In the case of east German banks, the licence to conduct banking business is deemed to have been granted to the extent that they were allowed to conduct banking business on July 1, 1990. In accordance with section 44 (1) 1 of the Banking Act, these banks had to provide the Federal Banking Supervisory Office and the Bundesbank, by August 15, 1990, with information on their legal and actual situation so as to furnish banking supervisors with basic information that can be kept up-to-date, inter alia, by means of reports pursuant to section 24 of the Banking Act. The reporting requirements pursuant to sections 13, 14 and 16 of the Banking Act had to be complied with by east German banks subject to diverse transitional regulations. Whereas large loans and loans to managers, etc. extended after July 1, 1990 had to be reported immediately, large loans which had already been granted on July 1, 1990 had to be reported by October 31, 1990 and the corresponding loans to managers, etc. by December 31, 1990. The reporting deadline for loans of DM 1 million or more to borrowers in the new Länder was initially set at January 15, 1991 and, owing to the prevailing serious reporting difficulties, then deferred, first to April 15, 1991 and finally to July 15, 1991. Together with the monthly balance sheet statistics. which are also regarded as monthly returns pursuant to section 25 (1) of the Banking Act, the ratios of the Principles pursuant to sections 10 and 11 of the Banking Act are to be calculated and the relevant forms are to be submitted. Initially this applies only to Principles I and Ia, while the calculation of the ratios pursuant to Principles II and III will be dispensed with until the end of May 1991.

Supervisory exigencies and reporting requirements

In order to be able to assess both the trend in and the determinants of credit expansion, monetary growth and foreign trade and payments, the Bundesbank had to call upon the banks in the new Länder to submit statistical reports from the outset. In principle, after the implementation of the monetary union these institutions were subject to the same reporting requirements as the west German banks. Until the end of 1990, however, the Bundesbank confined its requirements to the most important reports, namely those for the monthly balance sheet statistics and for the external position. So as to be able to draw up the balance of payments for the extended Deutsche Mark currency area, the Bundesbank also had to record the current and capital transactions of the new Länder with non-residents from the outset. The banks and non-banks subject to reporting requirements were granted certain concessions up to the end of 1990 to enable them to adjust to the reporting system, which was completely new to them.

Statistical reports

Involvement of the Bundesbank

The Provisional Administrative Office of the Deutsche Bundesbank (see page 119) and its branches in the new Länder are involved in banking supervision. In this connection, the Provisional Administrative Office is performing the functions of a Main Office for the new Länder — albeit with certain qualifications at first. It is supported in this capacity by the west German Main Offices, which, for the time being, are seeing to the recording and evaluation of the supervisory documents that are being received by the branches of the Provisional Administrative Office.

Adjustment needs of the banks in the new Länder

In view of the uniform legal framework, the banking sector in the new Länder will move into line with west German conditions very quickly. However, the road to that goal places heavy demands on the managers and staff of the banks in the new Länder. The Banking Act stipulates that each bank must have two managers, who must meet certain requirements that are based on west German standards and encompass theoretical and practical knowledge of western banking, including experience of the management of a bank. For a transitional period, concessions will no doubt have to be made for the new Länder in this respect. The need to hold their ground on the market by operating on their own responsibility under competitive conditions, to offer a comprehensive range of banking products by western standards, and to comply with all the supervisory and other statutory requirements at the same time, calls for cooperative efforts, extensive training and a massive exchange of personnel between east and west. In this respect, west German banks and their associations committed themselves at an early date. The Deutsche Bundesbank, too, held training courses in matters relating to banking supervision, the minimum reserve regulations and the statistical reporting system. The Bundesbank staff members seconded to the branches in the five new Länder helped, with a high degree of personal motivation and great commitment, to set in motion the restructuring of the banking system there and to familiarise the staff of the east German banks with the requirements of banking supervision and statistics, among other things.

Structure of banking associations, deposit guarantee schemes The various categories of banks have formed associations in the new Länder, although their structure cannot in every case be regarded as final. The private banks in the five new Länder and Berlin have a regional association of their own and, as members of this association, they belong to the deposit guarantee scheme of the Federal Association of German Banks. The East German Savings Bank and Giro Association has been a member of the German Savings Bank and Giro Association since January 1, 1991, and its member savings banks are members of the deposit guarantee scheme of the savings bank organisation. The category of credit cooperatives, too, has paved the way for its banks to join the deposit guarantee scheme of the Federal Association of German People's Banks and Raiffeisen Banks through membership in a statutory audit association, either an existing west German one or a newly established east German regional association. For the banks in the five new Länder, membership of a recognised deposit guarantee scheme will be one of the basic prerequisites for favourable business trends in the future.

# II. Cash and cashless payments

The Bundesbank made great efforts to provide at its newly established branches in eastern Germany, at an early date, the range of services customary in the Federal Republic in the fields of carrying giro accounts, supplying currency (including money processing), and cashless payments. The State Treaty of May 18, 1990 had granted it the right to set up in Berlin a Provisional Administrative Office responsible to the Directorate, with up to 15 branches in the territory of the GDR. The Provisional Administrative Office, whose functions are comparable to those of a west German Main Office, started operations with a skeleton staff in Berlin-Dahlem on May 3, 1990 and has been domiciled in the former Reichsbank building in east Berlin since June 18, 1990. The individual Land Central Banks assumed the responsibility for technical, organisational and staffing aspects at one or more branches as soon as they were established in buildings taken over from the State Bank; owing to the still limited staffing of the Provisional Administrative Office, a division of labour with the "sponsoring" Land Central Banks persists up to the present.

Structure of the Directorate's Provisional Administrative Office in Berlin and the Bundesbank's branches

At the outset, the Central Office and the Land Central Banks employed about 250 staff members from the Federal Republic as skeleton staff in the GDR; they were joined by approximately 900 other employees, mostly former staff members of the State Bank branches. By the beginning of 1991 the number of employees had risen to just under 1,500, including more than 1,200 locally recruited staff. The further trend in personnel requirements will depend strongly on the future structure of the Bundesbank in the territory of the former GDR, which is to be defined in an Act to be passed by October 3, 1991.

The conversion of GDR Mark into Deutsche Mark was effected, upon application, via the corresponding balances in accounts at banks in the GDR; a direct exchange of cash did not take place. The applicants therefore had to pay their cash balances into accounts by July 6, 1990, or, if possible, already before July 1, 1990. The general conversion rate was DM 1 for GDR Mark 2. Natural persons were granted a preferential conversion rate of 1:1 up to specific ceilings. Children below 14 years of age were entitled to a maximum amount of GDR Mark 2,000, adults up to 59 years of age to GDR Mark 4,000 and adults over 59 years of age to GDR Mark 6,000. As under-age children and family members required an account of their own for the conversion procedure, such accounts often had to be opened for the purpose. Ultimately, there were almost 25 million accounts, which were converted into Deutsche Mark on July 7-8, 1990. This was done by means of EDP in the GDR-owned Standard System of Electronic Computing (Einheitliches System der Elektronischen Rechentechnik - ESER). Banks in the GDR, especially savings banks and the State Bank. were consequently subjected to an exceptionally heavy workload. In the period up to July 9, 1990 no withdrawals were possible from accounts. This transitional period was necessary to book all the GDR Mark orders still in transit, to calculate interest and to close out the accounts for the first half of 1990. At the end of that moratorium on July 9, cashless payments in Deutsche Mark could be started in the GDR and with the Federal Republic.

Currency conversion as a prerequisite for starting cash and cashless payments in Deutsche Mark

To begin with, the Bundesbank provided banknotes totalling DM 27.5 billion as at July 1, 1990. To this end, the Land Central Banks had to transport banknotes with a total weight of about 460 tonnes to the branches in the GDR. By contrast, not all denominations of Deutsche Mark coins were initially available in sufficient quantities, so that GDR pfennig coins (pfennig 1 to pfennige 50) remained legal tender in the GDR for a transitional period. The cash required for the initial provision of Deutsche Mark currency was withdrawn by the banks from the branches of the Bundesbank to the debit of the balances in the banks' accounts. During the moratorium individuals received cash (up to an amount of DM 2,000) only against special outpayment receipts, with the balances to be

Cash payments

expected from the preferential conversion of their accounts being debited accordingly.

In view of the wide-meshed branch network of the Bundesbank in the new Länder and the relatively bad transportation conditions there, the provision of the banks with cash was difficult from the outset; some banks therefore held exceptionally large stocks of currency. The situation has partly eased, however, now that private enterprises have taken over the currency transportation. For the rest, the long transport routes still existing constitute a major reason for the Bundesbank to reconsider its presence in the new Länder and to establish a few more branches, if necessary, as soon as the legal basis for so doing has been created.

The GDR Mark-denominated banknotes and the coins of higher denominations which flowed back to the banks after the currency conversion were returned by them to the State Bank, which is responsible for monitoring the return flows and for the destruction or final storage of the currency. The GDR pfennig coins (of pfennig 1 and pfennige 5, 10, 20 and 50) will probably be withdrawn from circulation before the end of this year. In the meantime these GDR coins are increasingly being replaced by the corresponding Federal coins. The requisite higher minting capacity was achieved by arranging for the early participation of the former mint of the GDR, now the Berlin Mint (mint mark A) in coin production. At the beginning of 1991 some 4,200 tonnes of GDR coins were still in circulation (equivalent to about GDR Mark 190 million).

Procedures for the settlement of cashless payments between east and west With the commencement of the currency conversion, the Bundesbank extended to the GDR its giro network for processing cashless payments (particularly express payments, automated paper-based transfers, the paperless exchange of data media (EDM), conventional local credit transfers). Thus it took on the task of acting as the - initially only - intermediary between the west German giro systems and the single giro system (ESER) in the GDR. In the area of automated paper-based transfers and in the paperless exchange of data media, the computer centre of the Land Central Bank in Berlin assumed the role of a central payments computer centre for the territory of the former GDR. For a transitional period, however, other Land Central Bank computer centres (Hamburg, Hanover, Kiel and Munich) will also have to provide support and process the payment vouchers accruing at particular Bundesbank branches. This has resulted in a still somewhat longer processing time compared with the otherwise usual maximum processing period of 48 hours for payments via the Bundesbank's giro system. The linkage of the branches to the computer centre in Berlin has meanwhile been further improved by the use of the data postal service, which is now available in the new Länder, too, and by the optimisation of courier services. However, the time required for transportation from and to the giro account holders still poses problems, particularly if mail services have to be used.

In the run-up to the monetary union, procedures were agreed upon for passing payments of all kinds from ESER banks to western banks and vice versa. It had to be borne in mind not only that branches of west German banks started to operate in the territory of the GDR but also that ever-more GDR banks were withdrawing from the old ESER system to associate themselves with west German booking methods and booking centres; it thus became less and less possible to settle payments in the form of mere transfers within the ESER system. The old ESER standard system does not satisfy the requirements of a market economy. It hampers competition among banks and impedes autonomous business policies and the establishment of individual product ranges. Owing to its outdated technical standard and incompatibility with international norms, it was not possible to extend the system to reach the level of west

German payments and booking computer centres. An integration of this procedure in the west German payments system necessitated special conversion arrangements, which called for elaborate and hence error-prone adjustment and implementation measures from all concerned.

The west German banks - including the banks in the GDR using the west German booking standard - undertook to convert into data records all the paper-based credit transfers and direct debits received by them for ESER banks (west-east payments) because ESER banks, as the payee banks, were not equipped to handle paper-based transfers. Only certain types of credit transfers (e.g. express credit transfers by the Bundesbank, local credit transfers) and cheques are accepted by them in paper-based form. Paperless EDM payments of the west German standard can, by contrast, still be cleared with the aid of special conversion programmes at ESER banks. The data necessary for booking under the ESER system are converted into ESER data records and the information which cannot be passed on under the ESER procedure (notably the names of the originator and the payee and the purpose of the payment) is supplied to the payee banks on printed lists. The precondition for accessing ESER accounts via EDM transactions was the allocation of specially constructed bank codes (inclusion of components of ESER account numbers in the bank code) by the Bundesbank to all banks in the GDR.

The processing of payments from ESER banks to banks using the west German standard (east-west payments) is likewise possible only by means of vouchers or data records in accordance with the west German standard. As long as the originators were unable to prepare EDM data records in addition to their old ESER files, it was only possible to resort to paper-based transfers. Owing to their different format, the vouchers customary under the ESER procedure cannot be passed on under the west German system. Nor can ESER files be used without more ado to access accounts at banks using the west German standard, since the volume of data normal in west German payments cannot be accommodated in ESER data records. Initially, this resulted in a pronounced shift from paperless payments to paper-based transfers and generated a heavy workload for the Bundesbank as the "interface". As a result, methods of converting ESER files into EDM files were developed. Irrespective of this, however, enterprises and public cash offices in the former GDR have already largely adopted the new EDM standard.

Surveys carried out by several banks in the new Länder show that, in spite of the aforementioned, complicated conversion arrangements and the ongoing switching of banks from the old ESER system to the west German payment and booking procedures, normal processing periods have meanwhile settled down at less than one week, after originators in western Germany and in the new Länder had sometimes complained about processing periods of several weeks for credit transfers in the past. Particularly in the case of (paperless) payments from the western system to the ESER system, there were at times considerable delays if payment orders were not made out correctly, and these backlogs could only be reduced gradually.

In the case of (paper-based) payments from the ESER banks to banks using the west German standard, bottlenecks initially occurred because the banks left all the encoding work to the Bundesbank's branches. Later on, delays were caused mainly by encoding errors. These difficulties were compounded by account-management problems on the part of the banks, which meant that credit transfer orders were submitted to the Bundesbank's branches, but could not be executed for lack of cover. Since the postal transit times in the

Processing periods for cashless payments

new Länder still remain very long, the Bundesbank's branches sometimes receive orders from banks up to ten days late.

The Bundesbank, in cooperation with the banking industry, will continue its endeavours to eliminate the weak spots it has found. The processing times customary in western Germany will be reached only when west German paperless and paper-based payment methods are used everywhere, and when the postal transit times and transport times have been shortened.

The rediscounting of bills of exchange by east German banks is limited by refinancing quotas. Refinancing quotas are set for east German banks of independent legal status and branches of foreign banks not represented in the west German Länder. Refinancing quotas are calculated on the basis of the balance sheet total of the individual bank. The standard quota is computed by multiplying the balance sheet total by a percentage based on the total amount of the refinancing quotas set globally by the Central Bank Council in accordance with its monetary policy intentions (decision of May 17, 1990). Normally, a bank's refinancing quota is equal to the standard quota. It may be set at a level below the standard quota if specific circumstances make this seem appropriate.

Refinancing quotas for east German banks

Refinancing quotas were set for the first time as at July 1, 1990, to the amount of some DM 25 billion (decision of May 17, 1990). To bring them into line with east German banks' recent business performance, the refinancing quotas were recalculated with effect from January 2, 1991 on the basis of an unchanged total volume (decision of November 29, 1990). For east German joint venture banks, refinancing quotas were set for the first time as at January 2, 1991, after the expiry of a six-month period since their establishment. If a west German bank has a participating interest of 25% or more in an east German joint venture bank for which a refinancing quota has been set, the west German bank's standard quota will be reduced accordingly (decision of November 29, 1990).

It is planned to lower the refinancing quotas as soon as east German banks are able to participate in securities repurchase agreements on a broad basis. Furthermore, it is planned to transform refinancing quotas into normal rediscount quotas, which are calculated on the basis of the banks' liable funds, individual business structure and lending against acceptances and bills which are eligible for rediscount at the Bundesbank.

Notwithstanding the Central Bank Council decision of February 20, 1957 (cf. page 99), parties domiciled in east Germany liable on bills are regarded as "parties known to be solvent" within the meaning of section 19 (1) 1 of the Deutsche Bundesbank Act if no payment irregularities or other circumstances which preclude solvency are known (decision of May 17, 1990).

Bills of exchange eligible for rediscount at the Bundesbank

The refinancing quotas are, in principle, to be used for rediscounting trade bills which have been drawn on the basis of goods or services supplied between enterprises and/or self-employed persons and which as a rule bear the signatures of three parties known to be solvent. Since trade bills were not normally available to east German banks at the time of the establishment of the monetary, economic and social union with the former GDR on July 1, 1990, they were allowed, instead, to rediscount their own promissory notes (bank promissory notes), which bear no further signature (decision of May 17, 1990). These bank promissory notes were additionally backed to the extent that provisional — if necessary, unquantified — claims on the Currency Conversion Equalisation Fund in the amount of the refinancing quota had to be assigned.

Until January 31, 1991 the refinancing quotas could be fully utilised for rediscounting such bank promissory notes. With effect from February 1, 1991, however, the Central Bank Council limited the presentation of bank promissory notes. Since then east German banks — with the exception of joint venture banks, to which the arrangements described below apply — have been able to utilise not more than two-thirds of their refinancing quota for rediscounting promissory notes of their own which bear no further signature. The remaining

one-third of the quota may be used only for rediscounting trade bills, including one-tenth of the quota or more for rediscounting bills on which at least one east German non-bank is liable, either as a drawer and/or as a drawee (decision of November 29, 1990).

This arrangement is aimed at progressively replacing the bank promissory notes which have mostly been rediscounted so far by trade bills. After the refinancing quotas have been transformed into normal rediscount quotas, it will no longer be possible to rediscount bank promissory notes bearing no other signature. East German joint venture banks may utilise their refinancing quota only for rediscounting trade bills. At least one-tenth of the quota, however, can be utilised only for rediscounting bills on which at least one east German non-bank is liable, either as a drawer and/or as a drawee (decision of November 29, 1990).

#### 2. Lombard loans

Collateral for lombard loans

East German banks (with the exception of joint venture banks), if the collateral specified in the "List of securities eligible as collateral at the Deutsche Bundesbank (lombard list)" is not available to them in sufficient quantities, or at all, can be granted lombard loans against the collateral of their own promissory notes (bank promissory notes) which bear no further signature (decision of May 17, 1990). In principle, however, these bank promissory notes had to be backed by assigning allotment claims on the Currency Conversion Equalisation Fund. Own promissory notes issued by joint venture banks are not accepted as collateral for lombard loans.

It is planned to replace bank promissory notes as collateral for lombard loans as soon as securities eligible as collateral for lombard loans are available to east German banks on a major scale — possibly also bearer bonds officially listed on a stock exchange deriving from the conversion of equalisation claims on the Currency Conversion Equalisation Fund allocated on a provisional basis.

# 3. Open market operations

Open market transactions under repurchase agreements in securities Owing to the lack of suitable securities, east German banks could not at first be allowed to participate in open market transactions under repurchase agreements (securities repurchase agreements). By way of compensation, they were granted higher refinancing quotas. Since February 1, 1991 they have been permitted to participate in securities repurchase agreements (decision of November 29, 1990); to date, however, they have done so on a rather small scale.

### 4. Minimum reserve regulations

Calculation method

The minimum reserve instrument was introduced in the former GDR as well upon the implementation of the monetary union on July 1, 1990 by virtue of a Central Bank Council decision of May 17, 1990. This means that the provisions of the Deutsche Bundesbank's Minimum Reserves Order (Anweisung der Deutschen Bundesbank über Mindestreserven (AMR)) and the comments thereon likewise apply to the banks there. Because of the uniformity of the currency area, the same minimum reserve ratios apply as in the old Länder.

As a concession for the start-up period, banks in the former GDR were required to hold minimum reserves for the first time in the August 1990 reserve month. For calculating the required reserves on the basis of the four return days, the first day on which the GDR banks' reserve-carrying liabilities had to be established was thus July 23, 1990. The required reserves had to be held as

In calculating the required reserves, due account was taken of the special feature that there were no restrictions on withdrawals of deposits in giro accounts with savings banks and deposits in savings accounts evidenced by a passbook with banks in the GDR. For a transitional period, such deposits carried the lowest reserve ratios, even though these ratios are applied only to savings deposits within the meaning of sections 21 and 22 of the Banking Act, which are subject to certain withdrawal restrictions. For deposits in giro accounts with savings banks, the transitional period for the conversion to savings conditions consistent with the Banking Act during which liabilities were recognised as savings deposits for the purposes of the minimum reserve regulations expired at the end of 1990. For deposits in savings accounts for which a passbook has been issued, the deadline under a simplified conversion procedure offered to the banks is June 30, 1991. Deposits which have not been converted on the expiry of the transitional period can no longer be recognised as savings deposits. They are subject to the reserve ratio for sight deposits.

126 Foreign exchange regulations

In the course of the rapprochement between the two German states, the foreign exchange restrictions on intra-German trade and payments were lifted progressively in the first half of 1990. To begin with, the setting-up and acquisition of enterprises, branches and production facilities and the establishment of representative offices in the GDR and the Federal Republic of Germany were generally authorised by Notice no. 6001/90 in February 1990. In March 1990 the restrictions imposed on withdrawals in order to protect GDR residents were abolished by Notice no. 6003/90 and the holding of free accounts was generally authorised by Notice no. 6005/90. Through these free accounts, it was also possible to settle merchandise and service transactions under the Berlin Agreement, which could previously only be paid for via the clearing accounts maintained under that Agreement. Upon the implementation of the monetary, economic and social union on July 1, 1990, all the exchange restrictions still in effect were abolished. The allied exchange control legislation remains in force, however, to enable earlier offences to be punished.

### 1. Commercial payments

Intra-German payments

Turnover in the sub-accounts 1/2 and 3 carried under the Berlin Agreement for commercial payments amounted to:

	1st half-year		
	1989	1990	
	– millio	ons of	
	units of ac	count -	
Payments for west-east deliveries and services	3,898.5	4,409.5	
Payments for east-west deliveries and services	3,775.5	3,833.7	
	7,674.0	8,243.2.	

At the end of June 1990, the utilisation of the swing by the State Bank of the GDR amounted to 55 million units of account; it was settled in free currency at the beginning of July.

# 2. Non-commercial payments

Non-commercial payments under the terms of the agreements of April 25, 1974 on transfers of maintenance payments and transfers from credit balances in specific cases were effected through the clearing accounts U (maintenance payments) and T (transfer payments) carried by the Deutsche Bundesbank and the State Bank of the GDR until the entry into force of the monetary, economic and social union with the GDR on July 1, 1990.

The following maintenance payments were effected through the clearing account U:

	1st half	f-year			
	1989	1990			
	<ul><li>millions of DM</li></ul>				
West-east payments	3.17	2.54			
East-west payments	4.71	15.26			
Balance	1.54	12.72.			

The following payments were effected through the clearing account T:

	1st half-year	
	1989	1990
	<ul><li>millions</li></ul>	of DM -
West-east payments	0.16	0.02
East-west payments	36.51	111.55
Inpayments by the GDR under the protocol of July 5, 1985 and the accord of		
December 5, 1989	35.00	111.04
Inpayments by the GDR under the agreement		
on the issue, as agent, of Forum cheques	1.10	<del>-</del> .

Under the accord of December 5, 1989 the GDR had agreed to increase the quarterly inpayments to clearing account T to DM 25 million in 1990. The GDR had also undertaken to make a non-recurring special payment of DM 60 million at the beginning of the first quarter of 1990 so as to settle transfer orders dating back to earlier quarters which could not be carried out at the time because of insufficient cover. The resources made available by the GDR in 1990 were not large enough to enable all the transfer orders received by June 30, 1990 to be carried out. Some of the orders submitted therefore had to be returned unexecuted to the applicants.

Upon the entry into force of the monetary, economic and social union with the GDR on July 1, 1990, the transfer of payments under the terms of the agreements of April 25, 1974 was discontinued as the account holders can withdraw their credit balances at their discretion now that their accounts, which used to be carried in GDR Mark, have been converted to Deutsche Mark. Altogether, 609,000 payments in the west-east direction totalling DM 177 million and 785,000 payments in the east-west direction totalling GDR Mark 104 million have been effected since 1974 under the terms of the maintenance agreement. In the same period 1.6 million individual payments totalling GDR Mark 837 million have been transferred to the territory of the old Federal Republic from accounts held with banks in the former GDR under the terms of the agreement on transfers from account balances in specific cases and have been credited to the west German account holders in Deutsche Mark in the ratio of 1:1.58,000 payments totalling DM 62 million have been transferred in the opposite direction to the former GDR, and have been credited to the east German account holders in the ratio of DM 1 for GDR Mark 1.

# 3. Travel payments

The exchange controls governing the settlement of payments in the context of cashless travel payments were completely abolished in March 1990. This also cancelled the previous obligation to settle all payments by credit card, eurocheque and travellers' cheque exclusively through the free account of the Deutsche Aussenhandelsbank AG, Berlin (east), with the Deutsche Bundesbank. Hence no figures are available any more on overall cashless travel payments in the first half of 1990.

The GDR abolished the "compulsory exchange of payment media" required in foreign travel as long ago as December 24, 1989. The exchange rate at which travellers were officially allowed to purchase GDR Mark in unlimited amounts at branches and exchange bureaux of the State Bank of the GDR was set by the appropriate authorities in the GDR at DM 1 = GDR Mark 3 as from January 1, 1990. From May 2, 1990 the exchange rate for tourists was changed to DM 1 = GDR Mark 2. This rate applied until the introduction of the Deutsche Mark in the GDR.

From January 1, 1990 residents of the GDR who had reached the age of 14 were allowed to purchase, per calendar year, DM 100 at the exchange rate of 1:1 and a further DM 100 at the rate of 1:5 for GDR Mark to the debit of the Fund for Travellers' Payment Media set up by the governments of the two German states in December 1989. Children under the age of 14 were allowed to exchange one-half of these amounts. The agreement on the Fund for Travellers' Payment Media provided that the Fund was to be financed jointly by the two German states, with about three-quarters of the Deutsche Mark resources being contributed by the Federal Republic of Germany and one-quarter by the GDR. Under the terms of the agreement, the GDR Mark proceeds of the exchange were to be applied to infrastructural measures in the GDR.

Until the termination of the agreement on the Fund for Travellers' Payment Media at the end of June 1990, a total amount of GDR Mark 5 billion was converted into Deutsche Mark, with GDR Mark 1.5 billion being exchanged for Deutsche Mark at the rate of 1:1 and GDR Mark 3.5 billion being exchanged at the rate of 1:5. A total amount of DM 1.6 billion was paid into the Fund for Travellers' Payment Media by the Federal Republic of Germany to finance the GDR Mark sums exchanged; in accordance with its share, the GDR made available a total amount of DM 560 million.

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

130

Legal basis

The legal basis for the annual accounts of the Bank is provided by section 26 of the Deutsche Bundesbank Act (Gesetz über die Deutsche Bundesbank) in the wording of December 19, 1985. In accordance with that section, the provisions of the Commercial Code (Handelsgesetzbuch) relating to corporations are to be applied as appropriate to the valuation.

The annual accounts for 1990 are attached to this Report as an Appendix; as usual, the notes on them are presented in the order in which the items appear in the balance sheet and the profit and loss account. At the same time a report is rendered on the Bank's business operations, which were particularly marked in 1990 by the unification of Germany. Details are given in part A in: "Selected aspects of the monetary, economic and social union with the former GDR". The trends in major balance sheet items in the course of the year are shown in the Weekly Returns of the Bank, which are published as Appendix 3 of the German original of this Report.

### 1. Balance sheet

The balance sheet total at December 31, 1990 was DM 349,548.5 million, against DM 308,570.7 million at end-1989.

Assets

Gold

The gold holding, amounting to 95 million ounces of fine gold (excluding the gold reserves provisionally contributed to the European Monetary Cooperation Fund), is shown at December 31, 1990 at the same figure as at end-1989, viz. DM 13,687.5 million.

Reserve position in the International Monetary Fund and special drawing rights At December 31, 1990 the level of drawing rights within the reserve tranche in the International Monetary Fund (IMF) amounted to DM 4,565.0 million (= SDR 2,147.8 million), against DM 5,165.9 million (= SDR 2,315.3 million) at end-1989. It represents the difference between the German quota of SDR 5,403.7 million and the Deutsche Mark balances equivalent to SDR 3,255.9 million at the disposal of the IMF at the end of the year. Increases equivalent to SDR 309.4 million due to other members' Deutsche Mark drawings and other Deutsche Mark payments to other members were accompanied by decreases equivalent to SDR 476.9 million due to other members' Deutsche Mark repayments and other transactions.

During the year under review the Bank did not grant any new loans to the IMF under special borrowing arrangements. At present only one credit line amounting to SDR 2.4 billion in favour of the IMF is outstanding under the General Arrangements to Borrow (GAB), but the IMF can utilise it only subject to certain conditions.

The amount of special drawing rights (SDRs) held at December 31, 1990 came to DM 2,808.2 million (= SDR 1,321.2 million), against DM 3,062.8 million (= SDR 1,372.7 million) at end-1989. It was composed of SDR 1,210.8 million of SDRs allocated, the counterpart of which is shown on the liabilities side, and SDR 110.4 million of SDRs purchased. Increases of SDR 159.1 million due to interest payments and remunerations on the part of the IMF were accompanied by decreases of SDR 210.6 million in the context of freely agreed SDR transactions.

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

Claims on the European Monetary Cooperation Fund

The ECU balances amounting to DM 29,370.3 million arise mainly from the provisional contribution of 20% of the Bank's gold and dollar reserves to the European Monetary Cooperation Fund (EMCF) in the form of three-month swaps. In addition, these balances include to a small extent the reserve ECUs transferred to the Bank by other central banks participating in the European Monetary System (EMS). The gold and dollar reserves provisionally contributed to the European Monetary Cooperation Fund, under the terms of the EMS, against the crediting of ECUs were transferred at market prices and therefore at values higher than those shown in the balance sheet. The resulting difference of DM 10,925.1 million is deducted from the ECU balances. At the end of 1990 there were no other claims denominated in ECUs arising from lending under the very short-term financing mechanism.

The balances with foreign banks and money market investments abroad, the vast bulk of which are denominated in US dollars and bear interest, amounted to DM 64,486.1 million at the end of 1990, against DM 58,283.1 million at December 31, 1989 (excluding the dollar reserves provisionally contributed to the EMCF). The assets and liabilities denominated in US dollars were valued at the middle rate of December 31, 1990 (US\$ 1 = DM 1.4940).

Balances with foreign banks and money market investments abroad

The Bank's turnover in spot foreign exchange deals (foreign currency against Deutsche Mark) diminished in the year under review owing to decreased activity in the foreign exchange market to DM 15,574.0 million, against DM 29,877.7 million in 1989. The number of deals declined from 4,926 in the previous year to 4,139. Specifically, the deals consisted of

Foreign exchange dealing

	Number	1989 DM million	Number	1990 DM million
Purchases Sales	1,761 3,165	8,748.7 21,129.0	1,872 2,267	4,400.1 11,173.9
	4,926	29,877.7	4,139	15,574.0.

The volume of cross deals (foreign currency against another foreign currency) increased from DM 1,322.8 million in the preceding year to DM 2,324.5 million in 1990. The number of deals likewise rose (from 47 to 64). The volume of SDR-US dollar and SDR-Deutsche Mark deals (there were 20 such transactions equivalent to DM 391.1 million in 1989) also mounted to 36 transactions equivalent to DM 463.1 million in 1990. In addition, 204 US dollar inter-centre switch transactions totalling US\$ 58.7 million were entered into (1989: 238 transactions amounting to US\$ 67.8 million).

With a view to fine-tuning the money market, the Bank conducted Deutsche Mark-US dollar swaps equivalent to DM 5,689.8 million with domestic banks in December 1990 in order to increase liquidity.

External payments

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

nal payments					
of orders					
Outgoing external	payment orders				
				of which	
in foreign currencies	in Deutsche Mark	Total		Processed by automated standing order procedure	Processed automatically via SWIFT 1
375,184 370,092	2,698,182 2,876,048			2,810,311 2,972,025	188,445 203,449
Incoming external	payment orders	_			
				of which Payments received	l via SWIFT
16,765 17,143	233,534 248,896				233,498 253,097
	of orders  Outgoing external in foreign currencies  375,184 370,092 Incoming external in 16,765	of orders  Outgoing external payment orders  in foreign currencies in Deutsche Mark  375,184 2,698,182 370,092 2,876,048  Incoming external payment orders  16,765 233,534	of orders           Outgoing external payment orders           in foreign currencies         in Deutsche Mark         Total           375,184 2,698,182 3,073 370,092 2,876,048 3,246         Incoming external payment orders           16,765 233,534 256	of orders           Outgoing external payment orders           in foreign currencies         in Deutsche Mark         Total           375,184 2,698,182 3,073,366 370,092 2,876,048 3,246,140         Incoming external payment orders           16,765 233,534 250,299	Of orders           Outgoing external payment orders         of which           In foreign currencies         In peutsche Mark         Total         Processed by automated standing order procedure           375,184 2,698,182 3,073,366 370,092 2,876,048 3,246,140         2,810,311 2,972,025         2,972,025           Incoming external payment orders         of which Payments received           16,765 233,534 250,299         250,299

Foreign cheques

During 1990 25,218 (1989: 22,565) foreign cheques payable to order totalling DM 204.6 million (1989: DM 191.1 million) were sold. In addition, the Bank sold 35,934 traveller's cheques amounting to DM 4.0 million (against 35,730 traveller's cheques totalling DM 4.4 million in 1989). In 1990 the number of cheques presented under the simplified collection procedure for foreign cheques was larger than in the preceding year; for details see Appendix 4 of the Report (available in German only).

Foreign commission business

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

	1989	1990 Number
Bills, cheques, etc. Foreign notes and coins	22,939 4,455	17,529 3,989
· ·	27,394	21,518.

Foreign notes and coins

The amount of foreign notes and coins held at end-1990, at DM 30.9 million, was DM 5.9 million higher than at end-1989. During the year under review the Bank effected 19,523 purchases (1989: 19,577) and 44,811 sales (1989: 44,526) of foreign notes and coins.

External loans and other external assets

As in the preceding year, only loans to the World Bank (which were mostly granted against borrowers' notes denominated in Deutsche Mark) are included in this item. Loans under EC medium-term balance of payments assistance and other loans to foreign monetary authorities were not outstanding in the year under review.

Lending to domestic banks

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

In the year under review the Bank again regularly offered the west German banks, by tender, open market transactions in securities under repurchase agreements on a considerable scale in order to provide liquidity for a limited period; during that year the east German banks did not yet participate in such transactions. In the course of those transactions the Bank bought securities eligible as collateral for lombard loans subject to the condition that the sellers repurchased them forward. At the end of the year the claims deriving from these transactions amounted to DM 117,434.8 million (end-1989: DM 108,828.4 million).

Domestic bills of exchange

At the end of 1990 the Bank's portfolio of domestic bills amounted to DM 54,116.3 million against DM 34,102.4 million at the end of 1989. DM 30,336.0 million of the total holding stemmed from west German banks' presentations under the rediscount quotas and under the special refinancing facilities laid down for *AKA Ausfuhrkredit-Gesellschaft mbH* and *Privatdiskont AG.* Under the refinancing quotas granted them from July 1, 1990, east German banks rediscounted domestic bills of exchange amounting to DM 23,780.3 million. The domestic bill portfolio comprised:

	Dec.31, 1989	Dec. 31, 1990 DM million
Domestic bills discounted	32,168.3	53,147.0
Prime bankers' acceptances acquired in the course of open market operations	1,934.1	969.3
	34,102.4	54,116.3.

Purchases of domestic bills of exchange					
Area	1989		1990		
	Thousands	DM million	Thousands	DM million	
Land Central Bank					
Baden-Württemberg Bavaria Berlin Bremen Hamburg Hesse Lower Saxony North Rhine-Westphalia Rhineland-Palatinate Saarland Schleswig-Holstein	486 324 14 30 82 260 121 474 82 19	26,192.3 23,617.8 2,408.4 2,979.3 8,298.4 30,243.8 10,661.7 36,910.4 5,179.1 1,816.9 2,071.8	445 310 13 28 69 242 109 434 75 18	25,963.0 23,883.7 2,479.8 2,880.2 7,369.5 33,308.3 10,828.9 35,322.0 4,936.3 1,398.9 1,995.8	
Provisional Administrative Office	_	_	3	59,880.4	
Total	1,918	150,379.9	1,768	210,246.8	

The average value of the bills purchased in the year under review was DM 119,000 (1989: DM 78,400).

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

		1989		1990
	Number	DM million	Number	DM million
	6,167	79.4	5,675	114.5
as % of the total purchased	0.32	0.05	0.32	0.05.

Discount rate

During the year under review the Bank's discount rate for domestic and foreign bills was 6%.

Prime bankers' acceptances

Through the structural adjustment of the refinancing facilities, the presentation facility of *Privatdiskont AG* was lowered to DM 2 billion as from January 1, 1990 and to DM 1 billion as from January 1, 1991; it will be abolished entirely at the end of 1991.

Throughout the year the Bank's buying rate for prime bankers' acceptances was 0.5 percentage point below the discount rate, and thus remained considerably below the level of the money market rates; hence recourse to prime bankers' acceptances as a source of funding continued to be heavy. During the year under review the Bank's purchases through *Privatdiskont AG* totalled DM 8,372.0 million (1989: DM 12,963.2 million). There were, however, no repurchases.

DM 9,336.8 million remained in the Bank's portfolio until payment on maturity (1989: DM 13,938.6 million). At December 31, 1990 the Bank held prime bankers' acceptances deriving from open market operations totalling only DM 969.3 million (end-1989: DM 1,934.1 million); this was because of the above-mentioned reductions of the presentation facility.

Foreign bills of exchange

At the end of 1990 the portfolio of foreign bills accumulated through purchases in Germany amounted to DM 30,792.6 million (end-1989: DM 27,206.9 million). The share of Deutsche Mark bills in the total value of the foreign bills purchased averaged 98.6% in 1990 (1989: 98.0%).

Purchases of foreign bills of exchange					
Area	1989	1989		1990	
	Number	DM million	Number	DM million	
Land Central Bank					
Baden-Württemberg Bavaria Berlin Bremen Hamburg Hesse Lower Saxony North Rhine-Westphalia Rhineland-Palatinate Saarland Schleswig-Holstein	50,742 35,788 4,262 2,674 15,070 34,431 9,796 45,902 8,865 3,924 3,784	13,440.3 14,253.3 7,505.1 1,070.7 12,646.8 29,679.3 4,955.1 24,299.6 2,112.4 1,275.7 1,782.5	49,567 35,542 4,602 2,358 16,673 34,447 9,856 44,472 8,191 4,141 4,239	16,699.7 77,196.7 8,325.6 1,569.2 15,187.6 34,437.8 6,035.3 30,255.9 2,622.7 1,808.5 2,069.3	
Provisional Administrative Office	_	_	201	500.5	
Total	215,238	113,020.8	214,289	136,708.8	

Lombard loans

At the end of 1990 the outstanding amount of lombard loans which the Bank had granted to banks was DM 6,179.9 million, against DM 5,187.2 million at end-1989. At the end of the reporting year DM 5,997.2 million of the total amount was accounted for by west German banks and DM 182.7 billion by east German banks. Recourse to lombard loans is normally subject to marked fluctuations; the highest level was reached on February 28, 1990, at DM 16,807 million.

Lombard rate

In the year under review the lombard rate was 8% until November 1, and  $8\frac{1}{2}\%$  from November 2.

	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. This regulation now applies to the new Länder as well.

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

Cash advances outstanding					
DM million					
Borrower	December 31, 1989	December 31, 1990			
Federal Government	_	_			
Länder Governments					
Baden-Württemberg	_	79.8			
Bavaria	323.3	309.3			
Berlin		_			
Brandenburg	_	_			
Bremen	43.8	10.7			
Hamburg	_ :	_			
Hesse	_	147.2			
Lower Saxony	248.9	_			
Mecklenburg-Western Pomerania	_	_			
North Rhine-Westphalia	217.4	29.4			
Rhineland-Palatinate	98.8	135.3			
Saarland	34.4	30.3			
Saxony	_	_			
Saxony-Anhalt	_	_			
Schleswig-Holstein	86.5	_			
Thuringia	_	_			
Total	1,053.1	742.0			

Federal and Länder Governments

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

No cash advances to the Federal Railways or Federal Post Office were outstanding at December 31, 1990; any such advances, together with the claims arising from the purchase of Treasury bills and Treasury discount paper. are to be shown in the item "Lending to the Federal Railways and Federal Post Office" on the assets side of the Bank's balance sheet.

Federal Railways and Federal Post Office

Until July 31, 1990, the interest rate charged for cash advances was identical to the Bank's discount rate. Since August 1, 1990 a rate identical to the lombard rate has been charged.

For issues of Treasury discount paper (U-Schätze) in 1990, the Bank acted as selling agent for the Federal Government and the former GDR. This paper, which serves financing purposes, is distinct from the mobilisation and liquidity paper issued under sections 42 and 42a of the Deutsche Bundesbank Act, which is reported on elsewhere. No Treasury bills serving financing purposes were issued during the year under review.

Treasury bills and Treasury discount paper

Federal Government

In 1990 there were no sales of Treasury discount paper not returnable before maturity (type "BN") (1989: DM 849.7 million). DM 17,881.4 million of "Treasury financing paper" was sold (1989: DM 7,941.2 million).

DM 840.0 million of paper returnable before maturity (type "B") was redeemed and newly issued. After the redemption of DM 9,937.7 million (1989: DM 2,211.5 million) of matured Treasury discount paper (including "Treasury financing paper"), the total amount of Treasury discount paper of the Federal Government (types "B" and "BN") outstanding at December 31, 1990 was DM 21,681.4 million (end-1989: DM 12,897.7 million). Of this total, DM 1,440.0 million was repurchasable by the Bank (Treasury discount paper type "B").

Debt Processing Fund

By virtue of the State Treaty of May 18, 1990 Establishing a Monetary, Economic and Social Union, non-returnable Treasury discount paper (type "DDR N") was issued to the amount of DM 20,087.0 million for the then GDR. After the unification of Germany these liabilities were transferred to the Debt Processing Fund, as a further Federal Government special fund, under Article 23 of the Unification Treaty of August 31, 1990. At December 31, 1990 this Treasury discount paper was still outstanding in the same amount.

Federal Railways

DM 590.7 million of Treasury discount paper not returnable before maturity (type "BaN"), which was issued by the Federal Railways in the previous year, was redeemed in the year under review. There were no new issues of Treasury discount paper, so that only the returnable Treasury discount paper of the Federal Railways (type "Ba") issued in 1989 in the amount of DM 131.0 million was outstanding at December 31, 1990.

Federal Post Office

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

The total amount of money market paper issued for account of the Federal Government and its special funds and of the GDR outstanding at the end of 1990 was DM 41,899.4 million (end-1989: DM 13,619.4 million).

and its special funds and of the former GDR  DM million					
Type of paper	Outstanding at December 31	Issued	Redeemed	Outstanding a December 31	
Treasury discount paper of the Federal Republic of Germany types "B" 1 and "BN" 2 of which: "Treasury financing paper"	12,897.7 (8,529.8)	18,721.4 (17,881.4)	9,937.7 (6,169.8)	21,681.4 (20,241.4)	
Treasury discount paper of the German Democratic Republic type "DDR N" 2	_	20,087.0	-	20,087.0	
Treasury discount paper of the Federal Railways types "Ba" and "BaN" 2	721.7	-	590.7	131.0	
Total	13,619.4	38,808.4	10,528.4	41,899.4	

Länder Governments

At end-1990, as in the preceding year, the Bank had no money market paper of the Länder Governments in its portfolio.

Equalisation claims

The Bank's equalisation claims on the Federal Government (which yield interest at the rate of 1% p.a.) and the non-interest-bearing debt certificate in respect of Berlin remained unchanged during the year under review.

No lending to the Federal Railways and the Federal Post Office was outstanding at December 31, 1990, just as in the previous year. See also the notes on the items "Cash advances" and "Treasury bills and Treasury discount paper".

Lending to the Federal Railways and Federal Post Office

During the year under review the Bank's portfolio of securities (chiefly bonds issued by the Federal Republic of Germany, the Federal Railways and the Federal Post Office) declined only slightly to DM 4,251.8 million (end-1989: DM 4,262.2 million) on account of redemptions owing to maturity and of transactions in the open market.

Securities

Since mid-1990 the former issuing system has been supplemented by a combined syndicate and tender procedure. Under this procedure, part of a bond issue is offered to the Federal Bond Consortium for binding acceptance. A further part (of indeterminate size) is issued by tender, in which only members of the Consortium are permitted to participate. In 1990 twelve bond issues totalling DM 64 billion (1989: nine issues amounting to DM 35 billion) were launched through the Federal Bond Consortium. Of these, four issues by the Federal Republic of Germany totalling DM 33 billion were placed by the extended procedure. Two bond issues amounting to DM 9 billion were launched for the "German Unity" Special Fund. Three issues totalling DM 15 billion were increases of issues already outstanding. For the first time, the Federal Republic of Germany, the Federal Railways and the Federal Post Office each launched a bond issue by public tender and with a floating interest rate, with an overall volume of DM 11 billion. Of the bonds issued, an amount of DM 16,228.8 million was reserved for the issuers' own institutions and for market regulation purposes.

Issue of bonds

At the end of 1990 the outstanding amount of bonds issued by the Federal Republic of Germany was DM 239,283.1 million (end-1989: DM 195,765.8 million), that issued by the Federal Railways was DM 27,750.8 million (end-1989: DM 23,350.8 million), that issued by the Federal Post Office DM 36,800.7 million (end-1989: DM 32,400.8 million) and that issued by the "German Unity" Fund DM 9,000 million.

## Bond issues of the Federal Republic of Germany, the Federal Railways, the Federal Post Office and the "Germany Unity" Fund in 1990

	Amount (DM mill			Terms					
		of which					Yield		
Issuer	Total	Sold through Fed- eral Bond Con- sor- tium	Allo- cated by tenders	Nominal interest rate (% p.a.)	Maturi- ty (years/ months)	Issue price/ average allot- ment rate (%)	Issue price (% p.a.)	Tender (%) p.a.)	Start of sales
Federal Republic of Germany	5,000	4,000		7.25	10/0	100.00	7.25		Jan. 2
Federal Republic of Germany	4,000	3,200	_	7.75	10/0	100.00	7.75		Feb. 6
Federal Railways	1 4,000	_	1,863.1	Three-month Libor less 0.20	10/0	Ø 100.00			Mar. 3
Federal Republic of Germany	5,000	_	4,160.7	Three-month Fiborless 0.25	10/0	99.95			Mar. 26
Federal Post Office	2,000	_	1,865.9	Three-month Fibor less 0.10	10/0	99.95			Apr. 2
Federal Republic of Germany	6,000	4,800	-	8.75	10/0	101.00	8.60		May 2
"German Unity" Fund	6,000	4,800	-	8.75	10/0	101.00	8.60		July
Federal Republic of Germany	8,000	3,000	2,889.3	8.50	10/0	100,50/ ø 99.65	8.42	ø 8.55	July 3
Federal Post Office	2,000	1,600	_	9.00	10/0	100.70	8.89		Aug.2
"German Unity" Fund (increase)	3,000	2,500	_	8.75	9/10	99.20	8.88		Sep.
Federal Republic of Germany	8,000	3,000	4,272.7	9.00	10/0	100.60/ ø 99.94	8.91	ø 9.01	Oct.
Federal Post Office (increase)	3,000	2,400	_	9.00	9/10	100.60	8.89		Oct. 2
Federal Republic of Germany (increase)	9,000	3,000	3,801.5	9.00	9/11	100.60/ ø 99.91	8.90	ø 9.01	Nov.
Federal Railways	2,000	1,800	_	9.00	10/0				Nov.
Federal Republic of Germany	8,000	3,000	2,818.0	8.875	10/0	100.70/ ø 99.88		ø 8.89	Dec.

Issue of Federal savings bonds

With the assistance of the Bank (selling operations through banks and sales of its own), Federal savings bonds to the value of DM 15,149.3 million (gross) were placed with private purchasers in 1990 (1989: DM 7,254.5 million). During the year under review the rate of interest paid on Federal savings bonds was raised five times to bring it into line with market conditions. During the year under review DM 13,492.3 million (1989: DM 5,826.7 million) of Federal savings bonds from earlier tranches were returned to the issuer before maturity. A further DM 4,190.0 million of such bonds were redeemed on maturity. The amount of Federal savings bonds outstanding accordingly fell from DM 33,424.7 million (at end-1989) to DM 30,891.7 million at December 31, 1990.

Federal savings bonds type A 1	Federal savings bonds type B 2							1	I
426.5			1st	2nd	3rd	4th	5th	6th	7th
	1	Į Y	6.50 6.50	7.25 6.86	7.50 7.06	7.50 7.16	7.75 7.26	8.00 7.36	
	485.4	I Y	6.50 6.50	7.25 6.87	7.50 7.08	7.50 7.19	7.75 7.30	8.00 7.42	8.00 7.50
424.8		l Y	6.50 6.50	7.50 6.98	7.75 7.22	7.75 7.34	8.00 7.45	8.25 7.56	
	532.3	I Y	6.50 6.50	7.50 7.00	7.75 7.25	7.75 7.37	8.00 7.50	8.25 7.62	8.25 7.71
1,680.5		I Y	7.50 7.50	8.00 7.74	8.00 7.82	8.25 7.92	8.25 7.97	8.50 8.04	
	1,749.1	Y	7.50 7.50	8.00 7.75	8.00 7.83	8.25 7.94	8.25 8.00	8.50 8.08	8.50 8.14
1,933.0		Y	7.50 7.50	8.00 7.74	8.25 7.90	8.50 8.03	8.75 8.15	9.00 8.27	
	2,433.4	Y	7.50 7.50	8.00 7.75	8.25 7.92	8.50 8.06	8.75 8.20	9.00 8.33	9.00 8.43
1,437.6		Y	7.50 7.50	8.25 7.86	8.50 8.06	8.75 8.21	8.75 8.30	9.00 8.40	
	1,923.5	Y	7.50 7.50	8.25 7.87	8.50 8.08	8.75 8.25	8.75 8.35	9.00 8.46	9.00 8.53
894.6		Y	7.50 7.50	8.50 7.98	8.75 8.22	9.00 8.39	9.00 8.49	9.25 8.59	
	1,228.6	Y	7.50 7.50	8.50 8.00	8.75 8.25	9.00 8.44	9.00 8.55	9.25 8.67	9.25 8.75
_		1,228.6 3 6,797.0 8,352.3	1,228.6 Y 1,228.6 Y 3 6,797.0 8,352.3	1,228.6 Y 7.50 1,228.6 Y 7.50 7.50 3 6,797.0 8,352.3	1,228.6 Y 7.50 7.98 1 7.50 8.50 7.50 8.00	1,228.6 Y 7.50 7.98 8.22 Y 7.50 8.50 8.75 Y 7.50 8.00 8.25	1,228.6 Y 7.50 7.98 8.22 8.39 Y 7.50 8.50 8.75 9.00 7.50 8.00 8.25 8.44	1,228.6 Y 7.50 7.98 8.22 8.39 8.49 7.50 8.50 8.75 9.00 9.00 7.50 8.00 8.25 8.44 8.55	1,228.6 Y 7.50 7.98 8.22 8.39 8.49 8.59 Y 7.50 8.50 8.75 9.00 9.00 9.25 8.67 Y 7.50 8.00 8.25 8.44 8.55 8.67

<sup>1</sup> With annual payment of interest. — 2 With accrual of interest. — 3 Start of sales on November 7, 1989. — 4 Sales from November 7 to December 31, 1989: FSB/A DM 690.5 million; FSB/B DM 842.9 million. — 5 Sales not completed on December 31, 1990.

With the assistance of the Bank (selling operations through banks and sales of its own) newly-issued five-year special Federal bonds to the value of DM 22,776.7 million were sold in the year under review (1989: DM 11,205.9 million). In addition, an amount of DM 28,415.9 million was reserved for market regulation purposes. During the year under review the terms of these special Federal bonds were brought into line with the changed market conditions on 16 occasions. Series 53 to 59 of these special Federal bonds, to the amount of DM 17,800.0 million, were redeemed upon maturity during the year under review. At the end of the year the amount of five-year special Federal bonds outstanding was DM 126,915.8 million (end-1989: DM 96,758.7 million).

Issue of five-year special Federal bonds

		Amount i	ssued (DM i	million)		Terms			Date of
		Sales							admis-
Designation of series	Start of sales	per issue price	Total	Price regula- tion share	Total	Nomi- nal in- terest rate (% p.a.)	Issue price (%)	Yield (% p.a.)	stock ex- change dealing
S. 87 of 1989 (1994)	Jan. 21	2 138.1	138.1	3,606.9	5,000	7.25	98.80	7.55	Jan. 1
S. 88 of 1990 (1995)	Jan. 4 Jan. 26	906.8 262.7	1,169.5	3,830.5	5,000	7.50	99.00 98.50	7.75 7.87	Feb. 2
S. 89 of 1990 (1995)	Feb. 9 Feb. 15	115.9 102.3	218.2	4,781.8	5,000	8.00	100.00 98.80	8.00 8.30	Mar.
S. 90 of 1990 (1995)	Feb. 22	1,915.5	1,915.5	4,084.5	6,000	8.50	99.80	8.55	May !
S. 91 of 1990 (1995)	Apr. 30	5,717.4	5,717.4	4,282.6	10,000	8.75	100.00	8.75	July 1
S. 92 of 1990 (1995)	July 6 July 18 July 20 Aug. 10 Sep. 20	1,283.2 297.3 722.7 1,547.9 900.5	4,751.6	3,248.4	8,000	8.75	100.40 100.70 101.00 100.00 99.40	8.65 8.57 8.50 8.75 8.90	Oct. 1
S. 93 of 1990 (1995)	Oct. 12 Oct. 23 Nov. 19 Dec. 4	1,784.9 2,344.5	7,418.8	4,581.2	12,000	9.00	100.00 100.40 100.00 100.20	9.00 8.90 9.00 8.95	Dec. 1
S. 94 of 1990 (1995)	Dec. 12	1,447.6	1,447.6	3	3	8.875	99.80	8.93	3

1 Start of sales on November 13, 1989. — 2 Sales from November 13 to December 31, 1989: DM 1,255.0 million — 3 Sales not completed on December 31, 1990.

Issue of Treasury paper

In consultation with the Bank, during 1990 Treasury paper of the Federal Post Office was issued in the form of zero bonds to the nominal amount of DM 3,592.7 million. At the end of 1990 the amount of Federal Treasury paper outstanding was DM 38,762.6 million (end-1989: DM 43,366.9 million), that of the Federal Railways was DM 911.2 million (end-1989: DM 1,488.9 million) and that of the Federal Post Office DM 3,592.7 million (end-1989: DM 200.0 million).

Admission to stock exchange dealing

The Bank introduced the new bond issues of the Federal Republic of Germany, the "Germany Unity" Fund, the Federal Railways, the Federal Post Office and the Reconstruction Loan Corporation, as well as series 87 to 93 of five-year special Federal bonds, to official dealing on all German stock exchanges. The Bank also introduced new issues of bearer bonds and Treasury notes of the Reconstruction Loan Corporation to the Frankfurt stock exchange, as well as a bond issue and the bearer bonds of *Deutsche Ausgleichsbank* to official dealing on individual German stock exchanges.

Price regulation operations

The Bank conducted price regulation operations for account of the issuers on the eight German stock exchanges in respect of the bonds issued by the Federal Government and its special funds, five-year special Federal bonds, bonds issued by the Reconstruction Loan Corporation, as well as in respect of the bonds and bearer bonds of *Deutsche Ausgleichsbank* introduced to official dealing on individual German stock exchanges.

The Bank as paying and collecting agent for bonds

The Bank continued to act as paying and collecting agent for bonds of the Federal Government and its special funds, and paid 249,157 interest coupons and matured bonds in 1990 (1989: 272,243).

German coins

The amount of coins held by the Bank at the end of 1990 came to DM 1,118.7 million (end-1989: DM 803.2 million). In 1990 DM 1,323.0 million was credited to the Federal Government in respect of coins received from the mints and DM 14.4 million was debited to it in respect of coins no longer fit for circulation. Between 1948 and 1990 the Bank — acting for account of the Federal Government — received coins amounting to DM 15,507.4 million and redeemed coins

which were no longer fit for circulation or had been called in to the value of DM 1,799.8 million. In connection with the monetary union some small coins were taken over from the State Bank Berlin as at July 1, 1990, and will continue to be valid in the new Länder for a transitional period. By December 31, 1990 some of them had already been withdrawn from circulation and redebited to the State Bank. At the end of the year DM 1.6 million of such coins were still held by the Bank.

The amount of Federal coins outstanding increased distinctly against the previous year (from DM 11,595.8 million to DM 12,590.5 million) as a result of the monetary union; at the end of the year the amount of GDR small coins in circulation totalled DM 190.9 million.

During the year under review the DM 10 commemorative coin "Emperor Frederic I Barbarossa" was put into circulation.

At December 31, 1990 the balances on postal giro accounts, including the branch offices' transfers in transit to the postal giro account of the Bank (Central Office) in Frankfurt am Main, amounted to DM 106.0 million (1989: DM 189.6 million). The Bank's credit balance on the latter account, other than what is required for current payments, is offset daily against the giro account balances of the Central Cash Office of the Federal Post Office.

Balances on postal giro accounts

Postal giro transa	actions	with thi	rd part	ies						
	1989				1990					
	Transfers received third part	from	Transfers made to third part		Transfers received third part	from	Transfers made to third part			
Area	Number	DM million	Number	DM million	Number	DM million	Number	DM million		
Land Central Bank										
Baden-Württemberg Bavaria Berlin Bremen Hamburg Hesse Lower Saxony North Rhine-Westphalia Rhinelandc-Palatinate Saarland Schleswig-Holstein	49,109 32,852 6,953 6,107 19,295 49,325 33,418 109,126 71,822 3,009 25,941	21,980.8 14,329.9 3,459.6 316.4 24,077.3 6,964.0 8,204.2 20,995.3 1,600.9 1,386.3 109.8	4,696 7,438 750 93 1,742 3,798 3,946 7,084 3,783 97 236	6,132.9 12,133.4 2,701.9 0.0 594.5 12,177.4 5,903.3 4,423.3 1,695.3 0.1	47,019 29,076 4,431 5,661 14,663 44,788 27,665 81,764 63,300 2,786 23,480	23,861.4 15,356.0 3,504.6 269.0 24,513.7 6,947.7 8,684.0 21,358.8 689.2 1,023.8 134.3	4,086 6,850 956 53 1,862 3,578 3,488 7,320 3,455 45 202	6,217.3 14,821.1 2,695.2 0.0 1,287.6 12,984.2 5,616.0 4,560.3 2,211.0 0.1		
Provisional Administrative Office	-	-	_	-	14	0.7	17	0.7		
Central Office Total	8,440 415,397	1,435.1	1,023 34.686	8.6 45,750.8	11,969 356,616	1,684.4	1,025 32,937	4.3 50,397.9		

After additions of DM 230.4 million and depreciation totalling DM 192.0 million, land and buildings are shown at DM 2,851.1 million (1989: DM 2,812.7 million).

Land and buildings

The balance sheet value of furniture and equipment, after additions totalling DM 146.3 million and depreciation amounting to DM 125.6 million, is DM 239.1 million (1989: DM 218.4 million).

Furniture and equipment

The "Items in course of settlement" mainly consist of the cheques and direct debits in transit within the Bank at the end of the year and the intercity credit and debit transfers in course of settlement. At December 31, 1990 the balance of items in course of settlement stood at DM 13,275.1 million, against DM 12,346.1 million at end-1989.

Items in course of settlement

Other assets

At the end of 1990 other assets amounted to DM 3,266.5 million (end-1989: DM 2,875.6 million). They primarily comprise the interest income falling due in 1991 but assignable to the profit and loss account for the year under review from external transactions and securities (DM 2,695.7 million, against DM 2,564.3 million at end-1989).

This item also includes the Bank's 30% stake (DM 93 million in nominal terms) in the capital of *Liquiditäts-Konsortialbank GmbH*, Frankfurt am Main. The provision in the articles of association of that bank that, if necessary, further capital is to be paid up in proportion to the existing share entails for the Bank a maximum commitment of DM 279 million.

#### Prepayments

The prepayments consist almost entirely of salary and pension payments made in the year under review but relating to 1991.

#### Liabilities

# Banknotes in circulation

The amount of banknotes in circulation at December 31, 1990, at DM 166,908.7 million, was DM 16,360.7 million ( $\pm$ 10.9%) larger than at end-1989. The prime reason for this strong increase was the extension of the Deutsche Mark's area of validity as from July 1, 1990.

On October 1, 1990 the Bundesbank started to issue new DM 100 and DM 200 notes. DM 10 and DM 50 notes from the new series will follow in the spring and autumn of 1991, and DM 20 notes in spring 1992. The series is expected to be completed in autumn 1992 with the issue of new DM 5, DM 500 and DM 1,000 notes. Information on the appearance of the new banknotes and the security features they embody is being provided by brochures which are being published by the Bank on the launching of each denomination, and are available from banks and post offices. The notes of the present series will remain fully valid legal tender until further notice. When they are withdrawn from circulation at a later date, the period set for the purpose will be long enough to give everybody ample time to exchange the old banknotes for new ones at any bank. Even after the expiry of the official period for exchange, the Bank will continue to replace the old banknotes at their full face value.

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

1985 1986 1987 1988 1989 1990

Number (millions) 575.4 595.7 578.0 553.5 719.3 506.0

Value (DM million) 26,046.7 27,035.3 25,895.5 29,221.9 27,423.2 25,786.3.

Currency in circulation									
DM million									
End of	Currency in circulation	Banknotes	Coins						
1985	114,718.6	105,416.0	9,302.6						
1986	123,732.8	113,983.0	9,749.8						
1987	135,900.7	125,608.0	10,292.7						
1988	154,822.4	143,941.7	10,880.7						
1989	162,143.8	150,548.0	11,595.8						
1000	179,690,1	166,908.7	1 12,781.4						

The denominations of the banknotes and coins (currency) in circulation are shown in Appendix 4 of the German original of this Report.

The number of counterfeit Bundesbank notes detained in payments in the Deutsche Mark currency area increased slightly during the year under review; this was mainly because of counterfeit DM 50 notes. More counterfeits were likewise recorded in the case of Federal coins. Here, it was chiefly DM 5 coins which were more often counterfeited.

Counterf	eits detained in payr	nents		
	Banknotes		Coins	
Year	Number	DM thousand	Number	DM thousand
1981	2,896	219.1	17,172	34.3
1982	3,317	250.7	19,975	43.3
1983	2,156	181.7	26,607	56.1
1984	7,318	710.3	21,365	49.3
1985	7,585	712.2	24,617	57.7
1986	8,257	807.4	17,111	46.6
1987	6,010	598.4	11,758	38.0
1988	6,232	538.8	9,861	31.5
1989	3,425	304.2	8,324	31.0
1990	4,120	326.8	12,132	48.8

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

Deposits of banks

	Dec. 31, 1989	Dec. 31, 1990 DM million
Banks' deposits on giro accounts	66,844.0	76,647.1
Other	30.2	31.2
	66,874.2	76,678.3.

In the year under review this item was extended to include the "German Unity" Fund; it stands for other Federal Government special funds (such as the Debt Processing Fund) which serve to discharge public financing and administrative functions in the area of the former GDR. The published current balances of the public sector break down as follows:

Deposits of public authorities

	Dec. 31, 1989	Dec. 31, 1990 DM million
Federal Government	5,149.2	15,348.5
Equalisation of Burdens Fund, ERP Special Fund,		
"German Unity" Fund	2.9	13.8
Länder Governments	931.8	3,684.8
Other public depositors	44.7	97.7
	6,128.6	19,144.8.

Deposits of other domestic depositors

The deposits of other domestic depositors now also include the balances of the east German Reichsbahn (railways), which, for the time being, continues to exist as a public transport undertaking. Between the beginning of the monetary union and German unification, the former Post Office of the GDR likewise maintained deposits with the Bank; it was incorporated in the Federal Post Office as recently as 1990. These deposits were composed as follows:

	Dec. 31, 1989	Dec. 31, 1990 DM million
Federal Railways	17.5	308.7
Federal Post Office	4,692.6	5,222.1
Reichsbahn		15.2
Other depositors	805.7	875.2
	5,515.8	6,421.2.

Giro transactions, simplified cheque and direct debit collections In the year under review virtually all the collection and credit transfer orders presented were processed at the Bank's computer centres on an automated basis. The volume of payments executed through the paperless exchange of data media (EDM) was 15.3% greater than in the preceding year. Such payments now account for 72% of the payment items presented under the automated procedure. The strong increase in paperless payments is mainly due to the fact that, since the beginning of the monetary union, paper-based debit and credit transfers for banks which operate according to the east German ESER standard have had to be converted into EDM data records by the first participating banks which operate according to the west German standard. In addition, the sustained trend in the banking industry towards replacing paperbased payments by paperless procedures or converting them into data records continued to be felt. Moreover, after the ceiling for amounts for paperless cheque collections (cheque truncation) had been raised to under DM 2,000, more cheques than before were converted into data records and channelled into the EDM procedure. The conversion of cheques into data records by the Bank's computer centres increased once again; altogether, 87 million cheques to the value of DM 39 billion (1989: 84 million cheques amounting to DM 27 billion) were so converted. The volume of express payments (telegraphic credit transfers and credit transfers from DM 20,000 upwards) processed by means of data telecommunication in direct transactions between the branch offices of the Bank or the Bundesbank branches in the former GDR likewise continued to increase significantly; only about one-half of the credit transfers in direct transactions were processed by conventional methods (for the most part amounts between DM 10,000 and DM 20,000).

The credit transfers of banks operating according to the east German standard to banks working according to the west German standard initially had to be processed in paper-based form because the transition to the EDM procedure is taking place only gradually. This is why the volume of automated paper-based intercity transfers expanded considerably in the year under review; even so, its relative significance continued to decrease. The small-sized cheques drawn on banks operating on the east German standard cannot be processed by automated procedures and have to be collected by conventional methods in direct transactions; the volume of such collections therefore more than doubled. However, these are all special factors, which will disappear once all banks are converted to the west German standard (if not before).

Automa	ation (	of inte	ercit	y tran	sfer	S								
	Çollect	ion orde	ers pre	sented				Intercity credit transfer orders presented						
		Passec	d on						Passed	on				
				via con	nputer	centres	3				via con	nputer	centres	s
	Total	in direct operati betweet branch offices or bran	ons en	in auto mated paper-l operati	based	throug paperle exchar of data media	ess nge	Total	operati betwee branch offices	in direct operations between branch offices or branches		in auto- mated paper-based operations		h the ess ige
Year	Mil- lions	Mil- lions	0/0	Mil- lions	0/0	Mil- lions	%	Mil- lions	Mil- lions	0/0	Mil- lions	%	Mil- lions	0/0
1981	1,023	8	1	490	48	525	51	271	7	2	162	60	102	38
1982	1,098	7	1	512	46	579	53	291	6	2	180	62	105	36
1983	1,159	6	1	524	45	629	54	319	5	2	202	63	112	35
1984	1,226	6	1	533	43	687	56	335	4	1	216	65	115	34
1985	1,316	6	1	511	39	799	60	350	4	1	224	64	122	35
1986	1,405	5	0	412	29	988	71	372	3	1	238	64	131	35
1987	1,489	5	0	364	25	1,120	75	415	3	1	254	61	158	38
1988	1,568	3	0	355	23	1,210	77	464	3	1	270	58	191	41
1989	1,655	3	0	346	21	1,306	79	500	4	1	289	58	207	41
1990	1,807	7	0	324	18	1,476	82	627	5	1	353	56	269	43

Now that intercity payments are largely being processed automatically, the further automation of local payments and clearing operations (which, apart from local credit transfers in Hamburg, have not yet been processed automatically) has likewise been embarked on. Thus, since the end of March 1990 Electronic Clearing with File Transfer (ECFT) has been in operation as a pilot project in Frankfurt am Main. In terms of the number of items, to be sure, barely 1% of local payment transfers was processed through ECFT, but in terms of the amount involved this represented more than one-fifth. In the meantime, the degree of automation of cashless payments at the Bank exceeds 90%.

Once again, mobilisation and liquidity paper as defined in sections 42 and 42 a of the Deutsche Bundesbank Act, in the form of short-term Treasury bills (running as a rule for three days), was sold to domestic banks in the year under review in order to regulate liquidity. The volume of such transactions totalled DM 15,845.0 million (1989: DM 17,935.0 million). In addition, Treasury bills and Treasury discount paper was issued for the interest-bearing investment of excess deposits. At the end of the year paper of this kind was held by non-residents to the extent of DM 3,104.4 million (end-1989: DM 3,171.1 million), while DM 1,651.3 million was held by domestic public authorities (end-1989: DM 890.8 million). At December 31, 1990 the total amount of liabilities arising from mobilisation and liquidity paper outstanding was DM 4,755.7 million (end-1989: DM 4,061.9 million).

Liabilities arising from mobilisation and liquidity paper sold

Mobilisation and li	Mobilisation and liquidity paper sold and redeemed										
DM million											
	1989	1990									
Type of paper	Outstanding at December 31	Sold	Redeemed	Outstanding at December 31							
Treasury bills (running for up to 90 days)	3,961.9	41,224.8	40,635.4	4,551.3							
Treasury discount paper (running for 6 to 24 months)	100.0	204.4	100.0	204.4							
Total	4,061.9	41,429.2	40,735.4	4,755.7							

Liabilities arising from external transactions

The liabilities arising from external transactions rose from DM 48,471.3 million to DM 49,154.4 million in the year under review. It was mainly the deposits of foreign monetary authorities which increased. Specifically, DM 48,843.0 million of this sum (1989: DM 48,140.0 million) was accounted for by foreign banks' balances and DM 311.4 million (1989: DM 331.3 million) by other deposits.

Counterpart of special drawing rights allocated

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

Provisions for pensions

After the withdrawal of DM 154.1 million for the payment of pensions and an increase of the same size, the provisions for pensions amounted to DM 2,246.0 million (end-1989: DM 2,273.0 million). In addition, DM 27 million was to be released so as to correspond to the actuarially calculated requirements.

Provisions for other purposes

At December 31, 1990 DM 547.5 million net was added to the provisions for other purposes, which serve primarily to cover general risks inherent in domestic and external transactions and uncertain liabilities (see also the notes below on the expenditure items "Write-downs of monetary reserves and other foreign currency positions" and "Other operating expenditure"). As a consequence, they have since amounted to DM 3,226.2 million, against DM 2,678.7 million at end-1989.

Other liabilities

At the end of 1990 the other liabilities amounted to DM 696.3 million, against DM 758.2 million at the end of 1989. They mainly comprise the interest expenditure falling due in 1991 but relating to 1990. The liabilities which had arisen in the previous year from intra-German settlements (commercial payments under the "Berlin Agreement") have ceased to exist since the beginning of the monetary union.

**Accruals** 

Accruals amounted to DM 523.1 million at December 31, 1990 (end-1989: DM 457.8 million). This item mainly comprises the interest received during the year under review, but relating to the following year, on domestic and foreign bills of exchange and US Treasury bills.

Capital

The capital of the Bank amounts to DM 290 million; it is held by the Federal Government (section 2 of the Deutsche Bundesbank Act).

Reserves

In accordance with the decision taken by the Central Bank Council on April 19, 1990, the legal reserves were increased by DM 330.3 million out of the unappropriated profit for 1989. After this increase, the legal reserves totalled DM 7,527.4 million; they thus reached the maximum level permissible by law of 5% of the amount of banknotes in circulation, which was DM 150,548.0 million at the end of 1989. The other reserves reached the statutory ceiling of DM 290 million as long ago as end-1980.

Unappropriated profit

See the notes on page 149 of this Report.

#### Expenditure

Staff costs increased against the previous year by DM 51.5 million to DM 1,117.5 million ( $\pm$  4.8%). Not counting the changes in the provisions for pensions, which had risen in the previous year (in contrast to 1990), staff costs went up by DM 91.5 million ( $\pm$  8.9%). This owed a great deal, in particular, to the extension of the Deutsche Mark currency area to include the former GDR and the associated establishment of a Provisional Administrative Office in Berlin with 15 branches. The increase in responsibilities at the Land Central Banks and the Central Office necessitated a staff expansion of 683 persons (4.4%) to a total of 16,266 employees, while the Provisional Administrative Office and the 15 branches recruited 1,253 employees. In addition, wage and salary rises also contributed to the increase in staff costs.

Staff costs

The target of starting up as soon as possible a level of business operations geared to the standard of the existing branch offices called for the personal assistance of staff from western Germany in the new Länder. On January 1, 1991 239 staff members of the Bank were working at the Provisional Administrative Office and the branches, as seconded executives and "skeleton staff", on building up and maintaining the Bank's business operations.

Staff of the	Bank										
Beginning of 1990							Beginning of 1991				
				of whom	1				of whom		
Staff	Central Office	Land Central Banks	Total 1	male	female	Central Office	Land Central Banks	Total 1	male	female	
Civil servants	995	5,711	6,706	5,997	709	1,017	5,818	6,835	6,069	766	
Other salaried staff Wage earners	1,624 229	6,166 858	7,790 1,087	3,631 204	4,159 883	<b>2</b> 2,933	6,660 849	9,593 1.091	4,255 217	5,338 874	
Total	2,848	12,735	15,583	9.832	5,751	4,192	13,327	17,519	10.541	6,978	

1 Including 957 (1990: 945) trainees, 896 (1990: 718) part-time salaried staff and 720 (1990: 736) part-time wage earners; 30 (1990: 26) staff members were seconded to work abroad. Not included in the staff figures: 307 (1990: 284) members of the Bank released without pay. — 2 Including 1,253 staff members recruited by the Provisional Administrative Office and the branches.

Payments to serving members of the Central Bank Council and the Directorate of the Bank amounted to DM 9,444,462.21 in the year under review. Former members of these bodies and of the Board of Directors and Board of Managers of the Bank deutscher Länder and of the Managing Boards of the Land Central Banks, including their surviving dependants, received payments totalling DM 9,269,070.68. DM 170.8 million (1989: DM 201.2 million) of the staff costs was accounted for by retirement pensions. These included the payments made to staff members of the former Deutsche Reichsbank and to other persons to whom the Act concerning Article 131 of the Constitution applies, for whom the Bank is required to provide in accordance with section 41 of the Deutsche Bundesbank Act (DM 16.6 million).

In 1990 the Bank once again entered into a number of wage and salary agreements, thereby bringing the legal status of its salaried staff and wage earners in the old Länder into line with the regulations applying to the salaried staff and wage earners of the Federal Government, while paying due regard to the special conditions obtaining at the Bank. By virtue of wage and salary agreements reached back in 1988, and of amendments of the law for civil servants, the number of regular weekly working hours was reduced by another

Changes in staff regulations

1/2 hour, to 38 1/2 hours, with effect from April 1, 1990. The legal status of trainees was for the first time defined in a collective agreement based on the regulations applying to trainees of the Federal Government. The wage and salary agreements apply to the new staff members at the Provisional Administrative Office in Berlin and the 15 branches of the Bank in the new Länder only subject to qualifications. During a transitional period there will continue to be separate wage and salary agreements for staff members in the old and the new Länder.

## Other operating expenditure

During the financial year 1990 the other (non-staff) operating expenditure went up by DM 327.8 million. This was mainly because of the increase in the provisions for doubtful liabilities pursuant to section 249 of the Commercial Code and the assumption of additional duties in the new Länder.

#### Banknote printing

Expenditure on banknote printing amounted to DM 194.3 million in 1990, against DM 109.7 million in the previous year. The rise is due mainly to the production of new banknotes, which have been issued successively since October 1990.

#### Depreciation of fixed assets

Depreciation of land and buildings and of furniture and equipment was mentioned in connection with the respective balance sheet items. Further depreciation relates to computer software, as far as this was shown on the assets side under "Other assets".

# Write-downs of monetary reserves

This item contains the result of the valuation of the monetary reserves and other foreign currency positions. It also includes profits and losses arising from purchases and sales of foreign currencies and changes in provisions, which also affect the external position. Overall, losses totalling DM 5,258.5 million were incurred, mainly as a result of the decline in the dollar against the Deutsche Mark.

#### Other expenditure

Other expenditure is shown at DM 200.8 million (1989: DM 208.9 million). It mainly results from write-downs of the Bank's own securities.

#### Receipts

Interest

In the year under review net interest received, at DM 16,630.2 million, was DM 2,003.0 million higher than in 1989. The crucial factor here was interest income from lending to domestic banks, which rose by DM 4,101.7 million to DM 12,784.2 million. Interest income from securities and cash advances, at DM 343.6 million and DM 92.6 million, respectively, had only a minor impact on the overall interest figure. By contrast, interest income from financial investment abroad declined from DM 8,124.6 million to DM 7,557.8 million. This was primarily due to the falling exchange rate of the US dollar, despite the higher average level of external assets. Aggregate interest expenditure rose by DM 1,516.7 million against the previous year to a total of DM 4,239.2 million, owing to higher liabilities in respect of international transactions (as an annual average) and the higher domestic interest rate level. The interest paid on mobilisation and liquidity paper rose from DM 254.0 million to DM 327.6 million.

Fees

Fees, which mostly accrued in connection with payments, totalled DM 21.5 million in the year under review (1989: DM 21.1 million).

Other receipts The other receipts amounted to DM 118.6 million (1989: DM 80.6 million).

The profit and loss account for 1990 shows a profit for the year of which is entered in the balance sheet as unappropriated profit (net profit).

DM Unappropriated profit 9,113,026,373.08,

In accordance with section 27 of the Deutsche Bundesbank Act, the Directorate proposes to the Central Bank Council that the following appropriations should be made:

Proposed distribution of profit

149

to the legal reserves

818,000,000.00

to the Fund for the Purchase

of Equalisation Claims

30,000,000.00

848,000,000.00;

the balance of

8,265,026,373.08

is to be transferred to the Federal Government.

After this appropriation, the legal reserves will amount to DM 8,345,400,000.00; they will thus again reach the statutory ceiling of 5% of the amount of banknotes in circulation, which was DM 166,908,712,155.00 at the end of 1990.

Frankfurt am Main, April 1991

Deutsche Bundesbank
The Directorate
Pöhl Prof. Dr. Schlesinger
Gaddum Prof. Dr. Issing Dr. Storch Dr. Tietmeyer

# Part D: Report of the Central Bank Council

The annual accounts of the Deutsche Bundesbank for 1990 and the Report on the Fund for the Purchase of Equalisation Claims as at December 31, 1990 have been audited by *Treuarbeit AG Wirtschaftsprüfungsgesellschaft Steuerberatungsgesellschaft* of Frankfurt am Main and *Wollert-Elmendorff Deutsche Industrie-Treuhand GmbH Wirtschaftsprüfungsgesellschaft* of Düsseldorf, whom the Central Bank Council appointed to be auditors in accordance with section 26 of the Deutsche Bundesbank Act.

In their certificates of audit the auditors confirmed without any qualifications that the annual accounts for 1990 and the bookkeeping comply with German law and present an accurate picture of the Bank's assets and liabilities, financial position and profit or loss, and that the Fund for the Purchase of Equalisation Claims has been properly administered.

The Central Bank Council approved the annual accounts for 1990 on April 18, 1991 and accepted the Directorate's proposal in respect of the profit distribution. At the same time it approved the Report on the Fund for the Purchase of Equalisation Claims as at December 31, 1990.

The following changes took place at the Bank between April 2, 1990 and April 1, 1991, i.e. since the publication of the Report for the Year 1989:

#### Deceased

on February 20, 1991

Ottomar Werthmöller

Member of the Directorate of the Deutsche Bundesbank;

#### Retired

as at the close of June 30, 1990

Helmut Holzmaier

Member of the Managing Board of the Land Central Bank in Baden-Württemberg

as at the close of July 31, 1990

Hans Wertz

President of the Land Central Bank of North Rhine-Westphalia

as at the close of September 30, 1990

Prof. Dr. Claus Köhler

Member of the Directorate of the Deutsche Bundesbank

as at the close of January 31, 1991

Rudolf Ströhlein

Vice-President of the Land Central Bank in Bayaria

as at the close of February 28, 1991

Dr. Walter Gulden

Member of the Managing Board of the Land Central Bank in Bavaria

as at the close of March 31, 1991

Roman Flesch

Vice-President of the Land Central Bank in Lower Saxony;

Reappointed

with effect from June 1, 1990

Dr. Wilhelm Nölling

President of the Land Central Bank of the Free and Hanseatic City of Hamburg:

**Appointed** 

with effect from July 1, 1990

Dr. Günter Schmid

to be Member of the Managing Board of the Land Central Bank in Baden-Württemberg

with effect from August 1, 1990

Prof. Dr. Reimut Jochimsen

to be President of the Land Central Bank in North Rhine-Westphalia

with effect from October 2, 1990

Prof. Dr. Otmar Issing

to be Member of the Directorate of the Deutsche Bundesbank

with effect from February 1, 1991

Dr. Erich Fein

to be Vice-President of the Land Central Bank in Bavaria

with effect from March 1, 1991

Günter Bäumer

to be Member of the Managing Board of the Land Central Bank in Bavaria

with effect from April 1, 1991

Horst Langefeld

to be Vice-President of the Land Central Bank in Lower Saxony.

The Central Bank Council, acting also on behalf of the Directorate and the Managing Boards of the Land Central Banks, expresses its thanks to the entire staff of the Deutsche Bundesbank — civil servants, other salaried employees and wage earners alike — for their loyal and understanding efforts during 1990. The Central Bank Council likewise wishes to record its appreciation of the continued excellent collaboration with the staff representative bodies.

Frankfurt am Main, April 1991

Karl Otto Pöhl
President of the Deutsche Bundesbank

# Appendix to Part B

# 154 Assets

Asse	PIS			
			DM	31. 12. 89 DM million
1 G	iold		13,687,518,821.70	13,687.5
M	eserve position in the International Ionetary Fund and special drawing rights			
2	.1 Drawing rights within the reserve tranche	4,564,997,752.96		( 5,165.9)
2	.2 Loans under special borrowing	, , ,		,
2	arrangements .3 Special drawing rights	2,808,199,852.71		( 3,062.8)
_	.o opeoidranaming righte	2,000,100,002	7,373,197,605.67	8,228.7
	laims on the European Monetary			
	cooperation Fund in connection with the			
	uropean Monetary System .1 ECU balances 29,370,265,068.65			
	less			
	Difference between the ECU value and the book value of the gold and dollar reserves con-			
	tributed to the EMCF 10,925,044,836.97			
		18,445,220,231.68		( 17,302.9)
3	.2 Other claims		40 445 000 004 00	( -)
1 B	alances with foreign banks		18,445,220,231.68	17,302.9
	nd money market investments abroad		64,486,080,863.03	58,283.1
	oreign notes and coins		30,948,177.43	25.0
	xternal loans and other external assets  1 Loans in connection with EC medium-			
U	term balance of payments assistance	_		( -)
6	.2 Other loans to foreign monetary			1
6	authorities .3 Loans to the World Bank	2,423,463,000.00		( 2,431.8)
Ū			2,423,463,000.00	2,431.8
	ending to domestic banks			
7	.1 Securities bought in open market transactions under repurchase agreements	117,434,810,000.00		(108,828.4)
	.2 Domestic bills of exchange	54,116,335,302.76		( 34,102.4)
7	.3 Foreign bills of exchange .4 Lombard Ioans	30,792,604,901.66 6,179,882,100.00		( 27,206.9) ( 5,187.2)
,	.4 Lonibard loans	0,173,002,100.00	208,523,632,304.42	175,324.9
8 C	Cash advances			,
	.1 Federal Government	_		( -)
8	.2 Equalisation of Burdens Fund and ERP Special Fund	_		( -)
8	.3 Länder Governments	741,963,990.00		<u>(</u> 1,053.1)
			741,963,990.00	1,053.1
	qualisation claims on the Federal Sovernment and non-interest-bearing			
	ebt certificate in respect of Berlin		8,683,585,988.93	8,683.6
	ending to the Federal Railways and			
	ederal Post Office 0.1 Cash advances	<u></u>		( -)
	0.2 Treasury bills and			,
	Treasury discount paper		_	( -)
11 S	Securities		4,251,826,374.65	4,262.2
12 0	German coins		1,118,667,342.02	803,2
	Balances on postal giro accounts		106,024,899.78	189,6
	and and buildings furniture and equipment		2,851,075,535.67 239,130,667.84	2,812.7 218.4
	tems in course of settlement		13,275,085,978.90	12,346.1
17 C	Other assets		3,266,477,200.02	2,875.6
18 F	Prepayments		44,648,967.10	42.3
	_		349,548,547,948.84	308,570.7

### 156 Expenditure

				1989
			DM	DM million
1	Staff costs			/ 750.4)
	1.1 Wages and salaries	831,777,838.47		( 756.1)
	1.2 Social security contributions and spending			
	on retirement pensions and maintenance payments	285,740,922.95		( 309.9)
	payments	200): 10,022.02	1,117,518,761.42	1,066.0
0	Other energting expenditure		558,663,294.19	230.9
2	Other operating expenditure		194,279,747.60	109.7
3	Banknote printing		104,270,747.00	100.7
4	Depreciation 4.1 of land and buildings	191,995,023.83		( 144.7)
	4.2 of furniture and equipment	. • . , • • • • • • • • • • • • • • • •		,
	and other assets	135,555,951.33		( 126.8)
			327,550,975.16	271.5
5	Write-downs of monetary reserves and other			
	foreign currency positions		5,258,527,556.35	2,517.3
6	Other expenditure		200,781,053.58	208.9
7	Profit for the year (= unappropriated profit)		9,113,026,373.08	10,324.6
_	- <del></del>		16,770,347,761.38	14,728.9
Re	eceipts			
				1989
			DM	DM million
1	Interest		16,630,193,202.64	14,627.2
2	Fees		21,520,695.68	21.1

Frankfurt am Main, February 13, 1991

3 Other receipts

# Deutsche Bundesbank The Directorate

Pöhl Prof. Dr. Schlesinger Gaddum Prof. Dr. Issing Dr. Storch Dr. Tietmeyer

According to the audit which we have carried out in line with our mandate, the bookkeeping and the annual accounts comply with German law. The annual accounts conform to the principles of orderly bookkeeping and present a picture of the Bank's assets, liabilities, financial position and profit or loss which is consistent with the actual state of affairs.

Frankfurt am Main, March 19, 1991

Treuarbeit Aktiengesellschaft Wirtschaftsprüfungsgesellschaft Steuerberatungsgesellschaft Wollert-Elmendorff
Deutsche Industrie-Treuhand GmbH
Wirtschaftsprüfungsgesellschaft

118,633,863.06

16,770,347,761.38

Prof. Dr. h.c. Forster Certified Auditor Kern Certified Auditor Thoennes
Certified Auditor

Brückner Certified Auditor

80.6

14,728.9

Appendix to the Report of the Deutsche Bundesbank for the Year 1990 (cont'd)

