Deutsche Bundesbank
Annual Report 1998

We mourn the death in 1998

of the following members of our staff:

Johann Gebauer	21. 1. 1998
Bernd-Michael Hechler	29. 1. 1998
Dieter Mager	12. 3. 1998
Paula Eberwein	21. 3. 1998
Edda Gohmert	26. 3. 1998
Erika Klees	23. 4. 1998
Wilhelm Noll	23. 4. 1998
Klaus Richter	19. 5. 1998
Manfred Wrensch	26. 5. 1998
Dr. Friedel Wolak	27. 5. 1998
Karl-Heinz Voß	30. 5. 1998
Gerald Jarosch	2. 6. 1998
Helmut Misera	10. 6. 1998
Annemarie Baur	16. 6. 1998
Hermann Betzel	18. 6. 1998
Herbert Rass	2. 7. 1998
Hartmut Pieringer	5. 7. 1998
Ursula Hauf	8. 7. 1998
Franz Oberle	20. 7. 1998
Hilde Fusch	4. 8. 1998
Manfred Werdelmann	10. 8. 1998
Sabine Kluth	1. 9. 1998
Stephanie Hack	4. 10. 1998
Anneliese Greve	5. 10. 1998
Kurt Kanler	2. 11. 1998
Ingrid Högberg	30. 11. 1998
Elisabeth Kimmich	3. 12. 1998
Horst Langhammer	30. 12. 1998

We also keep in remembrance the retired staff members of the Bank and the former Deutsche Reichsbank who died in 1998.

We will honour their memory.

DEUTSCHE BUNDESBANK

Members of the Central Bank Council of the Deutsche Bundesbank

on April 1, 1999

Prof. Dr Dr h. c. mult. Hans Tietmeyer
Chairman of the Central Bank Council

Dr Jürgen Stark
Deputy Chairman
of the Central Bank Council

Dieter Haferkamp

Wendelin Hartmann

Prof. Dr Dr h. c. Reimut Jochimsen

Hans-Jürgen Koebnick

Prof. Dr Hans-Jürgen Krupp

Klaus-Dieter Kühbacher

Edgar Meister

Dr Guntram Palm

Prof. Dr Hermann Remsperger

Helmut Schieber

Peter M. Schmidhuber

Ernst Welteke

Dr Franz-Christoph Zeitler

Members of the Directorate of the Deutsche Bundesbank

from May 2, 1998
to April 1, 1999

Prof. Dr Dr h. c. mult. Hans Tietmeyer
President
of the Deutsche Bundesbank

Johann Wilhelm Gaddum
Vice-President
of the Deutsche Bundesbank
(until June 30, 1998)

Dr Jürgen Stark
Vice-President
of the Deutsche Bundesbank
(from September 1, 1998)

Dieter Haferkamp

Wendelin Hartmann

Prof. Dr Dr h. c. Otmar Issing
(until May 31, 1998)

Edgar Meister

Prof. Dr Hermann Remsperger
(from September 1, 1998)

Helmut Schieber

Peter M. Schmidhuber

Members of the Executive Boards of the Land Central Banks

from May 2, 1998
to April 1, 1999

Baden-Württemberg

Dr Guntram Palm
President

Dr Günter Schmid
Vice-President

Wilhelm Ergenzinger

Free State of Bavaria

Dr Franz-Christoph Zeitler
President

Dr Erich Fein
Vice-President

Günter Bäumer

Berlin and Brandenburg

Klaus-Dieter Kühbacher
President

Ulrich Preuß
Vice-President

Free Hanseatic City of Bremen, Lower Saxony and Saxony-Anhalt

Prof. Dr Dr h. c. Helmut Hesse
President (until December 31, 1998)
N. N.

Horst Langefeld
Vice-President

Prof. Dr Erich Stoffers

Free and Hanseatic City of Hamburg, Mecklenburg-Western Pomerania and Schleswig-Holstein

Prof. Dr Hans-Jürgen Krupp
President

Hans-Jürgen Siegmund
Vice-President

Hans-Georg Herrmann

Hesse

Ernst Welteke
President

Dr Hans Georg Fabritius
Vice-President

Hans Daubenthaler

North Rhine-Westphalia

Prof. Dr Dr h. c. Reimut Jochimsen
President

Jürgen von der Ahe
Vice-President

Kurt Riesbeck

Rhineland-Palatinate and Saarland

Hans-Jürgen Koebnik
President

Bolko Leopold
Vice-President

Free States of Saxony and Thuringia

Prof. Dr Olaf Sievert
President (until December 31, 1998)
N. N.

Dr Christian Milow
Vice-President

Deutsche Bundesbank
Wilhelm-Epstein-Strasse 14
60431 Frankfurt am Main

P. O. B. 10 06 02
60006 Frankfurt am Main
Federal Republic of Germany

Telephone (0 69) 95 66 - 1
or (0 69) 95 66 . . . plus extension
number

ISSN 0418 - 9292
The German original of this Report
went to press on April 15, 1999

Telex 41 227 within Germany
4 14 431 from abroad

Fax (0 69) 5 60 10 71

Internet http://www.bundesbank.de

The Annual Report is published autonomously by the Deutsche Bundesbank, Frankfurt am Main, by virtue of section 18 of the Bundesbank Act of July 26, 1957. It is available to interested parties free of charge.

Contents

Annual accounts for 1998 and opening balance sheet as at January 1, 1999 of the Deutsche Bundesbank (cont'd)

Records of policy measures

Tables

Tables (cont'd)

Charts

Abbreviations and symbols

p	Provisional
r	Revised
e	Estimated
pe	Partly estimated
...	Figure available at a later date
.	Figure unknown, not to be published or not meaningful
0	Less than 0.5 but more than nil
–	Nil

Discrepancies in the totals are due to rounding.

Foreword
by the President
of the Deutsche Bundesbank

Foreword

On January 1, 1999, Stage Three of European economic and monetary union was launched. That meant that eleven countries merged their monetary policies – on the basis of the Treaty of Maastricht signed in 1992 – and introduced a common currency, the euro. That momentous event, the full economic and political implications of which are still hardly foreseeable today, determined the public debate and much of the planning in the private and public sectors alike over many months of last year. With the selection of the participating countries in May and the subsequent setting-up of the European Central Bank and European System of Central Banks, the pace of the preparatory work quickened further. In this way, the ground was prepared in political, organisational and technical terms for the smooth launch of monetary union.

For German monetary policy makers, the approach of monetary union entailed an additional broadening of perspective last year. Besides the preservation of price stability in Germany, for which they remained primarily responsible, they had to take more account of the European setting in all their thinking and decisions, so as to facilitate the inauguration of the European Central Bank. Given the high level of price stability achieved in virtually all participating countries, that did not impair the attainment of the Bundesbank's stability mandate. In 1998 the average rise in consumer prices in Germany did not exceed 1%. Despite some disparate economic starting points, it thus proved possible to launch monetary union at a uniform and low level of interest rates. The foreign exchange markets, too, duly acknowledged the progress made towards economic convergence and thereby fostered the smooth transition to monetary union. Even before their irreversible fixing at the end of the year, the exchange rates of the participating currencies had steadily drawn closer to their bilateral central rates in the exchange rate mechanism of the European Monetary System, which rates had previously been announced as constituting the conversion rates.

With the launch of monetary union, the Bundesbank's role changed significantly. Primary responsibility for monetary policy in the common monetary area was assigned to the European System of Central Banks, of which the Bundesbank is now an integral part. The Bundesbank discharges its functions in the implementation of the single monetary policy within that institutional framework. In addition, under the amended Bundesbank Act, it continues to have important tasks to perform in the fields of payments, external economic relations, banking supervision and as the "state's bank", particularly on behalf of the Federal Government. Thus, even without monetary policy responsibilities of its own, the Bundesbank has retained a number of major central banking functions.

The smooth overall transition to monetary union contrasts with the upheavals that kept participants in the global financial markets busy again last year. The trouble spots ranged from Asia via Russia to South America. The monetary and financial crises of the past few years have raised questions as to the financial markets' capacity to function. However, the frequency of such crises should not over-hastily be put down to "market failure", and associated with calls for corrective public sector intervention. After all, it has often been precisely decisions by a country's monetary authorities (such as overly rigid exchange-rate pegs) that have eventually turned out to be a trap. At times of changing fundamentals, tensions have not infrequently arisen which have ultimately vented themselves in abrupt exchange-rate adjustments. That the markets have sometimes gone too far in that connection can hardly be disputed. As a rule, however, the "speculative attacks" have not been completely unfounded; in almost every case, weak spots that have made economies vulnerable have built up over time, and have finally given the markets cause to doubt the sustainability of an exchange-rate peg.

What is needed is therefore, as a rule, not additional bureaucratic regulation, even if an improvement in the supervisory systems for financial institutions is required in some countries. But it does make macro-economic sense, in particular, to leave exchange rates their function of being offsetting mechanisms, thus enabling exchange rates to "breathe", in line with the fundamentals. However, flexible exchange rates and liberalised capital movements presuppose appropriate underlying conditions and a sufficiently stable financial system – both nationally and internationally.

Much has been done of late to strengthen the international financial system: supervisory "codes of best practice" have been elaborated, market transparency has been enhanced and the financial resources of the IMF to counter crises have been substantially enlarged. Moreover, it is planned further to improve communication between the various national and multilateral bodies involved in overseeing the financial system, particularly by setting up a "Financial Stability Forum", and to exploit the available information more generally. By identifying problem areas at as early a stage as possible and elaborating minimum standards, the resilience of the financial system is to be reinforced and the functioning of the markets improved. The objective is to minimise the risks posed to the stability of the entire financial system.

A stable financial environment constitutes a major precondition for sustained growth and a higher level of employment. Conversely, uncertainty and a wait-and-see attitude on the part of market players slow down the pace of economic activity. In 1998 the crises besetting the international financial markets exerted dampening effects on the world economy and world trade – effects that ultimately encompassed the German economy as well. In particular, demand for German exports slackened appreciably in the course of last year. In that changed setting, the domestic expansionary forces have so far not proved robust enough to provide an appropriate counterweight. Certainly, that has not been due to overly restrictive monetary conditions. Instead, in the context of its monetary target, the Bundesbank has supplied enough liquidity to permit sustained economic growth without any inflationary tensions. Jointly with other European central banks, in December it lowered its refinancing rate for credit institutions to 3 %. The level of financing costs, especially long-term ones, presented no obstacle to a further upswing in the German economy in 1998. In April the European Central Bank lowered that rate again by one-half percentage point, to 2.5 %. Expecting monetary policy to accomplish any more than that suggests that its functions and possibilities are being misjudged.

The present Annual Report analyses the monetary policy pursued by the Bundesbank last year. It also addresses economic developments in Germany and the changes in the global monetary setting. At the same time, the Bundesbank presents its annual accounts for 1998, which have been audited (and certified) by two firms of auditors, and which were approved by the Central Bank Council on April 15, 1999.

Acting on behalf of the Central Bank Council, as well as speaking for myself, I should like to take this opportunity of expressing my gratitude to all the members of the Bank's staff for the great commitment with which they carried out their work in 1998; but for those efforts, the preparations for monetary union could never have been completed as envisaged. I also wish to thank the staff representative bodies for their co-operation, invariably in a spirit of mutual trust.

Frankfurt am Main, April 1999

Prof. Dr Dr h.c. mult. Hans Tietmeyer
President, Deutsche Bundesbank

The currency
and the economy

I. International economic fundamentals

Marked fall in economic growth ...

Last year the world economy was increasingly influenced by the impact of the currency and financial crises in the formerly buoyant East Asian emerging economies, the serious turmoil in Russia and the contagion effects from Latin America. In addition, the Japanese economy had still not overcome the crisis that had been building up there over a lengthy period of time. As a result of the accumulation of problems, the world economy, which had been growing rapidly for more than four years, came to a halt in the course of the year, with the result that global output in 1998 was only 2½% higher than in the previous year. In 1997 the rate of increase in real world output was more than 4%. World trade expanded at an even slower pace and declined from 10% in 1997 to 3½% in 1998.

... particularly in the crisis regions

The slumps in economic growth were especially marked in the aforementioned crisis regions themselves. For the first time in more than 20 years, economic performance in the East Asian emerging markets, where output had grown by nearly 7% in 1996 and by just over 5% in the crisis year of 1997 itself, fell short of the previous year's level (– 5%) in 1998. Moreover, particularly large falls in output were recorded in Russia and – partly as a consequence of this – in Ukraine. Other countries in central and eastern Europe were likewise affected or had to face undesirable trends in their countries. However, some of these countries in transition were able to avoid a severe deterioration in their financial markets and in the overall economic situation as a result of the generally more favourable macroeconomic fundamentals and a more determined reform policy. In some countries, for instance Poland and Hungary, the early flexibilisation of the exchange rate system had probably helped, too. Those Latin American countries which were being confronted with lower receipts from exports owing to the slump in prices of energy and commodities also recorded a marked weakening in economic growth, namely from 5% to about 2½%. Brazil, the largest economy in Latin America, had to deal with a severe crisis of confidence, which was triggered mainly by protracted problems in public finance. In spite of the adjustment measures adopted in December, the crisis culminated at the beginning of 1999 in a dramatic depreciation of the Brazilian currency. About one-fifth of the world economy had slipped into a recessionary phase by the end of the year.

Macroeconomic benchmark figures of selected industrial countries *

Table 1

Countries	Real GDP		Consumer prices 1		Public sector fiscal balance 2		Unemployment rate 3	
	1997	1998 p	1997	1998 p	1997	1998 p	1997	1998 p
	Change from previous year in %				as % of GDP		in %	
Industrial countries	2.7	2.2	2.1	1.4	– 1.1	– 0.8	7.3	6.9
of which								
European Union	2.7	2.9	1.9	1.7	– 2.3	– 1.5	10.6	10.0
of which								
France	2.3	3.2	1.1	0.7	– 3.0	– 2.9	12.3	11.7
Germany	2.2	2.8	1.8	0.9	– 2.7	– 2.0	9.9	9.4
Italy	1.5	1.4	2.0	2.0	– 2.7	– 2.7	12.1	12.2
United Kingdom	3.5	2.3	3.1	3.4	– 1.9	– 0.6	7.0	6.3
United States	3.9	3.9	2.3	1.6	0.5	1.3	4.9	4.5
Japan	1.4	– 2.8	1.8	0.6	– 3.3	– 5.4	3.4	4.1
Canada	3.8	3.0	1.6	0.9	0.9	1.5	9.2	8.4

Sources: IMF, OECD, EU Commission and national statistics. — * EU countries plus the United States, Japan, Canada, Switzerland, Norway, Iceland, Australia and New Zealand. — **1** Consumer price index. — **2** As defined in the national accounts (EU countries in accordance with the Maastricht Treaty). — **3** Standardised unemployment rate based on OECD and Eurostat calculations excluding Iceland.

Deutsche Bundesbank

Implications for industrial countries

The industrial countries could not fully avoid the crippling effects emanating from the crisis regions either. This applied in particular to their export business which slowed down at a faster or slower pace, depending on their level of integration with the most important crisis regions. In 1998 as a whole, however, economic activity in the United States remained robust owing to the relatively dynamic domestic demand. Domestic demand in continental Europe, too, more than offset the downturn in exporting momentum at first; in the second half of the year, however, the retarding influences were felt more and more strongly. The "home-made" problems confronting the Japanese economy were an additional factor that made stabilisation in other countries in East Asia more difficult.

Structural crisis in Japan

Despite the expansionary monetary policy pursued for some time and further government programmes to boost the economy, real economic output in Japan decreased by approximately 3 % in 1998. This again showed the ineffectiveness of wrongly applied demand management if structural problems are at the heart of the economic weakness. Moreover, many of the distortions in the balance sheets of banks and enterprises, which are reflected *inter alia* in a large number of bad loans, are the result of the former excessively expansionary policy stance.

With a budget deficit totalling 5½% of GDP, financial policy makers in Japan have little room for manœuvre. They will probably have no choice but to give priority to rehabilitating the unsound balance sheet structures of major banks and financial institutions, to deal systematically with the real economic structural problems and thereby to re-establish a solid basis for the return to a sustainable growth path.

Vigorous growth in the United States

Given the serious deterioration in the international environment, the US economy proved to be fairly vigorous. It is true that in the spring US exports to the Asian crisis regions decreased and that this had an increasingly adverse effect on industrial production. However, suppliers of higher-quality industrial products and the expanding services sector benefited, in particular, from the buoyant domestic demand, which accounts for nine-tenths of the United States' GDP. This situation was due not only to private consumption, which grew strongly in 1998 as a result of the improved employment situation, but also to the rising demand in the construction sector and for industrial investment. As in the previous year, GDP in the United States grew at a rate of 3.9% in 1998. The United States was therefore the "engine of growth" among the major industrial countries. This is all the more remarkable as it would have been understandable – judging by previous experience with the economic cycle – if economic activity in the United States, which has been flourishing for seven years now, had shown certain "signs of flagging".

Western Europe

By contrast, the recovery process in western Europe, which depends more strongly on exports, was more vulnerable to setbacks in the export markets in the crisis regions, especially as a number of structural weaknesses diminished the adjustment potential of the major European economies, in particular. The transition from depending on external expansionary forces to internal ones led to considerable progress at first, with the result that the detrimental effects of events in the crisis regions, which appreciably checked the growth in exports in all European countries in the course of the year, were more than offset by greater domestic demand in western Europe. Late in the year, however, this trend tailed off. Instead, the economic climate in western Europe became noticeably more clouded in the second half of 1998. During 1998 as a whole, however, economic growth, at 2.9%, was more or less as high as a year earlier.

First adjustment successes in East Asian crisis countries ...

The shifts in international trade flows following the economic slump in Asia and the dramatic depreciation of the currencies of the crisis countries brought about noticeable changes in the global current account pattern. Whereas the external position of the East Asian crisis countries improved mainly as a result of a drastic fall in imports, the associated burdens were reflected in a corresponding deterioration in their trading partners' trade balances and current accounts. Thus the aggregated surplus on current account of the East Asian emerging economies[1] went up by about US$ 80 billion to about US$ 100 billion last year, and the Japanese surplus expanded by about US$ 25 billion to US$ 120 billion owing to the weakness in economic activity in Japan. The current accounts of some Latin American countries and of Russia likewise improved, a development which prevented a further erosion of the financial position in the countries concerned.

... and their implications for the US current account ...

These trends were reflected in the trade balances and current accounts of the global growth centres in Europe and North America. The current account deficit of the United States alone went up by about US$ 70 billion last year to an all-time high of US$ 230 billion. Relative to GDP, however, this deficit, at 2.7 %, was still below the level reached at the end of the eighties. This development, incidentally, is attributable not just to the effects of the financial crises in Asia, Latin America and eastern Europe. To a large extent it also reflects the gap between the growth rates of the US economy and those of the other industrial countries, particularly of Japan and the countries in Europe. On the other hand, the foreign balance of the United States has been adversely affected in recent times by the increase in investment income payments, as external debt has been rising continuously in the past two decades.

... and the EU current account

At first glance, the impact of the Asian crises on the European Union's current account, which recorded a slightly declining surplus of just over 1 % of GDP in 1998, was less significant. However, this is the result of the contrasting trends in trade with the crisis regions, which was marked by the decline in exports to South-East Asia and Russia, and of the more buoyant demand for exports from the other industrial countries, notably the United States, which prevailed right into the summer. In that light, the usual cyclical fluctuations of the current account balances accentuated the direct external burdens the crises regions were imposing on the US economy; by contrast, they disguised most of the detrimental effects which the problems of the crisis countries were having on the European economy. There is no reason to call for protectionist measures to ensure a supposedly more balanced sharing of the burdens among the industrial countries. The associated disruptions in the international division of labour would be detrimental to all countries concerned.

1 China, Hong Kong, Indonesia, Korea (Rep.), Malaysia, the Philippines, Taiwan, Thailand and Singapore.

Exchange rate movements as a safety valve

Exchange rate movements provide an important transmission channel for external adjustments and related shifts in the structure of global economic growth. By pegging their currencies to the US dollar, many of the East Asian crisis countries had deliberately dispensed with this compensatory mechanism – even though they had not established the necessary domestic preconditions for stable exchange rates in the form of an adequate structural setting and an appropriate economic policy. This had evidently led to the build-up of potential tension in that area, which erupted dramatically in the currency crises in the autumn of 1997. These crises brought about exchange rate corrections of 50 % and more and forced the countries concerned to undertake radical adjustment measures. Even so, the East Asian currencies did not firm again until last summer when marked progress towards regaining stability began to emerge.

The role of economic fundamentals

Administrative exchange rate pegs alone cannot guarantee stable exchange rate parities over the long term unless the necessary economic fundamentals have also been achieved. This also became evident in the Russian financial crisis in the late summer of last year, in the course of which the rouble lost more than 60 % of its value. However, the reasons for this were completely different from those in the case of East Asia. A lack of progress in implementing reforms and acute payment difficulties played a decisive role in the crisis in Russia. Far-reaching exchange rate pegging and a rise in the budget deficit led to financial and currency crises in Brazil as well. These reached dangerous proportions at the end of 1998 and peaked for a time at the beginning of 1999 with dramatic exchange rate losses.

Yen subject to various influences

Moreover, judging by events during the past two years, the need for adequate exchange rate flexibility is not restricted to the emerging economies and the countries in transition. Of the major world currencies, the Japanese yen, in particular, fluctuated time and again between a marked tendency to weaken and renewed strength as it was subjected alternately to the persistent structural weaknesses of the Japanese financial system and confidence-building reform measures designed to overcome the deep-seated problems while being underpinned at times by selective yen/US dollar arbitrage deals ("yen carry trades"). Exchange rate movements fulfilled an important safety-valve function, which could probably have been replaced by administrative measures only at the expense of greater friction.

By contrast, the movements of the US dollar and the pound sterling, on the one hand, and of the Deutsche Mark and the other EMU member currencies, on the

Digression: The emergence of foreign exchange market turbulence

Given the far-reaching currency crises in some emerging markets and the associated burden for the world economy, the question of why such turbulence arises is a subject of – sometimes heated – debate. While speculative movements unrelated to macroeconomic fundamentals are sometimes criticised for being the real force behind such attacks, there are other important indications that in most cases foreign exchange market turmoil is also due to fundamental imbalances.

It is true that each currency crisis has its own causes and special features and that only limited comparisons can be made of turbulences arising in different countries and at different times. However, empirical studies have suggested that certain undesirable trends in the economic fundamentals can often be identified prior to the emergence of such crises.[1] Specifically, there are indications that imminent turbulence in foreign exchange markets is systematically preceded by an overvaluation of the currencies concerned, rather sluggish exports, comparatively low foreign exchange reserves and large current account deficits. Empirical analyses also indicate that a strong expansion of domestic credit, a significant inflation differential between the countries concerned and the industrial countries as well as high money market rates in the international financial markets increase such countries' vulnerability to speculative attacks. Although this does not mean that all of these factors can be found simultaneously prior to every currency crisis, differing combinations of them have very often indicated the possible emergence of such turbulence.

Events during the past few years have shown that the situation is also influenced by other factors which one has so far been unable to capture in empirical detail and which have therefore largely escaped consistent empirical examination. These factors include the institutional framework for supervising financial market players, the stability of the financial system and contagion effects, where turmoil in a given foreign exchange market may spread to those of other countries if the markets consider the risk profile of these countries is just as bad or even worse. Most currency crises in the nineties were probably influenced by the structure, maturity and denomination of external debts, in particular. A sufficiently consistent and up-to-date database for pursuing empirical analyses is still lacking in this area, too. Generally speaking, however, it would be desirable if the efforts already made to supply basic economic data on time were increased in order to enhance market transparency, thereby providing market players with a more reliable basis for decision-making (see also page 110).

Even so, a fundamental conclusion can be drawn by simply focusing on a few macroeconomic factors. In the past, currency crises were not the pure random product of fickle speculators. Instead, most crises became apparent systematically and far in advance. They did so in the form of a trend in the macroeconomic environment which differed substantially from that in tranquil times. However, it would be too much to expect that this evidence could be used as a basis for developing an early warning system to identify imminent crises and avoid them by taking appropriate measures. Even if data were provided early enough, which, judging by experience, is hardly likely in times of tension, market players – aware of an instrument to forecast turmoil in the foreign exchange markets – would alter their behaviour and launch an earlier attack on the currencies concerned. In other words, the structural relationships of the past cannot be projected into the future in the same way and used for forecasts. At any rate, there are important indications that today market players are reacting more sensitively to macroeconomic imbalances than they did 20 years ago.

1 For details see Deutsche Bundesbank, The role of economic fundamentals in the emergence of currency crises in emerging markets, Monthly Report, April 1999.

Deutsche Bundesbank

Change in growth patterns determines dollar exchange rate trend

other, were determined primarily by growth and interest-rate-cyclical factors. Following the period of strength of the dollar and the pound sterling, which had lasted for more than two years and which has been associated with the substantially greater rates of growth in the two economies, the situation seemed to change in favour of the future EMU currencies last summer under the influence of the self-perpetuating recovery process in continental Europe. But when the US economy proved to be surprisingly robust around the turn of the year, whereas the outlook for the euro area became increasingly gloomy, the trend in the foreign exchange markets was reversed in favour of the US currency and against the euro. Thus the exchange rate movements almost reinforce automatically the stabilising effects of other macroeconomic variables such as labour costs, capital market rates and fiscal-policy stabilisers. Fixing exchange rate target zones would be counterproductive not only for that reason but also because of the major industrial countries' need of flexibility. The compensatory function of exchange rates would then have to be performed to a greater degree by wage and fiscal policies, as the extent to which interest rates could move would be limited by fixed exchange rates (see section III.3.).

Low capital market rates ...

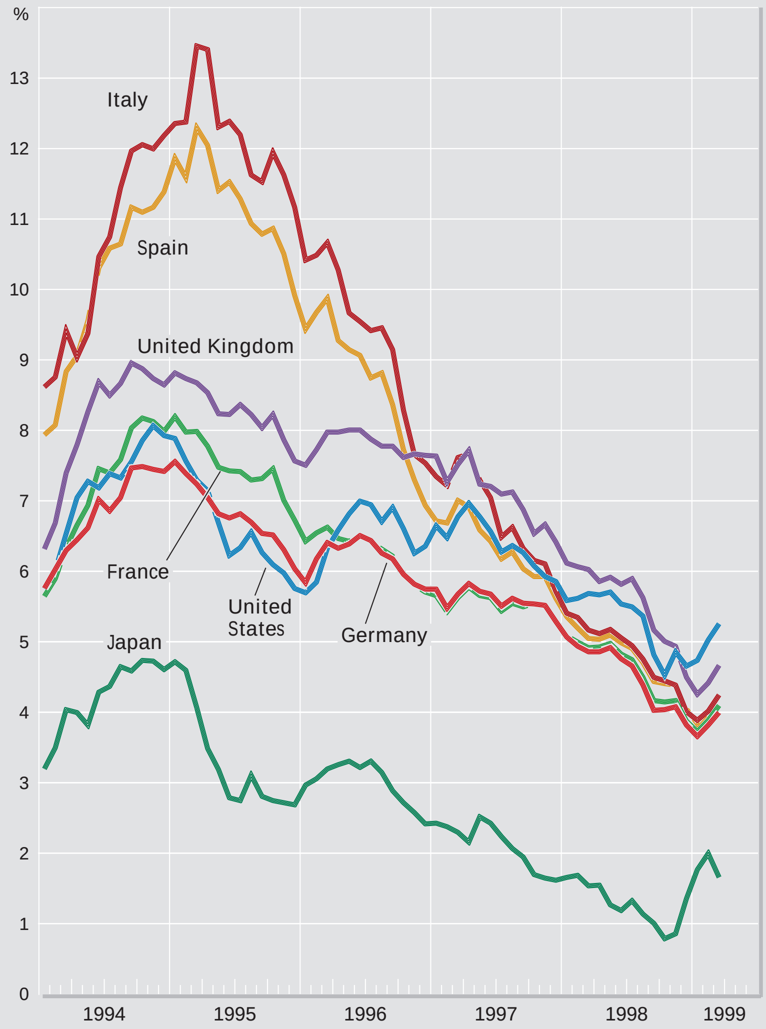
The trend in interest rates, which reached all-time lows last year, provided a certain counterbalance to the direct detrimental effects on the industrial countries of the financial crises during the past two years. First-class US and European government paper benefited most from investors' greater aversion to risk following their experience of the Asian crisis. For example, yields on ten-year US government bonds fell to 4 ¼ % at times in spite of the relatively buoyant economic growth in the United States; this is about 2 ¾ percentage points below the level before the outbreak of the Asian crisis in the summer of 1997. In the European monetary union (EMU), bond yields had fallen to 3 ¾ % by the beginning of 1999; this means that they were just under 2 ½ percentage points below their level in the early summer of 1997. This trend was due not least to the fact that lower inflation rates were expected in the former high-interest-rate countries in the run-up to monetary union.

... after monetary policy's success in fighting inflation

Investors' confidence, which is reflected in the interest rate convergence in the capital markets of EMU member countries as well as in the decline in US bond yields, is based on the forward-looking anti-inflationary monetary policy stance which has been pursued by Europe and the United States in the past few years. Consumer prices in the industrial countries rose by only 1.4 % on average in 1998. This is a major contribution towards achieving sound growth rates and an improvement in employment. This is quite obvious in the United States, where

Capital market rates of selected industrial countries*

Chart 1



* Government bonds with a residual maturity of approximately ten years.

Deutsche Bundesbank

the unemployment rate, at 4½% in 1998, fell to its lowest level for 20 years, but as far as the European Union (EU) is concerned, one might at first be tempted to doubt this statement. It is true that unemployment rates likewise declined last year, but, at 10%, they are still much too high. Lack of flexibility in the labour markets and other structural handicaps are still inhibiting a lasting improvement in employment in Europe. Under these circumstances, monetary policy would be overtaxed if it were primarily responsible for fighting unemployment. Monetary policy can make a valuable contribution to fostering both growth and employment by maintaining the high degree of price stability already achieved.

Consolidation in line with targets set by the Stability and Growth Pact unsatisfactory

The successful start of European monetary union on January 1, 1999 must not divert our attention from looking at the still unresolved structural problems in its member countries. In addition to the elimination of rigidities in the goods and labour markets, the consolidation of government budgets remains a particularly urgent task if growth and employment prospects are to be improved over the long term. In spite of interest savings and a cyclically-induced increase in receipts, the public deficits of EMU countries, which curb private-sector investment in many ways, hardly declined last year (see also section III.1.a). Most countries have not yet met the targets set in the Stability and Growth Pact, which requires the budgets of the EMU countries to be close to balance in the medium term or even in surplus. Further progress is urgently needed in this regard if the credibility of a main pillar of monetary union is not to be jeopardised. At all events, the increasing tendency of some European countries to boost domestic demand by means of financial policy measures is leading in the wrong direction. The greater tax burden inevitably associated with such steps could tend to weaken the rally in investment, which had only just been achieved with some difficulty, as well as consumers' confidence.

II. Economic trends in Germany and central bank policy

1. Increased growth accompanied by price stability

Strong growth for the year as a whole ...

Despite considerable turmoil in the international financial markets and crises in a number of countries affecting the entire world economy, the German economy managed in the last year to sustain growth and to keep pace again with its European partners. With an annual average rate of increase in gross domestic product of 2¾%, it exceeded last year's rate of growth by half a percentage point; at the same time increased production led over a longer period to a marked increase in the degree of overall capacity utilisation. This fulfilled an important condition for a certain easing of tensions in the labour market. For the first time since German reunification the employment figures rose slightly, and the average annual unemployment rate dropped by around 0.3 percentage point to 11.1 %. This, in turn, had a positive effect on business activity.

If growth in 1997 was primarily driven by an increase in exports, then the economic motor in the last year shifted to domestic demand components. In particular, the greatly increased investment in machinery and equipment on an annual average suggests a more favourable investment climate that has benefited from improved capacity utilisation, relaxed cost conditions, and continued higher returns. This was to no small extent a result of wage policy, which – as in previous years – followed a moderate course. Moreover, the underlying financial conditions were decidedly positive; the high degree of price stability attained not only served to stabilise long-term expectations but also – not least due to the considerable effects of "importing stability" – provided new stimulation for the economy over the short term as well, especially affecting consumption.

... but uneven development within the year

This positive overall view of the economy disguises the fact, however, that this year-long trend was in no way continuous. In the second half of the year the underlying economic momentum clearly slowed down. As a result of a general clouding of the world economic climate, exports were no longer able to give the economy new impetus, and domestic demand at the end of the year was no longer strong enough to offset increasing external pressures. In addition, "home-made" uncertainties and risks are likely to have contributed to a clouding of sentiment in certain sectors of the economy. Above all, the slowing of investment momentum suggests that many investors considered it more advantageous to postpone projects and to adopt for the time being a posture of "wait and see" – not least because of the uncertainty governing future investment conditions.

West/East growth differential not reduced further

On the dark side of the overall economic performance in 1998 is the fact that, once again, the economic gap separating the new and the old Länder was not narrowed further. Nevertheless it is important to note that the economic situation in eastern Germany continues to be overshadowed by longer-term restructuring processes. Thus the sharp downturns in the construction sector may be viewed as an admittedly painful but inevitable reduction of surplus capacity, which had developed after German reunification. Moreover, the services sector as a whole was unable to catch up further in the last year; by contrast, industrial production showed high rates of increase that were at times much higher than those in western Germany. Consequently, it has become increasingly advisable when assessing the economic situation in the new Länder to examine it not only macroeconomically but also more discriminatingly, according to economic sector.

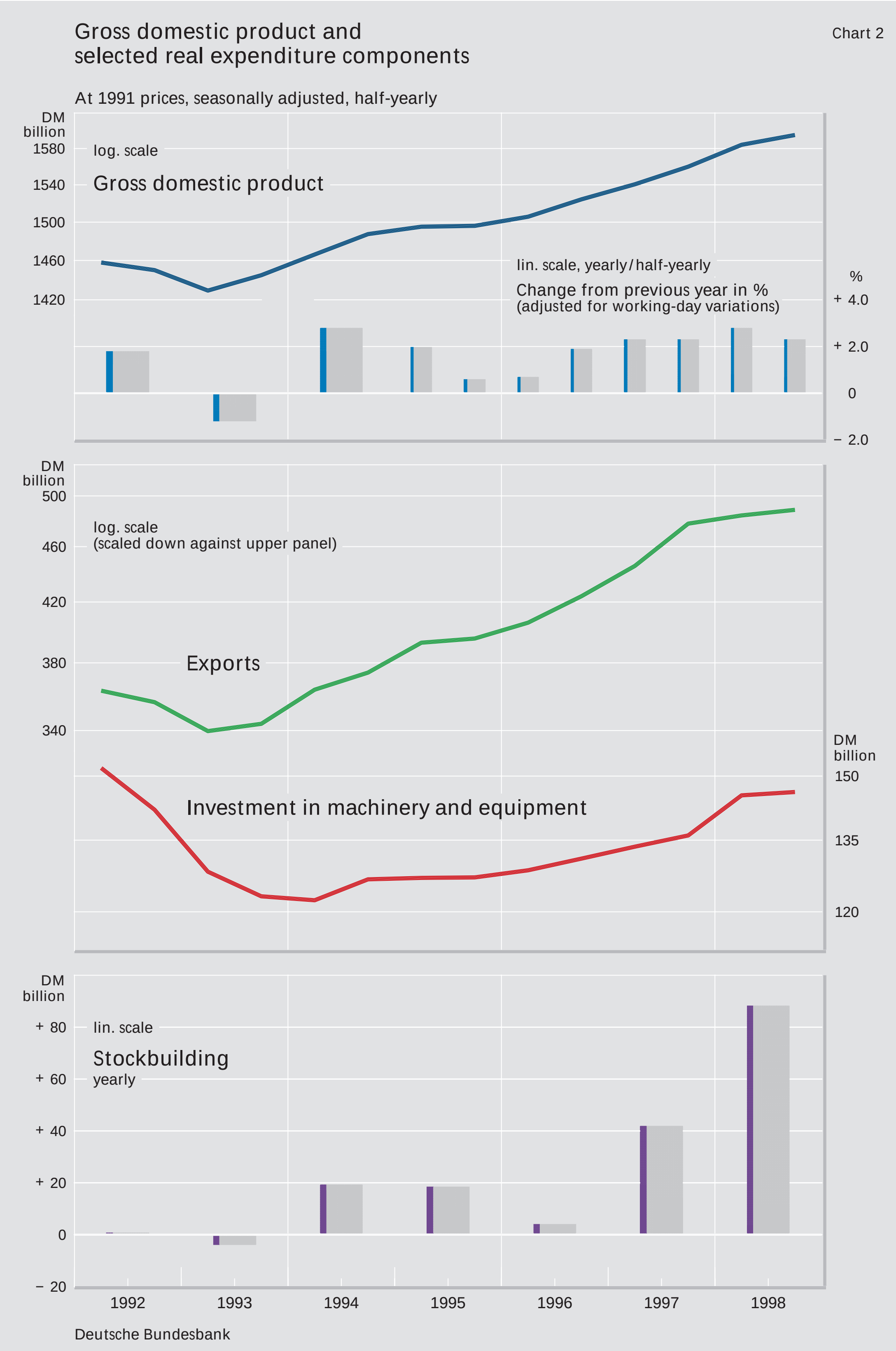
Domestic demand supplants foreign demand

Whereas foreign trade in 1998 clearly functioned less as an "economic motor" than it had in previous years, domestic factors have – as already stated – become much more important. Average annual domestic demand increased by a robust 3 %, having barely reached 1½ % in the previous year. Still the basis of this expansion seems to be only partially secured. One reason for this is that according to provisional data published by the Federal Statistical Office a substantial portion of this increased demand is attributable to a further, very significant increase in stockbuilding.

Once again heavy stockbuilding

Deviating from the long-term trend, the stockkeeping rate increased further last year. Given favourable procurement conditions, especially low commodity prices, it was probably the stocks for primary and semi-finished products that increased the most. In the case of finished products stockbuilding may have exceeded the amount originally foreseen by corporate planning. Some surveys suggest that stocks have become increasingly excessive of late, a finding that is probably prompted by a more pessimistic reading of business prospects. Thus it seems unlikely that the trend towards increased stockkeeping will persist.[1]

1 According to the latest data, changes in stocks, expressed in terms of 1991 prices, reached the unusually high level of DM 88 billion in 1998. It is likely that when the Federal Statistical Office compares the output and expenditure sides of gross domestic product more closely, this figure will have to be revised.


Gross domestic product and
selected real expenditure components
Chart 2
At 1991 prices, seasonally adjusted, half-yearly
DM billion
1580
1540
1500
1460
1420
log. scale
Gross domestic product
lin. scale, yearly / half-yearly
Change from previous year in %
(adjusted for working-day variations)
%
+ 4.0
+ 2.0
0
− 2.0
DM billion
500
460
420
380
340
log. scale
(scaled down against upper panel)
Exports
Investment in machinery and equipment
DM billion
150
135
120
DM billion
+ 80
+ 60
+ 40
+ 20
0
− 20
lin. scale
Stockbuilding
yearly
1992
1993
1994
1995
1996
1997
1998
Deutsche Bundesbank

Investment in machinery and equipment and capacity utilisation

The increased investment in machinery and equipment during the last year is to be regarded as an especially positive sign. On an annual average it exceeded – when converted into constant prices – the corresponding 1997 level by no less than 10 %. This was the largest increase since German unification. According to surveys conducted by the ifo Institute existing industrial production capacities were being increasingly exhausted. Capacity utilisation in Germany as a whole reached a new record high. In the old Länder alone the average medium-term utilisation level of tangible fixed assets was exceeded by a good four percentage points. The intense investment activity was spurred by favourable financing terms. First, the earnings position of the enterprises remained – on average – good. Second, interest rates fell once again over the entire maturity range. In the domestic capital market the yield on bonds outstanding struck a new low of 3 ¾ % in December. In addition, real interest rates in 1998 – regardless of how they are measured – may be considered quite low. Fixed capital promised a significantly higher return than did low-risk financial assets.

Structure of investment in machinery and equipment

Still, investment in machinery and equipment did not increase across the board. Thus acquisitions consisted primarily of company cars. By contrast, demand for mechanical engineering products, which are usually classified among the "classic" capital goods, did not rise as sharply. This also had an effect on production trends in German industry. Average annual domestic sales in the motor vehicle industry increased by slightly more than 20 %, compared with the previous year. The mechanical engineering industry clearly lagged behind with a mere + 5 ½ %. In numerous other segments of the capital goods sector such as those involved in the manufacture of precision instruments or in the "manufacture of other transport equipment" greater increases were rare.

Construction investment

It is consistent with this overall view that industrial construction investment, which is traditionally associated with expansion in plant capacity, once again dropped noticeably in 1998. Since 1994, when the decline began, total real expenditure in this economic sector has been reduced by approximately 15 %. This year, even more than in previous years, when a trend towards reduced plant space was inferred from the increased use of microelectronics, many saw no need to enlarge their production plants. In addition, large vacant properties probably existed even before this as a result of large tax concessions, especially in the new Länder.

A large number of unlet properties in eastern Germany stifled investment in the housing sector as well. The number of building authorisations in the new Länder

Key economic variables in Germany

Table 2

Item	1995	1996	1997	1998
	Change from previous year in %			
Growth (real) [1]				
Private consumption	+ 1.8	+ 1.6	+ 0.5	+ 1.9
Government consumption	+ 2.0	+ 2.7	– 0.7	+ 0.6
Expenditure on machinery and equipment	+ 1.6	+ 1.9	+ 3.9	+ 10.1
Buildings	– 1.0	– 3.1	– 2.5	– 4.3
Stockbuilding				
Change (in DM billion)	– 0.8	– 14.5	+ 37.8	+ 46.5
Domestic demand	+ 1.4	+ 0.7	+ 1.4	+ 3.1
Net exports [2]				
Change (in DM billion)	– 5.9	+ 17.1	+ 24.6	– 9.7
Exports	+ 6.6	+ 5.1	+ 11.1	+ 5.4
Imports	+ 7.3	+ 2.9	+ 8.1	+ 6.6
Gross domestic product	+ 1.2	+ 1.3	+ 2.2	+ 2.8
Western Germany	+ 0.9	+ 1.1	+ 2.3	+ 2.8
Eastern Germany	+ 4.4	+ 3.2	+ 1.7	+ 2.0
Contribution to GDP growth in %				
Domestic demand (excluding stocks)	+ 1.4	+ 1.2	+ 0.1	+ 1.6
Stockbuilding	+ 0.0	– 0.5	+ 1.2	+ 1.5
Net exports	– 0.2	+ 0.6	+ 0.8	– 0.3
Employment				
Employed [3]	– 0.4	– 1.3	– 1.3	+ 0.0
Average working time per employed person	– 1.4	– 0.3	– 0.4	+ 0.6
Total number of hours worked	– 1.7	– 1.5	– 1.8	+ 0.7
Unemployed (in thousands)	3,612	3,965	4,385	4,279
Western Germany	2,565	2,796	3,021	2,904
Eastern Germany	1,047	1,169	1,363	1,375
do. as % of the total labour force	9.4	10.4	11.4	11.1
Western Germany	8.3	9.1	9.8	9.4
Eastern Germany	14.0	15.7	18.1	18.2
Prices				
Consumer price index	+ 1.7	+ 1.4	+ 1.9	+ 1.0
Western Germany	+ 1.6	+ 1.3	+ 1.9	+ 0.9
Eastern Germany	+ 1.9	+ 1.9	+ 2.3	+ 1.1
Producer prices of industrial products [4]	+ 1.7	– 1.2	+ 1.1	– 0.4
Overall construction price level [5]	+ 2.1	– 0.2	– 0.8	– 0.2
Import prices	+ 0.4	+ 0.5	+ 3.2	– 2.9
Export prices	+ 1.7	+ 0.2	+ 1.5	+ 0.1
Terms of trade	+ 1.2	– 0.4	– 1.6	+ 3.2
GDP deflator	+ 2.2	+ 1.0	+ 0.6	+ 0.9
Value added and labour costs				
GDP per hour worked by employed persons [1]	+ 3.0	+ 2.8	+ 4.0	+ 2.1
Gross compensation per hour worked by employees [3]	+ 5.4	+ 3.0	+ 2.3	+ 0.8
Labour costs per unit of value added in the economy as a whole [6]	+ 2.4	+ 0.1	– 1.8	– 1.3

Sources: Federal Statistical Office; Federal Labour Office. — **1** At 1991 prices. — **2** Balance of transactions in goods and services with the rest of the world. — **3** Work-place concept. — **4** Domestic sales. — **5** Calculated by the Bundesbank. — **6** Gross compensation generated in Germany per hour worked by employees divided by real GDP per hour worked by employed persons. – The data from the national accounts and the figures on employed persons from 1996 on are provisional.

Deutsche Bundesbank

Decline in private housing construction

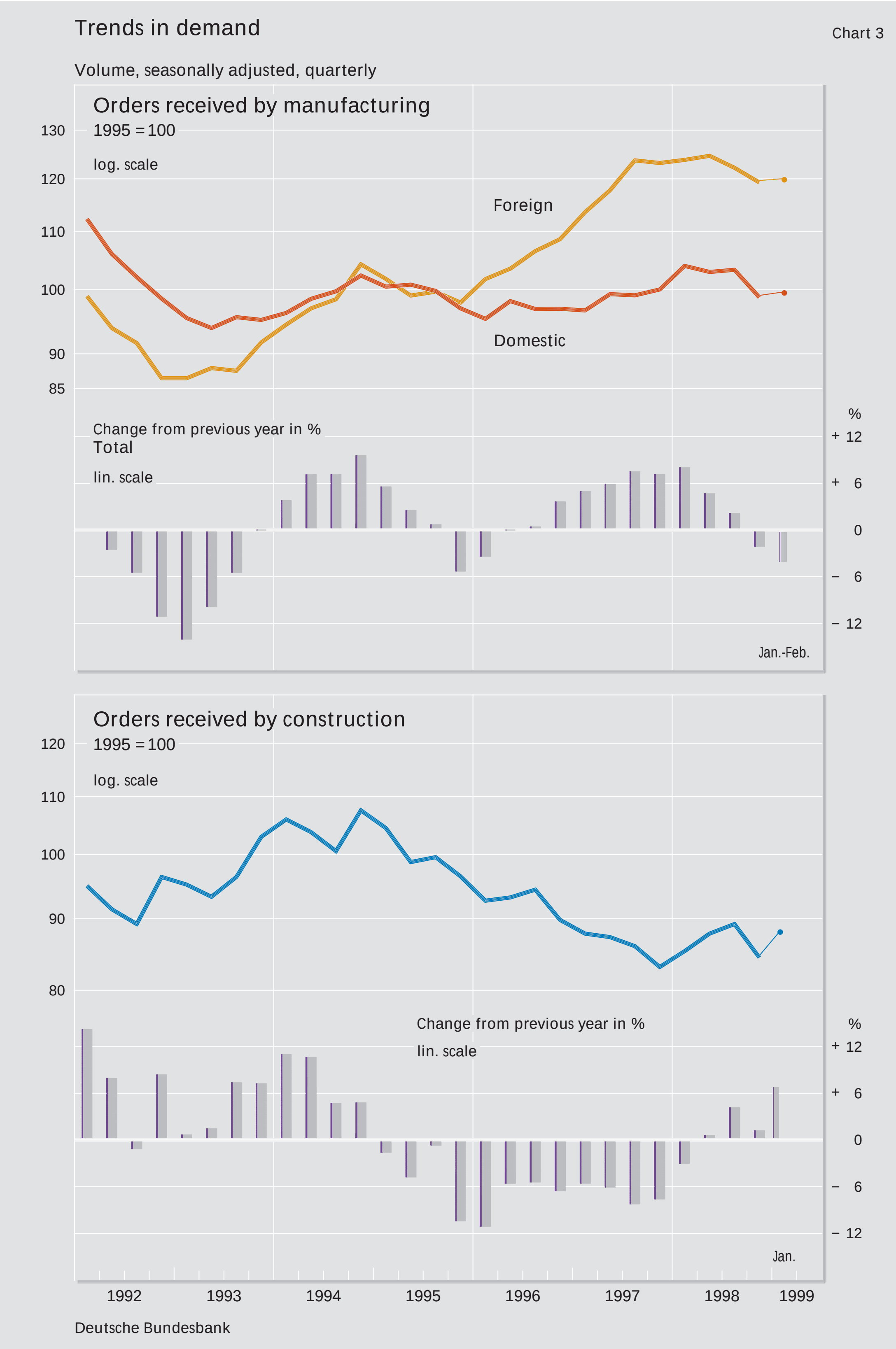
had already fallen sharply in 1997, but – owing to long production times – last year was the first time since German unification that the number of completed housing construction projects fell by a good quarter to approximately 130,000. In the old Länder the number of newly constructed dwellings in 1998 likewise lagged behind that of the previous year. If the decline was, at 5 %, considerably less than in eastern Germany, then the sole reason lay in the buoyancy of construction in the one-family house market. In addition to modified tax incentives for owner-occupied dwellings, favourable interest rates and largely stable construction prices led to a rise in the number of completed housing projects to approximately 170,000, which corresponds to an increase of one-tenth. This, however, did not suffice to compensate for the marked decrease in rented housing construction, which amounted to approximately 15 % or 30,000 dwellings. One decisive factor was certainly the fact that the often quite voluminous supply left little room for rent increases and the expected return on the capital tied up no longer seemed guaranteed. In addition it seemed increasingly unlikely that tax concessions would remain uncurtailed.

Public construction investment

Since the public sector also reduced its construction activities, total construction investment once again dropped noticeably in 1998. Amounting to 4½ % in real terms, the decline was even more pronounced than in previous years. Beginning with 1995, when the downward trend started, the cumulative drop amounts to approximately one-tenth.

Private consumption as an economic stimulant

By contrast, private consumption proved in the last year to be an important economic support. In 1998 household expenditure for consumer purposes rose in value by just under 3 % and in volume by 2 %. Increased consumer demand also benefited retail trade, which – excluding trade of motor vehicles and automotive fuel – for the first time since 1995 posted an increase in price-adjusted sales. Despite the raising of the standard turnover tax rate on April 1, 1998, demand for passenger cars remained brisk even in the following period. In addition, households once again increased their budgets for holidays abroad. From the standpoint of disposable income, private consumption in 1998 profited from an end to personnel cuts, somewhat higher wage settlements, and the lowering of the "solidarity surcharge". Moreover, real purchasing power was increased by considerable reductions in the cost of imported goods, especially energy. Still, the rise in disposable income was not enough to finance the total increase in private consumption. The saving ratio of households fell accordingly by a quarter of a percentage point to 11¾ %, the lowest level since German unification.


Trends in demand
Chart 3
Volume, seasonally adjusted, quarterly
Orders received by manufacturing
1995 = 100
log. scale
130
120
110
100
90
85
Foreign
Domestic
Change from previous year in %
Total
lin. scale
%
+ 12
+ 6
0
− 6
− 12
Jan.-Feb.
Orders received by construction
1995 = 100
log. scale
120
110
100
90
80
Change from previous year in %
lin. scale
%
+ 12
+ 6
0
− 6
− 12
Jan.
1992
1993
1994
1995
1996
1997
1998
1999
Deutsche Bundesbank

Slight easing of labour market tensions

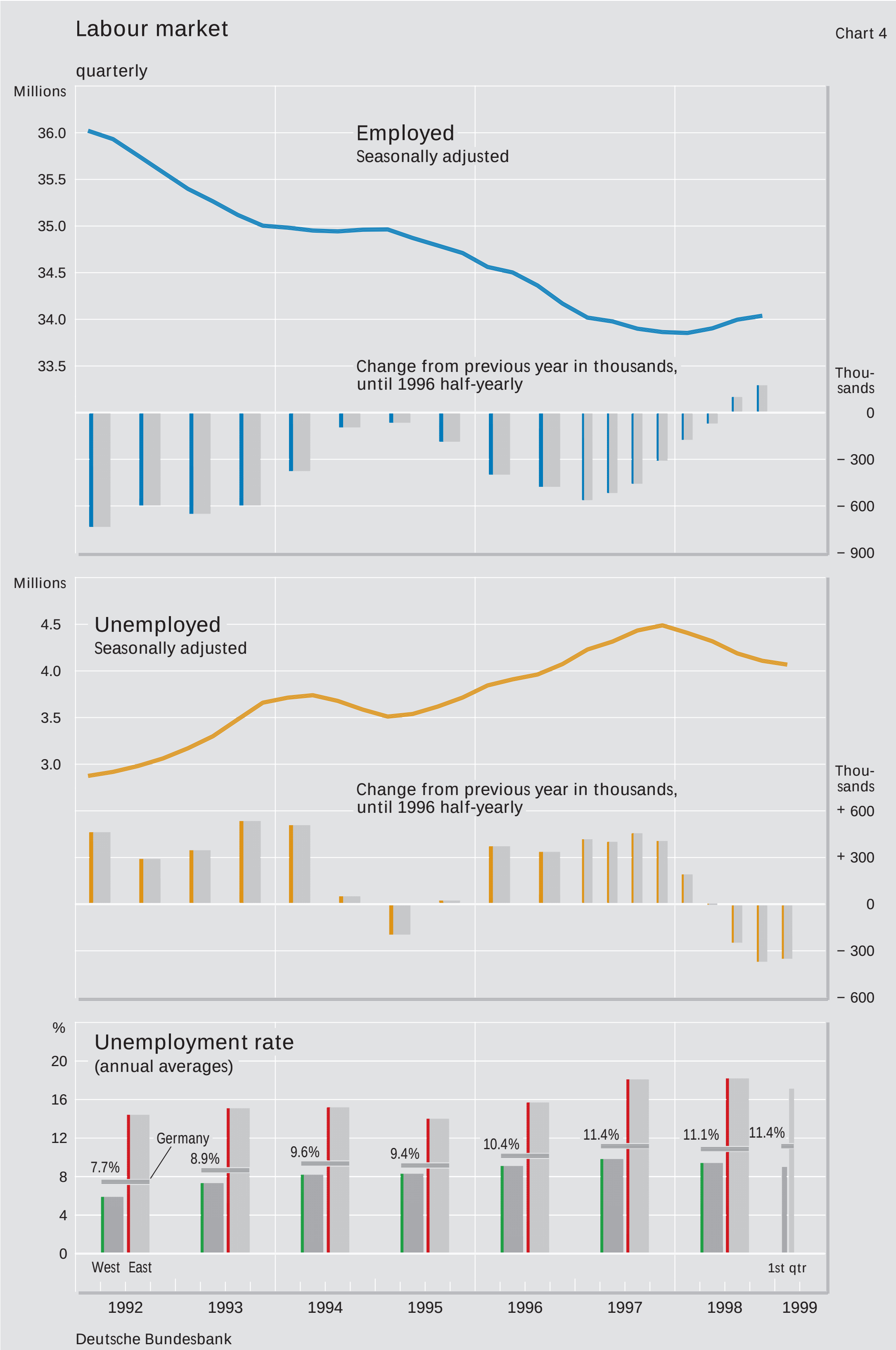
Despite existing structural flaws and flagging export momentum the situation in the labour market brightened somewhat for the first time since the beginning of the nineties. The upward trend, which in the course of 1998 became increasingly more apparent, had, however, only a slight effect on the annual figures. Nevertheless average annual employment showed a small increase; the number of employed persons reached a level of just under 34 million. Since at the same time the pressure exerted by the available labour supply slackened, the number of unemployed persons registered at labour exchanges fell more sharply than would have been justified by the small gain in employment. On average approximately 4.3 million persons were without work in 1998; this fell short of the previous year by 105,000. For the civilian labour force this yields a rate of 11.1 %, compared with 11.4 % for the previous year. Western Germany accounted for two-thirds of the unemployed, which corresponds to a recorded underemployment of 9.4 % (compared with 9.8 % in 1997), and the remaining third was in eastern Germany. There the number of unemployed expressed as a percentage of the civilian labour force was 18.2 %, as opposed to 18.1 % in the previous year.

Upturn reaches labour market in the West

In 1998 the longest period of decreasing employment to date in western Germany came to an end. The average annual number of employed persons in 1998 exceeded that of the preceding year by approximately 30,000; the number of unemployed fell by just under 120,000 on account of the less abundant labour supply. The improvement in the employment trend was mainly due, first, to the fact that industrial jobs were no longer being scaled down, owing to the revived demand for manufactured products, and, second, to the fact that the service industry achieved greater employment increases in 1998 than in the previous years. Although the manufacturing industry, which along with parts of the services sector forms the heart of the German economy, has lost the net amount of approximately 1¾ million jobs since 1991, services sector enterprises have in the same period created approximately 1¼ million jobs. A number of the shifts in sectoral employment structure resulted, however, from the outsourcing of business activities due to increasing specialisation and division of labour and thus continued to be closely linked to the demand for goods and services provided by German industry.

Active labour market policy in eastern Germany

Unlike in western Germany, labour policy in eastern Germany had a very large influence on movements in the labour market. Following the economising efforts of 1997, programmes for additional vocational training and employment promotion schemes were increasingly authorised. On average, however, not


Labour market
Chart 4
quarterly
Millions
36.0
35.5
35.0
34.5
34.0
33.5
Employed
Seasonally adjusted
Change from previous year in thousands,
until 1996 half-yearly
Thou-
sands
0
– 300
– 600
– 900
Millions
4.5
4.0
3.5
3.0
Unemployed
Seasonally adjusted
Change from previous year in thousands,
until 1996 half-yearly
Thou-
sands
+ 600
+ 300
0
– 300
– 600
%
20
16
12
8
4
0
Unemployment rate
(annual averages)
7.7%
Germany
8.9%
9.6%
9.4%
10.4%
11.4%
11.1%
11.4%
West
East
1st qtr
1992
1993
1994
1995
1996
1997
1998
1999
Deutsche Bundesbank

quite as many people took advantage of the opportunities for additional vocational training in 1998 as had in the previous year. Still, in its other main field of application, labour market policy achieved an increase of 80,000. The new structural adjustment measures in the East played a special role in supporting private business enterprises. Under their auspices the Federal Labour Office was able to assist in the creation of 115,000 jobs through labour cost subsidies; at the same time traditional employment promotion schemes became less important. Despite supporting actions, total employment in eastern Germany decreased by approximately 25,000 mainly on account of ongoing structural adjustments in the construction industry. Since the labour supply as measured in terms of the available labour force declined in this industry as well, the number of unemployed rose only slightly. Up until now a self-sustaining upward employment trend is still not evident in the new Länder.

Policy of moderate wage settlements continued

In the last year management and labour continued the policy of moderate wage settlements they had begun in 1996. Since in 1997 two-year contracts were signed in several economic sectors, such as the metal-working and electrical engineering industries, the private banking and the insurance industries as well as the textile and clothing industries, the wage round conducted in western Germany in 1998 was relatively limited in scope. Increases in basic monthly remuneration varied from 1½ % in the public sector and construction industry to as high as 2 ½ % in wholesale trade and foreign trade, as well as in the chemical industry. Including one-off payments and "zero months", the average overall wage settlement volume in the old Länder amounted to approximately 2 %. In the new Länder wages and salaries rose somewhat more, as several sectors took additional steps to adjust wages and salaries to the pay rate levels prevalent in western Germany. As a result, within one year the ratio of basic remuneration in eastern Germany to that in western Germany rose by one percentage point to almost 91 % at the end of 1998. Including relatively small-scale special payments in eastern Germany – for example, holiday allowances and Christmas bonuses – the ratio between pay rates in the East and in the West was, on average, 88 % in 1998.

Although the wage settlements in 1998 were on the whole somewhat higher than the year before, the increased scope for income distribution was not exploited in the interests of job security. The fact that wage increases in the last three years lagged behind the increase in the scope for income distribution led to a further correction of a number of wage policy flaws that date back to the early nineties. The decrease in unit labour costs also strengthened Germany's

Scope for income distribution in the economy as a whole and wage trends

Table 3

Germany

Period	Scope for income distribution in the economy as a whole at 1991 prices: 1991 = 100	Scope for income distribution: Change from previous year in %	Contribution made by: Net domestic product	Contribution made by: Terms of trade	Contribution made by: Balance of current transfers 1	Real compensation per employee 3: 1991 = 100	Real compensation per employee 3: Change from previous year in %
			Percentage points 2				
1991	100.0	–	–	–	–	100.0	–
1992	102.9	2.9	1.8	0.8	0.4	105.6	5.6
1993	101.1	– 1.8	– 2.0	0.4	– 0.1	105.9	0.3
1994	103.9	2.8	2.7	0.1	– 0.0	106.5	0.6
1995	105.6	1.7	1.0	0.4	0.2	108.7	2.1
1996 p	106.8	1.1	1.1	– 0.2	0.1	109.3	0.5
1997 p	108.6	1.7	2.2	– 0.6	– 0.0	109.2	– 0.1
1998 p	112.5	3.6	2.9	0.7	– 0.0	109.8	0.5
Memo item Average of the years 1992 to 1998	–	4 1.7	1.4	0.2	0.1	–	4 1.3

1 With the rest of the world. — 2 Discrepancies in the total are due to rounding. — 3 Deflated by the price index for private consumption. — 4 Average annual change.

Deutsche Bundesbank

international competitiveness. The (partial) progress made in the last few years in differentiating labour input and compensation and making them more flexible also exerted a positive influence on competitiveness. Still, except for the newly permitted option in the chemical industry to lower the wages and salaries of all employees of a business enterprise by up to 10 % of the negotiated pay rates for a limited time, no new labour policy ideas were introduced this time. On the whole the moderate wage policy of the last few years and the greater flexibility that has been attained in labour input were largely responsible for the modest improvement in the labour market situation in 1998.

Favourable price climate

The price climate in Germany was decidedly favourable for 1998 as a whole. Measured in terms of the consumer price index, which the general public usually regards as an indicator of general price developments, the average annual inflation rate was a mere 1.0 % compared with the previous year. Average annual consumer prices for 1997 had risen by 1.9 %; by the end of 1998 the annual percentage change fell to 0.4 %. In 1998 the harmonised index of consumer prices, which the European Central Bank (ECB) applies as its main measure for all member states of European monetary union, rose, on average, by 0.6 % in Germany; at the end of 1998 the rate of increase relative to 1997 was 0.2 %.

Price stability zone attained

The measured price trend was very much in keeping with the Eurosystem's objective of maintaining price stability, which was defined for the harmonised consumer price index and the euro area as involving year-on-year price increases of less than 2 %. This target, which is to be met over the medium term, also results from the realisation that the price increases measured in the official statistics probably tend to overstate somewhat the "real" inflation rate (measured in terms of a consumer price index). A research paper published by the Bundesbank in 1998 estimates this deviation for Germany at approximately three-quarters of a percentage point on average. The importance of such imprecision in measurement should, however, not be overestimated. Not only does this "measurement bias" vary with the rate of inflation but statistical agencies are constantly trying to refine their methods so as to obtain more precise results. For example, as part of a multi-stage programme to harmonise the price indices within European monetary union, the Federal Statistical Office's guidelines for determining prices have been adjusted; in this way, the margin of uncertainty can probably be set at a lower level. Thus the "bias amount" mentioned in the Bundesbank study cannot simply be applied mechanically to particular monthly figures and then juxtaposed with the official statistics.

Falling energy prices

Still, as successfully as the goal of price stability has been defended at the present time, it is just as important to distinguish the current, quiet price trend from deflationary tendencies, i.e. from a cumulative downward trend in the price level which would result in a self-reinforcing contraction of economic activity. The very subdued rise in prices experienced lately is associated in large part with the drop in oil prices in the international markets. In these markets – taking the Brent spot market quotation for North Sea oil as the measure – the price of a barrel of oil fell from just under US$ 24 at the turn of the year 1996-1997 to US$ 10½ in February 1999. As a result, German import prices for petroleum and mineral oil products were halved, and on the consumer level the degree of savings for petrol and light heating oil amounted to a full tenth. The reduction in oil prices also had indirect effects. More recently, however, the market has again shown marked tendencies towards correction.

Cheaper farm products

Another reason for the moderate price development was the fact that in 1998 seasonally adjusted food prices dropped for a time and at the end of 1998 were even somewhat lower than they had been a year earlier. This was due to sharply falling consumer prices for meat and meat products. An abundant supply, especially of swine stock, owing to the production cycle led at the producer level to a price drop of approximately two-fifths. Excluding mineral oil products and

Prices

Chart 5

1 Calculated by the Bundesbank.

Deutsche Bundesbank

food, the year-on-year price increase at the end of 1998 amounted to 1%, with the turnover tax increase effective as of April 1 possibly accounting for just under half a percentage point.

Subdued price movements in services and rents

As late as December 1998 rents were still almost 1½ % higher than in the previous year. This was mainly due to the fact that incidental rent expenses (which include fees for rubbish disposal, chimney sweep, running and sewage water) rose by 3½ %, as much as in the previous years. By contrast, the basic rent, excluding heating, rose by just under 1%. In the services sector – as in the case of industrial goods – prices likewise increased only slightly with a rise of approximately 1 %.

Overall price level

The costs of energy and the price of agricultural products also had a sustained effect on import prices and on industrial selling prices. On the whole the average annual prices of imported goods fell by 2.9 % in 1998 after having risen by 3.2 % in the preceding year. Average annual producer prices for domestically sold industrial products fell by 0.4 %, compared with a rise of 1.2 % in 1997. The overall construction price level, which had declined in the previous two years, fell again in 1998 by 0.2 %, although the raising of turnover tax had a deterrent effect. The total supply of goods and services, including foreign and domestic production, was, at just under ½ %, only slightly more expensive than in 1997. In this economic climate "importing stability" opened the way not only for cheap intermediates but also for a corresponding increase in competitive pressure domestically. As a result of their continuing cost discipline, made possible primarily by the moderate wage settlements, enterprises have been able to bear the "external pressure" so far without suffering a corresponding decrease in profit margins.

Prospects for 1999

With the actual attainment of price stability an important prerequisite for adequate and sustained growth has been fulfilled. This condition will in all probability continue to be met this year, and as such will provide an important counterweight to certain dangers threatening the world economy. Although progress has been made by some countries in reacting to the financial crises, efforts to compensate for the underlying structural problems and insufficient reforms will likely require more time. In addition, business activity in the United States and Europe can be expected to lose momentum. All in all, 1999 will be a difficult year. Even if up until now there has been little evidence to suggest that the world economy as a whole is moving into a recessionary phase, Germany as a traditional exporting country cannot shield itself from external influences. Moreover, it seems likely that countries in crisis, as part of their adjustment strategy, will step up the pressure on industrialised nations to import. As a result, the latter are now even more dependent on themselves. Under these circumstances, it is all the more important that Germany avoid "home-made" risks and continue its own reform efforts. A temporary slowdown in growth, as can be expected for this year, need not impact strongly on employment as long as longer-term earnings potential remains unaffected. Uncertainty as to the future status of important economic factors is, however, harmful to business activity and the labour market.

Allocation of functions in economic policy

The wage settlements that have up until now issued from the 1999 wage round are clearly higher than those of the previous year. In the metal-working and electrical engineering industries, management and labour have agreed to a total pay rise of 4.3 % for a fixed period of 14 months (on a twelve-month basis: + 3.6 %). The negotiated wage rate level for this year will rise, relative to that of 1998, by 5 %. In the public sector the wage agreements for this year will entail a rise in active personnel costs of approximately 3 % (compared with negotiated wage increases of 1½ % in each of the previous two years). Even when measured against the maximum 2 % rise in total expenditure for the central, regional and local authorities stipulated by the Financial Planning Council and the German stability programme, the wage round for this year fails to meet medium-term requirements.

In addition, it cannot be ruled out that certain developments in taxation and social security contributions policies may adversely affect the investment climate. Increased consumer demand will undoubtedly stimulate the economy, although, on balance, the diverse social and taxation policy measures will not make much of a difference in 1999. Still, it remains doubtful whether sustained economic growth can be fostered this way, if investment conditions for enterprises are not improved at the same time. Individual policy areas can – in keeping with the proven division of responsibilities among them – make decisive contributions: financial policy by adhering to the Stability and Growth Pact and by pursuing a taxation, social contributions and spending policy that stimulates investment and employment; monetary policy by defending the price stability attained; and wage policy by reaching moderate wage settlements that adequately acknowledge the supply and demand conditions for the production factors, labour and capital. A "policy mix", so conceived and supplemented by measures designed to support structural adjustments in the economy, would simultaneously improve supply and demand conditions and thus establish a secure, long-term foundation for new jobs and stronger growth.

2. Fiscal policy in need of further adjustment

(a) Trends in 1998

Stronger revenue growth

Trends in the central, regional and local authorities' budgets profited from stronger economic growth but also from powerful "one-off effects" last year. Consequently, revenue (as defined in the financial statistics) rose by 5 ½ % and was thus considerably higher than in 1997. The shortfalls in tax revenue of previous years did not repeat themselves. Rather, tax receipts exceeded expectations for the first time since 1994 – partly due, however, to transitory effects. The Bundesbank profit of DM 24 billion distributed last year was extraordinarily large on account of the revaluation of foreign exchange reserves. Of this amount DM 7 billion went – as usual – to the Federal budget; the remaining amount was transferred to the Redemption Fund for Inherited Liabilities in order to repay debts. Moreover, the Federal government, in particular, derived considerable revenue amounting to 20 billion through the privatisation of participating interests.

Tax revenue expectations exceeded

Tax revenue exceeded by almost DM 10 billion the official estimate of autumn 1997, which had in the interim been modified to take into account changes in tax legislation and which had largely been used as a basis for budget planning. The decisive factor here was the enhanced earnings position of enterprises, which led to a favourable upward trend in profit-related taxes. However, the latter also included large payments from previous years. Trade tax was especially affected by this trend; although the abolishment of trade capital tax went into effect at the beginning of 1998, trade tax produced distinctly more revenue than in the previous year. Corporation tax also brought very high yields, although the fact that the distribution of previously retained profits (known as "EK 50") was subject to tax advantages until the end of the year curtailed revenue to a substantial degree. Owing to these special dividends revenue from investment income tax on dividends increased by as much as one-half. In addition there were large increases in assessed income tax revenue. Here the erosion of the assessment basis, already well-advanced in previous years – not least due to tax concessions for East Germany –, began to reverse itself. Revenue from profit-related taxes amounting to DM 20 billion more than expected must, however, be contrasted with a loss of DM 12 billion in turnover and wage tax revenues. These tax shortfalls can be attributed, first, to the largely successful pursuit of price stability and a decrease in (taxable) investments in the housing and

Public sector finance *

Table 4

Item	1996 p	1997 pe	1998 pe	1996 p	1997 pe	1998 pe
	DM billion			Change from previous year in %		
Central, regional and local authorities						
Expenditure						
Expenditure on personnel	372.2	372.5	374	+ 0.5	+ 0	+ 0.5
Other operating expenditure	159.7	159.5	160.5	+ 0.8	– 0	+ 0.5
Transfers [1]	355.6	348	366	– 1.4	– 2	+ 5
Interest paid	130.9	132.5	134	+ 1.4	+ 1	+ 1.5
Fixed capital expenditure	91.5	87.5	86.5	– 5.6	– 4.5	– 1
Financial aid [2]	76.0	73	74.5	– 7.3	– 4	+ 2
Total expenditure [3]	1,188.3	1,177.5	1,199	– 1.1	– 1	+ 2
of which						
Federal Government [4]	490.4	479	495	+ 0.1	– 2.5	+ 3.5
West German Länder Governments [5]	399.8	398.5	403	+ 2.6	– 0.5	+ 1
East German Länder Governments	108.7	107.5	106.5	+ 3.6	– 1	– 1
West German local authorities	265.9	262.5	260	– 1.8	– 1	– 1
East German local authorities	67.9	63.5	62.5	– 3.7	– 6.5	– 2
EU [6]	39.5	42	43	– 1.6	+ 6.5	+ 2.5
Receipts						
Tax revenue	799.7	798	833	– 1.8	– 0	+ 4.5
Other receipts	272.6	291.5	315	– 2.8	+ 7	+ 8
Total receipts [3]	1,065.5	1,080.5	1,141.5	– 2.3	+ 1.5	+ 5.5
of which						
Federal Government [4, 7]	411.9	415.5	438.5	– 6.3	+ 1	+ 5.5
West German Länder Governments [5]	364.4	372	382.5	+ 1.8	+ 2	+ 3
East German Länder Governments	96.9	97.5	98.5	+ 5.6	+ 0.5	+ 1.5
West German local authorities	259.8	255.5	264.5	+ 0.6	– 1.5	+ 3.5
East German local authorities	65.2	62	61	– 4.8	– 5.5	– 1
EU	39.5	42	43	– 1.6	+ 6.5	+ 2.5
Deficit (–)	– 122.8	– 97	– 57.5	.	.	.
of which						
Federal Government	– 78.5	– 63.5	– 56.5	.	.	.
West German Länder Governments [5]	– 35.4	– 26	– 20.5	.	.	.
East German Länder Governments	– 11.8	– 10	– 8	.	.	.
West German local authorities	– 6.1	– 7.5	+ 4.5	.	.	.
East German local authorities	– 2.6	– 2	– 1.5	.	.	.
"German Unity" Fund	+ 2.7	+ 3.5	+ 0.5	.	.	.
Redemption Fund for Inherited Liabilities	+ 9.5	+ 8	+ 24	.	.	.
ERP Special Fund	+ 1.1	+ 1	– 0	.	.	.
Federal Railways Fund	+ 0.6	+ 0.5	– 0	.	.	.
Social security funds						
Expenditure	795.6	806	821.5	+ 5.4	+ 1.5	+ 2
Receipts	783.8	812	826	+ 5.3	+ 3.5	+ 1.5
Surplus (+) or deficit (–)	– 11.7	+ 6	+ 5	.	.	.
Public sector, total						
Expenditure	1,878.4	1,875.5	1,901	+ 0.9	– 0	+ 1.5
Receipts	1,743.9	1,784.5	1,848.5	+ 0.2	+ 2.5	+ 3.5
Deficit (–)	– 134.5	– 91	– 52.5	.	.	.

* As defined in the financial statistics; including hospitals keeping commercial accounts, and other special accounts. — **1** Mainly social expenditure and current grants to the corporate sector. — **2** Expenditure on investment grants and loans to third parties, plus the acquisition of participating interests. — **3** Including differences in clearing operations. — **4** The supplementary Federal grants and the share of mineral oil tax are included here on a gross basis. — **5** Including Berlin. — **6** EU expenditure financed out of EU revenue in Germany. — **7** The figure for the Bundesbank's profit transfer includes the amount of DM 7 billion provided for in the budget. The amount in excess of this was booked as revenue of the Redemption Fund for Inherited Liabilities.

Deutsche Bundesbank

public sectors. Second, the fact that – contrary to original expectations – annual average employment failed to rise also had an adverse effect.

Reduction in total taxes and social security burden despite a rise in the tax ratio

At 4.5 % total tax revenue for 1998 grew at an even faster rate than nominal GDP. As a result, the overall tax ratio rose somewhat for the first time since 1992, with the effects of tax concessions and of additional tax burdens attributable to tax legislation (elimination of trade capital tax and the simultaneous toughening of regulations governing the determination of profit, lowering of the solidarity tax, raising of the basic tax allowance, increase in turnover tax) tending to offset each other. A rise in the pension insurance contribution rate was prevented by raising the standard turnover tax rate one percentage point to 16 % effective as of April 1, 1998 and by channelling these additional resources into the statutory pension insurance scheme. On the whole, social security contribution rates have ceased to rise further; however, amounting to slightly more than 42 % of compensation subject to compulsory insurance, they were still much higher than they had been before the unification of Germany (36 %). Even so, due to a decrease in relative wages the social security burden declined in relation to total output in 1998. The total taxes and social security ratio (as defined in the national accounts) decreased by almost ½ percentage point to 42 ½ %.

Moderate rise in the central, regional and local authorities' expenditure...

Efforts to contain the rise in expenditure in public sector budget plans at all levels of government were considerably facilitated last year by a decrease in unemployment, a further lowering of interest rates and an effectively stable price level. On balance, total expenditure of the central, regional and local authorities rose by 2 %. Expenditure on personnel, which comprises almost one third of the total budget, exceeded the previous year's level by a mere ½ %. The additional burden posed by the moderate rise in public sector wages and salaries was almost entirely offset by further reductions in staff. Moreover, as in previous years, retrenchment efforts were focused on public expenditure on tangible goods. Other operating expenditure of the central, regional and local authorities increased by a mere ½ %. Investment was reduced even further (– 1%). Thus the deterioration in budget positions to the detriment of such expenditure, which has been observed for some time now, continued – albeit less so than in previous years. Interest expenditure rose by a mere 1½ % since the effect of new public sector borrowing was largely cushioned by lower long-term interest rates. By contrast, the central, regional and local authorities greatly stepped up their transfers (+ 5 %); still, this was primarily attributable to a supplementary, tax-financed Federal grant to the pension insurance scheme.

Indebtedness of the central, regional and local authorities

Table 5

DM billion

Item	1997 Level at end of year	1998 pe Level at end of year	1997 Change from previous year	1998 pe Change from previous year
Borrowers' note loans	912.8	923	+ 33.0	+ 10
Securities	1,215.4	1,269.5	+ 65.9	+ 54
Other debt	91.0	90	– 9.1	– 1
Total indebtedness	[1] 2,219.2	[1] 2,282.5	[2] + 89.8	[2] + 63
Federal Government	905.7	958	+ 65.8	+ 52
West German Länder Governments	505.3	525.5	+ 27.9	+ 20.5
East German Länder Governments	90.2	98	+ 9.2	+ 8
West German local authorities [3]	163.1	162	+ 1.7	– 1
East German local authorities [3]	39.0	39	– 0.2	+ 0
"German Unity" Fund	79.7	79.5	– 3.9	– 0.5
ERP Special Fund	33.7	34	– 0.5	+ 0.5
Federal Railways Fund	77.3	77.5	– 0.5	+ 0
Redemption Fund for Inherited Liabilities	322.0	305	– 9.9	– 17
Equalisation Fund for Safeguarding the Use of Coal	3.2	4	+ 0.1	+ 0.5
Indemnification Fund	0.1	0	+ 0.0	+ 0

1 In the definition relevant for compliance with the EMU convergence criterion, the indebtedness comes to DM 2,230 billion in 1997 and DM 2,296 billion in 1998. — **2** The change in the debt level deviates from net borrowing, since it includes the assumption of old debt and extractions from the public sector budgets. — **3** Including municipal special-purpose associations.

Deutsche Bundesbank

... and in the social security funds' expenditure

With an increase of just under 2 % total expenditure of the social security funds likewise rose only moderately. However, trends ran in quite different directions in the individual branches of the social security sector. In the wake of declining unemployment, Federal Labour Office expenditure was just under 4 % lower than in the previous year, although active labour market policy measures were given greater weight. By contrast, the pension insurance scheme's expenditure rose by 3 ¼ %. Although the mid-year pension adjustment proved to be quite small, the number of pensions increased significantly. The increase in health care expenditure was confined to slightly more than 1 %, a result stemming in part from previous measures designed to curb the rise in health care expenditure.

Further decline in the government spending ratio

On the whole, public sector expenditure rose by a mere 1½ % last year, constituting a further decrease in the government ratio. As defined in the national accounts, this ratio dropped 1 percentage point to 48 % in 1998. However, the rise in the government ratio, which had been recorded from German unification to 1995, has only partially been counter-balanced by this decline.

Deficit and debt ratios

On balance, as defined in the financial statistics, the central, regional and local authorities' budget deficits were approximately DM 40 billion less than in the previous year (DM 97 billion), clearly much less than originally expected. Given that economic conditions were more favourable and yields issuing from the Bundesbank profit and sales of participating interests exceptionally high, further structural reforms will be necessary in order to achieve a sustainable consolidation. The social security funds surplus has decreased somewhat (to DM 5 billion) vis-à-vis 1997. The surplus in the statutory pension insurance scheme did not suffice to bring the level of the fluctuation reserve back to the statutorily required minimum of one month's expenditure. The public sector as a whole incurred a deficit of approximately DM 52 billion, compared with DM 91 billion a year earlier. According to the Maastricht definition of the national accounts – which are affected by the above-mentioned special receipts to a lesser extent than the financial statistics – the general government deficit ratio declined from 2.7 % to 2.0 % of GDP. Although the debt ratio likewise declined by approximately ½ percentage point, it still stood at 61.1% and thus somewhat above the reference value set down in the Maastricht Treaty.

(b) Outlook and fiscal policy requirements

First stage of income tax reform

At the beginning of 1999 the first stage of an income tax reform went into effect which the new Federal Government believes will improve the underlying conditions for growth and employment and provide substantial relief, especially for low-income recipients and married couples with children. This three-stage reform, which will extend to the year 2002, provides for a successive lowering of the income and corporation tax rates while simultaneously broadening the tax assessment basis. Altogether, the reform is expected to save tax-payers approximately DM 20 billion; in light of the tight budgetary positions, however, the first two stages of the reform will be accompanied by only minimal tax concessions. Initially, this tax relief will focus on an increase in child benefits and on a reduction in the starting income tax rate. While the tax rates for business earnings have been lowered somewhat, on balance the business sector has been additionally burdened by a considerable tightening of the regulations governing the determination of profit. By contrast, tax deduction possibilities for employees have remained largely unchanged. These measures are expected to exert a stimulatory effect on the economy by raising consumer demand. However, the intended impact on private consumption is offset by worsened investment prospects for enterprises due to increased tax burdens. Still, the Federal Government plans an additional reform with an appreciable lowering of business tax rates, which is to take effect in 2000.

Ratios of public sector budgets *

Chart 6

as % of gross domestic product

* As defined in the national accounts. From 1991, including the new Länder. — 1 Taxes and social security contributions; the other revenue of the public sector budgets (1998: 3.3% of GDP) is not included here. — 2 The spending ratio and the taxes and social security ratio have been reduced by approximately ½ percentage point since 1996 owing to the net recording of child benefit.

Deutsche Bundesbank

"Ecological tax reform"

In addition, on April 1, 1999 the first stage of an "ecological tax reform" came into force; this reform is designed to facilitate the solution of employment problems and to reduce environmental pollution at the same time. The social security contribution rates are to be lowered by 2 ½ percentage points to under 40 % by the end of the legislative period in order to bring down the high level of non-wage labour costs; on the environmental side, the cost of energy consumption is to be raised successively. As a first step, the pension insurance contribution rate was cut 0.8 percentage point to 19.5 %. A simultaneous increase in mineral oil tax rates and the introduction of a new electricity tax are intended to offset, in large measure, the corresponding loss of about DM 9 billion in contributions.

To lessen the competitive disadvantages arising for the German economy from an increase in energy costs, taxes were increased only moderately in the manufacturing industry, agriculture, and the railways; any additional net costs incurred in individual cases were contained by offering refund possibilities. However, whether the tax reform will yield the desired "double dividend" remains uncertain. The more effective it is in promoting environmental protection, the fewer additional resources it will be able to generate to reduce non-wage labour costs permanently. Moreover, the desired decrease in labour costs would be jeopardised if the tax-induced rise in energy prices were to lead to higher wage demands.

Revenue prospects for 1999

The measures mentioned above are likely to be nearly neutral in their total effect on revenue in 1999. However, according to present expectations, tax revenue will be benefited by the fact that the use of tax advantages continues to decrease and that the restructuring of overall economic expenditure components favours domestic factors. In addition, the new wage settlements are likely to increase wage tax revenue at first, their possibly adverse effects on employment becoming apparent only over the medium term. Given the preceding and the higher rate of energy taxation, the tax ratio can be expected to continue its rise in 1999. Despite the lower pension insurance contribution rate, social security contributions are likely to increase more rapidly than in 1998, especially owing to the higher wage settlements. Other receipts can be expected to lag distinctly behind their 1998 level, primarily on account of the smaller Bundesbank profit. More generally, current economic trends toward weaker growth carry the danger that a loss in revenue will result vis-à-vis the original budget plans.

Higher rise in general government expenditure in 1999

The budget plans of the central, regional and local authorities reflect continuing efforts to economise on the expenditure side so as not to endanger the process of budget consolidation. Nevertheless, deviations from this course may be discerned in some areas. In addition, a variety of expenditure appropriations involve the risk that spending limits will be overrun. During a meeting of the Financial Planning Council in December 1998, the central, regional and local authorities reiterated their commitment to restricting annual expenditure growth to 2 % over the medium term. However, how close they will come to this target in 1999 is still an open question. Thus, in the new budget draft presented by the Federal Government for 1999, the Federal Government expenditure envisaged was almost 7 % higher than in 1998. This is largely due to the budgeting of new expenditure, which – as in the case of the supplementary grant to the pension insurance scheme – is merely a redistribution of expenditure items within the public sector; when adjusted for the new expenditure items, the rise is placed at 1¾ %. Nevertheless, in some areas – especially as regards active labour market policy measures – priorities have been set that will entail a sharper increase in expenditure. The Länder Governments and the local authorities intend to continue curtailing their expenditure growth this year. However, improvements in this area are threatened above all by the wage settlement for the public sector. In 1999 total general government expenditure, including the social security funds, is likely to rise more than it did last year.

Hardly any further reduction in the deficit ratio

On balance it is to be expected that the central, regional and local authorities will incur a larger budget deficit this year than in 1998, especially since the yields from the sale of assets and from the Bundesbank profit will be smaller. This trend will be only partially offset by a growing surplus in the social security sector, resulting from a necessary increase in pension insurance reserves. The deficit ratio as defined in the Maastricht Treaty, which is affected by the abovementioned receipts to a lesser extent, might decline further in the current year, though. However, given slower economic growth and a sharper increase in government expenditure, no major progress is to be expected in the reduction of the deficits. On the whole, the general government budgetary situation is still considerably far from the medium-term objective set forth in the Stability and Growth Pact, which prescribes budgetary positions "close to balance or in surplus".

Medium-term consolidation requirements

As a result, in future years there will still be a considerable need for consolidation to achieve fiscal positions that are sustainable in the long term. With its stability programme, submitted at the beginning of this year, the Federal Government has demonstrated its commitment to reduce the deficit ratio further over the medium term. By limiting the rise in general government expenditure to 2 %, it expects to lower the deficit ratio to 1% by 2002 and to prepare the way for a noticeable reduction in the taxes and social security burden. In addition, the general government debt ratio in 2002 is to drop below the reference value of 60 %. However, the intended consolidation process is subject to a number of risks. For example, the stability programme has not yet taken account of the substantial additional burdens arising from the rulings by the Federal Constitutional Court on the issue of family taxation. In terms of both economic growth and employment it would be counterproductive if the special form of tax relief granted to families were to be offset by a higher general burden of levies. Instead, what is needed are lasting reductions in general government benefit payments and subsidies. Additional problems for the stability programme could result from markedly weak economic growth. In such a situation, however, past experience shows that it would be a mistake, over and above accepting the effect of automatic stabilisers, to attempt to counteract cyclical fluctuations with expansionary fiscal policy measures. With the adoption of such a fiscal policy stance, a highly uncertain prospect of lasting economic policy success would have been purchased at the cost of a serious deterioration in fiscal positions; it would deprive the public sector budget for the foreseeable future of its flexibility, especially affecting its ability to improve underlying economic conditions.

Need for adjustment in monetary union

In European economic and monetary union (EMU), where monetary policy is unable to respond to regional differences, national fiscal policies have become increasingly important. The attainment of the objectives set forth in the Stability and Growth Pact provides fiscal policy with the flexibility that it must have if it is to be able to address cyclical fluctuations in business activity. This flexibility allows national budgets to leave the work of absorbing "asymmetric shocks" to automatic stabilisers while enabling them to remain within the contractually fixed deficit limit of 3 % of GDP. Although in periods of normal business activity an approximately balanced budget position is a pan-European necessity, it remains for each member state to do its own "homework". The responsibility cannot be transposed to the EMU level. The same applies to the various structural adjustments to be made by the member states: these require that they tailor their policy approaches to meet national needs. It would be counterproductive if necessary structural changes were to be hindered by an excessive harmonisation of tax and social security systems at the institutional level. Rather, the coordination of taxation policies should be confined to measures that are indispensable for the proper functioning of the Single Market and of competition among tax systems.

3. Foreign trade loses momentum

Repeated tensions in the foreign exchanges of some emerging markets and countries in transition

External economic relations were influenced by the deterioration in the international environment and the repeated tensions in the foreign exchange markets of some emerging markets and countries in transition in 1998. Particularly in the Asian crisis countries the turmoil in the foreign exchange markets that had already broken out in the previous year continued to smoulder and flared up again in some cases right into the spring. It was not until later in the year that these currencies stabilised and at times actually recorded substantial exchange rate gains until the end of the year. Nevertheless, the emerging calm on the Asian financial markets was overshadowed in the middle of August by the outbreak of the Russian currency crisis, in the course of which the rouble lost more than 60 % of its value against the Deutsche Mark within only a few weeks. Then at the beginning of 1999 the Brazilian authorities also found themselves compelled as a result of persistent speculative pressure to float the real, and it likewise lost considerable ground within days. Despite the relative insignificance of the aforementioned crisis regions for German business, these developments meant that the external value of the Deutsche Mark, including its value on a weighted average, again rose substantially from its fairly low level in 1997.

Deutsche Mark firms against the US dollar ...

Overall, the Deutsche Mark also appreciated again somewhat against the major world currencies in 1998. For example, the US dollar, whose momentum had already begun to wane at a rate of about DM 1.80 towards the end of 1997, depreciated, with slight fluctuations, to just over DM 1.60 in the autumn of 1998. The main reason for this trend was probably the substantially improved growth prospects for the German economy, especially in the first six months of the year. Another reason was the apparent deceleration in growth in the United States in the autumn. This, too, promised to even out the disparate cyclical positions. The decision then taken by the US central bank to lower interest rates evidently strengthened the markets' expectations in this regard. However, after the publication of the highly favourable US economic data for the third quarter and the clouding of the economic prospects for Germany and its partner countries in EMU the dollar was able to regain some of its lost ground up to the end of the year. When the last exchange rate between the Deutsche Mark and the dollar was established on December 31, the US currency was worth DM 1.6763 and was therefore about 7 % below its value at the beginning of 1998, which means that the Deutsche Mark had firmed by that amount.

... and the pound sterling

The Deutsche Mark likewise firmed again in relation to the pound sterling last year. In the spring the British currency was being quoted at more than DM 3 at times, but by the beginning of November its value had fallen to DM 2.75. Among the factors contributing to the decline of the pound were the deteriorating economic climate in the United Kingdom and – closely associated with this – the expected fall in central bank rates. However, here, too, the more pessimistic continental European expectations regarding growth again prevailed with the result that the pound sterling slightly recovered. At the end of the year the British currency was being quoted at DM 2.80, about 5 ½ % below its value at the beginning of the year. The Deutsche Mark had therefore appreciated by that amount against the pound.

Yen subject to sharp fluctuations

The relationship of the Deutsche Mark to the Japanese currency was characterised by the considerable uncertainty and disappointment with regard to the Japanese economy. The persistent structural faults in the financial sector, which had been undermining the yen right into the autumn of last year, had a particularly detrimental effect here. It was not until market participants' confidence was restored following the prospect of government intervention to restructure the fragile financial institutions that the yen firmed again.The yen then remained at this higher level. The currency was probably further supported by the upsurge in interest rates which was triggered by the strong government presence in the Japanese capital market and the consequent repatriation of Japanese investment capital. By the end of the year the yen had risen in value by 6 % against the Deutsche Mark despite the pronounced period of weakness which had lasted well into the autumn.

Stable euro-area currencies

In an environment characterised by uncertainty it was gratifying that a number of European currencies were stable last year. This was particularly true of those currencies that along with the Deutsche Mark were merged into the euro at the beginning of 1999. Prior to this, the participating currencies had been gradually approaching the central parities previously announced as conversion rates at the beginning of May 1998.

External value of the Deutsche Mark rises slightly

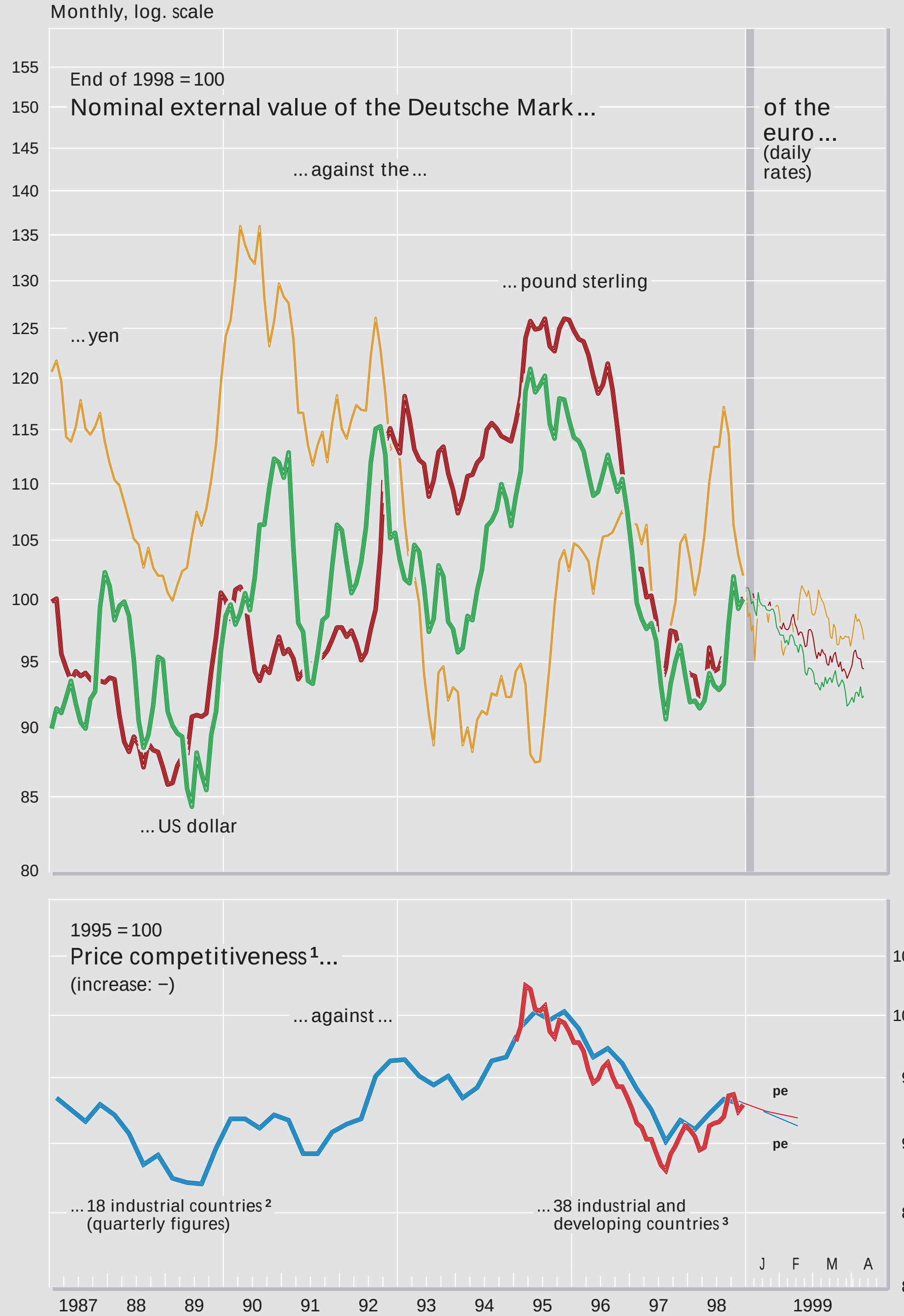
In the course of 1998 the Deutsche Mark appreciated by just over 1½ % on a weighted average against the currencies of 18 industrial countries. If the price developments in Germany and other countries (which are showing far less divergence now than hitherto) are taken into consideration, there was a real appreciation of approximately 1 %. Although this means that the real external value of the Deutsche Mark was still slightly below its long-term average, this seems quite reasonable in the light of the expected downturn in growth both in Germany and in the euro area as a whole. This evaluation still applies when the real external value of the Deutsche Mark is calculated on a broader basis comprising the currencies of 38 industrial and developing countries – although there is no long-term standard for comparison. The fact that the real appreciation of the Deutsche Mark last year was somewhat sharper, at 1½ %, on that basis than in a comparison with the currencies of the industrial countries alone is the result of the dramatic exchange rate adjustments in the crisis regions.

Downturn in export growth

The weaker growth rates and the more intense competitive conditions that obtained in some of Germany's export markets after these exchange rate corrections clearly left their mark on German foreign trade. Initially German exporters

Chart 7

Nominal external value of the Deutsche Mark and the euro and Germany's price competitiveness



1 Price competitiveness is equivalent to the real external value of the Deutsche Mark up to 1998. — **2** Based on the prices of total sales. — **3** Based on consumer prices.

Deutsche Bundesbank

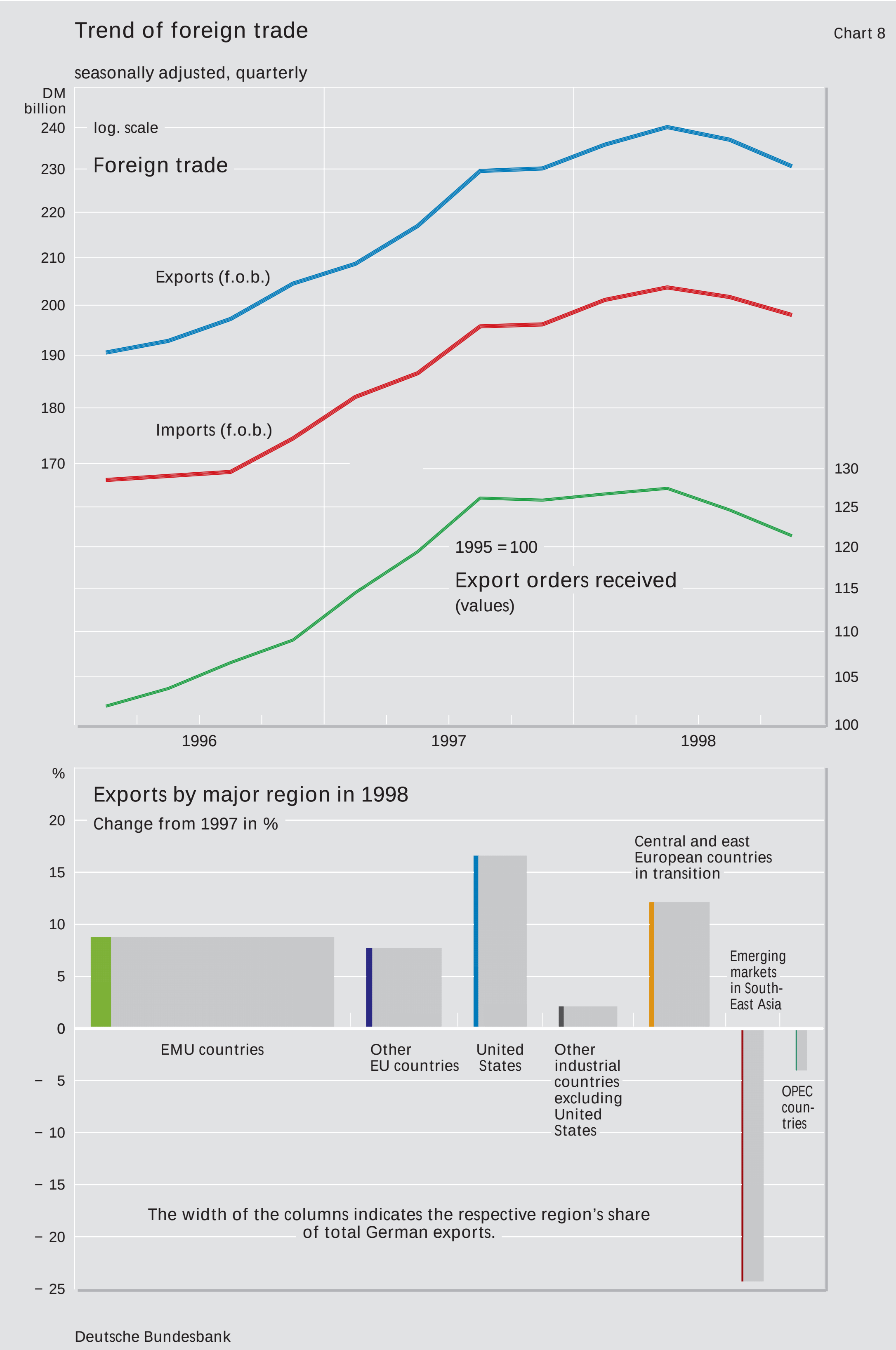
appeared to be remarkably successful in shifting the bulk of their export business from the crisis regions to their traditional markets in the industrial countries and, as a result, were able to achieve further sharp increases in sales well into the summer. Nevertheless, the impending downturn in sales was already becoming apparent in industrial order books. In fact, exports began to decline appreciably from the summer onwards with the result that the annual growth in value of 7 % very clearly shows the loss of momentum in growth when it is compared with the figure for 1997, which, at 12 ½ %, was almost twice as high. Virtually the same picture emerges in real, price-adjusted terms because export prices hardly increased last year. Even so, German exporters were again able to make a substantial increase in their share of total real world trade, whose expansion is estimated to have been about 3 ½ % last year – which indicates that, on the whole, German exporters are still fairly competitive internationally.

Exports down, especially to developing countries and emerging markets

The world economic weak spots were initially in South-East Asia, but this area accounts for a relatively small part of German exports. This applies even more so to Russia and Brazil, which later emerged as the new crisis centres. Even so, the restraining effects on German exports accumulated increasingly. These were associated with the persistent weakness in Japanese economic growth and accentuated by the oil-producing countries' reluctance to import as a result of the fall in petroleum prices. All in all, German exports to the countries mentioned, which together account for just over one-tenth of German exports, declined by more than 14 % in 1998. This was offset to a certain extent, especially in the first six months of the year, by the demand from other European Union countries and from the United States. The latter was enjoying markedly robust economic growth and, in conjunction with the relatively firm dollar, represented an interesting market for German suppliers. Yet here, too, German exports in seasonally adjusted terms eventually tended to weaken towards the end of the year. Nevertheless, German exports to the EU countries in 1998 exceeded their previous year's level by 8 ½ % and to the United States by 16 ½ %.

Price-adjusted imports rise significantly

The value of imports did not rise as fast either in 1998 as they had done in the previous year (6 % compared with 12 % in 1997). However, this trend is mainly a reflection of the sharp decline in import prices. In real terms, at all events, German imports of goods (at just over 9 % compared with 8 ½ % in 1997) again grew remarkably quickly although they, too, weakened distinctly towards the end of the year – as a result of the decelerated rate of growth in output. It was probably the building-up of raw material stocks in view of the sharp fall in world market prices that boosted the steep growth in imports, especially in the first six


Trend of foreign trade
Chart 8
seasonally adjusted, quarterly
DM billion
log. scale
Foreign trade
240
230
220
210
200
190
180
170
Exports (f.o.b.)
Imports (f.o.b.)
1995 = 100
Export orders received
(values)
130
125
120
115
110
105
100
1996
1997
1998
Exports by major region in 1998
Change from 1997 in %
%
20
15
10
5
0
− 5
− 10
− 15
− 20
− 25
EMU countries
Other EU countries
United States
Other industrial countries excluding United States
Central and east European countries in transition
Emerging markets in South-East Asia
OPEC countries
The width of the columns indicates the respective region's share of total German exports.
Deutsche Bundesbank

months of the year. For example, the import prices of petroleum alone declined by 32 % in 1998 compared with the previous year. As a result of this fall in prices, the value of imported oil was reduced by just over DM 6 1/2 billion, or by one-quarter, although the volume of petroleum imports increased by 7 ½ %.

Export surplus considerably greater

Accordingly, Germany's overall trade balance shows very different trends in nominal and real terms. While in 1998 the volume of German exports increased less rapidly than that of imports for the first time in six years, the value of the surplus in German trade in goods with non-residents rose by just over DM 15 billion to DM 140 ½ billion (on an f.o.b./f.o.b. basis) compared with the previous year. The difference in the trends is essentially due to the improvement in the terms of trade, which German business enjoyed in foreign trade last year and which ultimately more than compensated for the dampening effects of the decline in real net exports.

Growing deficits on invisibles

The larger surpluses in the trade in goods, however, were again accompanied by larger deficits on current invisible transactions with non-residents. These deficits rose from DM 127 ½ billion (1997) to almost DM 147 billion in 1998. The current account as a whole therefore ran a slight deficit of DM 6 billion, or approximately 0.2 % of gross domestic product. The larger deficit on invisibles is primarily due to an unusual development in the field of investment income payments, which rose by DM 13 billion net from the previous year to DM 14 ½ billion. Unusually large dividend payments in the summer of last year resulted in considerable outflows of funds, as did other transfers of earnings by foreign enterprises from their holdings of participating interests in Germany. The large net payments to the foreign shareholders and proprietors of the enterprises domiciled in Germany are a reflection of the improved profitability of German business and special tax factors. By contrast, the interest payments to non-residents on fixed-interest securities held by them did not rise further as a result of the decline in interest rates. The corresponding balances in the other areas of invisible transactions with non-residents were much the same as in the previous year. This applies to the trade in services, especially net expenditure on foreign travel, which after years of strong growth increased relatively little. The deficit on current transfers between residents and non-residents was also practically unchanged.

Trends in financial transactions in an eventful year

The trend in financial transactions with non-residents was characterised in 1998 by repeated changes in mood and, in some cases, by substantial price fluctuations in the international financial markets. The situation in the Far East, which

Balance of payments

Table 6

DM billion

Item	1995 [1]	1996 [1]	1997 [1]	1998 [1]
I. Current account	– 27.2	– 8.4	– 2.4	– 6.2
1. Goods	+ 93.2	+ 107.4	+ 125.1	+ 140.5
Exports (f.o.b.) [2]	749.9	786.5	885.9	948.7
Imports (f.o.b.) [2]	656.7	679.1	760.8	808.2
2. Services	– 65.0	– 66.2	– 71.7	– 77.3
of which				
Foreign travel	– 49.0	– 50.5	– 51.7	– 53.7
3. Factor income	+ 0.3	+ 1.7	– 3.0	– 16.1
of which				
Investment income	+ 1.7	+ 3.5	– 1.3	– 14.3
4. Current transfers	– 55.7	– 51.3	– 52.8	– 53.3
of which				
Net contributions to the EC budget [3]	– 29.3	– 27.2	– 28.1	– 29.6
Other official current transfers to non-residents (net)	– 11.0	– 8.1	– 8.8	– 7.8
II. Capital transfers	– 3.8	– 3.3	+ 0.1	+ 1.3
III. Financial account (net capital exports: –)	+ 63.5	+ 23.2	– 0.7	+ 23.5
1. Direct investment	– 38.7	– 68.0	– 53.2	– 117.4
German investment abroad	– 56.0	– 76.5	– 69.9	– 152.4
Foreign investment in Germany	+ 17.2	+ 8.5	+ 16.7	+ 35.0
2. Portfolio investment	+ 49.6	+ 96.0	+ 4.4	+ 9.4
German investment abroad	– 25.5	– 46.0	– 154.1	– 246.0
of which: Shares	+ 1.7	– 21.9	– 62.6	– 108.5
of which: Bonds and notes	– 24.1	– 20.6	– 76.6	– 109.2
Foreign investment in Germany	+ 75.1	+ 142.1	+ 158.5	+ 255.5
of which: Shares	– 1.7	+ 22.1	+ 27.4	+ 97.2
of which: Bonds and notes	+ 86.0	+ 102.8	+ 122.9	+ 147.9
3. Financial derivatives	– 1.0	– 8.8	– 15.1	– 12.0
4. Credit transactions	+ 58.8	+ 8.0	+ 68.3	+ 151.1
Credit institutions	+ 42.4	– 5.0	+ 63.9	+ 140.8
of which: short-term	+ 3.6	– 28.2	+ 67.8	+ 144.1
Enterprises and individuals	+ 23.8	+ 9.4	+ 21.6	+ 10.0
of which: short-term	+ 25.8	+ 10.5	+ 23.1	– 3.8
Government	– 4.2	+ 4.9	– 17.1	– 3.2
of which: short-term	– 4.1	+ 4.0	– 6.6	+ 6.9
Bundesbank	– 3.3	– 1.3	– 0.1	+ 3.4
5. Other investment	– 5.2	– 4.0	– 5.1	– 7.6
IV. Change in the monetary reserves at transaction values (increase: –) [4]	– 10.4	+ 1.9	+ 6.6	– 7.1
V. Balance of unclassifiable transactions	– 22.1	– 13.4	– 3.5	– 11.4

1 Figures subject to major uncertainty owing to changes in the method of data collection in foreign trade. — **2** Special trade, according to the official foreign trade statistics, including supplementary trade items; imports excluding freight and sea transport insurance costs, which are included under services. — **3** Excluding collection expenses, EAGGF (Guidance Fund) and Regional Fund. — **4** Excluding SDR allocation and changes due to valuation adjustments.

Deutsche Bundesbank

was somewhat more relaxed at first, and the initial improvement in the economic outlook in Europe resulted during the first six months of the year in a more optimistic mood on the part of internationally operating investors and in a favourable climate in the major stock and bond markets. However, Russia's temporary cessation of payments in August brought a reversal in expectations and gave rise to massive shifts in international portfolios. The re-awakening of risk awareness resulted globally in significant mark-downs in shares and a flight to the safe havens provided by first-class government paper, whose yields declined considerably. This applied in particular to the German bond market, which absorbed large sums of foreign money during this period. However, confidence was restored in October and prepared the way for renewed interest in international investment opportunities; this return of confidence also helped to bring about a recovery – in some cases a fairly fast recovery – in the markets, notably the stock markets.

Net inflows through portfolio transactions

The changeable development during the year was clearly reflected in Germany's portfolio transactions with non-residents. The large net capital exports at the beginning of last year were offset by substantial imports of funds, especially in the summer. The upshot was a net influx of DM 9½ billion through portfolio transactions.

Foreign investment in Germany rises strongly

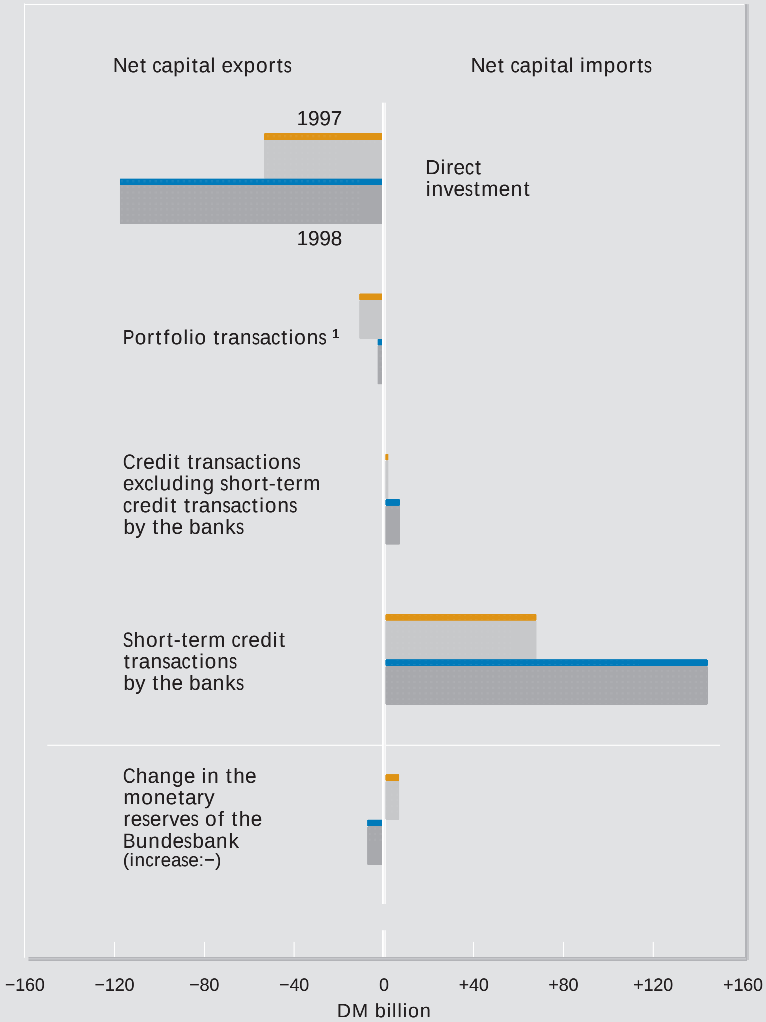
Non-resident investors purchased German paper worth a total of DM 255½ billion – which was actually more than in 1993 when the turbulence in the European Monetary System (EMS) and the rechannelling of German savings that were being invested abroad in connection with the discussion on taxing interest income had led to "foreign" investment of DM 240½ billion in the German market. Foreign investors' main interest last year was the bond market (DM 148 billion), which was seen as a safe haven, especially during the turbulence that followed the Russian crisis. Shares worth DM 97 billion were purchased during the period under review, the influx of related funds being concentrated initially on May, June and July. Thereafter, the outcome was largely influenced by the merger of two industrial enterprises, which alone accounted for more than DM 50 billion of the share purchases recorded.[1] If this transaction is excluded, non-resident investors sold German shares on balance during the last few months of 1998. German money market paper (DM 13 billion) also attracted somewhat

1 The transactions associated with the merger were recorded as outflows of funds under direct investment and inflows of a similar dimension under portfolio transactions. See also Deutsche Bundesbank, Monthly Report, February 1999, page 71.

Financial transactions and reserve movements

Chart 9

Balances in DM billion



1 Including financial derivatives.

Deutsche Bundesbank

more attention from international investors last year. Demand here was focused on short-term bank bonds.

Investment in foreign shares and bonds again at record levels

The accelerating internationalisation of German residents' investment was as remarkable as the substantial investment by non-residents in the German securities markets. Acute tensions in the international financial markets moderated this trend towards greater internationalisation only for a time. German investors were thereby continuing last year the trend that had emerged in 1997 and once again increased their new investment in foreign securities; a total of DM 246 billion was exported as a result. Greatest interest was shown by German investors in foreign shares (DM 108½ billion), many of which recorded substantial price rises over the year as a whole. Presumably the historically low interest rate level in the capital market provided an additional stimulus to the demand for shares. At all events, the sharp rise in funds accruing to German share-based funds indicates broad interest on the part of savers in this form of investment. By contrast, other motives were behind the increased purchases of foreign bonds and notes (DM 109 billion compared with DM 76½ billion in 1997). For example, further price gains expected from the continuing convergence of interest rates in the run-up to EMU certainly enhanced the attractiveness of foreign currency issues (DM 80½ billion compared with DM 64½ billion in 1997). Great interest was also shown, especially in the first half of the year, in foreign Deutsche Mark bonds, which were yielding a better return than Federal Government securities. Most of the foreign bonds and notes purchased by residents last year were acquired by credit institutions.

Greater German direct investment abroad ...

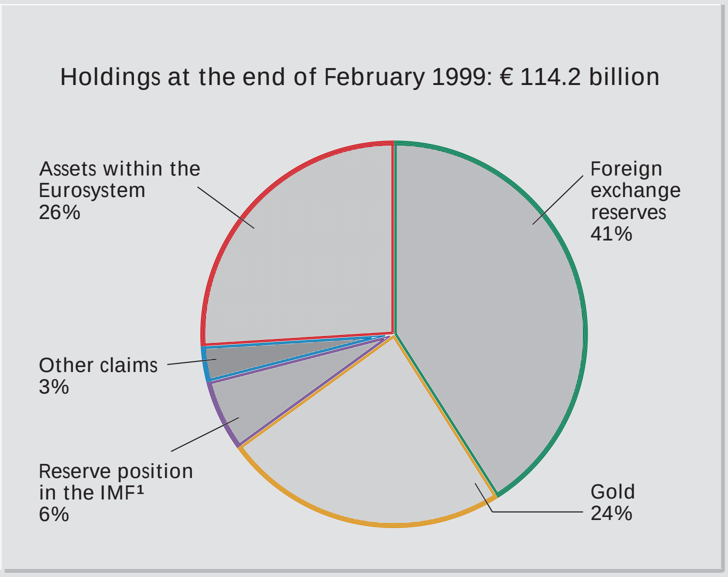
Globalisation advanced further in the corporate sector, too; at all events, this is suggested by the sharp rise in cross-border direct investment in both directions. All in all, there were extensive net capital exports as a result. At DM 117½ billion in 1998, these exceeded the previous year's figure (of DM 53 billion) substantially. German enterprises increased the funds they made available to their subsidiaries abroad to DM 152½ billion, the lion's share of which (DM 105 billion) was used to acquire participating interests. However, just over one-third of the total amount was due to the large merger already mentioned. Even if this transaction is excluded, however, German corporate investment abroad clearly exceeded the corresponding amount in 1997. The increased acquisition of participating interests abroad possibly reflects the sharp growth in exports that was still under way at the beginning of 1998 and the fairly good profitability of German enterprises at that time – two factors which had previously played a major role in determining German direct investment abroad.

... and greater foreign direct investment in Germany

Foreign direct investment in Germany also increased discernibly last year. Foreign proprietors, who had added DM 16½ billion to their participating interests in Germany in 1997, invested a further DM 35 billion in Germany in 1998. This positive development was probably due not least to the improvement in factors influencing investment decisions – such as the lower real external value of the Deutsche Mark than its long-term average and corporate restructuring measures. Nevertheless, strategic considerations about their positioning in the EU probably also played an important role because it was precisely enterprises domiciled in partner countries that invested particularly heavily in Germany.

Structure of the external assets of the Bundesbank

Chart 10



1 Including special drawing rights.

Deutsche Bundesbank

Funds also imported through credit transactions by non-banks

The unsecuritised credit operations of German non-banks resulted in a smaller influx of funds in 1998, and approximately DM 10 billion net accrued to the corporate sector (including individuals). This was mainly due to long-term financial transactions even though these – to a fairly small extent – were accompanied by outflows of funds at the short end of the market. There were likewise divergent trends in the case of the cross-border credit transactions of the public sector. Capital exports arising from the redemption of long-term loans were accompanied by imports of funds as a result of short-term liquidity operations. The upshot was a deficit of DM 3 billion.

Decline in short-term external position of the banks

If the payments shown so far in current and financial transactions are combined, a not inconsiderable deficit is the result. The counterpart is to be found in the credit transactions of the banks. Whereas the long-term transactions were almost in balance (minus DM 3 ½ billion), it was once again the short-term liquidity movements that helped to even out the cross-border payment flows. The total funds received by German banks in this sector amounted to DM 144 billion.

Transaction-related rise in the Bank's monetary reserves

The monetary reserves of the Bundesbank, which now appear as a separate item in the new presentation of the balance of payments, rose by DM 7 billion in 1998. Interest income from dollar assets and cheques purchased from the US army were the most important factors here. Movements in the other external assets and liabilities that do not count towards the monetary reserves were fairly limited; these are now shown under the various instruments in the financial account.

Reallocations in the external position

If, as usual, the Bank's total assets and liabilities vis-à-vis non-residents are combined, it becomes evident that in addition to the transaction-related changes at the turn of 1998-9 it was principally reallocations and revaluations which had a permanent impact on the structure of the external position. With the disbandment of the EMS at the end of 1998, for example, the gold and dollar reserves which had previously been transferred temporarily to the ECB were initially re-entered in the Bundesbank's balance sheet and the corresponding ECU-denominated claims on the ECB were annulled at the same time. When stage three of European economic and monetary union was introduced, the Bundesbank again transferred to the ECB at the beginning of 1999 monetary reserves amounting to € 12.2 billion (= DM 24.0 billion) as the German contribution to the ECB's monetary reserves. Like all of the Bank's other foreign assets denominated in euro and all foreign currency claims on residents within the euro area, however, the Bank's corresponding (counter) claim on the ECB is no longer included in the monetary reserves in EMU but, instead, is allocated to the Bank's other external assets. Besides, the external assets and liabilities were generally valued at market prices with the start of EMU and – where necessary – were converted into euro at current exchange rates.[1] Since then, the holdings have been updated by including current transactions and are revalued at the end of each quarter using the market prices applying at that time. The Bank's net external assets calculated in this way amounted to € 99 billion, or DM 194 billion, at the end of February 1999.

Holdings at the end of February 1999

Gold accounted for € 27½ billion and the IMF position (including the special drawing rights allocated) for € 7 billion of the monetary reserves of € 80½ billion. Most of the Bank's foreign exchange reserves (€ 46 billion) were invested in

1 This was done using a gold price of € 246.368 per ounce of fine gold and a dollar rate of $ 1.16675 per euro. On the balance sheet day at the end of 1998 the valuation of the dollar was raised from DM 1.5396 per dollar to DM 1.5629 per dollar. Special drawing rights (SDRs) were shown in the balance sheet with a value of DM 2.35353 per SDR instead of DM 2.42043 per SDR a year earlier. However, the revaluations last mentioned were only of secondary importance for the change in the external position.

dollar-denominated securities. Of the Bank's "Other external assets" its claims within the Eurosystem played the most important role with a value of € 30 billion. This sum includes not only the German capital holding in the ECB and the aforementioned claim arising from the transfer of monetary reserves but also balances amounting to € 16½ billion held with other central banks in the Eurosystem resulting from cross-border payments. The Bank's total external assets therefore amounted to € 114 billion. The Bank's liabilities arising from external operations amounted to € 15 billion. The latter consist mainly of deposits by other monetary authorities and international organisations at the Bundesbank.

4. Monetary policy as part of the close cooperation of the EMU central banks

(a) Bundesbank interest rates initially unchanged, coordinated reduction in interest rates in December

Steady monetary policy ...

Last year, the Bank continued its steady approach to monetary policy. It left the discount and lombard rates at 2½% and 4½%, respectively, which were the levels applying since April 1996. All the weekly securities repurchase agreements up to the beginning of December were concluded as fixed-rate tenders at a specified rate of 3.3%. In all cases, the terms of forthcoming open market operations were announced in advance following the meetings of the Central Bank Council in order to stabilise market expectations. In line with that, the shorter-term deposit rates in the German money market remained quite stable. By contrast, there was a continuation of the downward trend in German capital market rates, which reached new all-time lows of less than 4% in the wake of the crises in East Asia and Russia.

... was consistent with the macro-economic and monetary situation in Germany ...

This policy was geared to fostering a steady course in the money market and was consistent with monetary and macroeconomic conditions in Germany. The money stock M3 remained within the limits envisaged by the Bank. Monetary growth, which had been quite moderate at the turn of 1997-8, accelerated somewhat in the following spring, but stayed within last year's target corridor of 3% to 6%. The price climate remained decidedly calm. Measured by the current price indices, the objective of price stability was virtually achieved. Neither particular inflationary risks nor dangers of deflation were apparent for the immediate future, even taking into account the crises in East Asia and Russia and the associated uncertainties in the financial markets. The upward trend in the economy continued, although expectations regarding business activity – which had still been quite robust in early 1998 – became somewhat gloomier towards the end of the year.

... and in the other EMU member states

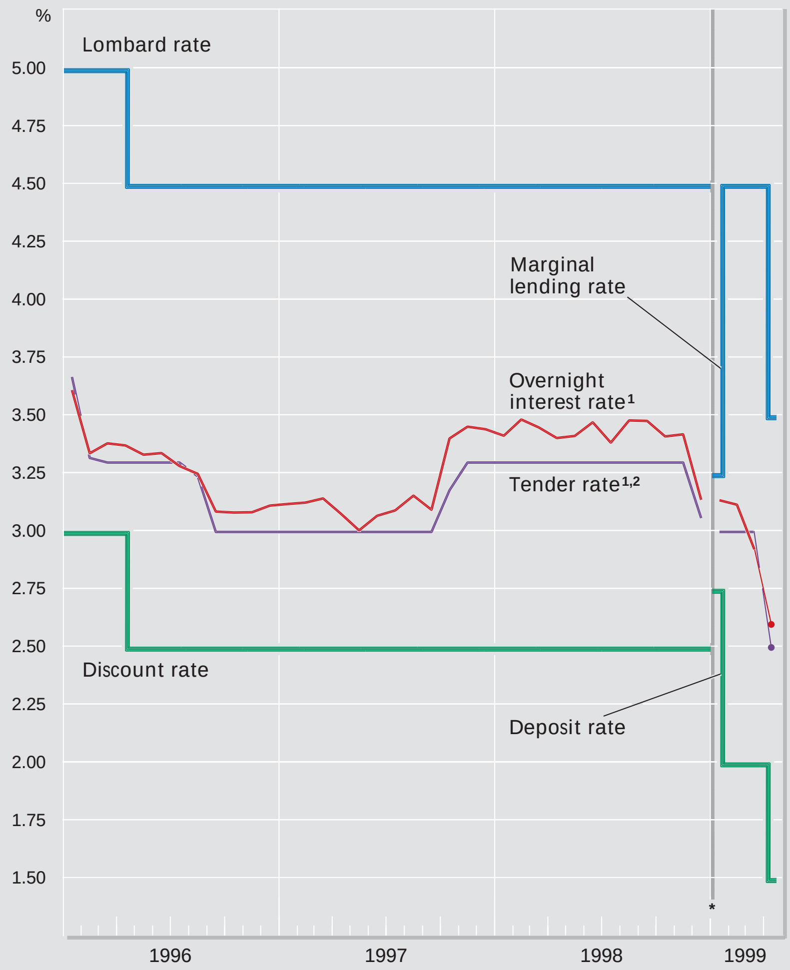
The steady monetary policy also took account of the monetary policy setting in the EMU member states. As early as December 1997, the Bank had announced that it would increasingly set its sights on the future European monetary union in the course of 1998 so as not to bequeath any potential for inflation to the European Central Bank. This European perspective was prudent, firstly, in view of the long time lags in the monetary policy transmission mechanism. Secondly, the necessary convergence in official interest rates at the end of stage two called for close cooperation among the national central banks, which was mainly a question of finding the interest rate which appeared compatible with future price stability in the euro area. This convergence process was not entirely easy, since the individual economies in EMU were at different stages of the business cycle. Even so, official interest rates had already largely converged at a low level in many of the countries (Germany, France, the Netherlands, Belgium, Luxembourg, Austria, Finland). Central bank interest rates in Italy, Spain, Ireland and Portugal, however, were significantly higher. However, the favourable outlook for prices in EMU – together with stable exchange rates – made possible gradual reductions in interest rates in these countries. As a result, official interest rates converged at the level of the "low-interest-rate" countries. From November 1998 onwards, money market rates in the participating countries were largely identical at 3 ½ %. Despite the occasionally turbulent developments in the international financial markets, convergence progressed very calmly. The process is likely to have been assisted by the credible prior announcement of the euro conversion rates, in May 1998, on the basis of the bilateral central rates of the European Exchange Rate Mechanism (ERM).

Coordinated lowering of interest rates in December

At the beginning of December, following a comprehensive analysis of the situation and outlook in EMU, the Eurosystem central banks arrived at the conclusion that it would be prudent to make a further reduction in interest rates to bring down the average level of key money market rates to 3 % before entry into monetary union. At the beginning of December, as part of a coordinated reduction in interest rates, the Bank lowered the rate applied to the securities repurchase agreements still to be concluded in this month, and continuing to be offered in the form of fixed-rate tenders, from 3.3 % to 3 %. It left the discount rate and lombard rate unchanged. The necessary convergence of money-market-relevant official interest rates was achieved and the initial level of the

Official interest rates and overnight interest rate*

Chart 11



* Up to end of 1998, quotations in DM; from 1999, quotations in euro. — 1 Monthly averages. — 2 Up to end of 1998, interest rate for securities repurchase agreements; from 1999, interest rate for main refinancing operations. — ● = Latest position: April 14, 1999.

Deutsche Bundesbank

corresponding ECB interest rate was virtually determined when Italy also lowered its key interest rate to 3 % later in the same month. As a result of the convergence in interest rates, the money market rates and the official interest rates relevant to the money market declined by almost 1 percentage point on an EMU average during 1998.

Money market management largely under stable underlying conditions

The underlying conditions for ongoing money market management in Germany remained largely stable last year. In the Bank's payments there were technical changes geared to an extension of float-free processing. At the end of November 1997, the Bank had changed over to booking all of its supraregional paper-

Record of domestic and external monetary policy measures

January 30, 1998
The Board of Governors of the International Monetary Fund approves an increase in members' quotas from SDR 146 billion to around SDR 212 billion.

March 16, 1998
The Irish pound is revalued in the EMS by 3 %. At the same time, Greece joins the exchange rate mechanism of the EMS with fluctuation margins of ± 15 %.

March 25, 1998
The EMI and the EU Commission publish their Convergence Reports pursuant to Article 109j of the EC Treaty. The Commission recommends that, of the EU member states, Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Portugal and Spain should start Stage Three of EMU in 1999. (Greece and Sweden have failed to meet the preconditions required for accession to the single currency; Denmark and the United Kingdom have "opted out" of joining in 1999.) In its report, the EMI draws attention to marked improvements in convergence, but expresses its ongoing concern with regard to general government debt levels in Belgium and Italy, and urges the responsible authorities to continue to assign high priority to the solution of that problem.

March 27, 1998
The Central Bank Council publishes its Opinion Concerning Convergence in the EU. Against the background of the progress towards convergence that has been achieved in many member states, and after giving due consideration to the remaining problems and risks, the Central Bank Council concludes that entry into monetary union from 1999 appears to be justifiable in stability-policy terms. With respect to the prerequisite of a sustainable public sector financial position, however, serious concern is warranted in the cases of Belgium and Italy. Such concern can be dispelled only if additional firm, substantive commitments are entered into. The selection of the participants ultimately remains a political decision, however.

May 2–3, 1998
The European Council, after taking due account of the Convergence Reports of the EU Commission and the EMI, and after having consulted the European Parliament, decides to start Stage Three of EMU on January 1, 1999 with the member states Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Portugal and Spain. Furthermore, it resolves that the bilateral central rates of the participating countries in the EMS are to be used as the basis for the conversion rates into euro.

May 14, 1998
The Central Bank Council approves the Bank's annual accounts for the financial year

1997. DM 24.21 billion of the net profit is paid over to the Federal Government.

June 1, 1998
The European Central Bank (ECB) and the European System of Central Banks (ESCB) are set up.

June 4, 1998
With the concurrence of the Federal Cabinet, the President of the Deutsche Bundesbank, in his capacity as the Governor for Germany, informs the International Monetary Fund that Germany has accepted the increase in quotas proposed by the IMF. This means that the preconditions have now been met by the German authorities for raising the German quota amount from SDR 8.2 billion to SDR 13.0 billion and the quota share from hitherto 5.66 % to 6.14 %. By thus accepting the increase, Germany is helping to ensure the appropriate funding of the IMF.

July 7, 1998
The Governing Council of the ECB adopts a recommendation for an EU Council Regulation on the introduction of minimum reserves by the ECB. Its main provisions encompass the definition of the institutions concerned, of the liabilities subject to reserve requirements, the possible spread of the reserve ratio, the introduction of a lump-sum allowance and the remuneration of minimum reserve balances.

July 23, 1998
The Central Bank Council reviews the monetary orientation for 1997-8 and the monetary target for 1998, and abides by the monetary orientation approved in December 1996, which provides for an expansion of the money stock by about 5 % p.a. in the course of 1997 and 1998 alike. It also abides by the target corridor of 3 % to 6 % which it had additionally laid down for 1998. At the same time, the Bundesbank points out that, in the further course of the year, its attention will focus increasingly on the entire area of the European monetary union; in that connection, monetary growth will merit particular consideration.

September 1, 1998
The ECB and the national central banks of the member states outside the future euro area agree on an accord defining the operating procedures of the new European exchange rate mechanism ERM II.

September 18, 1998
The ECB publishes a report entitled "The single monetary policy in Stage Three: General documentation on ESCB monetary policy instruments and procedures". The report provides credit institutions with the information they need to prepare for participation in the ESCB's monetary policy operations from January 1, 1999 onwards.

October 13, 1998
The Governing Council of the ECB agrees on the main elements of a stability-oriented monetary policy strategy. These elements comprise, on the one hand, the quantitative definition of the primary objective of the single monetary policy, viz. price stability, which is defined as a year-on-year increase of less than 2 % in the Harmonised Index of Consumer Prices for the euro area. On the other hand, the money stock will play an outstanding role in the monetary policy strategy to safeguard price stability. That role will be reflected in the announcement of a quantitative reference value for the growth of a broad monetary aggregate derived in a manner which is consistent with the objective of price stability, and which serves to attain that goal. Parallel to the analysis of monetary growth in relation to that reference value, a broadly-based assessment of the outlook for price movements and the risks to price stability will play a major part in the ESCB's strategy. That strategy underlines the ECB Governing Council's strict orientation towards its primary objective, and is intended to facilitate the performance of that overriding task. In addition, the Governing Council finally specifies the terms and conditions governing the minimum reserve system to be applied in Stage Three, and sets the reserve ratio at 2 %.

Record of domestic and external monetary policy measures

(continued)

October 14, 1998
Since rediscounting bills of exchange is not being adopted as a monetary policy instrument by the ESCB, the Bundesbank from now on accepts only rediscountable bills due not later than January 14, 1999 – i.e. the value date of the ESCB's first longer-term refinancing operation. In view of the requisite minimum residual maturities, the Bundesbank ceases to purchase bills payable abroad at the close of November 30, 1998 and discontinues its bill-purchasing operations altogether at the close of December 23, 1998.

November 17, 1998
The Bundesbank, acting with the approval of the Federal Cabinet, accedes to the New Arrangements to Borrow (NAB). The NAB constitute an agreement between the IMF and 25 member countries whereby additional credit lines are made available to the Fund if its own resources prove insufficient to fend off financial crises that pose threats to the global monetary system; the total volume of the NAB amounts to SDR 34 billion. The Bundesbank's share in that sum is around SDR 3.6 billion.

December 1, 1998
The Governing Council of the ECB specifies the quantitative reference value for monetary growth. That value is expressed in terms of the broad monetary aggregate M3 and is set at 4 ½ %. The ESCB will monitor monetary growth relative to that reference value on the basis of three-month moving averages of monthly 12-month growth rates. The ECB Governing Council announces that it will review the reference value in December 1999.

December 3, 1998
The Bundesbank lowers its repo rate from 3.3 % to 3 % in the context of a coordinated interest-rate cut by the national central banks which will participate in the single monetary policy right from the start of Stage Three. The joint interest-rate reduction effectively sets the initial level of the corresponding ECB interest rate at the start of Stage Three of monetary union.

December 22, 1998
The Governing Council of the ECB approves the central bank rates to be applied from the start of monetary union. Hence the first main refinancing operation of the Eurosystem will be conducted in the form of a fixed-rate tender at an interest rate of 3 %. The interest rates for the standing facilities of the Eurosystem, which will constitute the interest-rate corridor for short-term money-market rates, are set at 4.5 % for the marginal lending facility and at 2 % for the deposit facility from January 1, 1999. To make it easier for market participants to adjust to the new conditions of a single European money market, the ECB Governing Council approves, as a transi-

tional measure from January 4 to 21, 1999, a narrower corridor of between 2.75 % and 3.25 %. Furthermore, the Council decides that the first longer-term refinancing operation of the Eurosystem should be offered in the form of a variable-rate tender using the single-rate allotment procedure.

December 31, 1998
The Council of the European Union adopts a regulation defining the euro conversion rates at which the currencies of the eleven participating member states will be superseded by the euro. According to that regulation, EUR 1 is equivalent to DEM 1.95583.

January 1, 1999
The euro is launched as a common currency in the eleven participating member states. This means that the responsibility for monetary policy is transferred from the national central banks to the Eurosystem. The Eurosystem's primary objective is to ensure price stability in the common monetary area. To that end, the ECB Governing Council issues guidelines and takes decisions. The national central banks, being an integral part of the Eurosystem, implement that monetary policy in their respective member states. For that purpose, some major amendments of the Bundesbank Act come into effect; they include, in particular, a reformulation of the Bundesbank's duties and a redefinition of the functions of the Central Bank Council and of the Bank's powers in the field of monetary policy. Moreover, the provisions on the Bundesbank's capital and on its accounting system are adjusted to the changed underlying conditions.

Simultaneously with the start of monetary union, the European Monetary System goes out of effect. It is replaced by the new European exchange rate mechanism ERM II, under which the four member states which are not introducing the euro for the time being are given a chance to link their currencies to the euro. Denmark and Greece join that mechanism. The fluctuation margins around the central rate are ± 2 ¼ % for the Danish krone and ± 15 % for the Greek drachma.

January 4, 1999
The ESCB puts the TARGET payment system into operation. TARGET links 15 national real-time gross settlement systems with the payment system of the ECB; it paves the way in technical terms for the evolution of a single money market in the euro area.

January 21, 1999
The Governing Council of the ECB examines the experience gained with the single money market and concludes that market players' initial difficulties, in particular as regards cross-border liquidity flows, have diminished significantly. Against this background, the Council abolishes, as planned, the transitional arrangement for standing facilities. The interest rate for the marginal lending facility is set at 4.5 % and that for the deposit facility at 2 % with effect from January 22, 1999.

April 8, 1999
The Governing Council of the ECB decides to reduce the interest rate on main refinancing operations by 0.5 percentage point to 2.5 %, starting with the operation to be settled on April 14, 1999. In addition, it decides to lower the interest rate on the marginal lending facility by 1 percentage point to 3.5 % and the interest rate on the deposit facility by 0.5 percentage point to 1.5 %, both with effect from April 9, 1999.

April 15, 1999
The Central Bank Council approves the Bank's annual accounts for the financial year 1998. DM 16.22 billion of the net profit is paid over to the Federal Government.

Record of general economic and fiscal policy measures

January 1, 1998
A number of fiscal policy measures come into effect: the abolition of trade tax on capital, with a simultaneous tightening-up of the accounting rules for determining taxable profits, a lowering of the solidarity surcharge from 7 ½ % to 5 ½ % and a raising of the basic income-tax allowance.

February 12, 1998
The Bundestag adopts the "Act Strengthening the Financial Position of the Statutory Health Insurance System", which provides for an all-German risk structure compensation scheme to be introduced in the field of statutory health insurance from 1999 for an initial period of three years, and suspends the linkage envisaged in the former New Regulation Act between insured persons' additional payments and movements in a health insurance institution's contribution rates.

February 27, 1998
Along with preliminary national accounts data for 1997, the Federal Statistical Office announces the general government deficit, which, at 2.7 % of GDP, is slightly below the reference value of 3 %, as defined under the Maastricht Treaty. The Federal Cabinet also notifies the European Commission of the general government debt ratio, which, at 61.3 %, is slightly above the reference value specified in the Treaty.

March 11, 1998
In its Annual Economic Report, the Federal Cabinet expects an overall economic growth rate of 2 ½ to 3 % in 1998. This forecast is based on the assumption of an acceleration in domestic economic activity that will more than offset the weakening of external stimuli. On the labour market, the decline in the number of employed persons is expected to come to a halt, and unemployment is likely to fall slightly, for the first time in a long while. Inflation will continue to decrease.

April 1, 1998
The increase of 1 percentage point in the standard rate of turnover tax, to 16 %, comes into effect.

June 10, 1998
The Financial Planning Council considers it necessary to restrict the growth rate of general government expenditure to not more than 2 % p.a. over the medium term in order to ensure compliance with the deficit criterion for monetary union.

July 8, 1998
The Federal Cabinet approves the draft Federal budget for 1999, involving expenditure totalling DM 465.3 billion (0.4 % above the adjusted amount budgeted for in 1998) and a deficit amounting to DM 56.3 billion. According to the medium-term financial plan, which is submitted at the same time, the

growth rate of spending is to be limited to an average of 1.4 % p. a. between the years 2000 and 2002, and the deficit is to be reduced to DM 44.3 billion in 2002.

November 9, 1998
The parliamentary groups of the new Government coalition formed after the German general election submit a Bill Concerning Tax Relief in 1999–2000–2002, which provides for income taxation to be reformed in three stages. The reform encompasses gross tax relief totalling DM 57 billion, DM 42 billion of which is to be financed by broadening the tax basis, with the first two reform stages having virtually no impact on revenue. The planned tax relief comprises, in particular, an increase in child benefit and a successive reform of the income tax scale, the initial and top rates of which are to be lowered to 19.9 % and 48.5 %, respectively, by the year 2002. The tax rates on industrial and commercial earnings are likewise to be reduced. Since the broadening of the tax basis focuses on a tightening-up of the accounting rules for determining taxable profits, however, on balance the package of measures involves additional burdens on the enterprise sector.

November 20, 1998
Although the German Council of Economic Experts, in its Annual Report for 1998–9, identifies an increasing feeling of insecurity owing to the crises in a number of east Asian countries, it comes to the conclusion that the German economy may well continue to grow by just under 2 % in 1999. Given the slackening pace of growth, however, a further improvement on the labour market is hardly to be expected any longer.

December 4, 1998
The Bundestag adopts the 1999 Tax Relief Act, which includes major relief measures of the package of reforms (in particular, the lowering of the initial rate of income tax and the raising of child benefit), which will come into force at the beginning of 1999.

December 10, 1998
The Bundestag adopts the "Act to Enhance Solidarity in the Statutory Health Insurance System", under which a number of measures taken by the previous government are repealed. In particular, the additional payments are lowered, the existing "hospital emergency levy" of DM 20 per insured person is abolished, the automatic adjustment of additional payments is revoked and benefits for dental prostheses are, in general, granted in the form of a payment in kind rather than a subsidy. Moreover, the Bundestag approves the "Act Governing Adjustments to the Social Security Funds and Safeguarding Employees' Rights". The inclusion of a demographic adjustment factor in the pension adjustment formula, as envisaged in the 1999 Pension Reform Act, and the reform of occupational disability pensions are postponed. With effect from April 1, 1999, the contribution rate to the pension insurance scheme is lowered by 0.8 percentage point and, as a compensatory measure, an additional Federal grant is introduced. Furthermore, the relaxation of some provisions governing protection against dismissal and of the continuation of wage or salary payments in the event of illness is revoked.

January 1, 1999
Some provisions regulating fiscal policy enter into effect: they include, in particular, the raising of child benefit, the lowering of the initial rate of income tax and raising of the basic income tax allowance, and adjustment measures in the area of the statutory pension and health insurance schemes.

January 4, 1999
The Federal Cabinet approves a stability programme which is intended to take due account of the commitments resulting from the Stability and Growth Pact. To meet the medium-term objective of a fiscal position that is "close to balance or in surplus", the deficit ratio is to be reduced to 1% by 2002 by limiting the growth in general government expenditure to 2 % p. a. The programme also provides for the debt ratio to be reduced to

Record of general economic and fiscal policy measures
(continued)

59½ % by the year 2002; that would be marginally below the reference value specified in the Maastricht Treaty.

January 19, 1999
The Federal Constitutional Court announces a number of rulings relating to family taxation, obliging Parliament in future to define the subsistence level of children (which is to be exempt from taxation) much more broadly than hitherto.

January 20, 1999
According to preliminary budget figures, the deficit in the Federal budget for 1998 amounts to DM 56.5 billion, and is thus DM 1.2 billion above the (adjusted) figure budgeted for. On the expenditure side, the envisaged volume is undershot by DM 6.5 billion – owing, above all, to lower grants to the Federal Labour Office – while the receipts fall DM 7.7 billion short of the estimates. Although tax revenue is DM 1.9 billion higher than expected, receipts from privatisation that had originally been envisaged for 1998 were deferred to 1999.

Furthermore, the Federal Cabinet approves the new draft budget for 1999, showing a deficit of DM 56.3 billion, which is thus just as large as the deficit budgeted for by the previous government. At DM 488 billion, the planned expenditure volume is much larger than in the original draft, and exceeds the actual figure for 1998 by 6.8 %. That is mainly due to the inclusion of new expenditure and receipts, notably of additional tax-financed grants to the pension insurance scheme.

January 28, 1999
In its Annual Economic Report for 1999, the Federal Cabinet expects a growth of around 2 % in the gross domestic product. To achieve this, a reorientation of economic and fiscal policy towards higher employment levels under conditions of price stability is to be initiated. That entails – in the Federal Cabinet's view – not only a co-ordination of overall economic policy but also an alliance for jobs, training and competitiveness.

February 27, 1999
A pay settlement for public employees is agreed which runs for 15 months and provides for an increase of 3.1% in wages and salaries from April 1, 1999 and for a lump-sum payment of DM 300 for the period from January to March 1999.

March 3, 1999
The Bundestag passes the "Act Introducing an Ecological Tax Reform", which reform is designed to lower non-wage labour costs progressively, on the one hand, and to increase the cost of consuming energy, on the other. To this end, as an initial step, the existing mineral-oil tax is to be increased (by 6 pfennigs per litre for petrol and diesel fuel,

4 pfennigs per litre for heating oil and 0.32 pfennig per kilowatt-hour for natural gas), and a new electricity tax (of 2 pfennigs per kilowatt-hour) is to be introduced from April 1, 1999, with the tax increase being mitigated for the producing sector, agriculture and the railways. The extra revenue expected from these measures, amounting to just over DM 8 billion, is to be used to finance the lowering of the contribution rate to the statutory pension insurance scheme by 0.8 percentage point, which lowering will come into effect on the same day.

March 4, 1999
The Bundestag passes the "Tax Relief Act 1999–2000–2002" and the "Act Amending the Provisions Governing Insignificant Jobs". Compared with the draft bill, the income tax reform involves larger net relief owing to the softening of some counterfinancing measures; such relief will amount to an estimated DM 18½ billion net during the final stage (in 2002). The amendment of the provisions governing insignificant jobs stipulates a salary ceiling of DM 630 a month and replaces the previous flat-rate taxation by an obligation to pay contributions to the statutory pension and health insurance schemes.

April 1, 1999
The increase in energy taxation and the lowering of the contribution rate to the statutory pension insurance scheme come into effect.

less direct debit and cheque collections, too, on a same-day basis. From September 1998, all other collections that were still paper-based were likewise changed over to float-free processing. Furthermore, debiting and crediting of sizeable, regularly recurring transactions of the public authorities have been processed on a same-day basis since spring of last year. Finally, all credit transfers have been booked float-free since February 1999. Since then, there has generally not been any float in the Bank's cashless payments.

Float reduction

Ending of discount credit

Since lending through the purchase of bills of exchange (rediscount credit) has not been adopted by the European System of Central Banks (ESCB) as a monetary policy instrument, and as there was agreement that the national central banks' overhanging refinancing credits after the start of monetary union should be phased out quickly in order to ease the changeover to the single monetary policy, from October 14, 1998 only bills of exchange due not later than January 14, 1999, i.e. the value date of the first basic tender of the Eurosystem, were purchased by the Bank for rediscounting. Owing to the necessary minimum residual maturities of the bills of exchange, the purchase of foreign bills payable abroad was discontinued at the close of business on November 30, 1998. The purchase of domestic bills, and of foreign bills payable in Germany, was ended on December 23, 1998. From mid-October, credit institutions were no longer able to present bills of exchange with the usual maturity of three months for rediscounting. However, in order to make it possible for the banks to make large-scale use of their rediscount quotas before the discount window was closed, the Bank lifted its previous restrictions on the buying of bank acceptances, whose maturity can be fixed flexibly and which also require only two signatures. This enabled credit institutions to utilise their quotas quite heavily up to the end of the phasing-out period. On an average of December, the Bank's discount credit amounted no less than just over DM 57 billion, compared with DM 63 billion in September. The final maturities in mid-January 1999 amounted to just under DM 40 billion. Even after the discontinuation of discount business, however, commercial debt instruments can still be used for refinancing purposes since the Bank accepts bills of exchange (and, as an innovation, commercial banks' portfolios of loans and advances to eligible borrowers) as collateral for central bank credits. It is intended that commercial debt instruments will counteract preferential treatment being given to government debt instruments as eligible collateral, and that future refinancing, too, will be anchored, at least partly, in the real sector of the economy.

Liquidity management through securities repurchase agreements

In line with its steady monetary policy, the Bank's ongoing liquidity management was aimed at keeping the money market in consistent equilibrium. To do this, it measured its provision of funds so that the credit institutions' central bank balances were as close as possible to the current level of required reserves, thus enabling the banks to meet their minimum reserve requirements quite evenly. In doing so, the Bank relied as usual almost exclusively on the regular weekly conclusion of securities repurchase agreements with a maturity of two weeks. Adjustments to the volume of repurchase agreements outstanding offset, in particular, fluctuations in currency demand and in the Bank's external position, sharp variations in the float in the Bundesbank system, and the gradual reduction in rediscount borrowing in the fourth quarter. One-off liquidity effects, such as the transfer of the Federal Government's share of the Bank's profit for the financial year 1997, were an additional factor. The record amount of DM 24.2 billion, which was transferred to the Federal Government on May 14, 1998, was mainly the result of the Bank using the scope provided by the existing accounting rules in the valuation of its foreign exchange holdings. Given the change in the external risk situation, the Bank no longer valued its US dollar holdings at historically lowest rates. Instead, while maintaining the strict principle of the lower of cost or market, it valued them more consistently with market conditions, thereby releasing undisclosed reserves which were then reflected in the profit and loss account. The increase in liquidity resulting from the profit transfer was absorbed immediately by a matching sharp reduction in the volume of the securities repurchase transaction concluded on the same day. At the beginning of July, the Bank had to take due account of the payment of its share, amounting to DM 2.1 billion, of the capital of the European Central Bank (in accordance with Article 28 of the Statute of the ESCB and the ECB), since a matching volume of liquidity flowed to the credit institutions as a result of the ECB using its own funds. Overall, the buffer function of the minimum reserves was one main reason why it was possible to keep the fluctuations in the day-to-day money market rate within narrow bounds.

Allotment volumes made more uniform

Following the sharp tender reduction to offset the profit transfer in May 1998, the Bank split the following large-volume transaction into one two-week tranche and one three-week tranche in order to prevent the creation of too wide a disparity in the allotment volumes for the individual securities repurchase agreements. It was with the same objective at the end of November that the Bank, contrary to its usual practice, scheduled a fine-tuning operation to mature not on the next regular tender date but after the end of the month instead, i.e. at the beginning of the December reserve period.

Hardly any fine-tuning operations

Very short-term assistance measures were only rarely necessary last year. In each case, they were used by the Bank to provide additional liquidity after an unexpectedly high minimum reserve requirement had been announced. In April and November, it concluded liquidity-increasing foreign exchange swaps with maturities of five and nine days, respectively, and in October it used a quick tender with a five-day maturity to steady developments in the day-to-day money market and to limit the use of lombard credit by the banks at the end of the reserve period.

The banks' refinancing operations

Utilisation of the rediscount quotas, which – as is typical at the turn of the year – had been perceptibly reduced in December 1997, returned to its usual level of around 96 % by the end of January 1998 and subsequently remained there. The scheduled closing of the rediscount window at the start of EMU led to a gradual decline in bill rediscounting at the Bank during the autumn months. Credit institutions' daily recourse to lombard borrowing mostly remained slack. It was only at the end of the month that the banks made more frequent and somewhat greater use of lombard loans as part of their final minimum reserve management operations. On an annual average, utilisation of the lombard loan facility was at much the same low level as in previous years, at DM 0.4 billion; it accounted for 0.2 % of total refinancing.

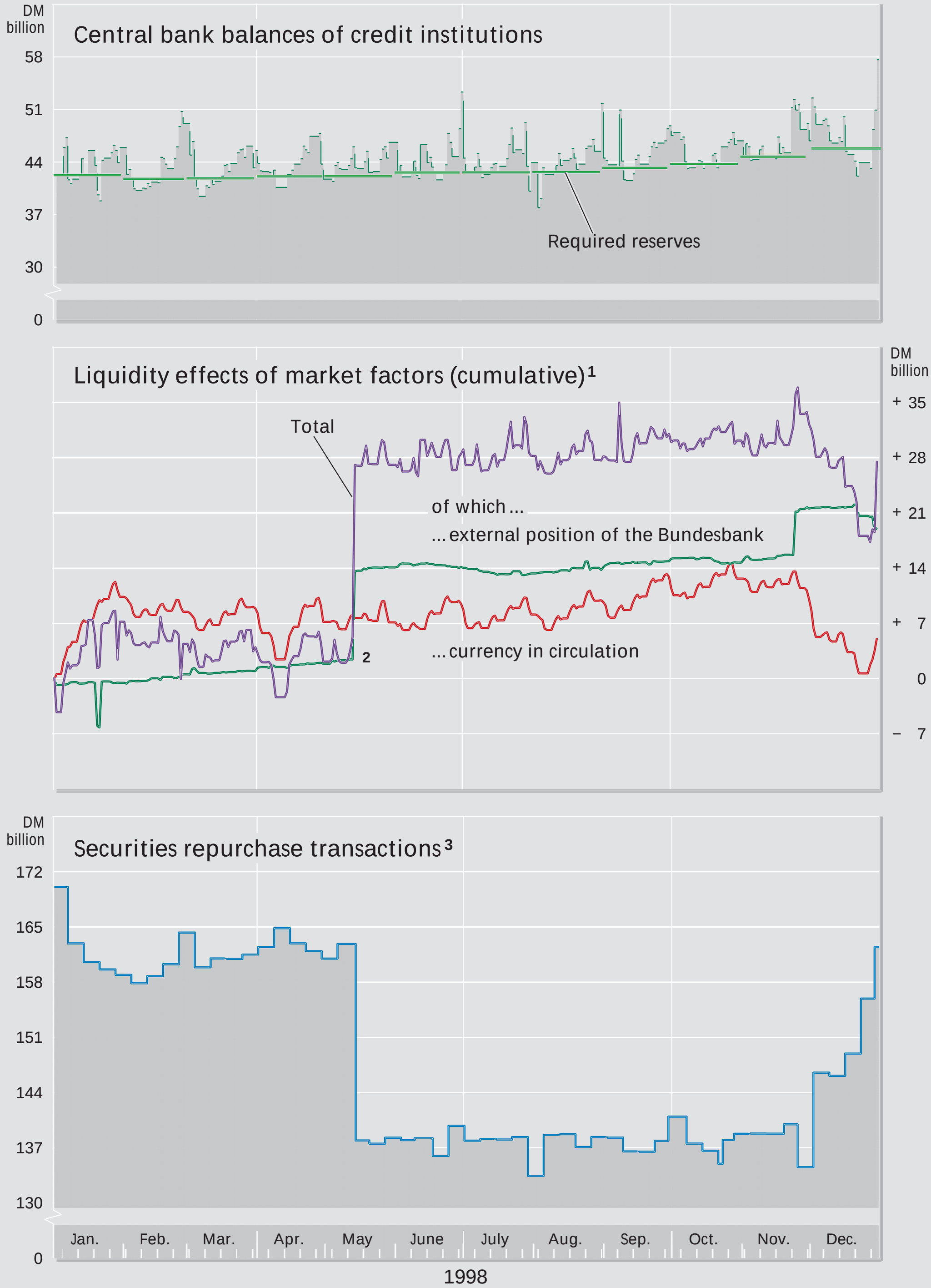
Lower borrowing requirements

The banks' borrowing requirements, which had risen sharply in the two preceding years (see table on page 81), fell during 1998. This decline is due, firstly, to a reduction in the holdings of central bank money (currency in circulation and minimum reserves on domestic liabilities) – the first such decline in the fifty-year history of the Deutsche Mark, leaving aside reductions made in the minimum reserve requirements on monetary policy grounds. This change reflects the decline in currency in circulation: by the end of December 1998 it had fallen back, in seasonally adjusted terms, to its spring 1996 level. By contrast, there was quite a sharp growth in required reserves on domestic liabilities. Secondly, the credit institutions' borrowing requirements were reduced as a result of the increase in the Bank's net external position, which was due to an expansion of the monetary reserves and to monetary authorities abroad making use of their Deutsche Mark credit balances at the Bank. Finally, the transfer of the profit to the Federal Government in May 1998 had a major liquidising impact. These expansionary effects were a long way from being offset by contractionary factors, such as current entries to the Bank's profit and loss account, the increase in reserves required on foreign liabilities and the marked fall in the utilisation of the (largely unchanged) rediscount quotas. At DM 19.4 billion, there was therefore

Liquidity management by the Bundesbank

Chart 12

Daily values



1 Currency in circulation, external position of the Bundesbank, cash items in the process of settlement and other factors; provision (+) or absorption (−) of central bank balances. — **2** Rise in May 1998 due to revaluation of the monetary reserves and profit transfer. — **3** Including quick tender of October 23 to 27, 1998.

Deutsche Bundesbank

a sharp reduction in the banks' short-term liquidity gap. In line with that, the volume of securities repurchase agreements outstanding was cut back. Nevertheless, their share in total refinancing, at around 70 %, was more or less unchanged from the previous year owing to the fact that there was also a decline in bills of exchange presented for rediscounting.

(b) Adoption of monetary policy by the Eurosystem

Setting of the first Eurosystem interest rates

At the beginning of stage three of EMU on January 1, 1999, responsibility for monetary policy was transferred to the Eurosystem. The Governing Council of the ECB, which has borne responsibility for monetary policy decisions since that date, set the first interest rates of the Eurosystem on December 22, 1998. It decided to offer the first main refinancing operation of the Eurosystem as a fixed-rate tender with a rate of 3 %, thereby formally confirming the level of convergence in national key money market rates, achieved at the end of last year, as the starting level for the corresponding ECB interest rate. At the same time, it reaffirmed its intention of leaving the main refinancing rate at this level for the foreseeable future. Accordingly, all main tenders up to the beginning of April 1999 were concluded at the unchanged rate. In order to stabilise market expectations, the terms of the forthcoming open market operations were in all cases announced in advance following the meetings of the Governing Council. Furthermore, on December 22, 1998, the Governing Council determined the interest rates for the two standing facilities which form the interest rate corridor for the overnight money market. It set the rate for the marginal lending facility at 4 ½ %, i.e. at the level of the final lombard rate of the Bundesbank, and the rate for the deposit facility at 2 %. For the first three weeks of this year, however, the interest rate corridor was narrowed to 50 basis points (from 2 ¾ % to 3 ¼ %) in order to make it easier for the market players to adjust to the new conditions obtaining in a single European money market and to limit volatility in money market rates at the start of the third stage. The limited duration of this measure made clear that the market players had to adapt quickly to the new monetary policy environment and that the development of a single money market in the euro area should not be impeded. Given increasing progress in the integration of the national money markets – illustrated by the rapid use of cross-border arbitrage options in Euro-money trading and the speedy adjustment to the way in which TARGET and other cross-border payment systems work – the Governing Council repealed this transitional arrangement, as planned, with effect January 22, 1999.

Lowering of interest rates in early April

In its meeting on April 8, 1999, the Governing Council of the ECB lowered the Eurosystem's interest rates. It reduced the rate applied to the main refinancing operations to 2 ½ %, the rate for the marginal lending facility to 3 ½ %, and the rate for the deposit facility to 1½ %. Interest rates were lowered with a view to the future. This step was consistent with the mandate and strategy of the Eurosystem. Neither monetary growth nor the outlook for prices signalled any identifiable risks of inflation for the foreseeable future. The decision to cut interest rates was intended to maintain monetary policy on a longer-term stability-oriented course, thus contributing to the creation of an economic setting in which the euro area's considerable potential for growth can be exploited.

Money market management through the Eurosystem ...

From the start of stage three of EMU, ongoing money market management, too, has been taking place through the Eurosystem. The Executive Board of the ECB determines the amounts of central bank money to be allotted in the course of open market operations. These allotments are based not only on the relevant monetary policy guidelines adopted by the Governing Council but also on estimations of the liquidity needs of the euro area as a whole. The estimations are produced as an aggregation of the national liquidity forecasts of the individual participating central banks. Practical implementation of monetary policy, however, follows the principle of decentralisation: in other words, the operations which are necessary for putting centrally decided money market management into practice are, as a rule, conducted by the national central banks.

... primarily through main refinancing operations ...

The Eurosystem's provision of funds consistently pursued the aim of offsetting the fluctuations in credit institutions' liquidity requirements as soon as possible. These fluctuations, which were caused by market factors or by national central banks transferring profits to their central governments (the profit transfer by the Bundesbank to the Federal Government on April 15, 1999 to the amount of DM 16.2 billion), were offset by providing the credit institutions with the amounts needed to fulfil the minimum reserve requirements at an early stage in the minimum reserve period. The Eurosystem primarily used the weekly main refinancing operations with a maturity of two weeks for covering the credit institutions' liquidity deficit and for offsetting fluctuations in the need for funds. In the first quarter, euro 45 billion was provided by the monthly longer-term refinancing operations with a maturity of generally three months. These operations – in line with the former Bundesbank discount credit – form a kind of basic refinancing which eases the pressure on the volumes of funds which the main tenders turn over in the fairly short term, and which is intended to steady the money market and facilitate the management of funds by smaller banks in par-

... and through longer-term refinancing operations

ticular. Since basic tenders are not normally intended to give monetary policy signals, all the operations so far have been offered as variable rate tenders; allotment at first took place as a Dutch (single-rate) auction. An American (multiple-rate) auction has been used since the end of March. Up to now, no fine-tuning operations have been conducted by the Eurosystem. Recourse to the standing facilities of the Eurosystem was initially comparatively high at the start of the year. However, owing to the accommodating provision of funds by the Eurosystem, the progress made in the use of the new payment systems, and the integration of the national money markets, the situation returned to normal quite quickly and recourse was thereafter mostly confined to frictional amounts.

Low money market rates

The quoted rates for overnight and three-month money were mostly close to the main refinancing rate of 3 % up to the beginning of April, which meant that money market rates in EMU were very low historically. This was also true in real terms, i.e. taking into account price developments. Much the same holds true of the long-term interest rates. Monetary conditions in EMU have eased further as a result of the recent reduction in interest rates and the weakening of the euro exchange rate.

(c) 1998 monetary target achieved

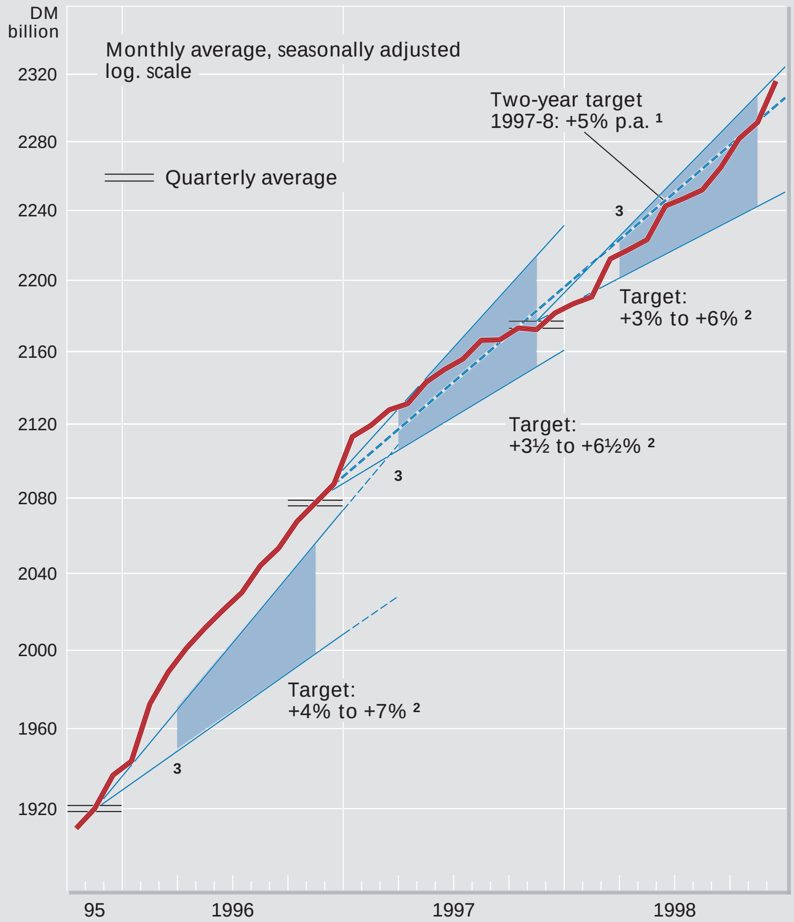
Monetary target 1997-8 and 1998 monetary target corridor

In 1998, the last year of the Deutsche Mark's "remaining life" as an autonomous currency, the Bundesbank adhered to its monetary targeting strategy and to the money stock M3 as a reference variable for monetary policy. At the end of 1996, the Bundesbank extended the time horizon for the monetary target to two years in order to take account of the specific underlying conditions in the run-up to EMU and to create early confidence in the continuation of stability policy up to the start of monetary union at the beginning of 1999. The money stock M3 was to grow by around 5 % in 1997 and 1998, respectively. Since there had been very little change in the benchmark figures on which the target had been based at the end of 1996, this two-year target was confirmed by the Central Bank Council in December 1997. Furthermore, the Central Bank Council set a target corridor of between 3 % and 6 % for 1998 in order to indicate the range of monetary growth that was compatible with stability policy in the shorter term. The corridor was lowered by ½ percentage point compared with the previous year: this was the Bank's response, in particular, to the fact that the corporate sector's provision with liquidity was still plentiful.

Growth of the money stock M3 *

Chart 13

Target and movement to date



* Average of five bank-week return days; end-of-month levels included with a weight of 50%. — 1 Between the fourth quarter of 1996 and the fourth quarter of 1998. — 2 Between the fourth quarter of the preceding year and the fourth quarter of the current year. — 3 The target corridor has been left unshaded until March because M3 is normally subject to major random fluctuations around the turn of the year.

Deutsche Bundesbank

Start not difficult and target achieved without problems

In contrast to 1997, entry into the target corridor was without difficulties in 1998. The quite moderate monetary growth in the second half of 1997 continued initially in January and February, when the money stock M3 remained at the floor of the target corridor of 3 % to 6 %. Thereafter, monetary growth accelerated owing to a sharp credit expansion and a slackening of monetary capital formation; up to autumn, the money stock moved roughly in the middle of the corridor set by the Central Bank Council, sometimes with sizeable fluctuations from month to month. There was a further increase in the pace of growth in the fourth quarter and the money stock M3 approached the ceiling of the target corridor. On an average of the fourth quarter of 1998, it was 5.5 % higher than in the fourth quarter of 1997. Between the fourth quarter of 1996 and the fourth quarter of 1998, M3 grew at an annual rate of 5.1% This meant that both the 1998 and 1997-8 monetary targets were met. Four-quarter M3 growth in 1998, which was consistent with the target, was accompanied by an annual average M3 growth of 4½%. This moderate growth was mainly due to subdued monetary expansion in the second half of 1997 and the associated quite low statistical overhang at the end of the year.

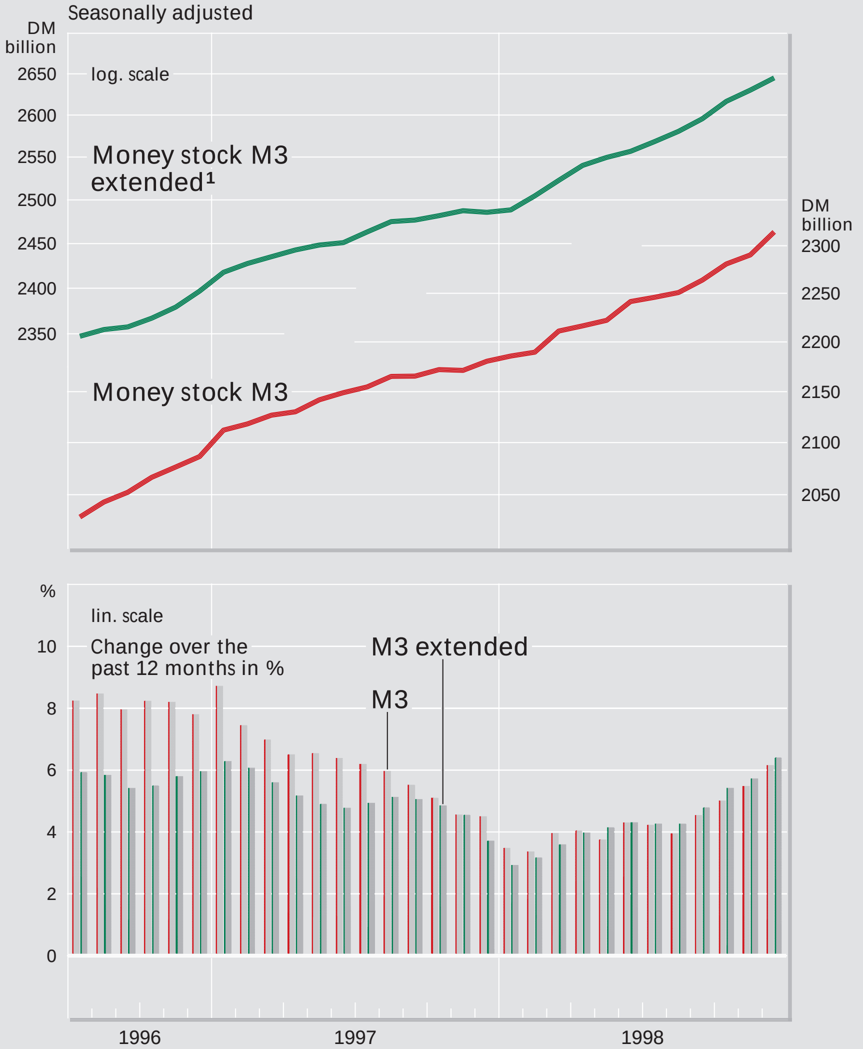
Growth of the money stock components

Among the individual components of the money stock, by far the sharpest growth last year was in sight deposits. This is likely to have been due in part to the extremely low opportunity costs of liquid money-holding on account of the historically low interest rates and the fact that price stability was largely achieved. Another contributory factor may have been the obviously increasing share of sight deposits yielding interest on market-related terms. Lastly, the high liquidity preference reflects the sharp growth in GDP and a "wait-and-see" attitude to future developments in the financial markets. By contrast, there was a decline in currency in circulation, which was accompanied by pronounced short-term fluctuations. At the end of 1998, it was just under 3% lower than a year before. This means that the persistent weak development of currency in circulation since the middle of 1997 continued. This affected notes of both high and low denominations and was probably due both to the increased use of cashless payment media in the retail trade and to a reduced demand for Deutsche Mark banknotes to be used for transactions abroad or for hoarding purposes. Despite the subdued development of currency, the money stock M1 (which measures the liquidity immediately available for transactions) grew sharply last year, at slightly more than 11%. Overall, there was a further slackening in the growth of savings deposits at three months' notice. Despite the numerous special savings schemes, the credit institutions are evidently finding it more difficult to gain customers for this form of investment when interest rates are low. For the first time in some years, shorter-term time deposits were formed again. Like sight deposits, they obviously benefited from investors' restraint in long-term monetary capital formation. Especially during the later part of the year, when interest rate uncertainty was at times quite high, funds were "parked" in liquid time deposit accounts on a major scale. At the end of the year, an additional factor consisted in repatriations of Euro-deposits to Germany and fairly large incoming payments in the construction sector owing to the phasing-out of special depreciation allowances in eastern Germany.

Growth of the monetary aggregates

Chart 14

Seasonally adjusted



1 Derived from two end-of-month levels.

Deutsche Bundesbank

Growth in the money stock M3 extended much the same as growth in M3

The Bank has always analysed monetary aggregates other than M3, especially M3 extended[1], which also comprises the liquidity-holding of domestic non-banks not included in M3. At 6½ %, this broadly defined aggregate grew at much the same sharp pace as the traditional money stock M3 (just over 6 %) between December 1997 and December 1998. One factor contributing to this was that – in contrast to the previous year – domestic non-banks acquired

1 Money stock M3, domestic non-banks' deposits with the foreign subsidiaries and foreign branches of German banks and the short-term bank bonds and certificates of domestic and foreign money market funds in the hands of domestic non-banks, less the bank deposits and short-term bank bonds of domestic money market funds, calculated as the average of two end-of-month levels.

money market fund certificates on balance (+ DM 10.1 billion). Given the low capital market rates and the flattened yield curve, this paper evidently became more attractive again. Domestic non-banks likewise increased their money balances abroad (+ DM 7.6 billion). By contrast, there was no more than a slight increase (+ DM 1.8 billion) in the holdings of short-term bank bonds held by non-banks.

(d) Determinants of monetary growth

Increased lending to the private sector

The acceleration of monetary growth in 1998 was due not least to banks stepping up their lending to the private sector. Lending by the credit institutions to enterprises and individuals went up by DM 309 billion, or 8 %, compared with DM 226 billion, or just over 6 %, in 1997. Given quite strong economic growth, short-term lending, in particular, expanded much more quickly, at 7 ½ %, than it had done in 1997 (1%). An added factor was that the banks purchased corporate securities to a greater extent than they had done in the year before (DM 56 ½ billion compared with DM 29 ½ billion). By contrast, longer-term direct lending to the private sector grew at an unchanged rate of 6 ¾ %.

Lending to enterprises and individuals as shown in the statistics probably somewhat overstates the basic trend in credit demand, however. For example, corporate securities – and shares, in particular – are purchased to a large extent in the secondary market and, in that respect, do not represent new lending to the issuers. In this connection, a particular role was played by one credit institution's purchase of a major package of shares from the Federal Government in November. This bloated the statistically recorded lending to the private sector, while the funds which flowed in this transaction benefited the Federal Government rather than the corporate sector. In December, lending appears to have been given an upward bias owing to the discontinuation of special depreciation allowances in eastern Germany at the end of 1998. The utilisation of these facilities for the last time in principle necessitated actual payment during 1998, and hence led to a surge in credit and a sudden rise in the money stock at the end of the year.

Credit by borrower

Lending to the private sector was buoyant on a broad front last year. All major groups of borrowers took up new bank credit on a fairly major scale, with the pace of expansion rising in the case of both enterprises and households. In housing construction, it remained at the level of the previous year (7 ½ %). Enterprises' indebtedness went up by 7 %, compared with an increase of just under 5 % in 1997, with the services sector (including the professions) and fi-

Monetary developments

Table 7

Changes during year

Item	1995	1996	1997	1998
	DM billion			
I. Central bank money requirements of banks and liquidy policy measures of the Bundesbank [1]				
1. Provision (+) or absorption (–) of central bank balances by:				
Changes in central bank money [2] (increase: –)	– 9.8	– 14.3	– 2.4	+ 2.0
Changes in the Bundesbank's external position (excluding foreign exchange swaps)	+ 9.0	+ 0.0	– 10.7	+ 11.1
Changes in domestic non-banks' net balances with the Bundesbank	+ 0.1	– 0.1	+ 0.1	– 0.2
Other factors	– 26.9	– 11.4	– 12.1	– 9.7
Total 1.	– 27.6	– 25.7	– 25.2	+ 3.3
2. Lasting provision (+) or absorption (–) of funds:				
Change in minimum reserve ratios [3]	+ 19.6	– 0.4	– 0.8	– 2.2
Change in refinancing facilities	+ 0.0	+ 0.1	– 0.4	– 0.2
Recourse to unused refinancing facilities (reduction: +)	+ 0.3	+ 0.4	+ 1.0	– 5.7
Open market operations in liquidity paper and in the bond market	+ 9.5	– 1.3	–	–
Transfer of the Bundesbank's profit to the Federal Government	+ 10.2	+ 10.3	+ 8.8	+ 24.2
Total 2.	+ 39.7	+ 9.1	+ 8.7	+ 16.1
3. Change in the banks' short-term liquidity gap (total 1 plus total 2, increase: –)	+ 12.1	– 16.6	– 16.6	+ 19.4
4. Meeting of remaining deficit (+) or absorption of surplus (–) by:				
Securities repurchase transactions	– 12.6	+ 16.6	+ 17.4	– 19.7
Very short-term assistance measures by the Bundesbank [4]	± 0.0	+ 0.2	– 0.2	+ 0.2
Changes in lombard loans (increase: +)	+ 0.5	– 0.3	– 0.6	+ 0.1
	%			
II. Key monetary indicators [5]				
Money stock M3 [6]	+ 3.4	+ 7.8	+ 4.5	+ 6.2
Money stock M3 extended [7]	+ 3.2	+ 6.0	+ 3.7	+ 6.4
Credit volume [8, 9]	+ 7.5	+ 7.6	+ 6.0	+ 6.5
	DM billion			
III. The money stock and its counterparts [8]				
Money stock M3 (= 1 plus 2 less 3 less 4 less 5)	+ 86.1	+ 174.0	+ 73.3	+ 165.8
Counterparts in the balance sheet:				
1. Credit volume [9]	+ 310.5	+ 335.4	+ 285.2	+ 331.0
of which				
Lending by credit institutions to domestic non-banks	+ 312.8	+ 336.3	+ 285.2	+ 331.0
to enterprises and individuals [10]	+ 223.0	+ 254.1	+ 225.8	+ 308.9
to public authorities	+ 89.8	+ 82.2	+ 59.4	+ 26.3
2. Net external assets [11]	– 31.7	– 19.1	– 67.7	– 134.0
3. Monetary capital formation	+ 181.7	+ 120.9	+ 116.1	+ 53.4
of which				
Savings deposits at over three months' notice and bank savings bonds	+ 15.4	– 19.1	– 11.7	– 14.7
Time deposits for four years and more	+ 69.1	+ 69.1	+ 45.3	+ 22.6
Bank bonds outstanding [12]	+ 74.8	+ 45.4	+ 45.7	+ 24.6
4. Federal Government deposits in the banking system	– 0.8	+ 4.5	– 6.5	+ 1.1
5. Other factors	+ 11.9	+ 16.9	+ 34.6	– 23.3

1 Based on daily averages of the last month of the period. — **2** Currency in circulation in the hands of non-banks and minimum reserves on domestic liabilities at current reserve ratios; but excluding changes in required reserves due to changes in the reserve ratios. — **3** Including changes in minimum reserves due to the growth of reserve-carrying foreign liabilities. — **4** Quick tenders, foreign exchange swaps and foreign exchange repurchase transactions, and sales of short-term Treasury bills. — **5** Seasonally adjusted. — **6** Currency in circulation plus the sight deposits, time deposits for less than four years and savings deposits at three months' notice held at domestic credit institutions, computed as a monthly average. — **7** Money stock M3 extended to include deposits abroad, short-term bank bonds and the certificates of domestic and foreign money market funds held by domestic non-banks, less the bank deposits and short-term bank bonds of domestic money market funds; average of end-of-month levels. — **8** Based on end-of-month figures. — **9** Credit institutions and the Bundesbank; including lending against securities. — **10** Including housing loans. — **11** Credit institutions and the Bundesbank. — **12** Excluding banks' portfolios and adjusted for transactions with non-residents.

Deutsche Bundesbank

nancial intermediaries continuing to be at the forefront. Lending to the manufacturing sector, which had shown scarcely any change in the preceding years, grew sharply in the light of the quite marked rise in industrial output and the greater propensity to invest (by just under 4½%). Statistically recorded consumer credit expanded by 6½%, compared with 3% in 1997. Households' increased propensity to incur debt is probably a reflection of improved consumer expectations and, in particular, the high demand for private cars and holiday travel abroad. Additionally, the rise in consumer credit is likely also to mirror the intermediate funding of payments for spending on housing construction in eastern Germany, which were to be made by the end of 1998 and which could not be converted into mortgage loans until the start of 1999.

Public sector demand for credit still declining

In 1998, there was a further marked reduction in the public sector's demand for credit. Bank credit to the public authorities increased by DM 26½ billion, or slightly more than 2%, compared with just under 5½% in 1997 and almost 8% in 1996. On balance, lending was solely in the form of direct credit. By contrast, the banks somewhat reduced their holdings of government bonds. In particular, this is likely to have been due to non-residents' very high demand for this paper during the financial market crises in autumn 1998, which the credit institutions partly satisfied from their own portfolios. The reasons for the public sector's declining demand for credit were, firstly, the accelerated sale of participating interests and the record transfer, amounting to DM 24.2 billion, of the Bundesbank profit, which was almost three times higher than in 1997 (DM 8.8 billion). Secondly, the development in public sector revenue was quite favourable owing to stronger economic growth and a slight rise in the tax ratio, and the increase in public sector spending remained tightly limited.

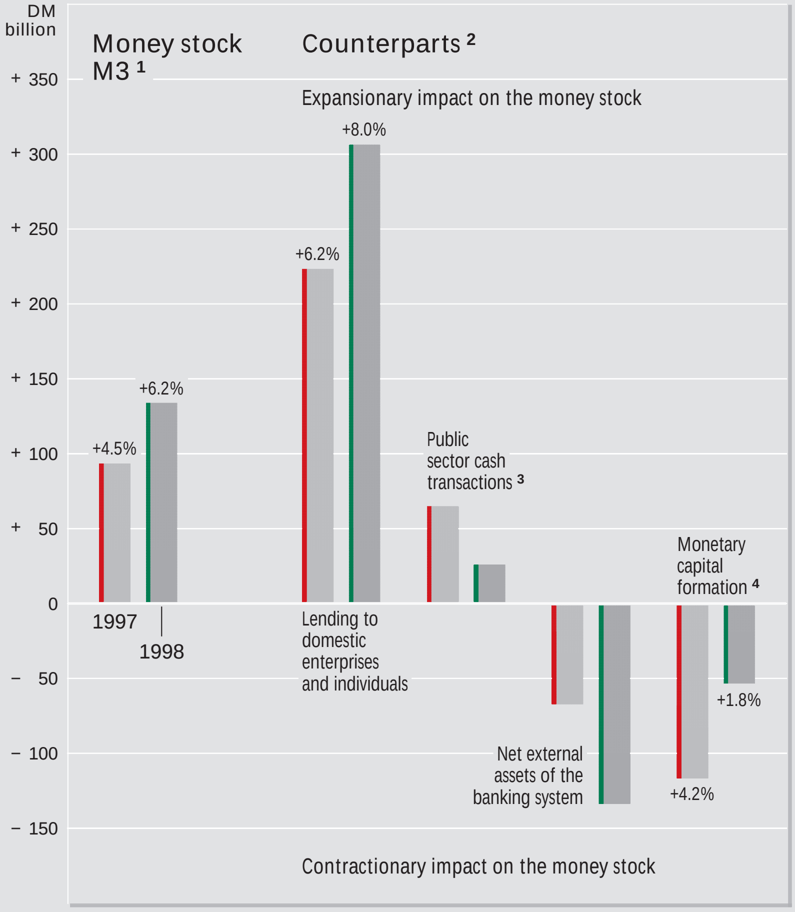
Renewed weakening of monetary capital formation

Besides more buoyant lending to the private sector, non-banks' very low propensity to accumulate longer-term financial assets with the credit institutions also produced sharper monetary growth. This propensity was further weakened by the historically low capital market rates, the flattened yield curve, and the occasionally quite pronounced uncertainties in the financial markets. Monetary capital with banks was increased by no more than DM 53 billion, or just under 2%, in 1998, compared with DM 116 billion, or slightly more than 4%, in the preceding year. All components of monetary capital formation were affected by the low propensity to acquire longer-term financial assets. Sales to domestic non-banks of bank bonds subject to price risks fell by one-half (to DM 24½ billion), as did the inflows of funds to long-term time deposits accounts (DM 22½ billion), which mostly comprise registered bank bonds which carry no price risk.

The money stock
and its principal counterparts

Chart 15

Change during year in DM billion or %



1 Calculated on the basis of monthly averages. — **2** Calculated on the basis of end-of-month levels. — **3** Lending by the banking system to the public sector less Federal Government deposits in the banking system. — **4** Monetary capital formation of domestic non-banks at domestic credit institutions.

Deutsche Bundesbank

Portfolios of bank savings bonds held by non-banks, which had risen by as much as DM 9 billion in 1997, declined by DM 2 billion. The reduction in savings deposits with an agreed period of notice, which had persisted since 1996, continued, but was smaller than in the two preceding years at DM 12 ½ billion.

Continued increase in outflows generated by external payments

There were extremely large outflows of funds last year in domestic non-banks' external payments. This is reflected by a decline in the net external assets of the banking system, which dropped by DM 134 billion, compared with a reduction of DM 67 ½ billion in 1997. The higher outflows of funds to other countries were mainly due to a further increase in domestic non-banks' investment in financial centres outside Germany. Excluding direct investment, the scale of which was crucially determined by the merger of two major industrial enterprises, domestic non-banks invested DM 159½ billion in foreign equities, bonds and investment fund certificates, compared with a figure of DM 111 billion in 1997. The lion's share of these portfolio investments was accounted for by foreign equities (see page 94). A good part of the large outflows of funds thus represents longer-term financial asset formation which has been shifted abroad. As a result, the sharp decline in the banking system's net external position is therefore likely to find its balance sheet counterpart not only in a curbing of monetary expansion but also in a weakening of monetary capital formation.

(e) Monetary policy strategy and monetary growth in the euro area

Monetary policy strategy ...

... of the Bundesbank ...

In order to perform the task of maintaining price stability in the best possible manner, the central banks need a clear strategy which gives guidance to the monetary policy decision-making process and serves as a means of communication with the general public. During the past 24 years, the Bundesbank has pursued a monetary policy geared to the money stock. This strategy is based on the finding that, in the longer term, inflation is a monetary phenomenon. The money stock is therefore, in principle, a suitable anchor for a monetary policy geared to the objective of price stability, making it easier to stabilise inflation expectations at the level envisaged by the central bank. Furthermore, it provides an appropriate benchmark for central bank accountability. This monetary targeting policy does assume, however, that there is a stable demand for money in the longer term, that the money stock has a lead over prices, and that the money stock can be controlled by the central bank. These empirical preconditions largely obtained in Germany, and the Bundesbank was therefore able to adhere to its tried-and-trusted strategy up to the start of EMU.

... and of the Eurosystem

Quantitative definition of price stability

The situation at the beginning of EMU is not so unambiguous, given the change in the monetary regime. It is unclear what impact this change will have on the financial market structures, the monetary policy transmission process, the expectations of the economic agents and, as a result, on money holding and the behaviour of the monetary aggregates. The Bundesbank therefore argued at an early stage in favour of monetary targeting being supplemented by selected elements of direct inflation targeting.[1] The monetary policy strategy adopted by the Governing Council of the ECB at the end of 1998 takes account of this. This

1 See Deutsche Bundesbank, Annual Report 1997, p. 82 f.

strategy comprises three main elements. The first element is the quantitative definition of the objective of price stability. It was defined as "a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2 %", with price stability "to be maintained over the medium term".[1] By publishing a quantitative definition of price stability, the Governing Council has provided the general public with a yardstick by which the success of the Eurosystem's monetary policy may be judged. Furthermore, the commitment to defined rates of price rises makes it clear that the Governing Council regards both inflationary and persistent deflationary trends as incompatible with the objective of price stability. Focusing on the Harmonised Index of Consumer Prices takes account of the fact that the general public mainly uses consumer prices to assess price developments. The fact that year-on-year price increases of below 2 % are regarded as compatible with the objective of price stability is due primarily to measurement problems, which may lead to actual price developments being overstated in the official price statistics. The objective of price stability relates to the medium term since there may be short-term movements in the overall price level which cannot be controlled by the monetary policymakers.

Prominent role of M3 ...

Secondly, the monetary policy strategy is characterised by the prominent role of the money stock. To make this clear, the Governing Council has set a quantitative reference value of 4½ % for the growth of the broadly defined aggregate M3. Like the erstwhile monetary target of the Bundesbank, it is based on medium-term benchmark figures, i.e. a trend growth rate for real gross domestic product (GDP) in the euro area of 2 % to 2½ % per annum, an increase in the HICP of below 2 %, and a medium-term decline in the velocity of circulation of M3 in the approximate range of ½ % to 1% each year. In order to eliminate the short-term volatility of the money stock, the Governing Council uses a three-month moving average of the 12 month-rates in pursuing the reference value. Just like the Bundesbank in the past, the Eurosystem will not respond mechanistically to monetary developments since the possibility of temporary distortions cannot be ruled out. Instead, any potential monetary policy responses will always be preceded by an additional, comprehensive analysis of the disruptions that may have led to the money stock deviating from the reference value. The term "reference value", which is less constraining than the term "intermediate target", is intended to characterise this pragmatic approach.

1 For this definition, see European Central Bank, Monthly Bulletin, January 1999, p. 46.

... and a broadly based assessment of the outlook for future price developments

Thirdly, the Eurosystem undertakes a broadly based assessment of the outlook for future price developments as a supplement to its monetary analysis. In the short term, price movements are influenced by a number of non-monetary factors. Furthermore, uncertainties about the stability of the money demand exist precisely at the start of EMU. The analysis of future price developments is based on a range of financial and real economic indicators which possess a lead over prices; these include wages, the exchange rate, the yield curve, indicators for real national product, price and cost indices as well as surveys of industrial and consumer confidence. Besides a comprehensive analysis of the individual indicators, the various factors are condensed in a single inflation forecast. In contrast to inflation targeting, this forecast will not play the key role in the monetary policy decision-making process, however.

Money stock definitions in the Eurosystem

The money stock definitions in the Eurosystem are essentially geared to the Monetary Financial Institutions (MFI) sector.[1] It is defined more broadly than the term "Banks", on which the banking statistics in Germany was formally based, and also comprises building and loan associations as well as money market funds. In EMU, there has likewise been a change in the maturity cut-offs of the bank deposits included in the money stock. The money stock M1 now includes currency in circulation and the overnight deposits of the non-MFIs resident in the euro area (but not the deposits of up to one month which were previously contained in the sight deposits). The money stock M2 additionally comprises deposits with agreed maturity up to two years and deposits redeemable at notice up to three months (in Germany, these are savings deposits at three months' notice) of the non-MFI sector of the euro area. The aggregate M3, for which the Governing Council has set a quantitative reference value, also contains a number of "marketable instruments", i.e. repurchase agreements of the MFIs, the money market fund shares/units, money market paper and debt securities of the MFI sector issued with a maturity of up to two years held by the non-MFI sector of the euro area.

Monetary developments in the euro area

During 1997 and 1998, the money stock M3 in the euro area grew quite steadily at rates of between 3½% and 5%, respectively. On an average of the last three available months (December 1998, and January and February 1999) it was 5.1% higher than twelve months previously. Its movements were thus slightly above the reference value of 4½%. Much the same as in Germany, growth in

1 In addition to the deposits with the Monetary Financial Institutions, the monetary aggregates contain deposits with the central governments (e.g. deposits with Post Offices, national savings banks and Treasuries.)

the narrowly defined money stock M1 – given the low interest rates – was far sharper, however. There are also quite close parallels between the trends in EMU as a whole and in Germany in terms of the driving forces behind monetary growth. In EMU as well, monetary growth is being promoted by a marked expansion in credit to the private sector and a quite low level of monetary capital formation as well as being curbed by large outflows of funds in the payments of non-MFIs with non-euro area residents. Similarly, public sector credit demand is fairly subdued throughout the monetary union. Marked regional differences are also apparent, however. Enterprises and individuals are displaying a particularly buoyant demand for credit in a number of countries which have experienced a very sharp fall in interest rates, which are at a more advanced stage of the business cycle, and where real estate prices are, in some cases, surging upwards.

5. Financial markets beset by global turbulence

(a) Renewed slide in capital market rates

Further sharp fall in capital market yields

Interest rates in the German capital market hit new all-time lows in 1998. At 4½%, the yield on domestic bonds outstanding was more than ½ percentage point lower on average last year than in 1997. In the first half of the year – following an initial slide in interest rates at the beginning of the year – capital market rates remained within a fairly narrow band of between 4½% and 4¾% in the context of a persistently stable price climate and favourable growth prospects. But from the later summer onwards, the yield trend was determined by the shockwaves emanating from the international financial markets. Russia's debt moratorium in August led to a fundamental reassessment of the risk in the credit markets and triggered panic-like shifts of resources on a very large scale. In the German bond market, which acted as a "safe haven" amid this turbulent atmosphere, this resulted in a massive slide in interest rates; between August and October the yield on bonds outstanding decreased by ¾ percentage point to 3¾%. In the late autumn the situation in the international markets calmed down somewhat, but the retarding effects of the crises on the cyclical momentum, which by now were clearly evident, in turn tended to depress the interest rate level. Against this background the yield on bonds outstanding fell to a new record low of 3½% at the end of January 1999. At the same time the yield spread of the United States, which is experiencing continuing buoyant growth, widened to over 1 percentage point for ten-year government bonds. Under the influence of rising US yields, German capital market rates subsequently climbed a little temporarily. When this Report went to press in mid-April, the yield on domestic bonds outstanding fell back to just over 3½%.

Marked change in interest rate differentials between different maturities ...

The inflows of funds from abroad to the German bond market led to pronounced shifts in the pattern of interest rates. The strong preference shown by investors for liquid securities with a first-class credit rating favoured longer-term Federal bonds, in particular. Regarding the maturity range as a whole, this resulted in the autumn in a sharp, "market-driven" flattening of the term structure of interest rates; in early October the yield spread of ten-year over one-year Federal bonds came to only ½ percentage point, as against almost 1½ percentage points at the beginning of 1998. Following the concerted cut in official interest rates at the start of December by the central banks of the countries participating in EMU, the yield curve steepened somewhat from the short end. Against the background of a declining interest rate level across the board, the flattening of the yield curve is not a sign of monetary policy tightening or of deflationary risks. It indicates rather that, over the longer term, market participants expect largely stable prices in Germany and in the euro area and therefore a low level of interest rates, too.

... and issuers

With the "flight to liquidity" in autumn the yield gap between Federal bonds *(Bunds)* and securities issued by other domestic borrowers widened substantially; thus ten-year bank bonds for a time yielded over ½ percentage point more than comparable Federal bonds. Unlike the situation in other countries, however, there were no indications of any credit squeeze in Germany. Despite the temporary widening of spreads, which was due especially to the different degree of liquidity in the various market segments, the yields on bank bonds likewise fell to new lows. This was also reflected in historically low interest rates on bank loans; for example, the ten-year fixed interest rate on mortgages at the beginning of 1999 was only 5% on average. Capital market rates are comparatively low in real terms, too. If the real interest rate is calculated on the basis of the current rate of price increases at the consumer level, it comes to just under 3½%; if it is based on long-term inflation expectations, it is even lower at around 2%. The terms for debt finance thus represent a stimulus to investment and growth in both nominal and real terms.

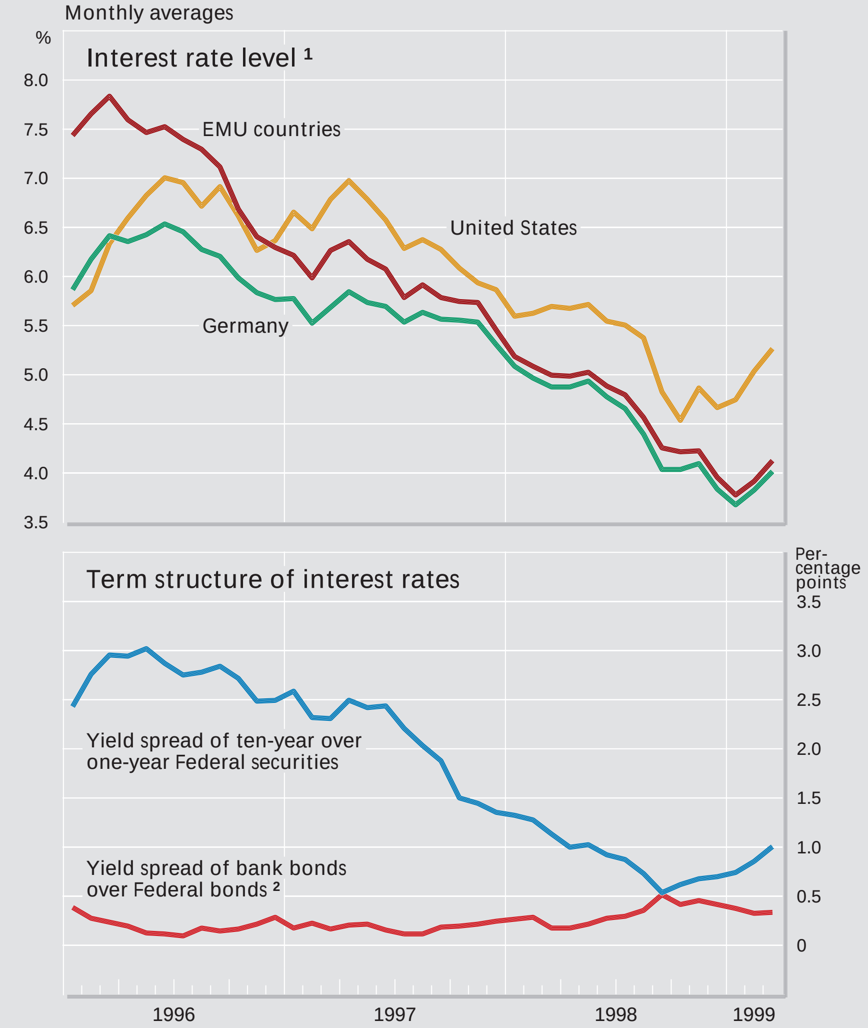
(b) Record issue volume despite financial market crises

In 1998 gross sales in the German bond market for the first time exceeded the threshold of DM 1 trillion. At DM 1,029½ billion (market value), the issue vol-

Interest rate movements in the bond market

Chart 16

Monthly averages



1 Government bonds with a residual maturity of around ten years; EMU countries: GDP-weighted average. — **2** In the ten-year maturity segment.

Deutsche Bundesbank

Issue volume above DM 1 trillion for the first time

ume was around 20 % higher than in 1997, when it had amounted to DM 844 ½ billion. Net sales of domestic bonds likewise grew faster than in 1997. After deducting redemptions and taking into account the changes in issuers' holdings of their own bonds, a sales balance of DM 308 billion remained, compared with DM 250 ½ billion in 1997. Net sales of foreign bonds in Germany even reached a new peak last year of DM 109 billion, which was almost one-and-a-half times as high as in the previous year. There was a particularly buoyant demand for securities denominated in the currencies of other countries participating in EMU. This owed something to the remaining small interest rate differentials within Europe which initially left some room for "convergence trading" in 1998. An additional factor was investors' desire to diversify their portfolios within the future single currency area. All in all, foreign currency bonds worth DM 80½ billion and debt securities denominated in Deutsche Mark and issued by foreign borrowers worth DM 29 billion were sold in Germany.

Continuing robust growth of bank bonds

The issuers of bank bonds registered sharp increases in the amount raised in 1998. At DM 254½ billion, the sale of such securities yielded about one-third more than in the previous year (DM 185 billion). The driving force behind this trend, as has been the case for some years, was the issuance of communal bonds *(Öffentliche Pfandbriefe),* the outstanding volume of which rose by DM 156 billion. This market segment is becoming increasingly dominated by large-volume "jumbo *Pfandbriefe",* which have an issue volume of at least DM 1 billion. At the end of 1998 the share of "jumbos" in the total amount of communal bonds outstanding reached almost 40%, compared with around 25% twelve months earlier. The outstanding volume of other bank bonds likewise expanded distinctly (by DM 57½ billion) amid banks' buoyant long-term lending business with private customers. Mortgage bonds *(Hypothekenpfandbriefe)* and debt securities issued by specialised credit institutions were sold in the amount of DM 21½ billion net and DM 19 billion net, respectively. By contrast, the market for corporate bonds issued by domestic enterprises remained very thin. Although the issue volume virtually doubled in 1998, it remains at an exceedingly low level, at DM 3 billion net.

Public sector

At DM 50½ billion, the public sector raised a smaller amount in the bond market last year than in 1997, when sales of government paper had yielded DM 64 billion. At DM 93½ billion net, the Federal Government's new borrowing in the bond market was markedly higher than in 1997, but this went hand in hand with substantial net redemptions of securities of the Treuhand agency (DM 28½ billion), the former Federal Post Office (DM 9 billion) and the Federal Railways Fund (DM 5 billion). The increase in the Federal Government's bonded debt is due not least to the fact that in the spring of 1998 the Federal Government began launching joint bond issues together with its special funds. This amalgamation under the name of the Federal Government facilitates higher issue volumes and thus boosts the liquidity of the market for Federal securities. Exempted from amalgamation are the debt securities issued by the Currency Conversion Equalisation Fund; these serve to secure equalisation claims (DM 2 billion in 1998) and are subject to special terms and conditions. The outstanding amount of Länder Government bonds declined by DM 1 billion.

Sales and purchases of bonds

Table 8

DM billion

Period	Sales				
		Domestic bonds 1			
			of which		
	Total	Total	Bank bonds	Public sector bonds	Foreign bonds 2
1992	291.8	284.1	106.9	177.4	7.7
1993	395.1	382.6	151.8	230.6	12.5
1994	303.3	276.1	117.2	158.9	27.3
1995	227.1	203.0	162.5	40.8	24.1
1996	254.1	233.5	191.3	41.5	20.6
1997	327.3	250.7	184.9	64.2	76.6
1998	417.4	308.2	254.4	50.7	109.2
1998 1st qtr	114.2	90.2	76.1	13.6	24.0
2nd qtr	115.9	78.7	67.5	11.2	37.2
3rd qtr	106.2	94.6	82.9	10.0	11.5
4th qtr	81.1	44.7	28.0	15.9	36.5
	Purchases				
		Residents			
			Non-banks 4		
	Total	Banks (including Bundesbank) 3	Total	of which domestic bonds	Non-residents 2
1992	291.8	133.5	37.4	45.6	120.9
1993	395.1	163.1	20.1	23.3	211.9
1994	303.3	125.3	154.7	134.0	23.3
1995	227.1	46.9	94.4	89.4	85.8
1996	254.1	116.5	30.8	34.5	106.8
1997	327.3	144.2	54.3	17.0	128.8
1998	417.4	203.3	46.6	18.5	167.5
1998 1st qtr	114.2	69.1	4.2	– 1.9	41.0
2nd qtr	115.9	79.4	9.2	2.2	27.4
3rd qtr	106.2	16.9	17.3	– 0.6	71.9
4th qtr	81.1	38.0	15.9	18.7	27.2

1 Net sales at market values plus/less changes in issuers' holdings of their own bonds. — **2** Transaction values. — **3** Book values; statistically adjusted. — **4** Residual.

Deutsche Bundesbank

German bond market as part of the European capital market

Since the start of 1999 the German bond market has been part of the euro capital market. The technical changeover to monetary union – which in the case of the Federal Government, for example, entailed the conversion of all listed securities to euro – was executed smoothly. In January 1999 almost half of all new issues in terms of amount were already denominated in euro. Bond issues launched by German borrowers account for around one-third of the total amount of bonds outstanding in the euro area: this is the largest share of any single country. However, the principal reason for the significance of the German market within monetary union is not its width but, above all, its depth, i.e. its liquidity. This is the underlying basis for the benchmark role which domestic bonds play throughout Europe in certain maturity segments. It assures issuers comparatively favourable financing terms and is also the catalyst in the creation of other products that are valued in relation to such a benchmark. In the past few years the Federal Government, as the foremost German issuer, has managed to position itself successfully in the European market by pursuing an issuance strategy in keeping with market requirements. This was demonstrated during the financial market turbulence in the autumn, in particular, when the role of ten-year Federal bonds as a benchmark for the euro area became clearly apparent. During that period the yield spread of government bonds of other EMU countries over German *Bunds* surged, and in some instances amounted for a time to more than ½ percentage point. But even after the crises had abated, ten-year Federal bonds remained at the lower end of the European yield range. Besides growing competition between issuers, international competition between stock exchanges also intensified in the run-up to monetary union. Advances were made especially by computer-based trading systems which facilitate cross-border participation in trading. Thus Eurex, an amalgamation of the Swiss Options and Financial Futures Exchange (SOFFEX) and its German counterpart (DTB), has assumed market leadership in the capital market in interest rate derivatives denominated in Deutsche Mark and euro.

Changeable pattern for foreign Deutsche Mark bonds

In the market for foreign Deutsche Mark bonds, 1998 was a year of extremes. Until the outbreak of the Russian crisis in August, issuing activity remained at a very high level; as late as in July foreign Deutsche Mark bonds were sold for the record amount for any month of DM 23 billion. Thereafter the primary market for such paper largely dried up. In September gross sales fell to their lowest level since 1994, at under DM 2 billion. This slump mirrors the pronounced risk aversion of investors during that period. The decline in interest concerned not only borrowers from emerging-market countries, who had previously resorted extensively to the Deutsche Mark segment of the international capital market, but also less liquid securities issued by borrowers with a relatively good credit standing. It was not until the late autumn, when the situation in the international financial markets gradually calmed, that market activity picked up again. Owing to the high issue volume in the first half of the year, gross sales of foreign Deutsche Mark bonds for the full year were nevertheless distinctly higher, at a nominal value of DM 149½ billion, than in 1997 (DM 114½ billion). Net sales of foreign Deutsche Mark bonds rose from DM 63 billion to DM 84½ billion. At DM 55½ billion, most of these debt securities were sold abroad.

Massive interest of non-residents

The international financial market turbulence in 1998 also made a clear impact on the buyers' side of the German bond market. It was above all the highly liquid Federal securities with their first-class rating that benefited from the "flight to safe havens" by internationally operating investors. Thus non-residents purchased public sector bonds for DM 76 billion on balance, DM 44 billion of which was concentrated on August and September alone. Looking at the year as a whole, however, foreign investors favoured bank bonds, which they purchased to the tune of DM 91½ billion net. German credit institutions have apparently managed to substantially enhance the attractiveness of their securities – for example, through "jumbo" issues – to foreign institutional investors. However, the sharp fall in foreign demand for bank bonds in autumn suggests that there is still room for improvement, especially in respect of market liquidity. In the aggregate, non-resident investors bought debt securities of German issuers to the value of DM 167 ½ billion net, compared with DM 129 billion in 1997.

Little change in bond purchases by residents

Despite the sharp rise in foreign purchases, domestic credit institutions remained the foremost buyer group in the German bond market. They added debt securities worth DM 203 ½ billion to their portfolios, the bulk of which (DM 122 billion) was accounted for by domestic bonds. Given the restraint shown by domestic non-banks vis-à-vis purchasing debt securities, the banks themselves assumed the task of maturity transformation via the bond market on a major scale. Domestic credit institutions bought foreign bonds for DM 81 billion net, DM 71 billion of which related to foreign currency bonds. Domestic non-banks showed less interest in bonds in 1998 than in the previous year; this was no doubt attributable mainly to the very low capital market rates and the at times quite high degree of interest rate uncertainty. They increased their bond portfolios by only DM 46 ½ billion, as against DM 54 ½ billion in 1997.

(c) Ups and downs in the equity market

Sharp share price fluctuations

In 1998 the German equity market registered its most pronounced share price volatility so far this decade. In a setting characterised by low interest rates and optimistic profit expectations, share prices initially surged in the first half of the year; they increased by almost 40 % up to mid-July – measured by the comprehensive CDAX share price index. This broad-based rally in equity prices was fuelled principally by the shares of manufacturing firms, which profited from prospects of a further revival in growth and speculation regarding corporate mergers. Against the backdrop of growing fears of worldwide "irrational exuberance" in the equity market, a phase of adjustment began at the end of July which, as the Russian economic and monetary crisis worsened, culminated in a global slump in share prices. Between the end of July and the middle of October German equities lost around 35 % of their market value. Shares in credit institutions suffered more than most owing to their commitments in Russia. As the situation in the international financial markets eased, share prices in Germany recovered appreciably from mid-October. Nevertheless, uncertainty among market players remained extremely high. At the close of 1998 share prices were ahead by 14 % on the year, but this was almost one-fifth lower than the all-time high reached at the end of July. In mid-April 1999 share prices were 3 % up compared with the end of 1998.

Record level of issuing business

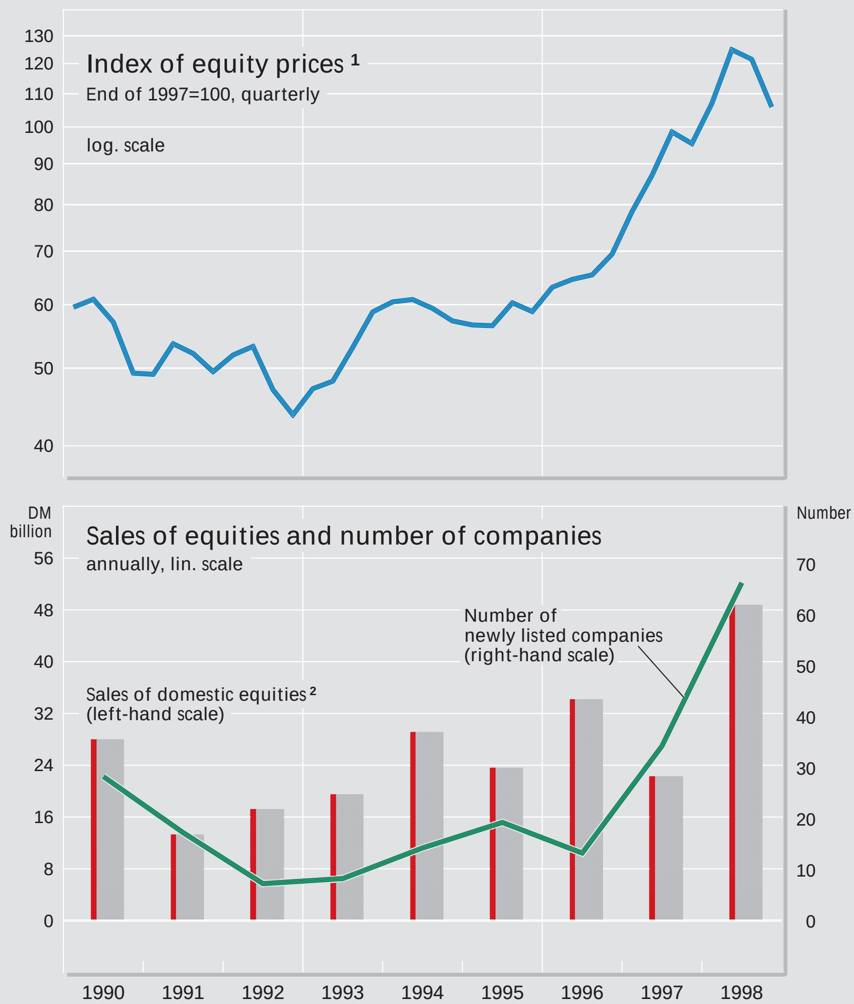
The volatility evident in the equity market was likewise reflected in issuing business. Up to and including August, domestic enterprises had already issued shares with a market value of DM 39 ½ billion – which was a record high in the post-war era. In the wake of the slump in the equity market, issuing business then came to a virtual standstill in September and October before picking up again appreciably with the recovery of share prices towards the end of the year. Domestic firms issued new shares in 1998 in the record total amount of DM 49 billion, compared with DM 22 billion a year before. The number of initial public offerings of shares by domestic enterprises on the stock exchange reached a post-war record level of 67 last year. That is an encouraging development, as it is macroeconomically desirable to strengthen the role of shares as a financing instrument.

High degree of cross-border activity in the equity market

Cross-border share trades also increased considerably last year in the context of the bull run on global equity markets and the impending introduction of the euro. Foreign equities were sold in Germany to the tune of DM 187 billion net, vis-à-vis DM 92 ½ billion in 1997. Nearly two-thirds of that sum (DM 108 ½ billion) was accounted for – as in 1997 – by portfolio investments undertaken by investors from Germany. This was attributable principally to a "run" on foreign shares on the part of domestic non-banks. The high direct investment of DM 78 billion in foreign equities (compared with DM 30 billion in 1997) was due primarily to the merger of two major industrial enterprises involving the transfer of foreign shares to a newly founded domestic company. Foreign involvement in the German equity market likewise underscores the high degree of international integration that has meanwhile been reached. Foreign investors purchased German equities worth DM 101 billion. Although this figure also includes the exchange of foreign shares for domestic shares connected with the aforementioned merger, it nevertheless reflects keen interest abroad in German shares.

Conditions in the equity market

Chart 17



1 CDAX share price index of the Deutsche Börse AG; quarterly averages. — **2** Sales at market prices.

Deutsche Bundesbank

Domestic non-banks increased their equity portfolios by DM 114 billion, which was approximately one-third more than in the previous year. Non-banks' high portfolio investment in foreign equities probably reflects, to a significant extent, portfolio adjustments to the new situation in the nascent euro area. The German commercial banks bought equities worth DM 20½ on balance last year.

Rapid Europeanisation of the stock exchange landscape

On the German stock exchanges themselves strategic measures were taken last year in preparation of international collaboration and the foundations were laid – over and above the purely technical process of conversion, which in particular entailed the changeover to non-par shares – for share trading at an increasingly European level. Operating times on the trading floor were extended. The electronic trading system Xetra was extended with a view to improving liquidity and transparency and supplemented by the inclusion of the major European blue chips. In addition, trading in derivatives on European share indices began on Eurex in the summer of 1998. In particular, the key group of institutional investors appear to have oriented their portfolios increasingly towards Europe-wide benchmarks in the course of last year.

(d) Investment funds on the advance

Record amount raised by investment funds

Irrespective of the financial market turmoil, the investment funds based in Germany last year again recorded a substantial increase in the amount of resources they raised. On balance the funds attracted the record amount of DM 169½ billion, compared with DM 139 billion in 1997. As in 1997, more than three-quarters of the resources accrued to specialised funds (DM 131 billion) which act as investment vehicles for institutional investors. Their shareholders are predominantly the domestic insurance enterprises and credit institutions – mainly the associations of savings banks and credit cooperatives. The bulk of the resources raised by the specialised funds was channelled into the mixed funds (DM 87½ billion). These resources were evidently invested to a considerable extent in foreign equities, because the share of the latter in the total equity held by mixed funds surged to almost half the total. Furthermore, the share of equities in the overall portfolios of these funds in 1998, at almost 50%, exceeded that of bonds for the first time. At DM 28 billion, bond-based funds attracted slightly more resources than in the previous year (DM 23 billion), while share-based funds grew a little less rapidly, by DM 14 billion (1997: DM 17 billion). A mere DM 1½ billion of new resources flowed into the open-end real estate funds, which continue to play a subordinate role.

Change of emphasis for funds open to the general public

The domestic funds open to the general public likewise raised a distinctly greater volume of resources, at DM 39 billion, than in 1997 (DM 31½ billion). Share-based funds were again to the fore, with net inflows of DM 22½ billion, although they improved only marginally on their 1997 total (DM 21½ billion). Specifically, the resources apparently accrued exclusively to internationally oriented funds. Increases were registered by mixed funds, which raised almost DM 6 billion compared with just over DM 2 billion in the previous year. The money market funds experienced a turnaround. They likewise sold certificates for roughly DM 6 billion, whereas in each of the two previous years they had had to repurchase certificates worth around DM 5 billion net. The high share and bond price level reached, together with the increased uncertainty in the financial markets, probably prompted private investors increasingly to temporarily "park" more resources in highly liquid money market investments. By contrast, open-end real estate funds lost further favour with investors; on balance they received only DM 4½ billion (1997: DM 6½ billion). Bond-based funds recorded slight outflows amounting to DM ½ billion in 1998; in the two preceding years they had sold certificates for around DM 6½ billion. Private old age pension fund certificates were issued for the first time in October 1998. With the Third Financial Market Promotion Act, which entered into force in April 1998, the German Parliament laid down the legal basis for special funds dedicated to private old age pension provision as part of expanding the business opportunities of investment companies. These special funds invest principally in shares and real estate; by the end of the year they had attracted just over DM ½ billion.

(e) Developments in the banking sector

Bank lending to domestic non-banks

Of the main categories of banks, the special-purpose credit institutions and the mortgage banks increased their market shares in lending business in 1998. The amounts they lent to domestic non-banks expanded by 15 % and 11%, respectively, which was far more than the average rate for all banks (6.6 %). Whereas special-purpose credit institutions recorded their biggest increase in lending to the private sector, the rise in lending by the mortgage banks was split more evenly between private and public borrowers. They increased their loans to public authorities by 12½ %, which was a far greater margin than the banking sector as a whole (2.2 %). The big banks lent 7½ % more to domestic non-banks, with short-term lending to the private sector increasing particularly (by 12½ %). By contrast, below-average rates of expansion were recorded by the savings banks, at 5 %, and the regional and Land banks, which both showed a rise of around 4½ %. Fairly buoyant lending to the private sector was offset by a falling or stagnant level of lending to the public sector, especially securitised lending. The credit cooperative sector presents a similarly differentiated picture, both at the primary level and at the regional institutions; overall lending by these categories of banks rose in both cases by the rather moderate rate of around 3½ %.

Expected earnings trend

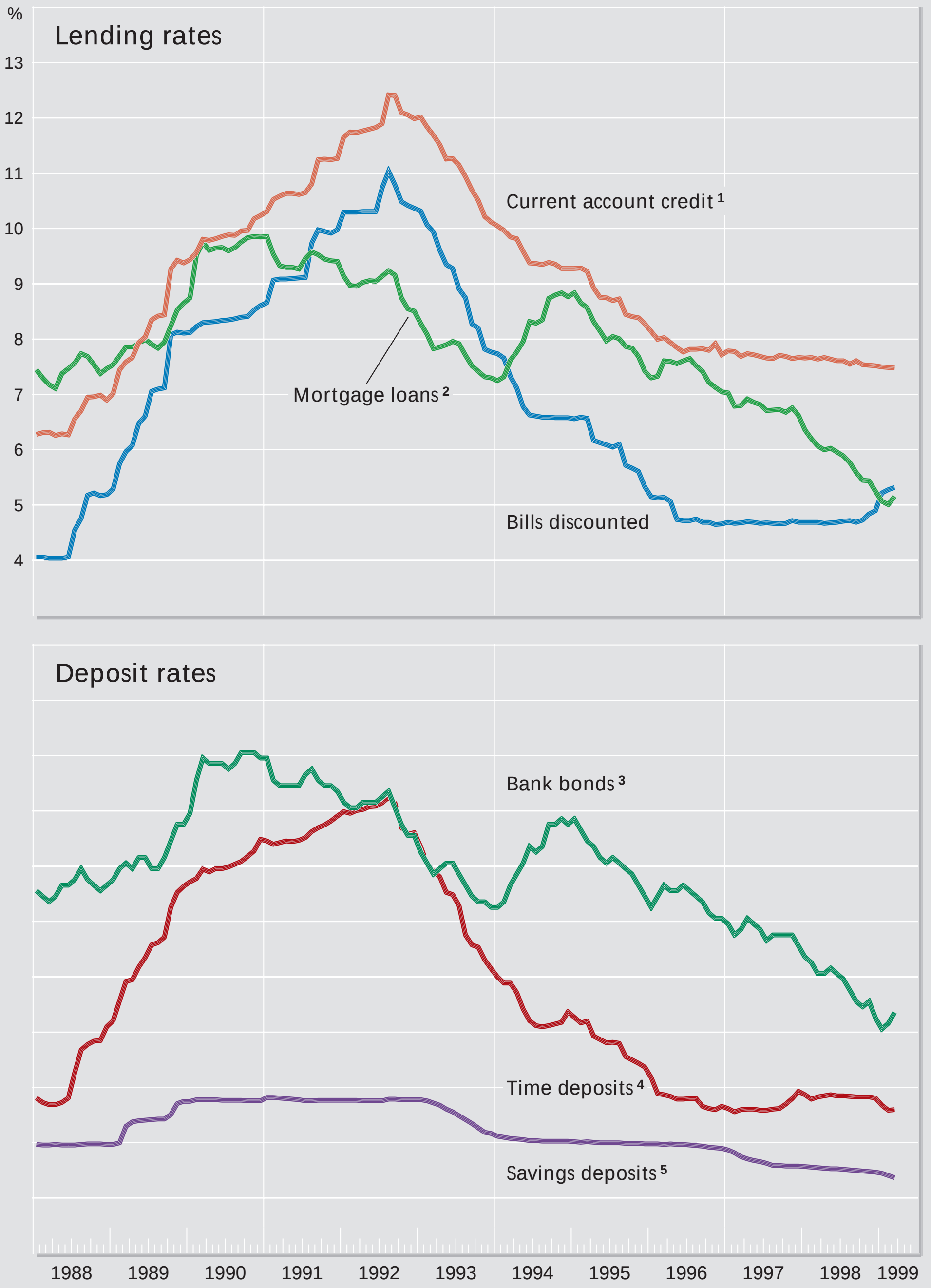
According to the information available so far, the profitability of the banking industry in the 1998 financial year appears to have been satisfactory on the whole. However, divergent trends and special factors make it difficult to arrive at an overall assessment. The pressure on interest rate margins evidently continued to be felt by the vast majority of institutions on account of the persistently low interest rate level, the competition from other forms of investment such as equities and investment fund certificates and the competition between banks. Moreover, the low-margin interbank business again grew particularly strongly. Net commissions received probably more or less matched their 1997 level; rising stock exchange turnover contributed to this, while the pressure of competition in payments business tended to depress commission income. Given the turmoil in the equity market and in foreign financial markets plus the rise in the price of domestic bonds, the own-account trading result may have varied greatly from one credit institution to another, depending on their respective business strategies and open positions. Administrative expenses were more or less held in check, despite the costs of converting to the euro and of dealing with the Year 2000 problem, which in part were subsumed under the ongoing task of renewing the information technology base. No uniform trend in risk provisioning is discernible for the different categories of banks. One stabilising factor, however, was the substantial level of extraordinary income from the disposal of participating interests.

Growing importance of interbank business

The balance sheet structures of credit institutions' asset-side and liability-side business indicate a continuation of the trends that have been evident for quite some time. The importance of interbank business has increased further. In the 1998 financial year the share of interbank loans rose by 1 percentage point to just under 35 % of the business volume. Conversely, the share of lending to non-banks declined from 60¾ % to 59½ %, with lending to borrowers domiciled abroad expanding more rapidly than lending to domestic debtors. Lending against securities grew particularly briskly. On the liabilities side, the credit institutions registered a further fall in the contribution from deposit business with non-banks, which decreased as a share of the business volume by 1½ percentage points to not quite 39 %. Of the various deposit categories, only sight deposits did not show a declining tendency; their weight stabilised at around 8 %. In contrast to deposits, the share of interbank borrowing in the business volume rose by 1 percentage point to 29½ %, while that of bearer debt securities increased by ½ percentage point to 22¼ %. Through the issue of longer-term financing instruments the banks are apparently seeking to limit the interest rate risk arising from the preference of borrowers for long-term fixed rates.

Movements in selected bank interest rates *

Chart 18



* Since January 1991 including the rates applying in the new Länder. — **1** Of DM 1 million and more but less than DM 5 million; movement in November-December 1996 influenced by the changeover to new interest rate statistics. — **2** Average effective rate for fixed-rate mortgage loans secured by residential real estate with interest locked in for ten years. — **3** Yield on bank bonds outstanding with a residual maturity of over nine but not more than ten years. — **4** Up to and including October 1996 with an agreed maturity of one month to three months inclusive, from November 1996 with a maturity of one month for amounts of DM 100,000 and more but less than DM 1 million. — **5** Until the end of June 1993 savings deposits at statutory notice, thereafter at three months' notice; earning minimum/basic interest.

Deutsche Bundesbank

III. International monetary policy cooperation

1. European monetary integration

(a) Successful changeover to stage three of EMU on the basis of further progress in convergence[1]

Establishment of the ECB and the ESCB in the interim period

In May 1998 the EU Council, meeting in the composition of Heads of State or Government, decided to begin stage three of Economic and Monetary Union with eleven countries participating in the euro area after an examination of the member states' convergence.[2] Then, in June 1998, the European Central Bank and the European System of Central Banks were established. While monetary policy continued to be the responsibility of each participating country until European monetary union began on January 1, 1999, during the interim period the ESCB needed to take the remaining necessary preparatory measures in order to be able to perform its tasks in monetary union efficiently from the outset. As important and successful as the activities of the European Monetary Institute (EMI) – the ECB's predecessor – and its decision-making body comprising all the EU's central bank governors (EMI Council) were, the ultimate decision-making responsibility in key central bank issues had to be left to the ECB and those central banks actually participating in monetary union and working together in the ESCB as the Eurosystem (with the ECB Governing Council as the highest decision-making body).[3] Especially deserving of mention here are the decisions taken during the interim period by the ECB Governing Council on monetary policy strategy, monetary policy instruments, the modalities of the payment system established by the ESCB (TARGET), and the statistical requirements, which are important to monetary policy. In addition, as early as 1998, a number of commit-

1 Here it is only possible to mention a few important aspects of the preparations and the beginning of the final stage of EMU. A comprehensive overview of the beginning of monetary union and its consequences can be found in Deutsche Bundesbank, Launching the economic and monetary union on January 1, 1999, Monthly Report, January 1999, page 19 ff.
2 On this subject, see Deutsche Bundesbank, Opinion of the Central Bank Council concerning convergence in the European Union in view of Stage Three of economic and monetary union, Monthly Report, April 1998, page 17 ff.; Deutsche Bundesbank, European policy decisions of May 1 to 3, 1998 pave the way for the introduction of the euro on January 1, 1999, Monthly Report, May 1998, page 17 ff.; Deutsche Bundesbank, Annual Report 1997, page 98 ff. The Convergence Reports submitted in March 1998 by the EMI and the EU Commission, which are available as special publications from those two bodies, formed the basis for the Central Bank Council's opinion on the convergence situation, which had been requested by the Federal Chancellor.
3 Whereas the ESCB, according to the EC Treaty, consists of the ECB and the national central banks of all 15 EU member states, the Eurosystem, as defined by the ECB Governing Council, is made up only of the ECB and the national central banks of the 11 countries that have introduced the euro up to now.

tees were established within the framework of the ESCB and the Eurosystem and in which the ECB and the national central banks have since been working together.

Irrevocable fixing of the euro conversion rates

On December 31, 1998, through a Council Regulation (upon a proposal from the European Commission and after consulting the ECB), the conversion rates between the euro and the currencies of the countries introducing the euro were irrevocably fixed; this was the last step of preparations for monetary union. Thus, on January 1, 1999 (0.00 hrs., local time), the euro became the single currency. The national currencies, which will remain in circulation for the time being, obtained the status of non-decimal denominations of the euro. As already announced in May 1998, the bilateral central rates in the EMS were used to calculate the euro conversion rates for the currencies introducing the single currency. Since the EC Treaty required that the ECU and the euro have identical values at the beginning of monetary union, a condition of this procedure was that the market rates of the euro area countries' currencies had to match their bilateral central rates in the EMS on December 31, 1998. When this method was announced in May 1998, the euro area countries' national central banks declared their willingness to ensure that the market rates and the central rates were identical, using suitable market techniques if required. As expected, the market largely produced this consistency itself; therefore, only minor foreign exchange market interventions were necessary on the last day before entering into monetary union.

Level of convergence made it easier for monetary union to pass its first acid test in the interim period

The progress of convergence in Europe, which led to the decision in May 1998 to begin monetary union with eleven participating countries, has up to now for the most part been confirmed by further economic developments. The markets, too, felt that the agreed changeover to monetary union thus rested on a solid economic foundation. This was reflected by the fact that the currency crisis in Russia and its impact on other emerging economies had no significant negative effects within the group of the designated participants in monetary union. That meant that monetary union had already passed its first acid test before it actually even began to exist.

Widespread price stability

In terms of the harmonised index of consumer prices, the annual inflation rate in the euro area went down to 0.8 % by November 1998 and remained at that level until February 1999. At the same time, though, the differences among the individual countries grew somewhat. In Austria, Belgium, Finland, France, Germany and Luxembourg, the annual inflation rate slowed down to 1% or lower.

By contrast, Portugal was at the upper end of the scale in February 1999, with an inflation rate that rose to 2.7 %.

Harmonised money market rates in the euro area in some cases in conflict with different cyclical developments

In harmony with the price climate, which is favourable on the whole, the short-term interest rates of all euro area countries, which had to be brought in line by the beginning of monetary union, went down to the level of the core countries, which had already been relatively low. This was not without problems for some individual countries where the economy was undergoing a prolonged boom. For that reason, Ireland raised the central rate of the Irish pound vis-à-vis its partner currencies in the former Exchange Rate Mechanism by 3 % with effect from March 16, 1998, especially in view of its sharp cyclical upswing.

Early and strong convergence of long-term interest rates

The strong convergence of long-term interest rates in the euro area countries at a relatively low level set in much earlier than convergence of the short-term rates. For government bonds with a residual maturity of around ten years, the interest rate premium for foreign paper, compared with German Federal bonds, was, at most, only ¼ percentage point as early as April 1998. Owing to the impact of the currency crisis in Russia and of the increasing problems in Brazil, this interest rate differential temporarily opened up to as much as ½ percentage point in some partner countries in the late summer of 1998; yet the gap between the interest rates was still much less pronounced than in some EU countries not participating in the euro area. In the EU, not only Greece but also Denmark and Sweden suffered relatively strong negative effects.

Stability programmes of euro area countries fraught with considerable uncertainty in many cases

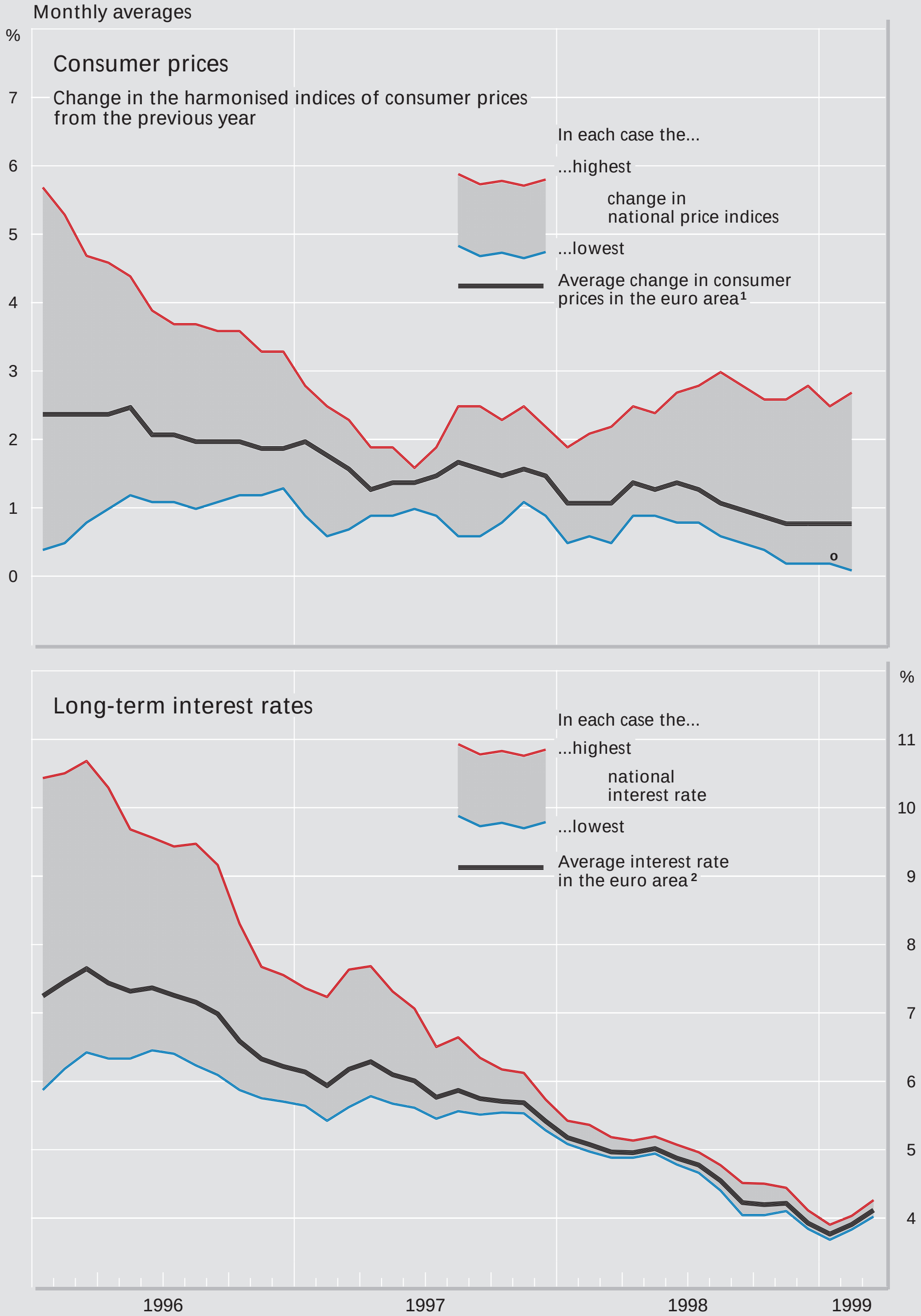
Confidence in the stability of the euro, which is currently reflected in the euro area countries' low level of long-term interest rates, can only be maintained over the long run if fiscal policy, which has remained the responsibility of each of these countries, is sufficiently geared towards stability. The Maastricht Treaty therefore requires all EU countries to avoid excessive budget deficits. The Stability and Growth Pact specifies these requirements of fiscal policy and governs how violations of the pact are to be penalised.[1] In order to prevent the development of excessive government deficits at an early stage, the pact requires the euro area countries to submit stability programmes annually, while the other EU member states are required to present convergence programmes. In their stability or convergence programmes, the EU member states must provide, in particular, information on how they intend to achieve the objective anchored in

1 For details of the Stability and Growth Pact, see: Deutsche Bundesbank, "Wichtige Elemente des Stabilitäts- und Wachstumspakts", in: *Informationsbrief zur Europäischen Wirtschafts- und Währungsunion,* No. 6, May 1997, page 3 ff., available only in German.

Chart 19

Movements of consumer prices and long-term interest rates in the euro area countries

Monthly averages



o January 1999 excluding Luxembourg.— **1** Weighted with data on private consumption. — **2** Yields on government bonds having a residual maturity of approximately ten years, weighted with the gross domestic product.

Deutsche Bundesbank

Planned fiscal developments according to the EU countries' stability or convergence programmes Table 9

Programme/country	Year the programme expires	Fiscal balance as a % of GDP: 1998 1	Fiscal balance as a % of GDP: Final year of the programme	Gross debt as a % of GDP: 1998 1	Gross debt as a % of GDP: Final year of the programme
Stability programmes					
Austria	2002	– 2.2	– 1.4	64.4	60.0
Belgium	2002	– 1.6	– 0.3	117.5	106.8
Finland	2002	1.1	2.3	51.9	43.2
France	2002	– 2.9	2 – 0.8/– 1.2	58.2	2 57.2/58.4
Germany	2002	– 2.5	– 1.0	61	59.5
Ireland	2001	1.7	1.6	59	43
Italy	2001	– 2.6	– 1.0	118.2	107.0
Luxembourg	2002	2.12	1.66	3 6.7	4 ≤ 6.7
Netherlands	2002	– 1.3	1.1	68.6	64.5
Portugal	2002	– 2.3	– 0.8	58.0	53.2
Spain	2002	– 1.9	0.1	67.4	59.3
Convergence programmes					
Denmark	2005	1.1	3.5	59	37
Greece	2001	– 2.4	– 0.8	107.8	99.8
Sweden	2001	1.5	2.5	74.2	58.0
United Kingdom	5 2003/4	0.8	0.1	47.9	40.4

1 Estimates given in the programmes. — **2** This band depends on expected real economic growth, estimated to be 2.5 % to 3 % annually. — **3** 1997. — **4** Goal: to avoid an increase. — **5** Fiscal years, each beginning on April 1.

Deutsche Bundesbank

the Stability and Growth Pact, i. e. to bring their budgets to a state of near-balance or to run a surplus and to reduce their debt ratios to below the reference value of 60 % of GDP. The medium-term budget goal is intended to create sufficient leeway to permit "automatic stabilisers" to work without exceeding the deficit limit of 3 % of GDP. However, the stability and convergence programmes of all EU member states, first presented in the second half of 1998 or the beginning of 1999, raise doubts as to whether the fiscal consolidation needed in most of the member states is being conducted at the necessary pace everywhere. It is true that the EU Council examined the programmes on a country-by-country basis between October 1998 and March 1999 and found that no member state failed to meet the terms of the Stability and Growth Pact. However, the Council frequently pointed out budgetary risks that did not appear to be sufficiently hedged. The German stability programme, in the view of the EU Council, was lacking an explicit declaration that, if necessary, additional measures would be taken if setbacks were to loom in fiscal consolidation.

(b) Euro area countries' monetary links with their non-European territories and with third countries

Euro introduced in non-European territories, too

The changeover to monetary union automatically included those non-European territories of the euro area countries where the currency of the parent country is in circulation and which belong to the territory of the Union. This includes the French overseas departments (French Guyana, Guadeloupe, Martinique and Réunion) and territories belonging to Spain (the Canary Islands, Ceuta, Melilla) and Portugal (the Azores, Madeira). Moreover, with the approval of the Council, France introduced the euro in two French territories which are not part of the Union (St. Pierre-et-Miquelon, Mayotte).[1]

Redefinition of the monetary links of some euro area countries with third countries

The monetary links of some euro area countries with third countries had to be redefined. With regard to those countries where Community currencies are currently legal tender (the French franc in Monaco, the Italian lira in San Marino and Vatican City), France and Italy were each given a mandate by the Council based on Article 109 (3) of the EC Treaty to negotiate the changeover to the euro on behalf of the Community. The relevant arrangements, which have not yet been finalised, must ensure that European monetary policy cannot be hampered by the introduction of the euro in those countries. Moreover, a Council Decision of November 1998, also based on Article 109 (3) of the EC Treaty, empowered France to continue the existing bilateral exchange rate agreements (fixed rate systems) with the countries of the African franc zone (including the Comoro Islands). Substantial changes, such as extending the support mechanisms or a regional extension of currency cooperation, though, would require the prior consent of the Council. Portugal was similarly empowered to continue its currency cooperation with Cape Verde.

Start of ERM II with Denmark and Greece

In parallel with the beginning of monetary union, a new European exchange rate mechanism (ERM II) took effect. The new mechanism provides a framework for the exchange rate cooperation between the euro area and the EU countries not yet participating in monetary union, as envisaged in Article 109m of the EC Treaty. The ERM II is based on a decision taken by the European Council in June 1997 and on an agreement signed in September 1998 between the ECB and the central banks of the "pre-ins". Participation by those countries which are

1 In some other French overseas territories also not belonging to the Union (New Caledonia, French Polynesia, Wallis and Futuna), the Maastricht Treaty permitted France to retain the sole right to determine the parity of the CFP franc (Communauté financière du pacifique), which is still legal tender in those territories, vis-à-vis the euro.

not a part of the euro area is voluntary, in principle. However, it is one of the preconditions to joining the monetary union later on. For the time being, only Denmark and Greece are participating in the new mechanism, both of which had been members of the previous system. The convergence orientation confirmed by their participation in the ERM II is reflected also by the fact that the euro serves as an anchor for the partner countries' exchange rate policy. On December 31, 1998, the finance ministers of the euro area, the ECB and the finance ministers and central bank governors of Denmark and Greece jointly set the central rates of the Danish krone and the Greek drachma vis-à-vis the euro such that there were no changes against the bilateral central rates in the former ERM. The Danish krone has a fluctuation margin of ± 2 ¼ %, whereas the standard band of ± 15 % was agreed for the Greek drachma.[1]

(c) External representation of the euro area

Representation of the euro area in the IMF agreed

One of the implications of monetary integration in Europe is that the euro area must adopt a uniform stance in its relations with international agencies and third countries regarding all monetary union issues. As regards monetary policy, responsibility for which rests solely with the Eurosystem, the Treaty basically holds that international and European representation of the Eurosystem must be undertaken exclusively by the ECB. Therefore, at the end of 1998, the IMF Executive Board agreed to grant the ECB observer status in the Fund's activities from the beginning of monetary union on. This participation primarily affects the Executive Board itself; there, the primary task of the ECB's representative is to comment on European monetary policy within the framework of the IMF's monitoring of the exchange rate policy in the euro area. Therefore, in future the monetary policy issues within the bilateral consultations with the euro area countries will be put together and discussed separately by the Executive Board. Furthermore, the ECB representative will take part in all discussions pertaining to the IMF's bilateral consultations with the individual euro area countries, or relating to the euro's international role as well as trends in the world economy and the international financial markets. Additionally, the ECB's representative is to be invited for topics which are of common interest to the ECB and the IMF. These special arrangements do not affect the member status of the individual euro area countries in the IMF. However, it is expected that, in future, the representatives of the countries participating in monetary union will adopt a largely common stance on international questions that are of crucial importance to

1 For details concerning ERM II, see Deutsche Bundesbank, Operational features of the new European exchange-rate mechanism, Monthly Report, October 1998, page 17 ff.

monetary union in the Executive Board of the IMF. The basis for this is a regular exchange of ideas on important international economic and monetary problems, particularly in the Economic and Financial Committee of the EU.

Representation of the euro area in other organisations and bodies clarified only in part

Now the ECB is also represented in other international organisations and in formal and informal boards which impinge on the ESCB's competencies. This applies to the OECD, the G-7 and the G-10, as well as the Committee of G-10 Governors (which convenes at the BIS) and its various sub-groups. Up to now no agreement has been reached on whether the start of monetary union will also result in other Community bodies having their own representation, especially in the informal composition of the G-7.

2. Expansion of the financial market crises in the second half of 1998

New wave of crises with a wide variety of impacts

In the first half of 1998, optimism re-emerged in the financial markets regarding further world economic developments, especially since there was increasing confidence that the currency and financial crises that had broken out in the East Asian emerging economies in the summer of 1997 would gradually subside. A visible sign of market optimism was the rise in share prices in the industrial countries to record heights, with only Japan being left out owing to its deep-seated structural problems. Once the rouble crisis broke out in August of 1998, however, the climate in the financial markets again underwent an unexpectedly comprehensive deterioration. As a result of a reassessment of the risks, in addition to a setback in the stock markets, the risk premiums rose violently and considerably, not just for capital-importing emerging economies but also for borrowers from industrial countries. Among the industrial countries, the United States was particularly affected by the concomitant deterioration in financing conditions, since the raising of funds in the enterprise sector through the bond market plays a significant role there. Moreover, the sometimes considerable losses incurred by institutional investors in turn increased the financial markets' problems. In addition, due to the pronounced risk aversion of investors, many emerging economies began to find it more difficult to obtain access to international financial markets. At the same time, the danger increased that, as a consequence of the increased risk awareness, currency and financial crises might strike other highly indebted emerging economies, too. Especially Brazil came to the centre of attention here, since this country, Latin America's largest and most heavily indebted economy, was at the same time confronted with considerable budget and current account deficits. In fact, at the beginning of 1999 a severe currency crisis did break out in Brazil, which led to a drastic devaluation of the real; yet it was possible to contain the crisis. However, at present the emerging markets will continue to have to pay considerable risk premiums, whereas the interest rate premiums for first-class domestic enterprises in the markets of the industrial countries have more or less returned to normal levels.

Russia's unilateral moratorium proved to be particularly harmful

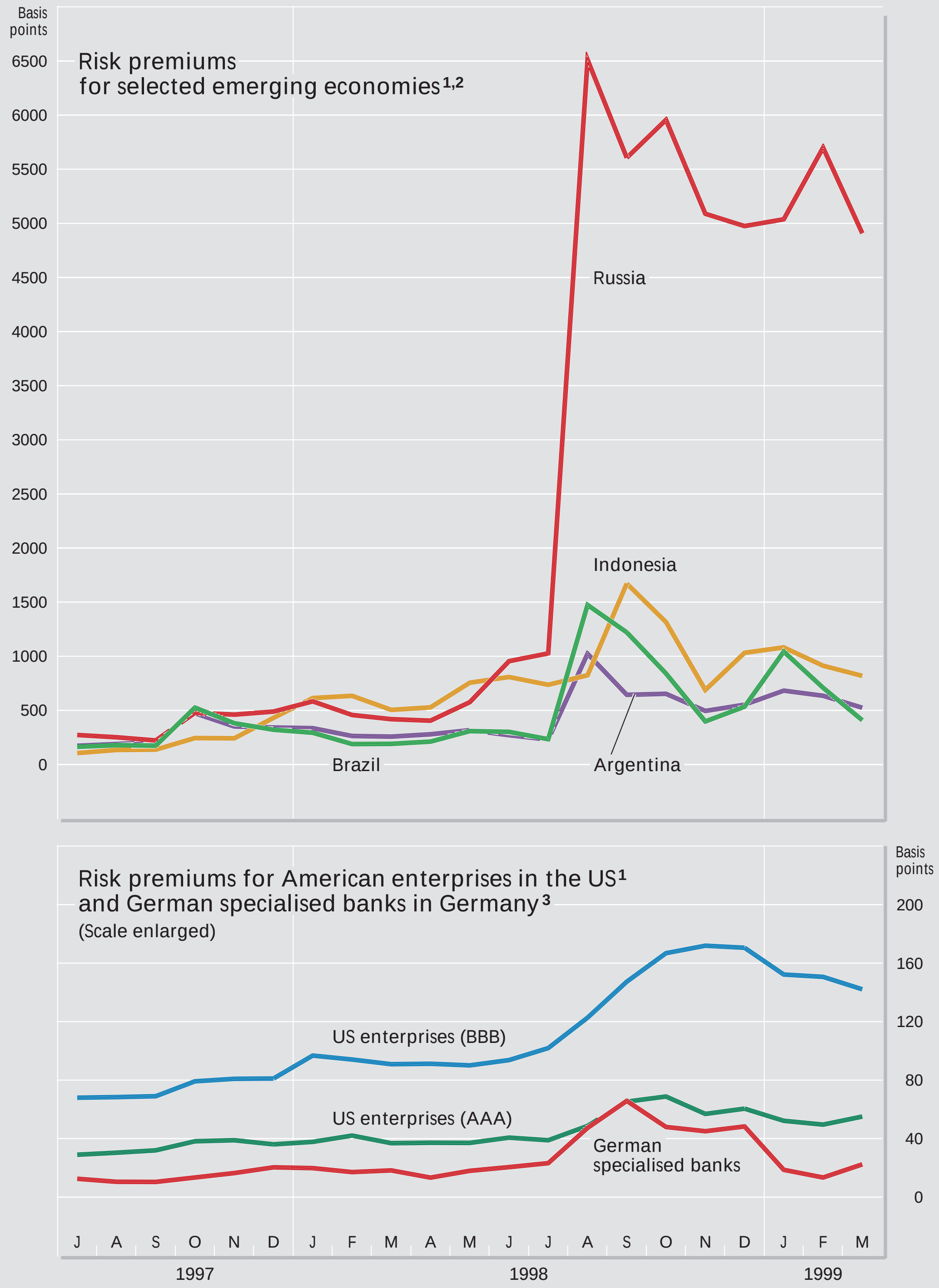
In retrospect, the question arises as to why the renewed currency crisis in Russia led to such far-reaching consequences in the financial markets. Russia's ongoing balance of payments problems mainly reflect massive budget deficits, caused by the fact that tax revenue is only trickling in sluggishly. Sharply fallen prices for raw materials have reduced revenues from Russian crude oil and natural gas exports, thus exacerbating the budget and balance of payments problems. To close these internal and external financing gaps, the Russian government, in addition to taking recourse to international financial assistance, has increasingly financed itself through short-term rouble issues. According to information provided by the IMF, around one-third of these funds was held abroad when the currency crisis broke out. Besides, Russian commercial banks ran up considerable foreign currency debt. When confidence in the ability of public and private Russian debtors to repay their debts began to shrink sharply starting in mid-1998, the Russian government reacted in August 1998 to the currency and banking crisis not just by devaluing the rouble but also by declaring a unilateral moratorium on private currency liabilities and at the same time announcing a forced restructuring of their rouble issues. Even if there was no reason for foreign creditors to have any doubts about the risks associated with their lending, as was indicated by the relatively high rates of interest paid by Russia, in the light of the aid measures in Asia and bearing in mind Russia's position of importance, many of them probably expected the international community to once again provide financial assistance in the event of a crisis. Therefore, their shock at Russia's unilateral administrative measures to solve its acute balance of payments problems was all the greater. These unusual steps seemed to be the reason why a mood of uncertainty prevailed when investors estimated their risks, and a general reassessment of the risks ensued.

Extraordinary financial aid for Brazil

To stabilise the situation in Brazil, the government and the IMF agreed in December 1998 on an adjustment programme which is being supported by international financial assistance amounting to US$ 41.6 billion. Of the financial assistance agreed on in principle, US$ 18.1 billion will be provided by the IMF, US$ 4.5 billion each by the World Bank and the Inter-American Development Bank, and US$ 14.5 billion through bilateral assistance coordinated by the BIS.

Movements of spreads in the bond markets

Chart 20



1 Measured in terms of long-term US Treasury bonds. — 2 Final maturity of the bonds: Brazil, Russia: 2001; Argentina: 2003; Indonesia: 2006. — 3 Measured in terms of German Federal bonds with a residual maturity of around ten years.

Deutsche Bundesbank

In that very month, a total of US$ 9.3 billion was paid by the IMF and bilateral donors, though no agreement was possible regarding any satisfactory assurance against private investors attempting to evade responsibility. Since the adjustment programme of December 1998 was geared towards maintaining the exchange rate regime of that time (moderate, continuing devaluation), the sharp drop in the real that set in following January 1999 made it necessary to modify economic policy. Core features of the modified programme, which was agreed in March 1999, are the conversion towards flexible exchange rates, a strict anti-inflation policy, a further tightening of the fiscal policy reins, and the increased involvement of creditor banks in crisis management. For the purposes of co-operation with the banks, Brazil then established the appropriate coordination agencies at the most important international financial centres. On this basis, at the beginning of April 1999 Brazil again drew on the IMF and bilateral donors to the tune of US$ 9.9 billion. In March 1999 the World Bank, prior to the approval of the reformed adjustment programme, had already provided a financial contribution of US$ 1 billion.

3. Improving the functioning of the international monetary system

Guiding recommendations by the Willard Group

A lengthy process was needed to recover from the international debt crisis that occurred during the eighties. Now, since the Mexican crisis of 1994-5, more and more payment crises have been suffered by emerging economies. This has touched off an extensive debate, the scope of which goes beyond the requirement of sound macroeconomic policies to include how the world economy can be made more crisis-proof by improving the "architecture" of the international monetary system. In 1998 the debate on reform, launched by the G-7 countries, was given a broader basis at the initiative of America when several other countries were included in the exchange of views to form the Willard Group, which was temporarily established for this purpose.[1] The finance ministers and central bank govenors established three temporary task forces on key issues of crisis prevention and crisis solution. The international organisations taking part in these committees (BIS, IMF, OECD, World Bank) published the findings of the studies in October 1998 once they were approved by the ministers and governors. The recommendations of the task forces can be divided into four major tasks: (1) improving the transparency of economic development and economic

1 Besides the G-7 countries, the other monetary authorities involved were Argentina, Australia, Brazil, China, Hong Kong, India, Indonesia, Malaysia, Mexico, Poland, Russia, Singapore, South Africa, South Korea and Thailand.

policy; (2) strengthening the national financial systems' resistance to crises; (3) caution in granting all types of public guarantees where they might contribute to private debtors and creditors not observing due diligence in their international commitments; (4) creating a framework which ensures that private creditors play a key role in crisis management. Implementation of all these tasks has only just begun, although the Group of Ten had already made individual demands in the past.[1] In particular, the strengthening of the emerging markets' national financial systems will take a relatively long time. A series of issues will also need to be given further close study, too.

Greater transparency of economic development and economic policy

It is generally believed that greater transparency with respect to economic developments and policy-making can contribute to giving private lenders a better basis for making decisions and thus to preventing excessive lending. The objective of transparency is directed at private borrowers and lenders, for one thing. Borrowers should give the public as much information on their financial situation as possible. The task of private creditors is to help improve the publicly available statistics on international lending. This matter concerns not just the banks but also other institutional investors (on whose lending in some cases – such as hedge funds – information is either scarce or nonexistent at present). For another thing, by increasing transparency in their own policy measures, public authorities can also contribute to a more efficient functioning of the markets. This includes publishing trends in foreign reserves and short-term government foreign currency debts completely and as frequently and up-to-date as possible. In the meantime the IMF has decided to strengthen its so-called Special Data Dissemination Standard (which countries that already have access to international financial markets or which seek access to it should commit themselves to) by adding extensive disclosure requirements on foreign reserves and on short-term official foreign currency debt. As a first step towards the most up-to-date reporting possible, at least monthly data with a maximum time lag of one month should be made available, but the prescribed deadlines are to be shortened considerably once the private lenders and investors have done their part to improve transparency in international capital movements. To fulfil the aforementioned minimum standards, the IMF has granted the countries concerned a transitional period up to the end of March 2000. In addition, there are plans to come up with codes intended to provide an overview of the aspects of economic policy that need particular attention and of the state of transparency in these fields; they are designed to make it easier for the markets to judge the domestic

1 See Group of Ten, The Resolution of Sovereign Liquidity Crises, May 1996; and Group of Ten, Financial Stability in Emerging Market Economies, April 1997.

economic policies of debtor countries. The IMF, having already adopted a Code of Good Practices on Fiscal Transparency in the spring of 1998, is currently working on another Code of Good Practices on Transparency in Monetary and Financial Policies. Last but not least, the international financial institutions, especially the IMF and the World Bank, are to give market participants a better insight into their own work, thus making it easier for market participants to judge the situation.

Strengthening the financial systems of the emerging economies

Since the Mexican crisis of 1994-5, events have shown time and again that currency crises can be exacerbated considerably by unstable national financial systems. Measures to strengthen emerging economies' financial systems are therefore of utmost importance. Recourse can be taken here to a number of internationally agreed sets of rules geared both to adequate management practices and to efficient supervision of financial markets. It is true that some aspects of these principles need to be refined, but it is most important to quickly achieve visible progress in the implementation of core principles in the emerging economies. To this end, on behalf of the G-7, Bundesbank President Professor Tietmeyer presented proposals for an intensified international cooperation in the supervision of financial markets in February 1999, following extensive international consultations. The presented concept, which was adopted by the ministers and governors of the G-7 countries at their meeting on February 20, 1999, is geared towards identifying structural weaknesses in the financial markets, working out appropriate proposals for improvements, and monitoring their implementation. These objectives are to be reached with the help of a "Financial Stability Forum" which will initially bring together, in particular, the agencies of the G-7 countries in charge of supervisory issues and representatives of the relevant international organisations and boards. Later, representatives from emerging markets should also be included in this forum. The Forum has a small secretariat located at the BIS at its disposal, since this international organisation of central banks has comprehensive experience in all issues of financial market stability. The BIS will also serve the goals of the Forum through the "Institute for Financial Stability", founded by it in 1998. As a training and advisory centre, it is intended to help improve the worldwide supervision of banks and insurance companies and of financial markets as a whole.

Caution in granting all types of public guarantees for private capital imports

One important lesson learnt from the financial crisis that befell the East Asian countries was that the governments of capital-importing countries should act extremely cautiously when giving public guarantees in favour of private debtors. Otherwise, debtors and creditors could be all but encouraged to invest thoughtlessly. There is no major difference here whether guarantees are expressly made or only implicitly enter into the mix, say, by opening up the prospect of lavish aid mechanisms for the banks of the country involved or by intervening in the lending policies of the institutions. In a broader sense, the promise of virtual exchange rate stability is also to be regarded as a type of government guarantee of private lending. In any event, a supposed exchange rate guarantee can induce debtors and creditors to underestimate the exchange rate risks involved in international lending. With many emerging economies having pursued various types of exchange rate pegging for a long time, the question of what exchange rate policy is the right one for emerging markets is now on the agenda of the further debate on architecture. To begin with, it must be stated that there is no one-size-fits-all solution regarding the exchange rate policies of emerging markets. In principle, depending on the underlying economic conditions in question, the whole range of possibilities from floating to fixing to even currency boards could be feasible. Experience has shown that emerging economies and countries in transition often need a sufficient degree of exchange rate flexibility.

Systematic involvement of private creditors in crisis management indispensable

In the light of the sharp rise in capital movements in emerging markets, it will hardly be possible to resolve the currency crises of heavily indebted countries through official financial aid anymore. Another reason against repeated granting of massive financial assistance by official agencies is also that misconduct by the debtor countries, but especially by private lenders, would be promoted ("moral hazard"). This would consequently disrupt the markets' allocative function, causing what was intended to be crisis prevention to end up becoming crisis proliferation. Therefore, severe currency crises must be counteracted by a strategy that ensures that burdens are divided equitably among debtor countries, private creditors and international financial institutions, with the IMF and its financial assistance acting mainly as a catalyst. More thought will need to be given as to how best to achieve a systematic involvement of private creditors in crisis solution strategies. Since the debt structure varies from country to country, involvement of private creditors in crisis management must undoubtedly be based on a complex concept, as is indicated by the information below:

– In order to restrict their access to international financial markets as little as possible, the debtor countries must primarily strive to address balance of payments problems in a cooperative manner. In the event of a crisis, this requires that they contact the IMF as soon as possible so that private lenders can be assured of credible adjustment measures being taken. At the same time the debtor countries must make intensive efforts to gain the support of their private creditors. If funds were taken up abroad by private debtors, in the event of a currency crisis the governments of the debtor countries should provide assistance in the formation of groups of cooperative debtors. Moreover, national bankruptcy codes which adequately uphold the interests of borrowers and lenders can make an important contribution to promoting cooperation between debtors and creditors. Unilateral moratoriums should only serve as a last resort for involving private creditors. Otherwise, the legal principle of contractual fidelity would sustain serious damage.

- The interest groups of lending banks and other investors should focus primarily on establishing lasting contacts for discussions with the individual debtor countries. This could provide a framework which could serve both to prevent crises and to resolve them. Besides, concrete study should be given to the proposal (which has been on the table for some time already) of including specific clauses in bond contracts which could, in the event of a crisis, promote agreement on debt restructuring among the often numerous bondholders. It would be easier for issuers to enact such clauses in the issuing emerging markets if the governments of the industrial countries would take the lead by reaching similar agreements for their own bonds for reasons of principle. Efforts to involve the private sector in preventing and resolving crises should also be intensified by offering private credit lines for debtor countries. Besides, closer study should be given to the extent to which it seems possible to add option clauses to loan agreements which would quasi-automatically prolong matured loans in the event of currency crises.

- The IMF, together with the monetary authorities of the creditor countries, can and should play the role of a mediator when involving private lenders in crisis management. Its financial aid should be focused on supporting the member states – subject to certain conditions – in their financing of current account deficits. Through such assistance, indispensable adjustment measures can be spaced in such a way that they are politically more viable. In principle, this would also make it possible to assist debtors and creditors with regard to interest payments. Such emergency credit could, in particularly justifiable cases, also be granted even where debt restructuring negotiations are under way but could not yet be concluded (i.e. lending into sovereign or private arrears). Departing from its usual practice, the Fund would thus be supporting a programme of adjustment without it being completely clear how the financing gap in the balance of payments could be closed by common accord. In this manner the IMF could signal to private creditors that, in its estimation, the debtor country is doing its best to largely accommodate the creditors and that therefore a contractual agreement on the debts should be reached soon. Moreover, further consideration must be given to whether the IMF should actually be empowered to formally recognise and support a temporary moratorium on payments by a member state. This would mean that the Fund would, for a certain period of time and in the interest of a mutually acceptable agreement on debt, be put in a position to prevent individual uncooperative creditors from beginning enforcement proceedings to seize the external assets of debtors. Numerous aspects must be taken into account when studying this possibility. In addition to serious international legal problems, such a procedure would relieve a moratorium of some of its stain as a serious breach of contract. To the extent that government debt is to be restructured, the London Club process already provides for precautions against uncooperative behaviour by individual creditors. The protection of private borrowers can also be improved by implementing adequate national bankruptcy codes, which are necessary in the debtor countries anyway (and which also have international effects).

Gear the liberalisation of financial markets towards state of economic development

In their declaration on the international monetary system of October 30, 1998, the finance ministers and central bank governors of the Group of Seven countries also called on the IMF to study whether special possibilities should be created for being able to provide rapid, massive financial support to economically healthy countries that are in jeopardy of suffering contagion effects from other countries' crises. With respect to sufficient crisis prevention, though, the finance ministers and governors also indicated that the advantages of free movement of capital can only unleash their full potential if the capital-importing countries first create the conditions for comprehensive liberalisation of their financial markets. Besides transparency and supervisory requirements, this particularly includes sound macroeconomic policies. Therefore, liberalisation processes should normally be conducted step by step according to the state of economic development.

Artificial stabilisation of exchange rates between key currencies neither desirable nor possible

As part of the extensive discussion of ways to improve the functionality of the international monetary system, the question was raised once again recently as to whether the exchange rates between the three key currencies in the world economy (the US dollar, the euro and the yen) can be protected better and more reliably from egregious misalignments and excessive volatility through an agreement on exchange rate targets. However, these ideas did not gain much support. From a European point of view, it must be stated that exchange rate fluctuations lost much of their importance for the countries that adopted the single currency when the euro was introduced. This results from the increase in the relative size of the economic area for each euro area country, which, like their former domestic markets, is not subject to exchange rate risks. All the same, exchange rate movements between the key currencies should still be monitored carefully. However, in the long run, the risk of misalignments can only be prevented by economic policies that are sound by internal and external standards. International cooperation can help identify critical developments early on and correct their economic policy causes. However, it would be asking too much, in particular, of the monetary policy of the key currencies' countries, whose economic developments are predominantly determined by domestic factors, if it simultaneously had to meet certain exchange rate targets. In addition, orienting monetary policy to the exchange rate is not an option for the Eurosystem, anyway, even if only because such a policy might come into conflict with the statutory requirement to maintain price stability in the euro area. However, the euro exchange rate has a significant influence on price movements and on current and expected economic activity in Europe. Therefore, in addition to other factors, the Eurosystem is taking due account of exchange rate developments in its monetary policy.

4. Recent developments regarding international financial institutions

Sharp rise in IMF lending

As a consequence of the currency crises in Asia, Eastern Europe and Latin America, the IMF's outstanding loans at the end of 1998 reached a new all-time high at around SDR 67 billion, or US$ 90 billion. Another SDR 30 billion were promised at the end of 1998 but had not yet been disbursed. The amounts owed to the IMF rose by SDR 14.2 billion compared with the end of 1997. On balance, lending to Asia rose by SDR 8.7 billion, to Russia by SDR 3.6 billion, and to Latin America by SDR 1.8 billion.

Borrowing under the SRF and its further extension

A large proportion of the new funds lent to Russia and Brazil were raised under the Supplemental Reserve Facility (SRF) established in 1997. This facility, having already been utilised by Korea, envisages shorter repayment deadlines and higher rates of interest than the "standard facilities". However, the large volume of such crisis aid and the frontloaded nature of the disbursements are not without problems from Germany's point of view. The provision of massive government assistance must not lead to private investors being bailed out. The Federal Government and the Bundesbank therefore advocate applying appropriate condi-

Purchases, repurchases and total credit outstanding under IMF facilities — Table 10

SDR billion

Item	1994	1995	1996	1997	1998
Purchases					
Credit tranches 1	1.8	14.4	2.5	13.3	12.1
Extended Fund Facility 1	0.9	2.0	2.6	2.7	6.3
Compensatory and Contingency Financing Facility	0.3	0.0	0.2	0.1	2.2
Systemic Transformation Facility 2	1.9	0.6	–	–	–
Structural Adjustment Facility 3	0.9	1.4	0.7	0.7	0.9
Total purchases	5.9	18.4	6.0	16.8	21.5
Repurchases	4.8	7.1	5.6	6.3	7.3
Net purchases	1.1	11.3	0.4	10.5	14.2
Total IMF credit outstanding 4, 5	30.3	41.6	42.1	52.6	66.8
of which					
Europe	8.0	11.4	13.9	15.7	19.6
Asia	5.8	4.8	3.7	15.5	24.2
Latin America	9.5	18.0	16.6	13.8	15.6
Africa	6.5	7.1	7.5	7.1	6.8

Source: IMF. — **1** Including purchases under the Supplemental Reserve Facility (SRF). — **2** Temporary facility for transitional countries; purchases were possible until the end of 1995. — **3** Including 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. — **4** Level as at the end of the year. — **5** Delineation of regions according to IMF definitions; "Europe" includes, *inter alia,* the regions of the former Soviet Union.

Deutsche Bundesbank

tions to the extension of the already voluminous and readily available SRF. Such an extension was envisaged by the G-7 in its declaration of October 30, 1998, which was adopted during its discussion of the architecture of the international monetary system. An SRF with a "contingent credit line" added to it could, under certain circumstances, contribute to protecting healthy economies from contagion effects of crises. However, in the absence of adequate provisions to involve private creditors, the role of the IMF might increasingly evolve into that of a "lender of last resort", which would threaten to undermine efforts to improve the functionality of the markets.

Activation of GAB and NAB

Owing to the large volume of lending by the IMF, the liquidity available to the IMF reached an all-time low in 1998, making it necessary to take recourse to both the General Arrangements to Borrow (GAB) and the New Arrangements to Borrow (NAB). In July 1998, the GAB were activated for IMF loans to Russia, and in December 1998 the NAB were used for lending to Brazil. The NAB, negotiated by the Fund and 25 member countries, had entered into force shortly before they were first drawn on. Members of the NAB are the G-10 and other financially potent countries. This gives the IMF a "reserve tank" with a total volume of SDR 34 billion for contingencies. Upon the consent of the NAB members, the IMF can take recourse to this facility if its own funds are not sufficient to prevent system-threatening financial crises through financial assistance. The highest credit line under the NAB was granted to the IMF by the US, at SDR 6.7 billion. The Deutsche Bundesbank and Japan assumed SDR 3.6 billion each, and France and the United Kingdom each provided SDR 2.6 billion. The NAB complement the GAB and should be the principal source used when the IMF needs to take up funds. Any preceding recourse to the GAB will be deducted from the volume of credit available under the NAB (and vice versa). When recourse was taken to the GAB and NAB in July and December 1998 totalling SDR 6.3 billion (GAB) and SDR 9.1 billion (NAB), respectively, the Bundesbank provided SDR 883 million (GAB) and SDR 1,039 million (NAB) worth of credit, respectively. It was agreed that the IMF would repay these amounts once the quota increase adopted at the beginning of 1998 entered into effect and most of the funds had been contributed. Accordingly, the IMF redeemed the GAB and NAB loans in March 1999.

Quota increase took effect in January 1999

The member countries were given a deadline of one year to adopt the quota increase agreed in January 1998. Germany notified the IMF of its consent to the new German quota as early as June 1998. This was intended to signal that Germany considers it important for the IMF to have a secure and adequate financial basis, so that the quotas remain the main source of financing, the NAB and GAB continue to be activated only under exceptional circumstances, and other ways of acquiring funds are not considered (borrowing in the markets, or sales of gold). The quota increase entered into force on January 22, 1999, upon the concurrence of countries that together represent 85 % of the former quotas. This fortified the Fund's own resources considerably; they rose by a total of 45 % to SDR 212 billion. Germany's share rose from 5.66 % to 6.14 % – given a new quota of SDR 13 billion. This is a reflection of the increase in Germany's weight in the world economy since the last quota review.

Special one-time allocation of SDRs still in the process of being ratified

The special one-time allocation of SDRs adopted by the IMF Board of Governors in September 1997 has not yet entered into force. The aim is to raise the cumulative allocation of each country to a uniform level of 29.32 % of the former IMF quotas, which would primarily benefit those countries that joined the IMF since 1981. This special allocation of SDRs (which is a one-time exceptional allocation not based on a worldwide shortage of foreign currency reserves) requires an amendment to the Articles of Agreement of the International Monetary Fund. The amendment to the Articles will take effect once three-fifths of the member states having at least 85 % of the voting rights have concurred with it. In Germany the necessary steps have been taken.

Financing of the HIPC debt initiative not yet completely assured

The debt relief initiative for heavily indebted poor countries (HIPC) is showing initial results. By the end of 1998, ten countries had been examined as to whether they qualified for such relief. Assistance has been either given or promised to seven of these countries. This has reduced their total level of debt by around US$ 6 billion (the corresponding present value of their debt was reduced by over US$ 3 billion). Around one-third of this debt relief will be financed by the World Bank and the IMF, and the rest by bilateral creditors. However, the financing of the debt initiative is still giving rise to difficult questions, particularly regarding new proposals aimed at extending access to debt relief measures. The World Bank is accounting for its share of the financing mostly through its own funds, which are provided through what is known as the HIPC Trust Fund, into which other creditors also channel financial means. Extending the debt initiative could also require increased financing of this Trust Fund through payments by bilateral donors. Another open issue at present is how the IMF's share of the necessary funds will be raised. The requisite amount of bilateral refinancing has not yet been agreed (Germany has offered to contribute a substantial amount to the IMF). Various options for closing the remaining financial gap are being studied.

Considerable involvement of multilateral development banks in financial aid for countries in crisis

The activities of the major multilateral development banks in 1998 were also strongly characterised by participation in the financial aid packages for the crisis countries in East Asia and Latin America. The financial aid was mainly intended to meet three goals: to support the restructuring of these countries' financial sectors, to reform the corporate structure, and to build up social security networks. As part of its participation in the financial aid packages for Indonesia, Korea and Thailand, the World Bank (through the International Bank for Reconstruction and Development, or IBRD) provided a total of US$ 16 billion, paying out just over half of it in 1998. Those payments went mainly to South Korea. Involvement in the crisis countries of East Asia contributed to the IBRD's new lending commitments rising to roughly US$ 21 billion in the 1998 business year, which ended in June 1998. In the years prior to that, loan commitments had generally been between US$ 14 billion and US$ 17 billion. Besides the World Bank, the Asian Development Bank (AsDB) and the Inter-American Development Bank (IDB) also extended their lending sharply in 1998. This was intended to prevent contagion effects and promote socioeconomic development. Whereas, for example, the AsDB's outstanding loans practically stagnated between 1994 and 1996, they increased by nearly 50 % up to the end of 1998, to about US$ 25 billion. The IDB increased its lending commitments from US$ 5.7 billion in 1997 to US$ 9.4 billion in 1998. The strong participation of multilateral development banks in financial aid packages for countries in crisis, however, raises the question as to how compatible this assistance is with the actual aims of the development banks, i.e. fighting poverty. Furthermore, the question arises as to whether extending the loan portfolio and the rather problematical portfolio concentration also lead to a corresponding replenishment of reserves. To improve the formation of reserves, the IBRD and IDB have, at all events, decided to charge a much higher interest rate for loans granted due to financial crises than for traditional structural adjustment loans.

Operations of the Deutsche Bundesbank

I. Processing cash payments and cashless payments

1. Cash payments

Banknotes and coins in circulation

The value of banknotes in circulation at December 31, 1998 was 2.1% lower than at the end of 1997. The value of coins in circulation rose by 0.6 %. At the end of 1998, 94.2 % of all currency in circulation consisted of banknotes, and 5.8 % of coins.

Currency in circulation and its pattern

Table 11

Trends over time

DM million

End of	Currency in circulation	Banknotes in circulation	Coins in circulation
1994	250,907	236,165	14,742
1995	263,510	248,363	15,147
1996	275,744	260,390	15,353
1997	276,242	260,686	15,556
1998	270,981	255,335	15,646

Pattern at the end of 1998

Banknotes in circulation			Coins in circulation		
Notes of DM	DM million	Percentage of total	Coins of DM	DM million	Percentage of total
1,000	86,638	33.9	10.00	2,575	16.4
500	26,498	10.4	5.00	5,655	36.1
200	8,354	3.3	2.00	2,313	14.8
100	98,213	38.5	1.00	2,297	14.7
50	21,357	8.4	0.50	1,120	7.2
20	8,749	3.4	0.10	1,050	6.7
10	5,226	2.0	0.05	319	2.0
5	300	0.1	0.02	150	1.0
			0.01	167	1.1
Total	255,335	100	Total	15,646	100

Deutsche Bundesbank

At the end of the period under review approximately 2.6 billion notes were in circulation. DM 50 banknotes with enhanced security features have been in circulation since February 2, 1998. Of the 427 million banknotes in this denomination in circulation at the end of 1998, around 303 million, or 71%, carried these improved safety features. DM 100 and DM 200 banknotes with enhanced security features have been in circulation since August 1997. The DM 50, DM 100 and DM 200 notes issued prior to August 1997 are likewise legal tender.

Destruction of banknotes

The following banknotes have been destroyed in the past few years:

	1994	1995	1996	1997	1998
Number (million)	516	739	659	1,466	1,475
Value (DM billion)	28.2	50.6	27.7	118.9	96.2

The large volume of notes destroyed in 1998 is essentially due to the fact that DM 100, DM 200 and DM 50 notes of the old type were destroyed along with those that were no longer fit for circulation or had been called in. Although these DM 100, DM 200 and DM 50 notes were still fit for circulation, they were not put back into circulation owing to the issue since August 1997 and February 1998 of notes of the same denomination with enhanced security features.

Coins

The stock of German coins held by the Bank at the end of 1998 amounted to DM 1,955 million (end-1997: DM 1,923 million). The Federal Government was redebited for the amount exceeding 10 % of the total coins in circulation. In 1998 about DM 242 million was credited to the Federal Government in respect of coins received from the mints and about DM 120 million was debited to it in respect of coins no longer fit for circulation. Between 1948 and 1998 the Bank – acting for the acccount of the Federal Government – received coins amounting to DM 19,856 million and redeemed coins which were no longer fit for circulation or which had been called in, equivalent to DM 2,255 million. At the end of 1998 coins totalling DM 15,646 million were in circulation, equivalent (given 82 million inhabitants) to around DM 191 per head of the population.

Counterfeits

The number of counterfeit banknotes and coins detained in payments and appraised by the Bundesbank increased compared with the previous year.

Counterfeits detained in payments, as recorded by the Bundesbank — Table 12

	Banknotes		Coins	
Year	Number	DM thousand	Number	DM thousand
1994	23,028	3,317	15,561	77
1995	31,148	4,919	24,201	111
1996	25,769	3,839	35,352	169
1997	33,873	3,933	14,983	67
1998	36,139	4,129	19,990	98

Deutsche Bundesbank

Counterfeits of the DM 100 notes of the type issued until the end of July 1997 without the improved security features accounted for 71% of the total while false DM 5 coins accounted for 98 % of all coin counterfeits.

2. Cashless payments

Slight rise in the number of payments submitted

In 1998 there was a slight rise in the number of credit transfers and collection orders channelled through the Bundesbank compared with the previous year. Overall, approximately 2.3 billion payments totalling DM 234,444 billion were submitted in 1998. This represents a slight rise of 0.3 % in the number of items processed whereas the total value increased by 4.6 %.

Complete paperless submission in interbank payments

In the reporting year the Bank and the German credit institutions completed the changeover to settling all interbank payments in paperless form. There has been a general obligation since November 1993 to convert all direct debits and to collect them in paperless form; this obligation has applied to credit transfers since June 1997. Since September 7, 1998, there has been an obligation for all cheques for amounts below DM 5,000 to be converted and collected under the paperless collection procedure. Cheques for amounts of DM 5,000 and more are converted and processed float-free in paperless form by the Bundesbank under the large-value cheque collection (GSE) procedure introduced in November 1994; nevertheless, the original cheques, which are frequently made out for very large amounts, are still transmitted and presented separately. Under the large-value cheque collection procedure, payments material which is not suitable for automated processing (such as large-format foreign cheques in correction envelopes) is converted, processed in paperless form and transmitted separately.

Paperless processing as a precondition for the introduction of the euro

Creating the data processing structure for the processing of interbank payments in completely paperless form was a prerequisite for the introduction of the euro in cashless payments. Since January 1999, both the original amount (for example, in euro) and the corresponding amount calculated by conversion (in this case, the DM amount) can be passed on by means of a second amount field in the data record (in addition to one field for recording the currency in which the order was originally submitted). Each bank will be able to choose the appropriate amount for the debit and credit entries on the relevant customer accounts.

The Bank's cashless payments

Table 13

Item	1997 Number (million)	1997 DM billion	1998 Number (million)	1998 Change in %	1998 DM billion	1998 Change in %
Retail payments						
Paper-based settlement 1						
Cheques	16.8	215	11.1	– 33.8	148	– 31.4
Credit transfers	10.9	4	–	–	–	–
Total	27.7	219	11.1	– 59.8	148	– 32.5
Paperless settlement (RPS) 2						
Direct debits, cheques	1,469.9	3,045	1,499.6	2.0	2,978	– 2.2
of which: Conversions	78.0	1,987	66.1	– 15.2	1,896	– 4.6
Prior 3 payments	747.3	1,277	739.7	– 1.0	1,308	2.4
of which: Conversions	5.0	21	2.8	– 44.1	14	– 32.0
Total	2,217.2	4,322	2,239.3	1.0	4,286	– 0.8
Grand total	2,244.9	4,541	2,250.5	0.2	4,434	– 2.3
Large-value payments						
Gross settlement procedures						
ELS	10.6	33,395	13.5	26.6	39,369	17.9
Local credit transfers	0.6	1,977	–	–	–	–
Other 3	1.0	1,431	0.9	– 8.7	2,298	60.6
Total	12.3	36,804	14.4	17.2	41,667	13.2
Net settlement procedures (Daily local clearing system)						
Collection items 4 (conventional)	0.2	275	0.1	– 71.2	87	– 68.4
Local credit transfers 4 (conventional)	0.1	803	–	–	–	–
EAF	22.4	181,669	22.5	0.6	188,255	3.6
Total	22.7	182,746	22.6	– 0.4	188,342	3.1
Grand total	35.0	219,550	37.0	5.8	230,009	4.8
Cashless payments	2,279.9	224,091	2,287.4	0.3	234,444	4.6

1 Excluding payments submitted in paper-based form which were converted and passed on in a paperless form by the Bundesbank's units. — **2** Including payments submitted in a paper-based form which were converted and passed on in paperless form by the Bundesbank's units. — **3** For example, special procedures for public authorities. — **4** Settled delivery envelopes (clearing items).

Deutsche Bundesbank

Implications of paperless processing for the Bank's procedures

The Bank had already discontinued its paper-based credit transfer procedures in retail and large-value payments (MAOBE transactions, local credit transfers and clearing operations) when it introduced the obligation to convert credit transfers in June 1997. Since September 1998, it has accepted paper-based orders in retail payments only from its own customers (such as the public sector) and passes them on in paperless form. Credit institutions may now present orders in paper form only for the large-value cheque collection procedure, which is processed technically using the bulk payment procedures, and for the large-value payment procedure Euro Link System (ELS) restricted to payments with the highest priority (Prior 1).

Innovations in the procedures, names of procedures and in the fee structure

With regard to the organisational and technical challenges posed by EMU (such as the settlement of TARGET and Prior 1 orders by data telecommunication between 7 a.m. and 6 p.m., including on certain public holidays, i.e. outside normal working hours at the branch offices), the Bank adopted a number of innovations and changes in both operating and settlement procedures in the year under review. This is also reflected by new names for the procedures. Furthermore, at the end of 1998, the Bank introduced a new fee structure in large-value payments. This provides for the input and output of payment orders by means of data telecommunication as a more cost-effective standard (settlement) performance, whereas a special charge is made (in addition to the fee for the standard performance) for the submission and delivery by diskette or by means of vouchers. Thus, for the first time, charges are also being made on the receiver side.

Central account management system

The decentralised computer systems at the branch offices, which were used both for carrying accounts and for the settlement of large-value payments, were replaced at the end of the year under review. The new centralised account management system in the "high-availability computer centre" ensures that booking operations are processed even outside normal working hours.

Euro Link System (ELS)

Payments in the real-time gross settlement system, Euro Link System (ELS), are also settled using the "high-availability computer centre". Under the ELS procedure (formerly known as EIL-ZV, the express electronic credit transfer system), orders are sorted by priority. Prior 1 payments (formerly known as telegraphic credit transfers) are executed individually and in real time, whereas Prior 2 payments (formerly known as express transfers) are settled in batch mode. Prior 1 payments are executed on a same-day basis. Prior 2 payments are also settled on a same-day basis, but only if the payment orders can be delivered electronically (by data telecommunication) as well as sent out electronically to the receiving bank, and are covered by 4.30 p.m. In the year under review, around 5.1 million Prior 1 payments (+ 5 %) and 8.4 million Prior 2 payments (+ 44 %) were processed. Of the total 13.5 million orders under the ELS procedure, 9.9 million were placed by means of data telecommunication and 1.1 million on diskette.

Euro Access Frankfurt (EAF)

Credit transfer orders for processing in the fully electronic, liquidity-saving and risk-reducing EAF procedure can be placed only by data telecommunication. A number of policy and operational innovations (such as the possibility of indirect participation) were introduced in the year under review: These were designed – particularly with the euro area in mind – to give both German and foreign banks an attractive opportunity of executing their large-value payments. In 1998, 22.5 million credit transfers totalling DM 188,255 billion (an average of DM 750 billion a day) were exchanged between the participating credit institutions. In terms of volume, EAF handled somewhat more than 80 % of the Bank's total turnover in cashless payments. These figures reflect the significance of the Frankfurt am Main banking centre as the major money marketplace in Germany and as the most important interface with other countries. Since EAF used to owe its great importance principally to the settlement of foreign exchange market activities in Deutsche Mark/US dollar, following the introduction of the euro it is now in direct "competition" with other euro payment systems.

Further refinement of Bundesbank procedures

Large-value payments are always settled on a same-day and, therefore, float-free basis, and cheques and direct debits have been collected float-free for some time. Additionally, since February 1999, Prior 3 payments in the retail payment system (RPS), formerly known as DTA (paperless exchange of data media) transfers, have also been executed float-free. The principals are debited on the business day after submission (instead of on the day of submission as before), although the cover should, as a matter of principle, already be available on the day of submission in the form of account balances or – in the case of credit institutions – as free facilities in the portfolio of collateral. During 1999, access to retail payments is also to be made possible by means of data telecommunication.

3. Notable developments in domestic and cross-border payments

(a) TARGET – the cross-border real-time gross settlement system for the euro

Importance

With the start of stage three of European economic and monetary union (EMU), the national central banks (NCBs) became part of the European System of Central Banks (ESCB), and responsibility for the single monetary policy was conferred on the European Central Bank (ECB). A functional and secure large-value payment system for the euro is a prerequisite for the efficient implementation of monetary policy measures and the distribution of central bank money throughout what is now a European money market.

Organisation and structure

The NCBs and the ECB's predecessor, the European Monetary Institute (EMI), therefore started developing the TARGET system as early as 1995. TARGET stands for Trans-European Automated Real-Time Gross settlement Express Transfer and is the cross-border real-time gross settlement system for the euro. TARGET comprises the 15 national real-time gross settlement (RTGS) systems of the EMU member states and the ECB Payment Mechanism. These are joined together by what is known as the Interlinking system to create a single platform for the settlement of cross-border payments.

Progress of the project

The TARGET project followed a detailed timetable established in July 1996, the individual stages of which were implemented as scheduled. The TARGET testing programme was completed on December 16, 1998, and TARGET was put into operation on the first business day of stage three of EMU, at 7.00 a.m. (Frankfurt local time) on January 4, 1999.

Positive TARGET development in the first quarter of 1999

TARGET has become established surprisingly quickly and has met with a high level of acceptance. Owing to its rapid, secure and efficient settlement of payments, it is now the euro-area large-value payment system processing the largest number of transactions. Throughout the EU, a daily average of around 24,800 payments totalling almost euro 350 billion have been routed via TARGET during the first quarter of 1999; in Germany, approximately 9,200 payments have been sent out to other countries and 6,900 payments have been received from abroad.

Fees

The ECB was established in June 1998 as the successor to the EMI. On June 9, 1998 the Governing Council of the ECB fixed the fees for the execution of cross-border TARGET payments, taking due account of the cost of development and the ongoing operational costs of the Interlinking system and of the average transaction charge for a national RTGS payment. As the effects of rationalisation and increasing business have led, in some cases, to a considerable reduction in charges for national RTGS payments, the fee was much lower than initial calculations suggested. The fee is based on the number of payments initiated by a TARGET participant in a single RTGS system. The fees for TARGET payment orders submitted by data telecommunication are staggered as follows:

– euro 1.75 per order for the first 100 payments in a month
– euro 1.00 per order for the subsequent 900 payments in a month
– euro 0.80 for each further order if there are more than 1,000 payments in a month.

The fee is charged solely to the initiating national central bank and is identical throughout Europe, irrespective of the destination or the amount of the payment. It covers the processing and settlement costs of the payment. As in the Bank's domestic payments, however, the inputting and outputting of TARGET payments by means of diskette or voucher represents a value-added service for which a special charge is made. The users of the cross-border TARGET system do not have to pay any additional entry fees or regular charges.

Operating hours

In September 1998, the ECB published the definitive calendar of the days on which TARGET will operate in 1999. Apart from Saturdays and Sundays, the only other days on which TARGET will not be in operation are the two EU-wide public holidays on January 1 and December 25. On all other days, TARGET will be open from 7 a.m. until 6 p.m. (Frankfurt local time). Because of necessary investment operations by the receiving banks, the cut-off time for customer payments will be one hour earlier at 5 p.m. The TARGET business day thus overlaps completely with that of the electronic payment system of the US Federal Reserve System and overlaps, during the first few hours of business in the morning, with that of the Bank of Japan's payment system. This makes it possible to reduce foreign exchange settlement risk.

Liquidity

Unlimited intraday credit on the basis of eligible assets is granted to the direct RTGS participants fulfilling the criteria for being monetary counterparts specified by the ESCB. This follows the pattern of the former giro overdraft lombard loan facility in business transactions with the Bank or, alternatively, in other countries on the basis of intraday repurchase agreements.

Also cross-border use of eligible assets

The ECB has listed all eligible assets of both the public and private sectors in two categories depending on whether the assets used as collateral fulfil general eligibility criteria or only the eligibility criteria specified by a particular central bank. Cross-border use may also be made of these assets. In particular, what is known as the correspondent central banking model has been developed for this purpose. As a result, securities located at a foreign collective custodian as well as bills of exchange and portfolios of loans and advances used as collateral by the NCBs in the euro area can be used at short notice for refinancing and for obtaining intraday liquidity from the local central bank. The central banks wish to maintain this linking system for the use of securities as collateral for at least as long as the national central securities depositories do not themselves provide the necessary linking system throughout the euro area. Even after the central securities depositories have been interlinked, however, the correspondent central banking model will be permanently available for the transfer of collateral which is not fungible securities, such as the above-mentioned bills of exchange and portfolios of loans and advances.

Granting of intraday credits in euro by EU central banks outside the euro area

In November 1998, the ECB decided to allow the EU central banks outside the euro area to offer limited intraday liquidity in euro to their RTGS participants in order to promote the flow of payments in TARGET. The credit which is granted is central bank credit in a foreign currency, which is something new. This arrangement is mainly intended to make it easier for the EU countries in question to enter monetary union at a later date.

The following requirements of the ECB are to be observed when the EU central banks outside the euro area grant euro intraday credits to their RTGS participants (on account of the home country principle which applies to the granting of credits in the ESCB, participants by remote access are excepted from this):

- The amount per participant is limited to euro 1 billion.
- After 5 p.m. participants in RTGS systems outside the euro area may execute payments only on the basis of credit balances. Participants whose RTGS accounts show a debit position at this time must balance the position so that their euro account is not overdrawn by the next business day.
- Participants who, for any reason, are unable to balance their position by the close of TARGET, must pay penalty rates of interest.
- The rate at which NCBs outside the euro area may remunerate the participants' euro credit balances held by them at the end of the day corresponds to the rate applied to the ESCB's deposit facility.
- The assets which the credit institutions outside the euro area may use for collateralising intraday credits must meet the same quality standards and be subject to the same valuation and risk-control regulations specified in the "General documentation on ESCB monetary policy instruments and procedures".

No intraday credits to EU central banks outside the euro area

The EU central banks outside the euro area must, for their part, ensure that they have a net credit position vis-à-vis the central banks participating in TARGET at all times during the day; there is no (unlimited and uncollateralised) granting of overnight and intraday credits, as is otherwise envisaged in TARGET, between the euro area central banks. In order to ensure the smooth operation of TARGET, the EU central banks outside the euro area must maintain appropriate deposits within the ESCB, which have to be delivered by no later than 8 a.m. on business days. The amount for the Bank of England has been set at euro 3 billion and the amount for the central banks of Greece, Denmark and Sweden has been set at euro 1 billion each. If the deposits are held overnight in the ESCB they are remunerated at the rate applied to the deposit facility.

(b) Electronic money

ECB report on e-money

In 1997, the EMI conducted a study on the impact of electronic money (e-money) on the European economies which, besides new market trends, investigated mainly the monetary policy implications of the issuance of e-money. On that basis, the Council of the EMI delivered an opinion on the issuance of electronic money to the European Commission on March 2, 1998 and the ECB published the "Report on electronic money" in August 1998. The opinion and the report both aim to safeguard the ECB's monetary policy measures in the field of e-money. From the ECB's point of view, it is necessary for the issuance of e-money either to be restricted to banks as defined in the First Banking Co-ordination Directive or to extend the definition of credit institutions to include issuers of e-money. This would ensure that the issuers of e-money are subject to the reporting requirements on the monetary statistics and, if necessary, the minimum reserve requirement. Furthermore, in monetary policy terms, the issuers of e-money are to be placed under a legal obligation to convert e-money into central bank money at all times upon the request of the owner. A reimbursement obligation of this kind would limit e-money creation by linking it to central bank money. At the same time, it would prevent the potential formation of varying exchange ratios for the e-money of different issuers jeopardising the role of money as a unit of account.

EU Commission draft directive

On July 29, 1998 the EU Commission adopted a proposal comprising two legislative initiatives in the field of e-money: the Directive on the taking up, the pursuit and the prudential supervision of electronic money institutions and the amendment of the First Banking Co-ordination Directive. This proposal largely conforms to the provisions in the Banking Act, which have been in force since January 1, 1998, stipulating that only banks can issue e-money. The Commission's proposal embraces an amendment to the definition of credit institutions contained in the First Banking Co-ordination Directive to include electronic money institutions, thus placing them under the monetary control of the ECB. However, the European Commission has not yet included the legal obligation to refund e-money in central bank money in the draft directive.

Development in Germany still moderate

Up to now, only the German banking industry's prepaid card system *GeldKarte* has supraregional significance in Germany. The *GeldKarte* system is still only slowly gaining acceptance, even two years after its introduction throughout Germany. Among the reasons for this, the main ones are still likely to be that the retail trade feels the banking industry's charges to be too high, insufficient awareness on the part of potential users or what they feel to be its limited range of uses and lack of additional applications. It remains to be seen whether the additional use of the *Geldkarte,* say, for telephoning, in public transport and as a payment medium on the Internet will have an impact on its future acceptance. Secure and efficient payment systems and hence, in addition to access products, mainly e-money systems will attain great importance precisely in view of the forecast sharp growth in electronic commerce on the Internet.

Inter-operability of electronic purses in Europe

At present, there are a large number of electronic purse systems in Europe which can be used only nationally and are technically incompatible. The agreement between the Central Credit Committee and Europay International of September 1998 therefore has to be seen as an important milestone on the road to smooth payments in the new currency area. This agreement envisages the creation of a single electronic purse system for Europe based on a joint open standard by 2002. This system, using the international brand name "Clip", is intended to ensure the cross-border use of e-money and hence its competitiveness with euro banknotes and coins and, at the same time, leave the European banks enough scope for competition and their national prepaid card programmes.

(c) Foreign exchange settlement risks

1996 G-10 report

In 1996, a report on foreign exchange settlement risks by the Committee on Payment and Settlement Systems of the Central Banks of the Group of Ten countries (CPSS) at the Bank for International Settlements (BIS) not only contained a precise analysis of the risks but also presented a number of recommendations. The key proposal is that the private banking sector should be induced to make its own efforts in reducing existing risks (for example, individual banks should improve their risk management procedures and banking groups are to establish and operate multi-currency settlement systems like the CLS system[1]). According to the report, the central banks will do all that is possible to support these efforts but refrain initially from taking more far-reaching measures of their own.

1 A group of private banks with a leading position in forex trading, the G20, has prepared the CLS (Continuous Linked Settlement) System for the execution of forex trading payments in accordance with the payment-versus-payment principle. CLS Services Ltd. has been established in London for the continued development of the CLS system and as a holding company for the existing ECHO and Multinet systems. Under this holding company, a CLS bank domiciled in New York is to be set up at a later date which will ultimately operate the CLS system.

1998 progress report

After just over two years, the Committee published a progress report which gave the following assessment of developments in the private banking sector with regard to the reduction of risk:

- The recommendations of the 1996 report have proved their worth and should be used as a basis for future action.
- The 1996 and 1997 market surveys of selected credit institutions (in Germany, five institutions from all categories of banks) revealed that, although some improvements have been initiated at the individual banks in order to reduce the settlement risk, the present situation of risk measurement and management still cannot be regarded as adequate.
- Banking groups have, for example, made progress in developing the CLS system; nevertheless, this is not to be put into operation until 2000.
- The G-10 central banks have initiated and/or supported improvements in domestic payment systems, for example, by extending business hours with overlapping periods between continents.

Progress report recommendations

The progress report contains the following recommendations:

- The private banks should make further improvements to their measures of risk management and control.
- The banking groups should continue their activities in the field of risk-reducing multi-currency settlement systems; private activities are preferred to public ones.

The CPSS, with the central banks, is to disseminate these recommendations worldwide, strive for further improvements in risk-reducing national payment systems and take suitable measures to encourage the efforts of the private sector.

Support by prudential guidelines

In order to support this strategy, the Payment Committee has now requested the Basle Committee on Banking Supervision to draw up prudential guidelines for credit institutions' management and control of settlement risks. This approach is to guarantee that the credit institutions have an international standard for risk-reducing measures.

II. The Bank's international transactions

Foreign bill-of-exchange and cheque business

In the context of refinancing operations, the Bundesbank bought foreign bills of exchange worth DM 33 billion in 1998 (see p. 135). In addition, it sold 28,593 foreign cheques payable to order amounting to DM 155 million (compared with 29,292 cheques totalling DM 133 million in the previous year). Another 38,756 cheques to the value of DM 79 million were presented in 1998 under the simplified collection procedure for foreign cheques; in 1997, 38,294 cheques worth DM 64 million had been presented in this way. For the rest, the Bank accepted 5,861 foreign items on a commission basis (mainly bills and cheques) for realisation; a year earlier 6,750 such items had been bought. Transactions in foreign notes and coins hardly changed at all compared with the previous year.

III. The Bank's money-market and refinancing operations

Discount credit

In 1998 the Bank granted credit institutions basic refinancing for the last time by supplying central bank money through the discount credit facility. Since the start of monetary union, credit institutions have been furnished with longer-term funds through the longer-term refinancing operations of the ESCB (known as basic tenders), which are offered once a month and whose maturity of normally three months carries on a major element of discount credit.

Transitional arrangement for phasing out discount credit

To ensure that overhanging refinancing operations soon matured after the start of monetary union, from October 14, 1998 the Bundesbank, under a transitional arrangement, only bought bills falling due not later than January 14, 1999 (the value date of the first ESCB basic tender). Taking due account of the necessary minimum residual maturity of the bills of exchange, the purchase of domestic bills, and of foreign bills payable in Germany, was discontinued at the close of business on December 23, 1998, and the purchase of foreign bills payable abroad as early as the close of business on November 30, 1998. Since credit institutions were unable to present trade bills with a maturity of three months, which is the usual maturity in commercial transactions, for rediscount after October 14, 1998, the Bundesbank was prepared as from October 1, 1998 to buy without any restrictions, under the rediscount quotas, bank acceptances, whose maturity can normally be fixed flexibly. Bank acceptances with only two signatures were also eligible, provided that the credit standing of the drawer and the accepting bank alike was excellent. This enabled credit institutions to utilise their quotas relatively heavily even during the phasing-out of discount credit.

Furthermore, the Bank refrained from adjusting the rediscount quotas as at the beginning of November 1998, i.e. at the end of the usual 12-month assessment period, to the changes in the liable funds, the business structure and the bill operations of the individual credit institutions which had occurred in the meantime. The effectiveness of the quotas, which had last been recalculated as at November 3, 1997 was thus automatically prolonged until the discontinuance of rediscount credit on January 14, 1999. As usual, the total volume of the rediscount quotas fixed was subject to minor fluctuations in the course of the year, and amounted to DM 65.9 billion on December 31, 1998 (1997: DM 66.0 billion).

Utilisation of rediscount quotas

The utilisation of the rediscount quotas ran at the usual high level up to September 1998 (utilisation rates of around 96 %). It was only in the final quarter of last year that credit institutions' rediscount debt started to decline, as expected. As a monthly average, quota utilisation came to 94.5 % in October 1998, 93.3 % in November 1998 and 86.8 % in December 1998. On the last maturity date, January 14, 1999, bills totalling DM 38.7 billion fell due for payment.

Purchases of domestic bills of exchange

Altogether, 0.9 million domestic bills amounting to DM 269 billion were purchased in 1998 under the rediscount quotas and (to a minor extent) on the basis of existing rediscount commitments under the special rediscount facility (ceiling B granted to the Ausfuhrkredit-Gesellschaft mbH), which had been set up to finance exports and which was abolished at midnight on May 31, 1996 (in 1997: 1.1 million bills totalling DM 276 billion). 5,094 bills worth DM 166 million were returned and charged to the parties presenting them as being non-paid items (in 1997: 5,616 bills amounting to DM 142 million).

Purchases of foreign bills of exchange

Purchases of foreign bills of exchange which were counted towards the rediscount quotas numbered 53,220 in 1998, and totalled DM 33 billion (in 1997: 68,806 bills amounting to DM 38 billion). The share of the foreign bills denominated in foreign currencies came to 1.2 % (in 1997: 1.7 %).

Securities repurchase agreements

The weekly open market transactions under repurchase agreements in securities (securities repurchase agreements), which constitute part of money market management, remained the most important instrument of ongoing fund provision. In all, 53 such transactions were conducted, in the form of fixed-rate tenders. The standard maturity of the transactions was two weeks. The volume of securities repurchase agreements outstanding at the end of 1998 came to DM 162.6 billion.

Operational safe custody accounts

At the end of 1998, securities amounting to DM 647 billion (in 1997: DM 558 billion) were lodged by credit institutions in operational safe custody accounts at Land Central Banks for securities repurchase agreements (and therefore for lombard purposes, too). In addition, securities totalling DM 2 billion were pledged in such safe custody accounts, exclusively for lombard purposes.

Fine-tuning operations

In 1998, too, fine-tuning operations were used (a rare exception) as part of the Bank's ongoing money market management. In all, the Bank resorted to such very short-term assistance measures for the money market on only three occasions; each time, the measures were prompted by a higher minimum reserve requirement. At the end of April, DM 2.0 billion was made available to banks through five-day foreign exchange swap transactions; at the end of October, a quick tender (fixed-rate tender) with a five-day maturity amounting to DM 3.0 billion was used and, at the end of November, liquidity-enhancing foreign exchange swaps equivalent to DM 4.9 billion with a maturity of nine days were concluded. These last transactions were intended at the same time to keep the volumes of the two outstanding regular securities repurchase transactions at the same level, as far as possible, in view of the move to EMU.

Lombard loans

Throughout the year, recourse to lombard loans was available to banks to meet their short-term liquidity needs. On a daily average, utilisation of the lombard loan facility increased from DM 0.3 billion in 1997 to DM 0.4 billion in 1998. At DM 8.8 billion, the heaviest recourse to lombard loans was recorded on February 26, 1998.

IV. The Bank's participation in issues of Federal securities

Pursuant to section 20 (2) of the Bundesbank Act, under which the Federal Government, Federal special funds and Länder Governments should issue debt securities and Treasury bills primarily through the Bank, the Bank acts as the "fiscal agent" of the public authorities. Besides issuing securities and price manage-

Bund Issues Auction Group

Table 14

List of members, ranked according to their 1998 shares in the amounts allotted

Ranking	
1	Dresdner Bank Aktiengesellschaft
2	Bayerische Hypo- und Vereinsbank AG
3	Paribas Zweigniederlassung Frankfurt a. M.
4	Bayerische Landesbank Girozentrale
5	Westdeutsche Landesbank Girozentrale
6	Norddeutsche Landesbank Girozentrale
7	Deutsche Bank Aktiengesellschaft
8	Morgan Stanley Bank AG
9	Bankgesellschaft Berlin Aktiengesellschaft
10	Südwestdeutsche Landesbank Girozentrale [2]
11	ABN AMRO Bank (Deutschland) AG
12	BHF-Bank Aktiengesellschaft
13	Commerzbank Aktiengesellschaft
14	Credit Suisse First Boston Aktiengesellschaft
15	Goldman, Sachs & Co. oHG
16	J.P. Morgan GmbH
17	ING Bank N.V. Deutschland Branch, Frankfurt
18	Deutsche Genossenschaftsbank
19	Barclays Bank PLC Frankfurt Branch
20	Banque Nationale de Paris Niederlassung Frankfurt a.M.
21	Landesbank Berlin – Girozentrale –
22	Lehman Brothers Bankhaus Aktiengesellschaft
23	Banca Monte dei Paschi di Siena S.p.A. Frankfurt a.M.
24	Landesbank Rheinland-Pfalz – Girozentrale –
25	Baden-Württembergische Bank Aktiengesellschaft
26	Bremer Landesbank Kreditanstalt Oldenburg – Girozentrale –
27	Landesbank Hessen-Thüringen Girozentrale
28	Landeskreditbank Baden-Württemberg [2]
29	Trinkaus & Burkhardt KGaA
30	Landesbank Schleswig-Holstein Girozentrale
31	Deutsche Siedlungs- und Landesrentenbank
32	Deutsche Girozentrale – Deutsche Kommunalbank –
33	WGZ-Bank Westdeutsche Genossenschafts-Zentralbank eG
34	Landesbank Sachsen Girozentrale
35	SGZ-Bank Südwestdeutsche Genossenschafts-Zentralbank AG
36	Merrill Lynch Capital Markets Bank Limited Zweigniederlassung Frankfurt a. M.
37	GZB-Bank Genossenschaftliche Zentralbank AG Stuttgart
38	Warburg Dillon Read AG
39	Bank of Tokyo-Mitsubishi (Deutschland) Aktiengesellschaft
40	Salomon Brothers Aktiengesellschaft
41	Sal. Oppenheim jr. & Cie. Kommanditgesellschaft auf Aktien
42	Istituto Bancario San Paolo di Torino S.p.A. Zweigndl. Frankfurt a. M.
43	M.M. Warburg & CO Kommanditgesellschaft auf Aktien
44	Hamburger Sparkasse
45	Banca Commerciale Italiana Niederlassung Frankfurt a. M.
46	Vereins- u. Westbank Aktiengesellschaft
47	Deutsche Apotheker- und Ärztebank eG
48	Landesgirokasse [2]
49	Dai-Ichi Kangyo Bank (Deutschland) Aktiengesellschaft
50	Coöperatieve Centrale Raiffeisen-Boerenleenbank b.a., Zweigndl. Frankfurt a. M.
51	Stadtsparkasse Köln
52	CDC Marchés Zweigniederlassung Deutschland
53	National-Bank Aktiengesellschaft
54	Société Générale S.A. Zweigniederlassung Frankfurt a. M.
55	Hamburgische Landesbank – Girozentrale –
56	Landesbank Saar Girozentrale
57	Kreissparkasse Köln
58	Citibank Aktiengesellschaft
59	Conrad Hinrich Donner Bank Aktiengesellschaft
60	Industriebank von Japan (Deutschland) Aktiengesellschaft
61	Tokai Bank (Deutschland) GmbH
62	Deutsche Verkehrs-Bank Aktiengesellschaft
63	Merck, Finck & Co.
64	Nomura Bank (Deutschland) GmbH
65	Reuschel & Co.
66	Delbrück & Co.
67	Schmidt Bank Kommanditgesellschaft auf Aktien
68	BfG Bank AG
69	Schwäbische Bank Aktiengesellschaft
70	Daiwa Europe (Deutschland) GmbH
[1]	Bank of America National Trust and Savings Association Frankfurt Branch
[1]	Hesse Newman & CO. (AG & Co.) Kommanditgesellschaft

1 No ranking assigned because joined the group only in 2nd half of 1998. — **2** Merged on January 1, 1999 to form Landesbank Baden-Württemberg.

Deutsche Bundesbank

ment, such duties include advisory and coordinating functions. The Bank is therefore represented in the Committee for Public Sector Credit Issues and in the Central Capital Market Committee, i.e. in the bodies in which the bond-issuing requirements of the central, regional and local authorities are coordinated, and in which recommendations are made by banks on the planning of public sector issues and the techniques to be used. The Bank also plays an active part in a number of other bodies which address capital and stock-market issues in the broader sense.

Issuers

In 1998 the Bundesbank was involved solely in the issuing of Federal securities. On the basis of powers included in the 1998 Federal Budget Act, the Federal special funds were, for the first time, able to arrange the follow-up financing of their impending redemptions under the name of the Federal Government; such issues totalled DM 31.3 billion. The Federal Government therefore arranged for the joint borrowing as the sole issuer.

The Indemnification Fund continued to allocate bonds under the Indemnification and Compensation Act on a larger scale in 1998; at the end of the year, DM 147.0 million of such bonds were outstanding.

Issuing procedures

After the disbanding of the Federal Bond Consortium at the end of 1997, since January 1998 Federal bonds and five-year special Federal bonds (after the conclusion of the sale of a series on market terms), Federal Treasury notes and Treasury discount paper have all been issued uniformly by auctions through a newly constituted "Bund Issues Auction Group". Resident credit institutions and domestic branches of foreign institutions may become members of this auction group, provided that they engage in underwriting business and have sufficient placing power. In 1998 that requirement was met if the successful bids submitted by an institution amounted on average to at least 0.05 % of the total issue volume allotted. A ranking list of the auction group members, by the size of their shares in the issue volume allotted (without quoting percentages), is published annually. In addition, the Bank will continue to place amounts through the stock exchanges on market terms, for market management purposes.

In 1998 Federal securities amounting in all to DM 180.6 billion were issued through the auction group in 22 auctions. At the beginning of 1999, the auction group comprised 72 members after the admission of seven new members, the retirement of likewise seven members and the exclusion of six institutions at

Bonds issued by the Federal Government in 1998

Table 15

Issue	Amount issued or increased (DM billion) Total	Amount allotted by auction	Market management amount	Terms Nominal interest rate (% p.a.)	Maturity (years/ months)	Weighted average price (%)	Average yield (% p.a.)	Date of issue
Federal Government (WKN 113 505)	15.0	10.1	4.9	5.25	10/0	100.42	5.19	Jan. 7
1st increase	10.0	7.4	2.6	5.25	9/11	101.27	5.08	Feb. 4
2nd increase	5.0	4.9	0.1	5.25	9/10	102.04	4.98	March 4
Total volume	30.0							
Federal Government (WKN 113 506)	10.0	8.1	1.9	5.625	30/0	100.00	5.62	Jan. 21
1st increase	8.0	6.5	1.5	5.625	29/9	101.74	5.50	April 1
2nd increase	2.0	–	2.0	5.625	29/8	–	–	April 22
3rd increase	8.0	6.0	2.0	5.625	29/6	103.76	5.36	July 1
Total volume	28.0							
Federal Government (WKN 113 507)	12.0	9.6	2.4	4.75	10/0	100.51	4.68	July 8
1st increase	2.0	–	2.0	4.75	9/10	–	–	Aug. 21
2nd increase	3.0	–	3.0	4.75	9/10	–	–	Aug. 31
Total volume	17.0							
Federal Government (WKN 113 508)	8.0	5.3	2.7	4.75	29/9	99.73	4.76	Oct. 7
Increase	2.0	–	2.0	4.75	29/8	–	–	Nov. 19
Total volume	10.0							
Federal Government (WKN 113 509)	15.0	12.0	3.0	4.125	9/8	100.09	4.11	Oct. 28
Increase	12.0	10.6	1.4	4.125	9/7	100.55	4.05	Nov. 25
Total volume	27.0							

Deutsche Bundesbank

the end of the year for lack of sufficient placing power. The number of members was reduced to 70 at the beginning of 1999 as a result of the merging of three institutions.

In 1999 it is planned to assign the following weights to allocations for the purpose of drawing up the ranking list: Treasury discount paper: factor 1, Federal Treasury notes: factor 4, five-year special Federal bonds: factor 8, ten-year Federal bonds: factor 15, and 30-year Federal bonds: factor 25. When determining the relative placing power, the weighting factors are intended to reflect the differing capital commitments and interest rate exposures involved in the various maturities of the Federal issues; they will remain unchanged throughout the calendar year.

Issue of bonds

In 1998 the Bank participated in the launching of three ten-year and two 30-year Federal bond issues with a total volume of DM 112.0 billion (in 1997: DM 82.0 billion). By reopening issues using the auction procedure and by raising the amount set aside for market management operations, the volumes of three bond issues were increased to between DM 27.0 billion and DM 30.0 billion; the right to top up the other bond issues was reserved. The tendency towards increasing the volume of bond issues outstanding therefore continued.

Stripping

With a view to improving terms and conditions and enhancing the German financial market's competitiveness, the Federal Government has been authorising the separation of the principal and interest payments (stripping) of newly issued ten-year and 30-year bonds, all with coupon dates of January 4 and July 4, since July 1997. It has also made this possible retrospectively for the 30-year bond issue launched at the beginning of 1994 and for the two ten-year bond issues launched in the first half of 1997. At the end of the year, the volume of strippable bonds totalled DM 214.0 billion, around DM 8.3 billion (or 3.9 %) of which were held in stripped form. The 30-year bond issue of July 1997 has the highest stripped share, at 21.6 %, which suggests significantly greater interest in long-dated principal and coupon strips.

Five-year special Federal bonds

In 1998, too, five-year special Federal bonds, some of which were initially sold on tap on market terms, were offered for sale by auction at quarterly intervals (February, May, August, November). Of the total issue volume amounting to DM 56.6 billion (1997: DM 59.7 billion), allotments under the auction procedure accounted for DM 31.4 billion and sales in the open market for DM 7.2 billion.

Issues of five-year special Federal bonds in 1998

Table 16

Issue	Amount issued (DM million)				Terms				Start of sales in the open market/ date of stock exchange listing
					Sales in the open market		Auction procedure		
	Total	Sales in the open market	Amount allotted by auction	Market management amount	Issue prices (%)	Yields (% p.a.)	Weighted average price (%)	Average yield (% p.a.)	
4.50 % series 124 of 1997 (2002)	–	–	–	–	–	–	–	–	–
Increase	1 2,000	–	–	2,000	–	–	–	–	Jan. 29
5 % series 125 of 1997 (2002)	2 10,510	889	7,590	2,031	100.00 – 102.75	4.35 – 5.00	102.45	4.41	Jan. 2/ Feb. 20
1st increase	2,000	–	–	2,000	–	–	–	–	March 30
2nd increase	2,000	–	–	2,000	–	–	–	–	May 4
Total volume	14,510								
4.50 % series 126 of 1998 (2003)	13,000	851	9,473	2,676	100.20 – 100.90	4.29 – 4.45	99.44	4.62	Feb. 17/ May 22
4.50 % series 127 of 1998 (2003)	13,000	2,967	7,334	2,699	99.90 – 103.30	3.72 – 4.52	102.43	3.92	May 18/ Aug. 28
Increase	2,000	–	–	2,000	–	–	–	–	Oct. 20
Total volume	15,000								
3.75 % series 128 of 1998 (2003)	11,000	1,406	7,000	2,594	99.80 – 101.80	3.34 – 3.79	99.96	3.75	Aug. 25/ Nov. 13
3.50 % series 129 of 1998 (2003)	3 1,105	1,105	3 ...	3 ...	99.55 – 101.35	3.10 – 3.20	3 ...	3 ...	3 Nov. 10/ ...

1 Total amount issued: DM 15,000 million. — **2** Sales of this series began on November 11, 1997; total amount sold in the open market: DM 2,379 million, total amount issued: DM 16,000 million. — **3** Sales were not completed at the end of the year.

Deutsche Bundesbank

Treasury notes

Of the two-year Federal Treasury notes *("Schätze")* which have been offered for sale since September 1996, a total of DM 42.0 billion (1997: DM 42.0 billion) was sold by auction at quarterly intervals (March, June, September, December).

"Bubills"

The Bank has been issuing debt securities running for less than one year by auction, likewise since July 1996. The issue volume (gross value) of such paper, which is also issued every quarter (January, April, July, October) in the form of discount paper *("Bubills")* with a maturity of six months, came to DM 40.1 billion (1997: DM 39.9 billion). In 1998, too, the maximum amount outstanding was limited to DM 20.0 billion.

Issue calendar

In 1998 the Federal Government's issue calendar, which is regularly published for the quarter ahead, again attracted substantial attention. It encompasses the Federal securities to be issued every three months and the Federal bonds issued at irregular intervals. All issues were implemented as planned.

Market management operations

Of the listed Federal securities issued in 1998, a total amount of DM 59.5 billion (1997: DM 57.3 billion) was set aside for successive sale through the stock exchanges for market management purposes, specifically, DM 31.5 billion in the case of Federal bonds, DM 18.0 billion in the case of five-year special Federal bonds and DM 10.0 billion in the case of Federal Treasury notes. DM 60.9 billion (1997: DM 58.0 billion) of the amount set aside for market management purposes was sold through the stock exchanges in 1998.

Price management operations

As in previous years, the Bank conducted (for the account of the issuers) price management operations on the German stock exchanges for officially listed securities issued by the Federal Government, its special funds, the former *Treuhand* agency and the former *Deutsche Bundespost,* as well as for securities issued by the *Kreditanstalt für Wiederaufbau* and the *Deutsche Ausgleichsbank.* The Bank also conducts price management operations for the bonds issued by the Land of Lower-Saxony listed on the stock exchanges in Frankfurt and Hanover and for the bonds issued by the Land of Schleswig-Holstein listed on the Hamburg stock exchange.

Federal savings bonds and Treasury financing paper

In the year under review, the Bank, acting for the account of the Federal Government, continued to be involved in the selling (through credit institutions and its own offices) of Federal savings bonds and Treasury financing paper issued on tap. With gross sales amounting to DM 7.3 billion, Federal savings bonds running for six and seven years with annually rising yields, which are sold only to

Issues of Federal Treasury notes in 1998

Table 17

Issue	Amount issued (DM million)			Terms				
	Total	Amount allotted by auction	Market management amount	Nominal interest rate (% p.a.)	Maturity (years/ months)	Weighted average price (%)	Average yield (% p.a.)	Date of issue
Federal Government (WKN 113 681)	10,000.0	8,748.7	1,251.3	4.00	2/0	100.21	3.89	Mar. 18
Increase	2,000.0	–	2,000.0	4.00	1/11	–	–	April 15
Total volume	12,000.0							
Federal Government (WKN 113 682)	10,000.0	7,611.5	2,388.5	4.00	2/0	100.04	3.98	June 24
Federal Government (WKN 113 683)	10,000.0	7,653.0	2,347.0	3.25	2/0	99.72	3.40	Sep. 16
Federal Government (WKN 113 684)	10,000.0	7,964.8	2,035.2	3.00	2/0	99.85	3.08	Dec. 16

Issues of Federal Treasury discount paper (“Bubills”) in 1998

Table 18

Issue	Amount issued (DM million)	Date of issue	Terms		
			Maturity (months)	Weighted average price (%)	Average yield (% p.a.)
January 1998 (WKN 111 425)	10,157	Jan. 14	6	98.295	3.43
April 1998 (WKN 111 426)	9,939	Apr. 15	6	98.258	3.51
July 1998 (WKN 111 427)	9,992	July 15	6	98.296	3.43
October 1998 (WKN 111 428)	10,040	Oct. 14	6	98.368	3.28

Memo item: DM 20,032 million outstanding on December 31.

Deutsche Bundesbank

Issues of Federal savings bonds in 1998

Table 19

Issue	Sales period 1998	Gross sales (DM million)			Nominal interest rate (% p.a.)	Final yield (% p.a.)	
		Total	Federal savings bonds, Type A	Federal savings bonds, Type B		Type A	Type B
1997 / 9 + 10	1 Jan. 2 – Jan. 5	383	313	70	3.25 – 7.00	5.18	5.53
1998 / 1 + 2	Jan. 5 – Feb. 5	1,617	1,409	208	3.25 – 6.25	4.84	5.10
1998 / 3 + 4	Feb. 5 – April 7	1,946	1,650	296	3.25 – 5.50	4.61	4.78
1998 / 5 + 6	April 7 – July 8	1,525	1,310	215	3.25 – 5.50	4.45	4.64
1998 / 7 + 8	July 8 – Aug. 5	435	380	55	3.00 – 5.50	4.36	4.57
1998 / 9 + 10	Aug. 5 – Aug. 31	198	166	32	2.50 – 5.75	4.26	4.53
1998 / 11 + 12	Aug. 31 – Sep. 22	286	123	163	2.50 – 5.50	4.06	4.32
1998 / 13 + 14	Sep. 22 – Dec. 9	826	705	121	2.50 – 5.00	3.74	3.96
1998 / 15 + 16	2 Dec. 9 – Dec. 31	107	89	18	2.50 – 4.00	3.39	3.50

1 Sales began on October 21, 1997; total sales issue 1997/9: DM 1,998 million, issue 1997/10: DM 570 million. — **2** Sales were not completed at the end of the year.

Deutsche Bundesbank

natural persons and non-profit making institutions, once again made a distinctly lower contribution to budget financing in 1998 than in the previous year (1997: DM 14.9 billion), presumably because of the sharp drop in yields. Treasury financing paper, which is issued in the form of discount paper with maturities of one year and two years, was sold to the total of DM 3.8 billion (in 1997: DM 3.9 billion).

V. The Bank's participation in banking supervision and changes in banking supervision legislation

1. International harmonisation of banking supervision

In addition to its ongoing supervision of credit institutions, the Deutsche Bundesbank is regularly involved through national and international bodies and committees in the further development of banking supervision. The main areas of work in the prudential field during the year under review were as follows.

(a) Activities in connection with the Basle Committee on Banking Supervision

Core Principles for Effective Banking Supervision

The Basle Committee on Banking Supervision, the International Monetary Fund (IMF) and the World Bank are urging the rapid implementation of and compliance with the "Core Principles". To this end the Basle Committee set up a "Liaison Group" composed of banking supervisors from both G-10 and non-G-10 countries. The IMF and the World Bank are participating as observers. The first task of the Liaison Group was to carry out a worldwide survey on compliance with the Core Principles in about 150 countries for the International Conference of Banking Supervisors (ICBS) in Sydney in October 1998. The results of the survey indicated that some countries had interpreted compliance with the rules rather generously. For this reason the Liaison Group will submit a proposal for a more detailed method with criteria enabling the definition of compliance with these principles to be determined with sufficient accuracy.

Recognition of innovative capital instruments as core capital

In addition, the Committee also discussed the subject of the composition of tier 1 capital last year. The discussion focused on whether innovative capital instruments should be assigned to the prudential concept of core capital. As such instruments include contributions to the capital by silent partners, the discussion was of great significance for Germany. At its meeting in Sydney in October 1998 the Basle Committee agreed on a set of guidelines subject to which innovative capital instruments, including contributions to the capital by silent partners, may be assigned to the core capital. Under the guidelines up to 15 % of the core capital may consist of such innovative components.

Revision of the 1988 Capital Accord

Against the backdrop of the constantly evolving financial markets, the Basle Committee last year also began work on revising the 1988 Capital Accord, especially concerning the treatment of credit risk. However, given the major implications that a change in this globally accepted standard could have, it is necessary to consider the possible consequences very carefully. The aim of the deliberations, which are continuing, is initially to submit a consultation paper in the first half of 1999. It is not possible at the moment to define a time scale for the entry into force of an amended Capital Accord.

Harmonisation of accounting regimes

As part of the international efforts aimed at harmonising accounting regimes, the Basle Committee also published the consultation paper "Sound Practices for Loan Accounting, Credit Risk Disclosure and Related Matters" in October 1998. This paper contains recommendations for banks, banking supervisory authorities and accounting regulatory bodies on the reporting and valuation of loans, the setting-up of value adjustments, the disclosure of credit risks and associated issues. The paper gives the view of banking supervisory authorities regarding the appropriate methods of loan accounting and disclosure for banks. It is further intended to serve as a guide on these points for the prudential assessment of the information quality of banks' entrepreneurial principles and methods. The ideas for further developing the accounting and disclosure practices for banks' lending business, which have been submitted for consultation, are also in line with the demands for greater transparency of the risks inherent in lending business made by the finance ministers of the Group of Seven countries (G-7), the central bank governors of the Group of Ten countries (G-10) and international organisations such as the IMF and the World Bank.

Transparency of derivatives business

In September 1998 the Basle Committee and the Technical Committee of the International Organisation of Securities Commissions (IOSCO) issued a "Framework for Supervisory Information about Derivatives and Trading Activities". This revised the basic concept for improving the transparency of derivatives business of May 1995 and brought it into line with current risk management practice in derivatives and trading business, particularly with regard to market risk. The paper contains proposals for an internationally harmonised minimum standard of information on derivatives business ("Common Minimum Framework") which the two committees are proposing should be made available to supervisory authorities. The Framework provides a basis for a derivatives regulation currently in preparation and which will probably enter into force this year.

Improving disclosure requirements

In September 1998 the Basle Committee also published a recommendation for improving the disclosure requirements of credit institutions ("Enhancing Bank Transparency") with a view to strengthening market discipline in the financial markets. Specifically, it recommends adequate transparency *inter alia* in the disclosure of information on liquidity, risk management strategy and practice, the incurred credit exposure and the use of internal risk monitoring systems. The recommendations are also in line with the demands of the G-7, the G-10 central bank governors, the national supervisory authorities and market participants and are designed to support and complement banking supervision.

(b) Harmonisation in the European Union

Three amended Directives of the European Union

In June 1998 the European Parliament and Council issued three Directives amending the EC Capital Adequacy Directive, the EC Solvency Ratio Directive and the EC Banking Coordination Directive of 1977. These amended Directives essentially resulted in the broad adjustment of the European solvency rules to the corresponding standards of the Basle Accord. Under the amended version of the EC Capital Adequacy Directive ("CAD II"), the commodity price risk now also has to be backed by own funds. Moreover, internal risk management models are now permitted for calculating the overall capital requirement for market price risk (i.e. including what is known as specific risk). The amendment of the EC Solvency Ratio Directive ("Expanded Matrix Directive") extends the obligation to apply the marking-to-market method and introduces differentiated weightings for potential future increases in the risk when determining counterparty risk for over-the-counter derivatives. The third amended Directive ("Mortgage Credits Directive") extended the exemption ruling which applies more favourable weightings to commercial and industrial mortgages with a creditworthiness rating of 50 % by 10 years until the end of 2006. In addition, institutions may now apply a reduced weight of 50 % to mortgage-backed securities. The EU member states must translate these Directives into national law by July 2000 at the latest.

Banking Supervision Committee of the European Central Bank

The European Central Bank (ECB) commenced operations on July 1, 1998. In performing the tasks entrusted to it by the Maastricht Treaty in the field of banking supervision, it is assisted by the Banking Supervision Committee, which additionally serves as a forum for the exchange of opinions between EU banking supervisors. The Banking Supervision Committee is composed accordingly of representatives of central banks, including the Bundesbank, and banking supervisory authorities of all 15 EU member states.

2. Amendments of national banking supervision legislation

Sixth Act Amending the Banking Act

The principal innovations introduced by the Sixth Act Amending the Banking Act, which was announced on October 28, 1997, entered into force on January 1, 1998, with the exception of the provisions under the Own Funds Regulation and the Regulation governing large exposures and loans of DM 3 million or more. The provisions relating to the adequacy of own funds and large exposures came into effect on October 1, 1998. The central element of the new provisions on the adequacy of own funds and on large exposures is the distinction that is now drawn between trading book and non-trading book institutions. As a general principle, all credit institutions and financial services institutions which trade for their own account, regardless of whether or not they do so as a service for third parties, have to keep both a trading book and a banking book. The trading book is deemed to comprise all own-account positions in financial instruments, marketable assets and equities taken on by the institution with the intention of profiting in the short term from price variations and differences between buying and selling prices as well as transactions that are linked directly to trading book positions. The new provisions relating to the trading book (backing of market and large exposure risk with own funds) do not have to be observed by non-trading book institutions, defined as institutions whose trading book business does not normally exceed 5 % of its total on and off-balance sheet business, or € 15 million, and even in exceptional cases never exceeds 6 %, or € 20 million.

New definitions of large exposure thresholds

The thresholds for what constitutes large exposures were lowered from January 1, 1999 for all institutions. A large exposure is now deemed to exist if an exposure reaches or exceeds 10 % of the liable capital or, in the case of trading book institutions, 10 % of the own funds (liable capital plus tier 3 capital). The individual large exposure limit has been lowered to 25 %; transitional phases extended by five years apply to credit institutions whose liable capital on February 5, 1998 did not exceed ECU 7 million. Except for exposures incurred prior to

January 1, 1996 and which, on the basis of contractual agreements, do not become due until after December 31, 2001, exposures which legitimately exceeded this limit on December 31, 1998 must be reduced to the new ceilings by December 31, 2001.

Financial services institutions now subject to prudential supervision

Following the entry into force of the Sixth Act Amending the Banking Act, enterprises which provide financial services on a commercial basis or on a scale which requires a commercially organised business undertaking (financial services institutions) are now supervised in principle according to the same rules as credit institutions. Financial services comprise investment broking, contract broking and portfolio management as well as own-account trading as a service for third parties. Non-EEA deposit broking, money transmission services and foreign currency dealing were also added to the list of financial services in order to improve monitoring of the "grey capital market". The Banking Act introduced a simplified authorisation procedure for enterprises which were legitimately providing financial services on January 1, 1998. They were merely required initially to report activities that are subject to authorisation and their intention to carry on performing these to the Federal Banking Supervisory Office and the Bundesbank by April 1, 1998. Only in a second step were they required to submit the customary documents needed when applying for a licence. At the end of 1998 more than 3,000 financial service institutions were in possession of the necessary licence to provide financial services.

EC Deposit Guarantee Directive and EC Investor Compensation Directive

With the entry into force of the act implementing the EC Deposit Guarantee Directive and the EC Investor Compensation Directive on August 1, 1998, legislation was passed in Germany for the first time providing for compensation to depositors and investors. Hitherto, deposits alone were protected by the deposit guarantee schemes set up on a voluntary basis by the banking associations in which virtually all credit institutions engaging in deposit business are members. Since the statutory compensation scheme only provides basic cover, the guarantee schemes set up on a voluntary basis are to be continued. Under the act implementing the EC Deposit Guarantee Directive and the EC Investor Compensation Directive, a creditor's claim to compensation is limited to 90 % of his deposits and to an amount of € 20,000. The same compensation rule applies to an investor if an institution is no longer able to repay the funds it owes investors in connection with investment business transacted or to return securities or financial instruments which belong to investors and which the institution keeps in safe custody or manages on behalf of the investors. The claims in respect of losses of deposits and investment business transacted may be asserted on a cumulative basis. In accordance with the provisions of the Directives, the depositor or investor has a direct claim on the compensation scheme. The compensation schemes will be subject to supervision and audits by the Federal Banking Supervisory Office. As long as the guarantee schemes operated by the regional savings bank and giro associations or the guarantee scheme of the Federal Association of People's Banks and Raiffeisen Banks *(Bundesverband der Deutschen Volksbanken und Raiffeisenbanken)* by virtue of by-laws protect the viability of the member institutions, the latter will not be required to join a compensation scheme. The Deposit Protection Fund set up for the commercial banks on a voluntary basis at the Association of German Banks *(Bundesverband deutscher Banken)* will continue to be operated alongside the statutory compensation scheme. In the event of insolvency, the Fund safeguards non-securitised liabilities to non-bank creditors, for each creditor, up to the level of 30 % of the liable capital of the bank concerned (sum total of core capital and supplementary capital, of which the latter must not exceed 25 % of the core capital). The Deposit Protection Fund will cover not only the 10 % deductible of the statutory compensation scheme and deposits exceeding € 20,000, but also the deposits of various depositors which are not entitled to compensation from the statutory compensation scheme (public sector, investment companies with their funds and all business enterprises other than banks).

Principle concerning the capital of institutions

The amendment of Principle I announced by the Federal Banking Supervisory Office on October 29, 1997 came into force on October 1 of the year under review. As of that date institutions must also back their market price risk with own funds. The new Principle I therefore also supersedes the old Principle Ia, which limited certain market risk positions by requiring them to be backed by liable capital. The new version of Principle I further takes account of the altered provisions of the EC Capital Adequacy Directive and of the EC Solvency Ratio Directive (see also Section 1b).

New Liquidity Principle

With the entry into force of the new Liquidity Principle[1] from July 1, 2000 the Liquidity Principles II and III that are currently valid will be abolished; owing to their conceptual deficiencies, the latter are no longer suitable for facilitating the prudential assessment of a credit institution's liquidity position. Under a flexible transitional arrangement institutions can opt to apply the new Principle II already from January 1999. The new Principle applies equally to credit institutions (for

1 Announcement on the amendment of the Principles concerning the own funds and liquidity of institutions of November 25, 1998, printed on page 16985f of the Federal Gazette of December 9, 1998.

the first time including mortgage banks and building and loan associations), domestic branches of foreign credit institutions and certain financial services institutions.

Concept of the new Principle

The concept of the Principle is based on the idea that the liquidity of an institution depends primarily on the scale of its maturity transformations, on the available stock of highly liquid assets and on refinancing lines in the money market. Therefore the liquid assets (means of payment) and liabilities (payment obligations) on a given date are listed in various time bands according to their probable residual maturity. By comparing the asset and liability components the banking supervisory authorities can obtain an overview of the expected inflows and outflows of liquidity at each institution. Listed securities and covered debt securities (within the meaning of Article 22 (4) of Directive 85/611/EEC – UCITS Directive) are assigned to the first time band as highly liquid means of payment. An institution's liquidity is normally regarded as adequate if the means of payment available during the next 30 days at least cover the expected liquidity outflows during this period (liquidity ratio ≥ 1). The scale of maturity transformation is determined on the basis of what is known as observation ratios regarding the liquidity in the second, third and fourth time bands.

Accounting Regulation

The provisions of the German Commercial Code, which previously applied only to credit institutions, were extended by the Sixth Act Amending the Banking Act to financial services institutions from January 1, 1998. As the provisions for credit institutions concerning the layout of the annual accounts and of the consolidated annual accounts and on the contents of the notes to the financial accounts were largely transferable to financial services institutions, the Federal Ministry of Justice, in consultation with the Bundesbank, merely amended the Accounting Regulation for Credit Institutions. Additional individual amendments were necessary in the wake of the legal changes following the introduction of the euro and of the European System of Central Banks (ESCB). The Accounting Regulation for Credit Institutions and Financial Services Institutions was published on December 18, 1998 (Federal Gazette I 1998, page 3654).

Auditor's Report Regulation

The regulation of 1994 concerning the contents of audit reports on the annual accounts and interim annual accounts of credit institutions was revised and largely brought into line with the Sixth Act Amending the Banking Act by the Federal Banking Supervisory Office after having consulted the Bundesbank. Among other things, the provisions were extended to financial services institutions, and auditing and reporting obligations in respect of the more flexibly defined own funds were specified in greater detail. Moreover, the provisions which hitherto were contained in the Directives Governing the Auditing of Safe Custody Accounts were updated and included in the Auditor's Report Regulation. The provisions first apply to the audit of the financial year beginning after December 31, 1997.

Audit of internal risk measurement and management models

The dialogue that was begun with banks in 1997 on using internal risk measurement and management models was continued and intensified last year. Of the institutions interested in obtaining prudential approval, 13 applied to have their models examined. In 1998 the Bundesbank, together with the Federal Banking Supervisory Office, examined the suitability of internal risk measurement and management models for calculating the level of own funds required to back market price risk pursuant to Principle I section 7 at these credit institutions. The degree of development of the internal risk measurement and management models at the examined institutions in both qualitative and quantitative terms varied greatly. In three cases it was found that the internal model was not yet suitable for approval for prudential purposes. In the other cases the weaknesses detected in the institutions' internal model and in the model environment were neutralised by the imposition of conditions, including the stipulation of a higher multiplication factor. In connection with the imposition of conditions, some models were approved for a limited term only. All of the institutions that were examined undertook great efforts in constructing and further developing modern internal risk measurement and management models based on the value-at-risk concept. For that reason continuous further improvements of the level of development and the constant adjustment of the models to the changing organisational and business environment may be expected in the future. This process of change is being monitored by the banking supervisory authorities through follow-up inspections and examinations. In the resulting intensive dialogue the banks will be supported by the banking supervisory authorities in their efforts to improve and extend the existing internal risk measurement and management models for market price risk and to design and construct internal risk measurement and management models for other types of risk as well.

3. Ongoing banking supervision operations

Intensified process of concentration

At the end of 1998, 3,445 credit institutions were subject to banking supervision, which was 167 institutions fewer than in 1997. The process of concentration in the German banking industry has thus intensified somewhat compared

Ongoing banking supervision operations

Table 20

Number of operations conducted

Item	1995	1996	1997	1998
Individual reports pursuant to section 13 of the Banking Act	66,714	71,951	72,303	66,491
Borrowers included in the lists submitted pursuant to section 13 of the Banking Act	77,317	59,759	79,063	63,956
Reports on loans of DM 3 million or more pursuant to section 14 of the Banking Act	1,184,719	1,382,914	1,751,974	1,863,012
Reports pursuant to sections 24 and 24a of the Banking Act	51,245	40,339	56,327	39,868
Monthly returns pursuant to section 25 of the Banking Act	46,900	45,913	44,770	46,319
Reports on the volume of foreign lending	302	303	293	296
Annual accounts of credit institutions	4,008	4,054	3,788	3,477
Auditor's reports on annual accounts	2,429	2,647	2,746	2,798
Reports on the auditing of safe custody accounts	412	501	602	449
Routine, special and deposit guarantee fund auditor's reports	683	812	1,119	1,333
Audits commissioned by the Federal Banking Supervisory Office pursuant to				
section 44 (1) of the Banking Act	34	29	25	30
section 44 (2) of the Banking Act	103	34	31	24
Reports under the Capital Accord of the Basle Committee on Banking Supervision	97	97	96	23

Deutsche Bundesbank

with the previous year. With 170 mergers, the credit cooperative sector again provided the main impetus for this trend in numerical terms. Only nine mergers were recorded in the savings bank sector. A total of 213 closures of credit institutions contrasted with 46 new registrations. 19 of the new authorisations concerned branch offices of foreign banks.

Division of labour in exercising supervision

Apart from five credit institutions which perform central tasks nationwide, and which are supervised directly by the Bank's Central Office in Frankfurt am Main, responsibility for the ongoing supervision of German credit institutions, within the framework of the division of prudential duties between the Federal Banking Supervisory Office and the Bundesbank, lies with the Land Central Banks. The involvement of the Bank's Central Office is largely limited to basic policy issues. The figures in table 23 provide details on the volume of supervisory tasks for selected areas of prudential work in the year under review.

Comparability impaired by amendment of Banking Act

When comparing the figures with those of 1997 it should be borne in mind that, although part of the Sixth Act Amending the Banking Act entered into force already on October 29, 1997, most of the provisions of that Act came into force on January 1, 1998; this changed the reporting contents to some extent as a result. In addition, changes occurred in the allocation and aggregation of operations performed. For example, the number of audits performed in accordance with section 44 (1) of the Bankng Act now also includes audits of the trading activities of the foreign branches of domestic credit institutions performed on behalf of the Federal Banking Supervisory Office. Furthermore, the impact of the changes caused by the Regulation governing large exposures and loans of DM 3 million or more will only be felt in the course of the current year as credit institutions were required to apply *inter alia* sections 13 to 13b of the Banking Act only from October 1, 1998.

New version of Principle I

Like the previous version, the new version of Principle I, which came into force on October 1, 1998 requires that at least 8 % of the weighted risk assets both of an individual institution and of a group of institutions or a financial holding group is backed by liable capital. The average capital ratio of all individual institutions at December 31, 1998 was 11.3 % (1997: 10.9 %). On a consolidated basis the capital backing of German institutions stood at 10.6 % at the end of December 1998 (1997: 9.7 %). The new Principle I requires capital backing not just for counterparty risk but also for market price risk. The aggregate market price risk is limited to the liable capital plus the eligible tier 3 capital that is not needed to cover the counterparty risk. In order to capture the proportion of an institution's capital that is required to back counterparty and market price risk in a succinct formula, an overall ratio has to be calculated which expresses the ratio of the institution's own funds used for backing risk to the sum of the weighted risk assets and the capital charges for market price risk (multiplied by 12.5). At the end of 1998 this overall ratio of the individual institutions came to 10.5 %, and the corresponding overall ratio on a consolidated basis was 9.6 %. The average overall ratios in relation to the average capital ratio of the various subsectors of the banking industry are shown in chart 21.

Principles II and III

The average utilisation rate of Liquidity Principles II and III, which – as mentioned – are to be replaced by July 1, 2000 by the new liquidity standard via a flexible transitional arrangement, at December 31, 1998 was 90.2 % and 72.3 %, respectively.

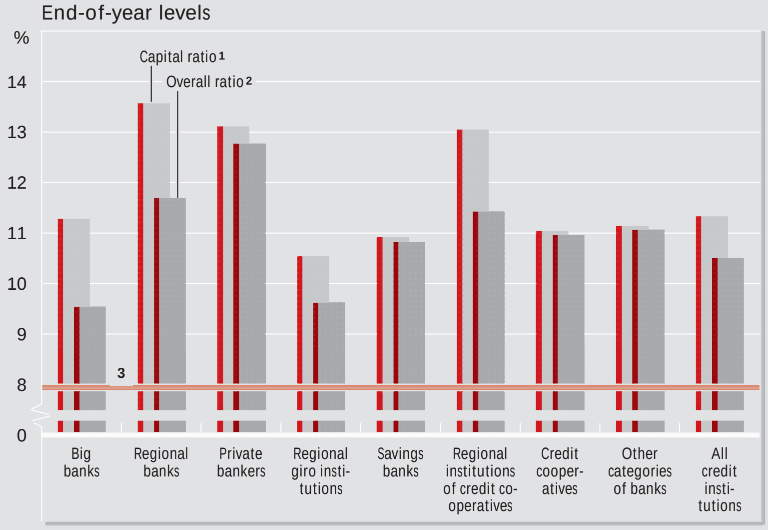
Credit register for loans of DM 3 million or more

The number of loans of DM 3 million or more to be reported quarterly under section 14 of the Banking Act increased in the twelve months from September 30, 1997 to September 30, 1998 by just over 4 % to almost 465,000 reports. The total volume of loans of DM 3 million or more reported went up during this period from approximately DM 8 trillion to DM 9.4 trillion on the reporting date, September 30, 1998. As at that reporting date, 3,496 credit insti-

Chart 21

Ratio of the liable capital and liable own funds of individual institutions filing Principle I reports *

End-of-year levels



* Credit institutions and financial services institutions on a non-consolidated basis. — **1** Capital ratio = (liable capital: weighted risk assets) x 100. — **2** Overall ratio = (own funds: weighted risk assets + capital charges for market risk x 12.5) x 100. — **3** The minimum percentage for both ratios under Principle I is 8%.

Deutsche Bundesbank

tutions, 607 insurance enterprises and 963 financial enterprises had submitted reports on loans of DM 3 million or more. Table 21 shows the trend since 1994.

The Bank's central credit register ascertains each borrower's aggregate debt on the basis of the reports submitted and discloses this figure to the individual lending institutions in a notification. The number of borrowers notified to lenders at the reporting date September 30, 1998 increased by 6 % compared with 1997 to nearly 314,000 borrowers. Just under two-thirds of the borrowers were amalgamated into 65,500 single borrower units pursuant to section 19 (2) of the Banking Act. At the end of September 1998, 84 single borrower units had debts exceeding DM 3 billion each; the aggregate indebtedness of those borrowers amounted to over DM 552 billion, which represents not quite 6 % of the total credit volume reported. Just under two-thirds of the total credit volume reported (DM 6 trillion) was taken up by domestic borrowers.

Pre-loan inquiry now possible

Since January 1, 1998 lenders have had the possibility, subject to certain conditions, of requesting information from the central credit register about the reported level of indebtedness of potential borrowers prior to granting a loan. This pre-loan inquiry facility was used in just under 500 cases in 1998.

Credit register of loans of DM 3 million or more — Table 21

Third quarter	Volume of loans of DM 3 million or more: DM billion	Volume of loans of DM 3 million or more: Change (%)	Number of loans of DM 3 million or more reported: Number	Number of loans of DM 3 million or more reported: Change (%)	Number of reporting: credit institutions 1	Number of reporting: financial enterprises	Number of reporting: insurance enterprises
1994	2,613	+ 6.9	284,568	+ 3.2	2,429	–	398
1995	2,791	+ 6.8	307,544	+ 8.1	2,500	–	383
1996 2	6,695	+ 139.9	405,983	+ 32.0	3,667	874	551
1997	8,056	+ 20.3	446,146	+ 9.9	3,635	893	584
1998	9,368	+ 16.3	464,507	+ 4.1	3,496	963	607

1 Credit institutions and financial services institutions. — **2** Extension of the concept of loan and enlargement of the range of lending institutions required to report as from the reporting date September 30, 1996.

Deutsche Bundesbank

Insolvencies

In 1998 the credit register recorded a total 1,341 insolvencies of enterprises and individuals who, at the date when the insolvency became known, had loans of DM 3 million or more outstanding. This was 58 cases more than in 1997 (+ 4.5 %). The volume of loans of DM 3 million or more reported for insolvent borrowers amounted to approximately DM 12.6 billion, which was roughly DM 1.6 billion more than in 1997 (+ 15 %).

International cooperation between European credit registers

Given the growing internationalisation of banking business, both banking supervisors and banks themselves increasingly need to obtain information on the borrowings of domestic debtors from banks abroad. Cooperation between the European credit registers was therefore continued in 1998. All the existing credit registers in Europe (in Austria, Belgium, France, Germany, Italy, Portugal and Spain) are now taking part in the agreed exchange of information between credit registers on the indebtedness of borrowers, which at present may be used solely for banking supervisory purposes. The efforts being undertaken to intensify this cooperation are now focusing on creating the legal and organisational prerequisites to enable the information received from foreign credit registers to be made available in future to credit institutions, too.

VI. Authorisations under monetary law

Value guarantee clauses

Decisions on the authorisation of value guarantee clauses were taken by the Bank in accordance with its “Principles Governing Decisions on Applications for

Applications for authorisations pursuant to section 3 sentence 2 of the Currency Act, and the decisions taken

Table 22

Year	Applications	Authorisations	Certificates of non-applicability of authorisation requirement 1	Applications rejected
1989	38,633	30,349	6,448	1,836
1990	42,552	33,232	7,123	2,197
1991	48,806	37,837	8,197	2,772
1992	54,129	41,689	8,840	3,600
1993	57,155	44,949	8,231	3,975
1994	68,698	54,490	9,886	4,322
1995	71,881	57,643	9,767	4,471
1996	63,176	50,084	8,902	4,190
1997	55,038	43,605	7,740	3,693
1998	60,139	47,750	3,644	8,745

1 Declarations that authorisation is not necessary.

Deutsche Bundesbank

Authorisations Pursuant to Section 3 of the Currency Act (No. 2 (c) of the Currency Regulation for Berlin)”.[1]

As a result of Article 9 sections 1 to 3 of the Act on the Introduction of the Euro[2], section 3 of the Currency Act and the relevant provisions of monetary law were repealed on January 1, 1999 or have not been applicable since that date.

In Article 9 section 4 of the Act on the Introduction of the Euro, a regulation which in some respects was a follow-up provision was provided for value guarantee clauses by the inclusion of section 2 of the act on price quotations and price clauses; the authorising authority is the Federal Office of Trade and Industry in Eschborn.[3]

1 Deutsche Bundesbank Notice No. 1015/78 of June 9, 1978. For the Bank’s policy in granting such authorisations, see also Deutsche Bundesbank, Value guarantee clauses - synopsis of the Bundesbank’s policy in granting permits, Monthly Report, April 1971, page 24 ff. Regarding the incurrence of liabilities denominated in the European Currency Unit (ECU) or in the special drawing rights of the International Monetary Fund (SDR), see Deutsche Bundesbank Notice No. 1002/90 of January 5, 1990, published in the Federal Gazette No. 3 of January 5, 1990, page 54. With respect to its application in eastern Germany see Deutsche Bundesbank Notice No. 1006/90 of June 13, 1990, published in the Federal Gazette No. 114 of June 23, 1990, page 3215. For agreements on rent adjustments in contracts for residential rents (section 10a (1) of the Act governing rents as amended on July 21, 1993) see Deutsche Bundesbank Notice No. 1003/98 of November 3, 1998, published in the Federal Gazette No. 223 of November 26, 1998, page 16640.
2 Act of June 9, 1998, Federal Law Gazette I, page 1242.
3 Section 7 of the regulation governing price clauses of September 23, 1998, Federal Law Gazette I, page 3043.

VII. UN/EC financial sanctions: new developments

EC sanctions

The Kosovo crisis has given rise to a number of EC financial sanctions: a ban on public financial assistance to Serbia, a freezing of government funds and a ban on new investment.

Serbia

Initially, public financial assistance, insurance and guarantees for new export credit were prohibited (EC Regulation No. 926/98 of April 27, 1998, Official Journal L 130/1 of May 1, 1998).

The balances of the governments of the Federal Republic of Yugoslavia and the Republic of Serbia were then frozen in June (EC Regulation No. 1295/98 of June 22, 1998, Official Journal L 178/33 of June 23, 1998). This restraint on disposition affects only government balances, including the accounts of the new central bank of the remaining part of the former Yugoslavia. Balances of enterprises and commercial banks controlled by the government are not affected; to that extent, there is no impediment on payment transactions. Balances belonging to the sub-republic Montenegro are not affected either. The regulation contains some exemptions: payments by Yugoslav diplomatic and consular missions, social security and pension payments, payments for certain humanitarian measures, the settlement of old obligations and payments for transit rights (charges for the right to fly over Yugoslavia) (Article 3). No authorisation is required in these cases.

The ban on investment concerns new investment only; that is to say, existing contracts may be performed (EC Regulation No. 1607/98 of July 24, 1998, Official Journal L 209/16 of July 25, 1998). The transfer of funds to create a lasting economic link with Serbia and explicitly to purchase real property is prohibited. The Land Central Banks may authorise transfers in exceptional cases, especially for humanitarian purposes (Article 2). In principle, however, everybody, particularly every bank acting on its own responsibility, must check to ascertain whether or not the type of investment concerned is prohibited.

It goes without saying that certain payments, such as private maintenance payments for dependants, may be transferred unhindered.

These restrictions represent sanctions by the EC alone, and not by the UN.

Sierra Leone

Like the UN earlier, the EC has now lifted the financial sanctions against Sierra Leone (EC Regulation No. 2465/97) (EC Regulation No. 941/98 of April 27, 1998, Official Journal L 136/1 of May 8, 1998).

UN sanctions

The UN financial sanctions imposed on Iraq and Libya continue to apply unchanged:

Iraq: sections 52 and 69 e of the Foreign Trade and Payments Regulation

Libya: section 69 n of the Foreign Trade and Payments Regulation.

VIII. Technical central bank cooperation by the Bank

Ongoing need for technical cooperation

The demand of foreign central banks for advisory and training facilities persisted in 1998, and operations under the Bank's technical central bank cooperation scheme were more or less as extensive as in the previous year. The primary purpose of cooperating as partners in this way with the central banks of more than 40 countries in transition, developing nations and emerging markets is to foster the development of modern, efficient central banking systems in those countries. This is achieved mainly by imparting knowledge and experience in the course of training and advisory sessions. Subjects range from central bank legislation, via domestic and external monetary policy, banking supervision and payments to internal banking issues such as personnel matters, organisation and internal auditing. Recently there has also been rapidly growing interest in all questions relating to European monetary union, especially in the changed assignments of monetary policy makers under the European System of Central Banks. The Bank has been devoting greater attention to these questions in the course of its bilateral and multilateral technical assistance programmes.

Regional shifts in the wake of financial market crises

There were some regional shifts in the Bank's technical cooperation, partly as a result of the financial crises in South-East Asia, Russia and Latin America. It was some central banks in South-East Asia that stepped up their demands on the Bank's advisory services most. Much the same can be said of central banks in Latin America, while some central banks in Africa also showed greater interest in the Bank's technical cooperation scheme. By contrast, cooperation with some

CIS countries stagnated at times, probably not least as an indirect result of difficult political and economic developments.

Some cooperation partners were applicants for EU membership

Against this background, the sustained progress made by most central and eastern European countries in transition in creating a modern central banking system, fighting inflation and stabilising their banking systems is particularly noteworthy. Some of these countries, viz. the Czech Republic, Estonia, Hungary, Poland and Slovenia, are applicants to join the European Union and have already begun negotiations with the European Commission. The assistance given to the central banks of those countries by western central banks and other institutions has certainly fostered this development. The fact that some of these countries have already begun to advise less advanced central banks in other countries in transition is particularly gratifying.

Many forms of cooperation

There are a number of ways in which the Bank gives advice and training to executive and other members of the staff of foreign central banks. For example, seminars are held in Germany and abroad, foreign central bank staff are invited to Germany to gather information, and experts from the Bank are sent on advisory missions abroad. For reasons of cost, seminars intended for fairly large groups of interested staff are mostly staged in their respective countries, and only smaller groups are invited to visit the Bundesbank to familiarise themselves with the working methods of the relevant specialist areas. The Technical Central Bank Cooperation Division, located at the Central Office, coordinates all aspects of the technical assistance scheme, and experts from the Bank as a whole (that is to say, including those from Land Central Banks) carry out the work of advising and training. The Bundesbank's training college is also involved in the technical central bank cooperation scheme, and in the past few years some of the partner countries have established their own banking schools along the lines of the Bundesbank's.

Importance of standard seminars grows

In the past few years the Bank has adjusted its programme of assistance to comply as far as possible with the specific needs and wishes of the beneficiary central banks, which are at very different stages of development. Although this approach has proved to be the right one on the whole, the growing number of requests from partner central banks has made it necessary, for reasons of cost-efficiency, to extend the standard seminars conducted at the Bundesbank in future, so that the work of the technical cooperation division can be streamlined more effectively than hitherto. These standard seminars for junior executive staff, which for the most part are held in English, deal with general fundamental aspects of modern central banking as well as issues relating to European integration and, above all, monetary policy within the European System of Central Banks. Special emphasis is placed on the presentation of the theoretical principles involved. The standard seminars are open to a wide group of interested central banks in developing countries, countries in transition and emerging markets, and have already aroused a great deal of interest among the partner central banks. While the aim of the seminars is to impart expert knowledge and experience, they also provide central bank staff from all parts of the world with a forum for exchanging knowledge gained from their own experience.

Information visits and seminars for over 1,700 central bankers

More than 180 information visits were made and seminars held in 1998, which means that the number of activities was much the same as in 1997. Approximately one-half of the events were organised for Belarus, China, Lithuania, Poland, Romania, Russia, Turkey and Ukraine; the other half involved a further 35 countries participating in the technical cooperation scheme. Overall, approximately 1,700 foreign central bank staff (compared with approximately 1,600 in the previous year) took part in the Bundesbank's training activities. Of that number, 700 central bank employees had an opportunity to improve their knowledge in Germany, at the Bank's Central Office, the Land Central Banks or the training college. Most of these participants were relatively young, already well trained and with appropriate development potential. The total number of foreign central bank staff that has taken part in the Bundesbank's training programmes in Germany and abroad since 1993 far exceeds 7,000.

More than 50 advisory missions abroad

Twenty central banks called on the short advisory sessions offered by the Bank under the technical cooperation scheme on a total of 50 occasions in 1998. These missions are undertaken by individual members of the Bank's staff from specific operational areas and provide the central banks concerned with advice in their respective countries. Sometimes Bundesbank advisory staff join international expert groups such as those that were formed on several occasions in connection with the crisis in South-East Asia. The advisory sessions are arranged in consultation with the central bank concerned and seldom last longer than a week. By contrast, longer advisory missions undertaken by "resident advisors", as they are called, appear to be useful only under specific conditions. In 1998, for example, four members of the Bank's staff were involved in long-term projects in eastern Europe and Africa.

Although the efforts of western central banks and international organisations were very successful in supporting market-oriented reforms in central banking

Transfer of knowledge and experience continues

in a number of countries in transition, in other countries success was less pronounced. This applies to a few CIS states, whose central banks naturally have to operate in an environment that is difficult for economic policy makers. Nevertheless, the Bank is still prepared to cooperate with the central banks of those countries because, in the countries in transition, sound and efficiently operating institutions such as a modern central bank are quite imperative if business and finance are to develop successfully.

IX. Organisation and staff

Further streamlining of the branch office network

The Bank increased its efforts to rationalise in 1998. As a result of the continual fall in the private banking sector's demand for central banking services in every part of the country, the Bank closed 16 branch offices in the year under review and thus further reduced its branch office network.

The number of branch offices fell from 163 to 147 (minus 10 %). Closures last year affected branch offices only in western Germany; seven of the closures were in North-Rhine Westphalia alone.

Staff numbers decline slightly

The number of staff in the Bank as a whole declined by 97 in the year under review, but there were movements in both directions. As a result of further closures, the number of staff in the branch offices fell by another 176, or 2.1%. Consequently, a slight increase in staff in the cash-handling area was more than offset by the reduction in staff arising from the decrease in business in the other areas of the branch offices.

By contrast, the situation at the Central Office and in the Main Offices was characterised by a further rise in the workload owing to the preparations for European monetary union. This is reflected in a slight increase in staff.

Number of training places again increased

The Bank recruited a disproportionately large number of trainees again last year (an increase of 54 persons, or 24 %), with the result that the number of trainees rose to 282. The number of civil service candidates and officials entering a civil service career rose by 53.

Trends in staff levels at the Bundesbank

Table 23

In thousands

Employed persons	Staff level at the beginning of 1999: Total [1]	Land Central Banks	Branch offices	Central Office of the Bank [3]	Changes from the beginning of 1998: Total	Land Central Banks	Branch offices	Central Office of the Bank [3]
Civil servants	6,743	2,371	3,348	1,024	4	54	– 51	1
Other salaried staff	8,287	2,727	4,596	1,419	48	28	– 16	36
Wage earners	861	264	434	163	– 42	0	– 32	– 10
Total	15,891	4,907	8,378	2,606	10	82	– 99	27
Trainee civil servants/ other trainees [2]	610	199	294	117	107	17	77	13
Career civil servants	15,281	4,708	8,084	2,489	– 97	65	– 176	14

	Beginning of 1999	Beginning of 1998
1 Of which, part-time employees: Civil servants and other salaried staff	1,378	1,344
Wage earners	554	594
The following are not included in the staff figures: persons who are seconded to work for 12 months or more for other public employers or for international organisations or who are otherwise employed abroad	82	79
members of the Bank's staff on leave without pay	695	697
2 Other members of staff undergoing training: civil servants switching to other departments	34	52
3 Including the Bank's training college.		

Deutsche Bundesbank

Total staff numbers remain unchanged

Given the contrary trends in permanent staff and trainees, the total number of staff remained virtually unchanged from the previous year, at 15,891 employees. If this number were expressed in terms of full-time jobs, it would represent 14,458 full-time employees.

Part-time ratio

At 12.2 %, the ratio of part-time employees was unchanged from the previous year (1,932 part-time employees, each working an average of 57.6 % of a full-time job). Whereas, in the case of civil servants and other salaried staff, the number of part-time employees rose by 34, the number of part-time wage earners declined (minus 40 persons) – again as a result of staff reductions. In principle, the Bank endeavours to comply with the wishes of employees regarding part-time work, as long as operational requirements allow it.

Age-induced part-time work

The Bank is applying the regulations governing age-induced part-time work agreed in the wage settlement for the public sector in 1998. The statutory provisions approved in the autumn of 1998 apply to civil servants. As the first age-induced part-time working contracts were not concluded with staff until the end of last year, however, these are not yet reflected in staff numbers.

Practice-oriented training further intensified

In the light of the changed European environment and recent developments in banking business, new emphases were set in the sphere of training. Priority was given to topics relating to Europe, such as the conceptual and operational aspects of the monetary policy pursued by the European Central Bank. Banking supervisory issues, which are becoming increasingly complex, were another focus of attention. Furthermore, considerable emphasis continued to be given to management training on a longer-term basis, as well as to language training. Efforts were made in the pursuit of all of these activities to ensure that their practical relevance was further enhanced.

The total number of staff participating in internal and external seminars, workshops and conferences throughout the Bank rose by an average of 16 % to approximately 13,000. About 2,500 of these employees took part in the training programme jointly organised by the Central Office and the Land Central Banks at the central training centre in Eltville. This programme comprised 125 courses, 36 of which were management seminars involving approximately 500 participants from various levels of management.

Traineeships reformed

The changed demands placed on junior management, including the more international orientation of operations, necessitated a reform of training for the Bank's Higher Service, and this was successfully completed on October 1, 1998. The main purpose of the reform was to gear the content of training programmes even more than hitherto to central-bank-specific requirements and, above all, to take account of the Bank's incorporation into the European System of Central Banks. Furthermore, greater importance was attached to the improvement of key qualifications, such as competence in personnel management, in particular, and English-language skills. At the same time, it was possible, owing to the streamlining of the training programmes, to shorten the preparatory time needed by three months.

X. The Deutsche Bundesbank's preparations for the year 2000

1. The underlying problem

Problems caused by computer systems using two-digit instead of four-digit years

The turn of the year from 1999 to 2000 can lead to massive difficulties in computer systems where the year is specified as a two-digit number, as has often been the case up to now. The cause of the problem is that many of the computer programs still being used in numerous mainframes, client-server systems and PCs were developed at a time when memory and computing time were very expensive. To save memory (among other things), in computer programs the years were often specified using the last two digits only, thus assuming that the first two digits of the four-digit year number would always be "19". Despite later expansions, this practice was often maintained.

The year 2000 is a leap year

In addition to the rollover from 1999 to 2000, it must also be noted that not all programs recognise 2000 as a leap year. Therefore, problems in DP systems and applications may also show up during the change of the month from February to March 2000.

The affected components

In addition to hardware and software, microprocessor-controlled systems often referred to as "embedded systems" will also have to be included in year 2000 preparations provided they have built-in date functions. These are found in most modern electronic appliances or systems (such as elevators, vaults, cash dispensers, air conditioning, telecommunications facilities). A further problem is the networking of systems among various sectors of business. Business operations, which hinge on the reliability of data processing, could be jeopardised if the data being exchanged are interpreted differently from the intended manner.

Particular importance of basic services

The year 2000 problem is particularly important in the area of basic services, since nowadays nearly every household or enterprise is dependent on the provision of the relevant basic services (e. g. telecommunications, electricity, water and gas supply, and transportation).

Time-critical task of adjustment cannot be put off

The tasks described above cannot be put off, since all preparatory measures need to be implemented by December 31, 1999 at the latest. This seems at first glance to be a harmless computer-related matter. However, the ramifications of the problems that will ensue if adjustments are not made in time will be of decisive importance to all economic agents.

2. The year 2000 issue and German banking supervision

Particular challenge to the banking industry

Due to the myriad uses of DP and information technology in the financial sector, the year 2000 poses a particular challenge to banking supervisors. In the light of the large degree to which the banking industry is networked, even individual banks' problems with the year 2000 could potentially spill over to the entire banking sector.

There are many ways in which the consequences of insufficient year 2000 readiness can manifest themselves in the financial sector. Besides the failure of entire computer systems, for example, errors might occur when computing the interest and repayment dates of loans, account statements might be updated incorrectly, cash dispensers might refuse to accept cards, or forward contracts might be terminated. A much greater danger, though, is that liquidity bottlenecks might develop or that customers might fall behind on their payments because they, in turn, are having their own year 2000 problems. Moreover, insufficient confidence in the ability of the financial sector to solve the problems associated with the century date change might lead to withdrawals of deposits or an increased demand for cash.

The year 2000 is a central theme of ongoing supervision

At a national level, the Deutsche Bundesbank and the Federal Banking Supervisory Office are supporting the German banking industry's year 2000 preparations by a prudential information campaign. The state of the banking industry's year 2000 preparations is a central theme of ongoing banking supervision.

Banking supervisors called on the external auditing firms to comment on the German credit institutions' year 2000 readiness in their reports on the 1997 annual accounts. The evaluation of these reports, in particular, prompted the Federal Banking Supervisory Office and the Deutsche Bundesbank to circulate an initial major questionnaire.

Questionnaires on the state of preparations

In May 1998 the questionnaire on the state of preparations was sent to a total of 3,851 institutions, computer centres and selected stockbrokers and then evaluated. As a consequence, the Federal Banking Supervisory Office sent letters to over 120 commercial banks, with a request for comment. Many savings banks and credit cooperatives indicated in their responses that the regional computer centres were responsible. In October 1998, a second questionnaire tailored especially to the needs of those two groups of banks was circulated, with the intention of precluding the possibility that any necessary conversion of systems being operated autonomously and of embedded systems might not take place or that the work necessary for conversion might not be completed. During the subsequent evaluation, some institutions showed obvious shortcomings, whereupon each of these institutions was sent a letter indicating these shortcomings and requesting comment.

Involving financial services institutions in prudential information campaigns

Moreover, the financial services institutions operating in the Federal Republic of Germany have also been involved in the year 2000 prudential information campaigns. To this end, the Federal Banking Supervisory Office has sent circulars through the Land Central Banks to all financial services institutions to draw their attention to the year 2000 problem. These circulars also made reference to the existing sources of prudential information. To ensure that the enterprises which are important to Germany's position as a financial centre take the necessary steps to successfully address the year 2000 problem, a self-assessment questionnaire was sent to selected institutions. Following this letter, those institutions were also sent supplemental information to assist them in evaluating the questionnaires on their own so that they could independently identify critical factors.

Supervisory measures planned for 1999

A number of additional supervisory measures designed to maintain awareness of the year 2000 problem and to be a driving force behind the necessary preparations are planned for the course of this year. They include the circulation of a further questionnaire among several associations, intended to provide up-to-date information on any delays or problems that may have occurred during the implementation of the projects. There are also plans for another series of individual talks to be held by the Federal Banking Supervisory Office and the Deutsche Bundesbank with the largest internationally operating institutions. Owing to their key position in payment operations, the Land banks and computer centres of the savings bank sector and the central banks and computer centres in the cooperative banking sector will also be involved in these interviews.

A further focal point of national banking supervisory activity is to obtain the required information from the institutions on the status of contingency plans in the event of disruptions in operating procedures during the century date change and – to the extent necessary – to provide the appropriate assistance. This takes due account of the complex nature of the year 2000 challenge, since isolated malfunctions cannot be ruled out despite all careful preparations.

3. The year 2000 issue and payment systems

Smooth solution to the year 2000 problem in payment systems technology...

It is exceedingly important to the stability of the financial sector to smoothly solve the problem of the date rollover from 1999 to 2000 in payment systems technology. The Deutsche Bundesbank bears crucial responsibility, since it is itself actively involved in payments, particularly in large-value payments. Through its clearing facilities, it provides all credit institutions involved in payment transactions with a payment network under neutral competitive conditions.

... including TARGET

The preparations being made by the Deutsche Bundesbank, as the nodal point in Germany's large-value payment system, which has been incorporated into the Europe-wide TARGET system through the Euro Link System (ELS) since the beginning of stage three of EMU, are primarily designed to ensure that the payment data of the Bundesbank's customers are processed in a year 2000 compliant manner. The Bundesbank will also take precautions to ensure that its systems are robust enough in the event that individual customers' systems should – unexpectedly – not be year 2000 compliant.

Bundesbank has offered to run tests with payment systems participants

For quite a long time already, the Bundesbank has been offering interface tests to assess year 2000 readiness in the settlement of payments for the large-value payment systems (ELS and EAF) and for all other "electronic access" interbank payment systems. This enables credit institutions to test their systems under the most realistic conditions possible and to check whether data flows via the respective interfaces function properly.

Worldwide year 2000 test for international payment systems

Furthermore, the Deutsche Bundesbank, along with internationally operating German credit institutions, will take part in the global year 2000 test of internationally significant payment systems scheduled for June 12 and 13, 1999, when the settlement of payments on the first two business days of 2000 is to be simulated and tested. The main purpose of this test is to demonstrate the ability of credit institutions to access various international payment systems from their own systems. The aim here is to strengthen confidence in the functionality of the international payment network, taking special account of the year 2000 requirements, prior to the actual century date change. As regards the organisation of the test, the Deutsche Bundesbank has developed a framework for a test scenario together with the German banking industry. At an international level, the Deutsche Bundesbank, in cooperation with the banking industry, considers itself a coordinator and the mouthpiece of the German participants for this test.

4. Cooperation at the national and international level to solve the year 2000 problem

Deutsche Bundesbank involved in various discussion forums ...

By virtue of its position, the Deutsche Bundesbank is involved in various discussion forums on the year 2000 challenge at the national and international levels. This is expressly welcomed by the Federal Government. All the economic agents benefit from an exchange of ideas and experience and from the information and recommendations that result from such an exchange.

... at the national level

At the national level, the Deutsche Bundesbank is maintaining close contact to the German banking industry through the Central Credit Committee's Year 2000 Forum. Key issues pertaining to the German banking industry's year 2000 preparations are discussed in this forum, established at the initiative of banking supervisors. Among other things, a uniform questionnaire has been developed on corporate clients' state of readiness, and information on the coordination of testing activities and on contingency plans has been exchanged. Moreover, a database has been established to facilitate the exchange of information on year 2000 problems which can be accessed by all credit institutions.

Through the group of experts set up at the Federal Ministry of Economics and Technology, the Deutsche Bundesbank maintains contact with the central associations of German industry. This body provides a forum for a regular exchange of views and information concerning the year 2000 preparations being made by the business community. As of late, the key issue of the year 2000 readiness of enterprises supplying basic services has come to the fore.

... and at the international level

At the international level, the Deutsche Bundesbank has been working on the year 2000 issue by participating in the committees set up at the Bank for International Settlements (the Basle Committee on Banking Supervision and the Committee on Payment and Settlement Systems).

Participation in the Joint Year 2000 Council

Moreover, the Deutsche Bundesbank is represented in the Joint Year 2000 Council. With the support of the Basle Committee on Banking Supervision and the Committee on Payment and Settlement Systems (CPSS) as well as the International Organization of Securities Commissions (IOSCO) and the International Association of Insurance Supervisors (IAIS), representing the securities and insurance sectors, this body seeks primarily to heighten awareness of the risks involved with the century date change and to improve the exchange of information. Various publications pointed to key topics such as the general significance of the year 2000 issue, tests to be run on the applications, or the need to disclose information on the state of preparations. There is an active dialogue with banking supervisors at the conferences initiated by the Joint Year 2000 Council throughout the world. Together with the Deutsche Bundesbank, the Council invited representatives of supervisory authorities from all over Europe and Israel to a regional conference held in Frankfurt am Main on October 30, 1998.

5. The Deutsche Bundesbank's own year 2000 preparations

The Deutsche Bundesbank's year 2000 project

In the light of its statutory tasks, the Deutsche Bundesbank considers the year 2000 issue to be highly important; it implemented measures early on to ensure that its procedures and systems are year 2000 compliant. For some years already, the need for year 2000 readiness has been taken into account not only in the design of new procedures but also in the revision of existing procedures. Especially following the changeover to stage three of EMU on January 1, 1999, many of the Bank's applications which are extremely important to its business operations have been completely redesigned. Year 2000 requirements have already been taken into account in the revised versions.

"Milestones" towards achieving year 2000 readiness

July 1, 1999 is the deadline for all affected systems in the Bundesbank to be year 2000 compliant. Specifically, this means that by April 1, 1999, the complete DP infrastructure (systems and networks) should be ready for operation, and DP applications and procedures should be available in year 2000 compliant versions ready for testing. The following internal tests to check the individual components must be completed by July 1, 1999.

Completed inventory and follow-up work

As early as 1997, a year 2000 project team was established. It initially conducted an inventory of all affected systems and procedures. Now all the necessary internal adjustment measures have been set in motion. In those cases where external hardware or software or processor-controlled systems are affected, the necessary conversion orders have for the most part already been placed with the suppliers or manufacturers. The Central Bank Council is kept informed on the progress of the preparatory work. In 1999, the focal point of the work will be on internal tests and the development of contingency solutions.

6. The year 2000 and cash supply

Sufficient cash reserves

Early on, as part of its year 2000 preparations, the Deutsche Bundesbank studied the issue of provisions for increased cash supply requirements. The result is that the German cash reserves, in terms of the entire amount of cash in circulation, are completely sufficient by international standards. Even if larger amounts of cash should unexpectedly be needed, no bottlenecks are to be expected.

7. Conclusions

A high level of year 2000 awareness must be maintained in 1999

Fully aware of its special position and duties, the Deutsche Bundesbank will take all the necessary measures to ensure a smooth century date change for its own systems. As part of national and international cooperation, the Bundesbank makes an important contribution towards maintaining a continuously high awareness of the problem and promoting the preparatory work in the public and private sector.

Self-responsibility of every economic agent

Notwithstanding the Deutsche Bundesbank's own work and supporting measures, all economic agents (e. g. payment systems participants, energy suppliers) are responsible for preparing their own procedures for the century date change in a timely and proper manner.

Information on the Deutsche Bundesbank's web site

Information on the current state of the Deutsche Bundesbank's year 2000 preparations can be found on the Bundesbank's home page (http://www.bundesbank.de), which is updated at regular intervals.

Annual accounts for 1998 and opening balance sheet as at January 1, 1999 of the Deutsche Bundesbank

I. Balance sheet of the Deutsche Bundesbank as at December 31, 1998

Assets

				DM	31. 12. 1997 DM million
1 Gold				17,109,431,199.98	13,688
2 Reserve position in the International Monetary Fund and special drawing rights					
2.1 Drawing rights within the reserve tranche			12,163,632,846.27		(10,666)
2.2 Loans under special borrowing arrangements			1,247,372,731.04		(—)
2.3 Special drawing rights			3,122,114,233.61		(3,207)
				16,533,119,810.92	13,873
3 Claims on the European Central Bank					
3.1 ECU balances		—			
less: Difference between the ECU value and the book value of the gold and dollar reserves contributed		—			
			—		(22,649)
3.2 Other claims			—		(—)
				—	22,649
4 Balances with foreign banks and money market investments abroad				100,333,910,843.26	76,642
5 Foreign notes and coins				28,926,605.18	32
6 External loans and other external assets					
6.1 Loans in connection with EC medium-term balance of payments assistance			—		(—)
6.2 Other loans to foreign monetary authorities			—		(—)
6.3 Loans to the World Bank			250,000,000.00		(750)
6.4 Other external assets			829,313,812.50		(215)
				1,079,313,812.50	965
7 Lending to domestic credit institutions					
7.1 Securities bought in open market operations under repurchase agreements			162,570,955,600.00		(170,200)
7.2 Domestic bills of exchange			44,553,076,139.75		(53,727)
7.3 Foreign bills of exchange			3,751,060,826.99		(8,525)
7.4 Lombard loans			5,081,205,500.00		(2,737)
				215,956,298,066.74	235,189
8 Equalisation claims on the Federal Government and non-interest-bearing debt certificate in respect of Berlin				8,683,585,988.93	8,684
9 German coins				1,586,192,734.77	1,580
10 Land and buildings				3,818,257,422.93	3,757
11 Furniture and equipment				370,407,156.05	279
12 Items in course of settlement				485,232,693.67	494
13 Other assets				4,896,836,929.04	2,631
14 Prepayments				61,521,959.42	64
				370,943,035,214.39	380,527

Liabilities

				31.12.1997
			DM	DM million
1	Banknotes in circulation		255,335,062,495.00	260,686
2	Deposits of credit institutions			
	2.1 on giro accounts	57,666,567,154.33		(48,718)
	2.2 on other accounts	17,223,629.30		(21)
			57,683,790,783.63	48,739
3	Deposits of public authorities			
	3.1 Federal Government	98,973,353.73		(87)
	3.2 Federal special funds	15,416,526.97		(8)
	3.3 Länder Governments	103,829,240.36		(157)
	3.4 Other public depositors	72,753,828.96		(77)
			290,972,950.02	329
4	Deposits of other domestic depositors		944,173,173.19	1,023
5	Liabilities arising from liquidity paper sold		–	4,541
6	Liabilities arising from external transactions			
	6.1 Deposits of foreign depositors	15,969,804,231.20		(12,357)
	6.2 Other	8,194,123.85		(33)
			15,977,998,355.05	12,390
7	Counterpart of special drawing rights allocated		2,849,559,982.80	2,930
8	Provisions			
	8.1 for pensions	3,805,000,000.00		(3,582)
	8.2 for other purposes	7,244,945,406.67		(7,944)
			11,049,945,406.67	11,526
9	Other liabilities		359,729,663,46	301
10	Accruals		228,601,929.03	234
11	Capital		5,000,000,000.00	290
12	Reserves			
	12.1 Statutory reserves	5,000,000,000.00		(13,019)
	12.2 Other reserves	—		(290)
			5,000,000,000.00	13,309
13	Unappropriated profit		16,223,200,475.54	24,229
			370,943,035,214.39	380,527

II. Profit and loss account of the Deutsche Bundesbank for the year 1998

Expenditure

			DM	1997 DM million
1	Interest expenditure		583,073,038.93	520
2	Staff costs			
	2.1 Wages and salaries	1,092,202,150.66		(1,076)
	2.2 Social security costs and costs relating to retirement pensions and other benefits	606,265,470.39		(600)
			1,698,467,621.05	1,676
3	Other operating expenditure		464,475,013.50	418
4	Banknote printing		249,261,089.05	172
5	Depreciation			
	5.1 of land and buildings	281,223,798.24		(326)
	5.2 of furniture and equipment and of other assets	136,662,547.77		(114)
			417,886,346.01	440
6	Other expenditure		74,474,710.40	55
7	Profit for the year		12,608,900,475.54	24,229
			16,096,538,294.48	27,510

Receipts

		DM	1997 DM million
1	Interest receipts	13,834,938,389.20	13,835
2	Fees	118,367,004.08	120
3	Receipts from purchases and sales of foreign currencies and from the valuation of foreign reserve assets and other foreign currency positions	1,907,418,214.02	13,300
4	Other receipts	235,814,687.18	255
		16,096,538,294.48	27,510
1	Profit for the year	12,608,900,475.54	24,229
2	Withdrawals from reserves	3,614,300,000.00	—
3	Unappropriated profit	16,223,200,475.54	24,229

Frankfurt am Main, February 24, 1999

Deutsche Bundesbank
The Directorate
Prof. Dr Dr h.c. mult. Tietmeyer Dr Stark
Haferkamp Hartmann Meister Prof. Dr Remsperger Schieber Schmidhuber

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

Frankfurt am Main, March 31, 1999

C & L Deutsche Revision
Aktiengesellschaft
Wirtschaftsprüfungsgesellschaft

KPMG Deutsche Treuhand-Gesellschaft
Aktiengesellschaft
Wirtschaftsprüfungsgesellschaft

Prof. Windmöller
Certified Auditor

Langen
Certified Auditor

Dr Nonnenmacher
Certified Auditor

Rönnberg
Certified Auditor

III. Notes on the annual accounts for 1998

1. Legal basis

Legal basis

The legal basis for the Bank's annual accounts and for the distribution of profit is provided by sections 26 and 27 of the Bundesbank Act *(Gesetz über die Deutsche Bundesbank – BBankG).* Pursuant to those provisions, the annual accounts are to be drawn up and elucidated with due consideration of the duties of the Bank. In this context, the Bank is likewise subject to generally accepted accounting principles. Valuations are governed by the provisions of the Commercial Code *(Handelsgesetzbuch – HGB)* relating to corporations, *mutatis mutandis.*

Specifically, current assets (which include, first and foremost, the foreign reserve assets) are to be shown in the balance sheet strictly in accordance with the principle of the lower of cost or market, with the lower of the purchase price or the market value being entered on the balance sheet date (section 253 (3) sentence 1 of the Commercial Code). A value may likewise be chosen that takes due account of section 253 (3) sentence 3 of the Commercial Code. Moreover, in the context of determining the profit or loss, liability items may be created in respect of general risks incurred in the course of domestic and international operations.

Reclassification of the capital and reserves

As part of the preparations for the introduction of the euro, German central banking legislation was adjusted, by means of the Sixth Act Amending the Bundesbank Act (Federal Law Gazette I, p. 3274), to the precepts of Community law for Germany's participation in stage three of the European economic and monetary union (EMU). The opportunity was taken to amend the provisions governing the Bank's capital and reserves at the same time.

With effect from December 31, 1998, it was decided to increase the capital from DM 290 million to DM 5 billion (cf. section 2 sentence 2, Bundesbank Act), and to set the ceiling for the statutory reserves at DM 5 billion (cf. section 27 (1), Bundesbank Act). The other reserves are abolished, as section 27 (2), Bundesbank Act has been repealed. The other reserves and the statutory reserves, insofar as they exceed DM 5 billion, are dissolved in the annual accounts for 1998. The amounts resulting from such dissolution are then added to the capital until that item amounts to DM 5 billion. Any excess is then transferred to the net profit (cf. section 45 (2), Bundesbank Act).

Use of the previous reserves

At the end of 1998, the following calculation was effected:

	DM thousands
Statutory reserves after the approval of the annual accounts for 1997	13,034,300
less the redefined statutory reserves as at December 31, 1998	5,000,000
Dissolution of the statutory reserves in excess of DM 5 billion	8,034,300
plus dissolution of the other reserves	290,000
Amount resulting from the dissolution of the reserves	8,324,300
less transfers to the capital	4,710,000
Transfer to the net profit	3,614,300

Audit and approval of the annual accounts

The annual accounts of the Bank for 1998 were audited by *C&L Deutsche Revision AG Wirtschaftsprüfungsgesellschaft* of Frankfurt am Main and *KPMG Deutsche Treuhand-Gesellschaft AG Wirtschaftsprüfungsgesellschaft* of Berlin and Frankfurt am Main, whom the Central Bank Council had appointed to be auditors in accordance with section 26 (3), Bundesbank Act. In their certificate of audit, the auditors confirmed without qualification that the Bank's annual accounts for 1998 and bookkeeping comply with German law, and present an accurate picture of the Bank's assets and liabilities, financial position and profitability. The Central Bank Council approved the annual accounts for 1998, along with the profit distribution, on April 15, 1999.

2. Assets

Gold

The item "Gold" comprises 119 million ounces of fine gold (ozf), with a balance sheet value of DM 17,109 million. In contrast to the previous year, it also includes the 24 million ozf hitherto provisionally transferred to the European Monetary Institute (EMI) and the European Central Bank (ECB), equivalent to 20 % of the Bank's gold reserves (see also the notes below on the item "Claims on the

European Central Bank"). As in previous years, the gold is valued at its purchase price; consequently, the average value per ounce works out at DM 144. The item "Gold" also includes claims arising from gold lending operations, which are conducted on a limited scale only.

Reserve position in the International Monetary Fund and special drawing rights

This item contains the claims on the International Monetary Fund (IMF) financed and held by the Bank resulting from the Federal Republic of Germany's membership of the IMF. The drawing rights within the reserve tranche correspond to the amounts actually paid to the IMF in gold, special drawing rights (SDRs) and Deutsche Mark under the German quota. At December 31, 1998 they amounted to DM 12,164 million (= SDR 5,168 million), compared with DM 10,666 million (= SDR 4,407 million) at the end of 1997. They represent the difference between the German quota of SDR 8,242 million and the Deutsche Mark balances amounting to DM 7,233 million (= SDR 3,073) at the disposal of the IMF at the end of the year. Mainly as a result of Deutsche Mark drawings and Deutsche Mark repayments by other member countries, the holding of drawing rights increased by SDR 761 million net in 1998.

Loans under special borrowing arrangements were granted in the amount of DM 1,247 million (= SDR 530 million). The Bank's credit line in favour of the IMF under the General Arrangements to Borrow (GAB) amounted to SDR 2.4 billion, as before. In 1998 it was utilised as part of the IMF assistance to Russia, amounting to SDR 202 million (= DM 476 million). In the year under review, moreover, the New Arrangements to Borrow (NAB) entered into effect, under which the IMF is endowed with additional credit lines, subject to certain conditions. The Bank is participating in the NAB up to a ceiling of SDR 3.6 billion, with utilisations being counted towards the GAB. At December 31, 1998 an NAB loan amounting to SDR 328 million (= DM 772 million) was outstanding as part of IMF assistance to Brazil.

Special drawing rights, by means of which convertible currencies can be obtained at any time, were originally allocated free of charge to the extent of SDR 1,211 million. Their counterpart is shown on the liabilities side. The level of special drawing rights held at the end of 1998 amounted to DM 3,122 million (= SDR 1,327 million). Increases totalling SDR 243 million owing to interest credited, in particular, were accompanied by decreases amounting to SDR 241 million on account of freely agreed sales.

In line with the IMF's rules, SDR-denominated drawing rights in the reserve tranche, loans under special borrowing arrangements, special drawing rights and the counterpart of special drawing rights allocated have been converted at the market rate prevailing at the end of 1998 (SDR 1 = DM 2.35353). The SDR item in the balance sheet is valued on the basis of that market rate. As with the US dollar, the SDR is valued at the average rate, which was ascertained on the basis of the valuation rate in the annual accounts for 1997 and after taking due account of the increases and decreases in 1998. A provision totalling DM 408 million, reflecting the difference between the valuation rate (SDR 1 = DM 2.28331) and the market rate applying at the end of 1998, is shown in liability item 8.2.

Claims on the European Central Bank

The ECB was established on June 1, 1998 and assumed the functions of the EMI, which was liquidated on the same date. At the end of 1998 the Bank held no more ECU balances at the ECB; in the past, such balances had resulted from the provisional transfer of 20 % of the Bank's gold and dollar reserves. Article 23.2 of the EMI Statute stipulates that the mechanism for the creation of ECUs against gold and US dollars is to be unwound by the first day of the third stage of EMU. In this context, the EMI Council decided on December 3, 1996 to discontinue gold/US dollar revolving three-month swaps on December 31, 1998. This decision by the EMI Council implies that, in the annual accounts of the national central banks participating in the Eurosystem, at the end of 1998 the full gold and US dollar holdings are shown in the respective balance sheet items. No other claims denominated in ECUs arising from lending under the very short-term mechanism financing interventions were outstanding at the end of 1998. Article 23.3 of the EMI Statute stipulates that all claims and liabilities arising from the short-term monetary support mechanism are to be settled by the first day of the third stage. Accordingly, the system of short-term monetary support ceased to exist with the launch of the third stage of EMU.

Balances with foreign banks and money market investments abroad

The balances with foreign banks and money market investments abroad, almost all of which are denominated in US dollars and bear interest, amounted to DM 100,334 million at the end of 1998, against DM 76,642 million at December 31, 1997. This increase is mainly due to the fact that foreign currency reserves are no longer provisionally transferred to the ECB (see also the above notes on the item "Claims on the European Central Bank"). The positions denominated in US dollars are valued at the average rate which was ascertained on the basis of the valuation rate in the annual accounts for 1997 after taking due account of the increases and decreases in 1998. Hence the valuation rate was US$ 1 = DM 1.5629 (1997: US$ 1 = DM 1.5396).

External loans and other external assets

The components of this item are loans to the World Bank, which were granted against borrowers' notes denominated in Deutsche Mark, and other external assets, which comprise limited investments with foreign institutions. No loans under the EC medium-term balance-of-payments assistance arrangement or other loans to foreign monetary authorities were outstanding at December 31, 1998. Owing to their lesser liquidity, external loans and other external assets are not counted among the foreign reserve assets.

Lending to domestic credit institutions

This item reflects the volume and pattern of domestic credit institutions' refinancing. Most of it is composed of the securities repurchase operations used as part of the Bank's flexible money market management. In that context, the Bank bought securities eligible as collateral for lombard loans on condition that the sellers repurchased them forward. At the end of the year, the claims deriving from such operations amounted to DM 162,571 million (1997: DM 170,200 million). The portfolio of domestic and foreign bills of exchange which the Bank purchased at the discount rate under the rediscount quotas decreased by DM 13,948 million compared with December 31, 1997. Purchases of foreign bills of exchange payable abroad were discontinued after November 30, 1998, and purchases of domestic bills of exchange, and of foreign bills of exchange payable in Germany were discontinued after December 23, 1998. Lombard loans, by means of which the Bank supplies central bank money against the collateral of certain securities and Debt Register claims, serve to meet temporary short-term liquidity needs on the part of credit institutions. On the balance sheet date, such lombard loans amounted to DM 5,081 million (1997: DM 2,737 million).

Equalisation claims

The equalisation claims on the Federal Government and the non-interest-bearing debt certificate in respect of Berlin both date back to the currency reform of 1948. They form the balance sheet counterpart of the amounts paid out at that time in cash per capita and per enterprise, and of the initial provision of credit institutions and public corporations with central bank money. Equalisation claims yield interest at the rate of 1% per annum. In connection with Article 104 of the Maastricht Treaty, it has been stipulated that equalisation claims are to be redeemed in ten annual instalments, starting in the year 2024.

German coins

The Bank's stock of coins is held as a reserve for use in the payment system. The Bank, acting for the account of the Federal Government (which holds the coin-age prerogative), receives new coins from the state mints at face value. The value of the coins recorded increased by 0.4 % compared with the previous year.

Land and buildings

In 1998 the balance sheet value of the Bank's land, offices and residential buildings increased by DM 61 million net. Net additions of DM 342 million were accompanied by depreciation amounting to DM 281 million.

Furniture and equipment

In the year under review the value of the Bank's furniture and equipment rose by DM 91 million, after net additions of DM 209 million and depreciation totalling DM 118 million.

Items in course of settlement

"Items in course of settlement" primarily encompass the cheques and direct debits (asset items) and credit transfers (liability items) which are circulating within the Bank, and which are set off against each other. The mail/processing credit to the banking industry associated with a positive float from collections was reduced almost to zero. By means of the data telecommunication net between the Bank's computer centres and the large-value cheque collection procedure, the same-day collection of cheques and direct debits has generally been achieved. The asset balance at December 31, 1998 was based on a special situation at the end of the year, attributable to the limited opening hours of individual categories of banks and to the changed collection times at the Bank's computer centres.

Other assets

"Other assets" mainly comprise the Bank's participating interests in the ECB, Frankfurt am Main, the Bank for International Settlements, Basle, the cooperative society SWIFT, La Hulpe (Belgium), and *Liquiditäts- und Konsortialbank GmbH,* Frankfurt am Main. The Bank's capital share in the ECB was finally fixed on December 1, 1998 at 24.49 % of the total capital, and amounts to DM 2,395 million (= ECU 1,225 million). The Bank's participating interest in the EMI, as shown in last year's balance sheet, has been offset against the payment of the capital share. The 30 % interest in *Liquiditäts- und Konsortialbank* entails for the Bank an unchanged maximum additional commitment of DM 558 million. In addition, this item includes interest receipts from external assets and securities repurchase operations, which do not fall due until 1999 but are attributable to the profit and loss account for 1998.

Prepayments

The prepayments chiefly consist of payments booked in the year under review, but relating to 1999, in respect of salaries and pensions.

3. Liabilities

Banknotes in circulation

In the year under review, the volume of banknotes in circulation declined by DM 5,351 million to DM 255,335 million; this represents a decrease of 2.1%. In contrast to that, the volume of banknotes in circulation had risen marginally (by DM 296 million = 0.1%) in the previous year.

Compared with the preceding year, the total amount of currency in circulation (banknotes and coins) fell by DM 5,261 million to DM 270,981 million; coins accounted for DM 15,646 million of that sum.

Deposits of credit institutions

Credit institutions' deposits on giro accounts, totalling DM 57,667 million (1997: DM 48,718 million), are mainly minimum reserves to be held at the Bank. The sub-item "Other" (DM 17 million) contains the deposits of domestic credit institutions and of the branches of foreign banks on US dollar accounts.

Deposits of public authorities

This item encompasses the balances of the Federal Government, its special funds, the Länder Governments and other public depositors. The special funds principally include the Equalisation of Burdens Fund. The deposits of other public depositors constitute balances held by social security funds and local authorities. At December 31, 1998 such deposits amounted to DM 291 million in all (1997: DM 329 million).

Deposits of other domestic depositors

This balance sheet item contains the deposits of enterprises and individuals. At the end of 1998 such deposits totalled DM 944 million, as against DM 1,023 million in the previous year.

Liabilities arising from liquidity paper sold

In the year under review, the liquidity paper sold to foreign monetary authorities and other institutions consisted entirely of Federal Treasury bills; those institutions used such securities *inter alia* for investing at interest balances not required for payment purposes. Prior to the transition to stage three of EMU, all Treasury bills outstanding were redeemed at the close of the year, so that no liabilities were outstanding on December 31, 1998. In the year under review, the Bank did not sell any Treasury bills to domestic credit institutions to mop up short-term liquidity surpluses.

Liabilities arising from external transactions

This balance sheet item, totalling DM 15,978 million (1997: DM 12,390 million), consists primarily of the Deutsche Mark deposits of foreign monetary authorities. Their rise is attributable to the fact that the Bank has switched from selling liquidity paper to the direct payment of interest on account balances. Specifically, DM 15,697 million (1997: DM 12,315 million) is accounted for by the balances of foreign banks and DM 281 million by other deposits.

Counterpart of special drawing rights allocated

The counterpart of the special drawing rights allocated by the IMF free of charge, and shown as item 2 on the assets side of the balance sheet, corresponds to the allocations of SDRs to the Federal Republic of Germany from 1970 to 1972 and from 1979 to 1981, which totalled SDR 1,211 million.

Provisions for pensions

Following an increase of DM 223 million, the provisions for pensions amount to DM 3,805 million; they are based on an actuarial expert opinion. The Bank exercised its right to spread the increase in the provisions for pensions over four years on the basis of the new 1998 mortality tables. In 1998 the adjustment to the new tables resulted in an increase in the provisions for pensions of DM 69 million.

Provisions for other purposes

The provisions for other purposes, which serve principally to cover general risks inherent in domestic and international operations and doubtful liabilities, decreased at December 31, 1998 by DM 699 million net. They now amount to DM 7,245 million (see the notes below on the item "Receipts from purchases and sales of foreign currencies and from the valuation of foreign reserve assets and other foreign currency positions.").

Other liabilities

The other liabilities, amounting to DM 360 million (1997: DM 301 million), constitute first and foremost a counterpart of the valuation of foreign exchange swaps, amounts not yet passed on and interest expenditure falling due in 1999 but relating to 1998.

Accruals

Accruals totalled DM 229 million at December 31, 1998 (1997: DM 234 million). This item comprises the interest received during the year under review, but relating to the following year, on discounted external investments in time deposits, Treasury bills and other zero coupon instruments, and on domestic and foreign bills of exchange.

Capital and reserves

The Sixth Act amending the Bundesbank Act of December 22, 1997 restructured capital and reserves (see also the above notes on "1. Legal basis").

Unappropriated profit

See the notes on "6. Profit for the year and unappropriated profit" below.

4. Expenditure

Interest expenditure

Interest expenditure mainly affected foreign transactions; it rose by DM 63 million in the year under review.

Staff costs

Staff costs went up by DM 22 million (1.3 %) in 1998 to a total of DM 1,698 million. This increase was due mainly to general pay rises by 1.5 % as from January 1, 1998. Transfers to the provisions affecting staff costs decreased only marginally against the previous year. The average number of persons employed at the Bank hardly changed at all compared with the preceding year.

Retirement pensions accounted for DM 440 million (1997: DM 435 million) of aggregate staff costs. This sum includes the increase of DM 223 million in provisions for pensions, as well as the payments made to staff members of the former *Deutsche Reichsbank* to whom Article 131 of the Basic Law applies, and to other persons for whom the Bank is required to provide in accordance with section 41 of the Bundesbank Act.

Payments to serving members of the Bank's Directorate and of the Executive Boards of Land Central Banks amounted to DM 10,587,235.46 in the year under review. Former members of the Bank's Directorate, of the Board of Directors and Board of Managers of the *Bank deutscher Länder,* and of the Executive Boards of Land Central Banks, including their surviving dependants, received payments totalling DM 13,919,017.20.

Other operating expenditure

The other (non-staff) operating expenditure increased by DM 46 million (11%) compared with 1997 to DM 464 million; this was primarily due to higher expenditure on computer hardware and software.

Banknote printing

In the year under review expenditure on banknote printing went up by DM 77 million (45 %) to DM 249 million. The reason for this was the marked increase in the amounts of Deutsche Mark notes supplied because the production of euro banknotes is to start in 1999.

Depreciation of tangible fixed assets

The depreciation of land and buildings and of furniture and equipment is specified under the respective balance sheet headings. Further depreciation relates to computer software, which is included on the assets side under "Other assets".

5. Receipts

Interest receipts

Compared with 1997, interest receipts, at a total of DM 13,835 million, remained virtually unchanged. A slight decline in the interest received from international operations was offset by an increase in the interest received from domestic operations.

Fees

Receipts from fees, which accrue primarily in connection with the handling of payments and in securities and safe custody account business, fell by DM 2 million against the preceding year to DM 118 million.

Receipts from purchases and sales, and from the valuation, of foreign reserve assets

This item comprises the profits and losses resulting from purchases and sales of foreign currencies and the outcome of the valuation of the foreign reserve assets and other foreign currency positions; the amount also includes the change in the provisions relating inter alia to the external position. Altogether, receipts totalling DM 1,907 million were generated, with the exchange rate and securities price gains realised in respect of the dollar reserves amounting to DM 1,631 million net.

6. Profit for the year and unappropriated profit

The profit and loss account for 1998 shows a profit for the year amounting to DM 12,608,900,475.54, which is entered in the balance sheet (along with the amount of DM 3,614,300,000.00 resulting from the restructuring of the capital and reserves) as unappropriated profit, totalling DM 16,223,200,475.54.

In accordance with section 27, Bundesbank Act, the unappropriated profit will be paid over to the Federal Government in full, as the statutory reserves have reached their ceiling of DM 5 billion.

IV. Opening balance sheet of the Deutsche Bundesbank as at January 1, 1999

Assets

			Millions of euro
1	Gold and gold receivables		29,312
2	Claims on non-euro-area residents denominated in foreign currency		
	2.1 Receivables from the IMF	8,461	
	2.2 Balances with banks, securities investments, external loans and other external assets	56,113	
			64,574
3	Claims on euro-area residents denominated in foreign currency		–
4	Claims on non-euro-area residents denominated in euro		128
5	Lending to financial sector counterparties in the euro area		
	5.1 Main refinancing operations	83,121	
	5.2 Longer-term refinancing operations	24,698	
	5.3 Fine-tuning reverse operations	–	
	5.4 Structural reverse operations	–	
	5.5 Marginal lending facility	2,598	
	5.6 Other lending	5	
			110,422
6	Securities of euro-area residents denominated in euro		–
7	Claims on the Federal Government		4,440
8	Intra-Eurosystem claims		
	8.1 Participating interest in the ECB	1,225	
	8.2 Claims arising from the transfer of foreign reserve assets to the ECB	–	
	8.3 Other claims within the Eurosystem	–	
			1,225
9	Items in course of settlement		284
10	Other assets		
	10.1 Coins	811	
	10.2 Tangible and intangible fixed assets	2,162	
	10.3 Other financial assets	51	
	10.4 Off-balance-sheet instruments revaluation differences	–	
	10.5 Accruals and deferred expenditure	799	
	10.6 Sundry items	453	
			4,276
			214,661

Frankfurt am Main, February 24, 1999

Deutsche Bundesbank
The Directorate
Prof. Dr Dr h.c. mult. Tietmeyer Dr Stark
Haferkamp Hartmann Meister Prof. Dr Remsperger Schieber Schmidhuber

Liabilities

			Millions of euro
1	Banknotes in circulation		130,551
2	Liabilities to euro-area financial sector counterparties denominated in euro		
	2.1 Current accounts	29,325	
	2.2 Deposit facility	–	
	2.3 Fixed-term deposits	–	
	2.4 Fine-tuning reverse operations	–	
			29,325
3	Liabilities to other euro-area residents denominated in euro		
	3.1 General government deposits	149	
	3.2 Other liabilities	707	
			856
4	Liabilities to non-euro-area residents denominated in euro		8,094
5	Liabilities to euro-area residents denominated in foreign currency		10
6	Liabilities to non-euro-area residents denominated in foreign currency		0
7	Counterpart of special drawing rights allocated by the IMF		1,458
8	Intra-Eurosystem liabilities		
	8.1 Liabilities to the ECB arising from promissory notes	–	
	8.2 Other liabilities within the Eurosystem	5	
			5
9	Items in course of settlement		36
10	Other liabilities		
	10.1 Off-balance-sheet instruments revaluation differences	38	
	10.2 Accruals and deferred income	32	
	10.3 Sundry items	86	
			156
11	Provisions		5,441
12	Revaluation accounts		25,322
13	Capital and reserves		
	13.1 Capital	2,556	
	13.2 Statutory reserves	2,556	
			5,112
14	Unappropriated profit for 1998		8,295
			214,661

In its opening balance sheet as at January 1, 1999, the Deutsche Bundesbank rearranged and revalued the balance sheet items shown in its balance sheet as at December 31, 1998 in accordance with its accounting principles, adopted by the Central Bank Council on December 3, 1998, on the basis of section 26 (2) sentences 2 and 3, Bundesbank Act, and at the same time converted those items into euro at the conversion rate fixed on December 31, 1998.

Our audit has shown that the Deutsche Bundesbank's opening balance sheet as at January 1, 1999 has been correctly derived from the balance sheet as at December 31, 1998, which was audited by us and given our certificate of audit without qualification, and complies with the Deutsche Bundesbank's accounting principles.

Frankfurt am Main, March 31, 1999

C & L Deutsche Revision
Aktiengesellschaft
Wirtschaftsprüfungsgesellschaft

KPMG Deutsche Treuhand-Gesellschaft
Aktiengesellschaft
Wirtschaftsprüfungsgesellschaft

Prof. Windmöller
Certified Auditor

Langen
Certified Auditor

Dr Nonnenmacher
Certified Auditor

Rönnberg
Certified Auditor

V. Notes on the opening balance sheet as at January 1, 1999

1. Legal basis

Harmonisation of accounting rules

In connection with the preparations for the introduction of the euro, the Sixth Act Amending the Bundesbank Act *(Gesetz über die Deutsche Bundesbank)* was passed on December 22, 1997 (Federal Law Gazette I, page 3274). That amendment brought German central bank legislation into line with the precepts of Community law governing Germany's participation in stage three of EMU. At the same time, the provisions governing the Bank's accounting, as laid down in section 26 (2) sentences 2 and 3 of the Bundesbank Act, were amended to read as follows, with effect from January 1, 1999:

"The annual accounts shall be drawn up with due regard to the duties of the Deutsche Bundesbank, in particular, those deriving from its being an integral part of the European System of Central Banks, and shall be published with appropriate notes; contingencies need not be disclosed. Unless sentence 2 above entails any deviations, valuation shall be governed by the provisions of the Commercial Code relating to incorporated enterprises *mutatis mutandis.*"

Principles for the accounting of the Bundesbank

This amendment also enabled the Bank to adopt the accounting principles of the ECB, which are issued by the ECB Governing Council. On December 1, 1998 the ECB Governing Council adopted principles governing the annual accounts of the ECB, in accordance with Article 26.2 of the ESCB Statute. On that basis, the Central Bank Council of the Deutsche Bundesbank decided to adopt those principles as far as possible as the "accounting principles of the Deutsche Bundesbank". In line with a decision taken by the Central Bank Council, the annual accounts relating to financial years ending after December 31, 1998 and the opening balance sheet as at January 1, 1999 are to be laid out and valued in accordance with those accounting principles.

Audit of the opening balance sheet

The opening balance sheet of the Bank as at January 1, 1999 was audited by *C&L Deutsche Revision AG Wirtschaftsprüfungsgesellschaft* of Frankfurt am Main and *KPMG Deutsche Treuhand-Gesellschaft AG Wirtschaftsprüfungsgesellschaft* of Berlin and Frankfurt am Main. In their certificate of audit, the auditors confirmed that the Bank, in its opening balance sheet as at January 1, 1999, rearranged and revalued the items shown in the balance sheet of December 31, 1998 in accordance with the Bank's accounting principles as adopted by the

Central Bank Council on December 3, 1998, and at the same time converted the Deutsche Mark amounts into euro using the conversion rate fixed on December 31, 1998. The Central Bank Council approved the opening balance sheet as at January 1, 1999 on April 15, 1999.

2. Changeover to market-price valuation

Market value/ revaluation accounts

According to the accounting principles, assets and liabilities which are subject to market-price fluctuations are to be valued at current market rates and prices. The resultant valuation gains are not to be recognised as income in the profit and loss account, but are transferred directly to a revaluation account.

Uniform basis as from January 1, 1999

On January 1, 1999 the central banks participating in the Eurosystem put their accounting systems on a uniform basis in order to be able to compare and consolidate the relevant figures emanating from their accounting and reporting systems. To this end, the following approach was applied:

(1) An opening balance sheet was drawn up as at January 1, 1999, in which assets and liabilities subject to market-price fluctuations were valued at the market rates and prices ruling on that date. They comprised, in particular, the foreign reserve assets, including the securities portfolios.

(2) The difference between the market values and the (hitherto lower) valuations was shown in the balance sheet in a counterpart on the liabilities side. This balancing item in the opening balance sheet therefore contains nothing but valuation gains from the period prior to stage three of EMU. The entering of valuation gains in separate revaluation accounts ensures that the unrealised profits generated by gold, foreign exchange and securities prior to stage three are recorded at the central banks participating in the Eurosystem separately from subsequent valuation gains or losses.

(3) With respect to the initial valuation at market rates and prices, it was laid down at the same time that the respective market rates and prices applied are to be regarded as the new average cost of the gold, foreign exchange and securities holdings existing at that moment. This makes it possible to establish a uniform point of departure for identical holdings in the Eurosystem as from the start of stage three of EMU, which means that similar criteria can be applied to valuation and that profits or losses resulting from monetary policy or other

business operations in the Eurosystem can be ascertained and compared in a uniform manner.

Revaluation accounts

Unrealised profits accrue to the Bank by reason of the valuation at market rates and prices as at January 1, 1999 of the gold, SDR, US dollar and securities holdings which have hitherto been valued at a lower price pursuant to section 253 of the German Commercial Code. The Bank records such unrealised profits in special revaluation accounts of the initial valuation (classified by gold, SDRs, US dollars and securities). In the case of SDRs, it should be borne in mind that they have so far been valued below the current market rate but shown in the balance sheet at the current market rate. The difference between the current market rate and the lower valuation rate has hitherto been shown among the provisions. That provision is being transferred to the revaluation account resulting from the initial valuation of SDRs. The total amount of the individual revaluation accounts resulting from the initial valuation, at EUR 25,322 million, is shown in liabilities item 12 "Revaluation accounts" (see also the notes below on this item).

Dissolution of the revaluation accounts

The valuation gains resulting from the initial valuation can be used to offset future valuation losses. The valuation losses may not be offset against valuation gains in respect of other securities, other currencies, or gold.

Besides offsetting valuation losses, such dissolution is possible only in the case of disposals of the corresponding assets, since disposals result in the realisation of profits which accrued prior to stage three of EMU. In this connection, the Central Bank Council of the Bank decided that disposals of gold, SDRs and US dollars should be subject to dissolution in line with the LIFO method on the basis of annual calculations. Accordingly, all disposals of gold, SDRs and US dollars occurring after December 31, 1998 are first of all offset against the corresponding additions. Only if the disposals exceed the additions on an annual basis are the holdings on the revaluation accounts concerned dissolved proportionally.

For the dissolution of the revaluation account for securities, the Central Bank Council adopted a simplified procedure which takes particular account of the heavy turnover in securities holdings. Under that procedure, the revaluation account for securities will be dissolved in the financial year 1999 in favour of the profit and loss account.

3. Notes on the individual balance sheet items

Assets

Gold and gold receivables

This balance sheet item corresponds in content to asset item 1 "Gold" in the annual accounts for 1998. The gold is valued at the market price ruling on January 1, 1999 (1 ozf = EUR 246.368). The difference between the market value and the hitherto lower valuation is shown in liability item 12 "Revaluation accounts".

Claims on non-euro-area residents denominated in foreign currency

Receivables from the IMF and balances with banks, securities investments, external loans and other external assets outside the euro area are included in this item. Foreign currency amounts are converted into euro at their respective exchange rates on January 1, 1999. The differences between the market value and the hitherto lower valuation in the annual accounts for 1998 resulting from the revaluation of sub-items 2.1 and 2.2 are shown in liability item 12 "Revaluation accounts".

Receivables from the IMF

The sub-item "Receivables from the IMF" corresponds to asset item 2 "Reserve position in the International Monetary Fund and special drawing rights" in the annual accounts for 1998. The transition to stage three of EMU does not affect the membership structure of the IMF. The 11 member states of the euro area will retain their current quotas unchanged. However, the shares of the Deutsche Mark and the French franc in the SDR currency basket will be replaced by the euro, with the weights remaining the same as before. The SDR value as at January 1, 1999 was EUR 1 = SDR 0.830248.

Balances with banks, securities investments, external loans and other external assets

The sub-item "Balances with banks, securities investments, external loans and other external assets" is composed of parts of various items of the balance sheet as at December 31, 1998. The claims on non-euro-area residents denominated in foreign currency are taken from asset item 4 "Balances with foreign banks and money-market investments abroad". In the process, the income from discounted fixed-term deposits and Treasury bill investments and from other zero-coupon instruments included in liability item 10 "Accruals" has been deducted from the respective holdings. In addition, the foreign notes and coins of countries not participating in the Eurosystem, which were previously part of asset item 5 "Foreign notes and coins", are now included here. Finally, this sub-item also contains the claims denominated in foreign currency which have hitherto been included in asset item 6.4 "Other external assets". The claims and investments covered by this sub-item are almost entirely denominated in US dollars and bear interest. The exchange rate of the US dollar as at January 1, 1999 was EUR 1 = USD 1.16675.

Claims on non-euro-area residents denominated in euro

This item includes the amount shown in asset item 6.3 "Loans to the World Bank" of the 1998 annual accounts. In future, it will also encompass the Bank's claims on ESCB central banks not participating in the Eurosystem arising from the settlement of TARGET payments.

Lending to financial sector counterparties in the euro area

Sub-items 5.1, 5.2, and 5.5 supersede the old asset item 7 "Lending to domestic credit institutions" of the 1998 annual accounts. Transactions which were conducted with domestic credit institutions during stage two, but which do not fall due until 1999, have been assigned to the corresponding new balance sheet items. Claims arising from securities repurchase operations are included in the sub-item "Main refinancing operations", loans associated with domestic and foreign bills of exchange are shown in the sub-item "Longer-term refinancing operations", and Lombard loans are recorded in the sub-item "Marginal lending facility".

Sub-item 5.6 contains claims based on balances with correspondent banks in the euro area.

Claims on the Federal Government

The claims on the Federal Government correspond to asset item 8 "Equalisation claims on the Federal Government and non-interest-bearing debt certificate in respect of Berlin" in the 1998 annual accounts.

Intra-Eurosystem claims

The sub-item "Participating interest in the ECB" corresponds to the Bundesbank's participating interest in the ECB, as included in asset item 13 "Other assets" of the 1998 annual accounts.

No amount is shown in the sub-item "Claims arising from the transfer of foreign reserve assets to the ECB", since the transfer provided for pursuant to Article 30 of the ESCB Statute was not effected until the first week of January 1999 (see section 4 "Transfer of foreign reserve assets" below).

In the sub-item "Other claims within the Eurosystem", the net claims arising, in particular, from the settlement of TARGET payments within the Eurosystem are to be shown (balance of claims and liabilities). On January 1, 1999, however, only the conventional correspondent banking links existed, and resulted for the

Bank in net liabilities which are shown in sub-item 8.2 on the liabilities side "Other liabilities within the Eurosystem".

Items in course of settlement

In the presentation of the items in course of settlement within the Bank, asset and liability items are to be shown separately as from January 1, 1999. Consequently, there will henceforth be separate items on each side of the balance sheet for assets and liabilities in course of settlement (gross presentation).

Other assets

The sub-item "Coins" corresponds to asset item 9 "German coins" of the 1998 annual accounts.

The sub-item "Tangible and intangible fixed assets" encompasses the old balance sheet items 10 "Land and buildings" and 11 "Furniture and equipment", as well as computer software, which has hitherto been part of asset item 13 "Other assets".

The Bundesbank's participating interests in the Liquidity Consortium Bank in Frankfurt am Main, the Bank for International Settlements in Basle and the cooperative society S.W.I.F.T. in La Hulpe, Belgium, which were included in asset item 13 "Other assets" of the 1998 annual accounts, are shown in the sub-item "Other financial assets".

The sub-item "Accruals and deferred expenditure" comprises the accruals which have so far been included in asset item 13 "Other assets" and the prepaid items hitherto shown in asset item 14 "Prepayments".

Liabilities

Banknotes in circulation

This item corresponds to the former liability item 1 "Banknotes in circulation".

Liabilities to euro-area financial sector counterparties denominated in euro

The sub-item "Current accounts" includes the deposits of the former liability item 2.1 "Deposits of credit institutions on giro accounts", which, as before, serve to comply with the minimum reserve requirements and to settle payments. In addition, this item includes the deposits of counterparties from the financial sectors of other member states participating in the Eurosystem, which have so far been incorporated in liability item 6.1 "Liabilities arising from external transactions, Deposits of foreign depositors".

The key criterion for recording in sub-item 2.1 is that the respective counterparty has access to the standing facilities of the Eurosystem.

The operations covered by the sub-items "Deposit facility", "Fixed-term deposits" and "Fine-tuning reverse operations" have been possible only since January 4, 1999.

Liabilities to other euro-area residents denominated in euro

The sub-item "General government deposits" comprises the old liability item 3 "Deposits of public authorities". The sub-item "Other liabilities" contains the liabilities included in liability item 4 "Deposits of other domestic depositors" of the 1998 annual accounts along with the deposits of euro-area counterparties of the Bank who have no access to the standing facilities of the Eurosystem.

Liabilities to non-euro-area residents denominated in euro

This balance sheet item contains the Deutsche Mark liabilities to non-euro-area residents shown in liability item 6.1 "Liabilities arising from external transactions, Deposits of foreign depositors" of the 1998 annual accounts. In future, it will also include the Bank's liabilities to ESCB central banks not participating in the Eurosystem that arise from the settlement of TARGET payments.

Liabilities to euro-area residents denominated in foreign currency

The US dollar accounts of domestic banks and of the branches of foreign credit institutions in the euro area, which have previously been included in liability item 2.2 "Deposits of credit institutions on other accounts", are shown in this item. In addition, this item includes other foreign currency liabilities to euro-area residents (hitherto shown in liability item 6.2 "Liabilities arising from external transactions, Other").

Liabilities to non-euro-area residents denominated in foreign currency

This item comprises the foreign currency liabilities to non-euro-area residents included in liability item 6 "Liabilities arising from external transactions" of the 1998 annual accounts.

Counterpart of special drawing rights allocated by the IMF

This item corresponds to the old liability item 7 "Counterpart of special drawing rights allocated".

Intra-Eurosystem liabilities

Liabilities to the ECB arising from promissory notes will not be possible until the future, in connection with the issuance of ECB debt securities. The net liabilities resulting from TARGET payments and from conventional correspondent banking operations within the Eurosystem are to be shown in the sub-item "Other liabilities within the Eurosystem". On January 1, 1999 a credit balance resulted from the assets and liabilities arising from correspondent banking operations with the central banks participating in the Eurosystem; a debit balance would have had to be shown under asset item 8.3 "Other claims within the Eurosystem".

Items in course of settlement

In the presentation of the items in course of settlement within the Bank, asset items and liability items are to be shown separately from January 1, 1999 onwards. Consequently, assets in course of settlement and liabilities in course of settlement will each have an item of their own in the balance sheet (gross presentation).

Other liabilities

The item "Off-balance-sheet instruments revaluation differences" contains the outcome of the valuation of foreign exchange swaps. In the 1998 annual accounts, this balancing item was shown in liability item 9 "Other liabilities".

The sub-item "Accruals and deferred income" encompasses the accruals which have so far been included in liability item 9 "Other liabilities" and the prepaid items shown in liability item 10 "Accruals" (see also the notes on asset item 2.2 "Balances with banks, securities investments, external loans and other external assets").

Provisions

The sub-items "Provisions for pensions" and "Provisions for other purposes", which were included in liability item 8 "Provisions" of the 1998 annual accounts, are shown in this item. However, the provisions are diminished in the opening balance sheet, since the provision created on account of the SDR valuation – amounting to EUR 209 million (DEM 408 million) – has been transferred to the SDR revaluation account (see the notes below on liability item 12 "Revaluation accounts").

Revaluation accounts

This item comprises the hidden reserves disclosed owing to the changeover to valuation at current market rates and prices on January 1, 1999.

	Value of balance-sheet item as at December 31, 1998	Valuation at market rates and prices as at January 1, 1999	Revaluation differences
	EUR million	EUR million	EUR million
Gold	8,748	29,312	20,564
Foreign exchange	59,163	63,123	3,960
of which			
SDRs	(6,787)	(7,002)	(215)
US dollars	(52,376)	(56,121)	(3,745)
Securities	39,540	40,338	798
			25,322

The foreign exchange holdings denominated in US dollars and SDRs were not valued at market rates in the 1998 annual accounts, so that differences for these items emerge. The other foreign currency holdings serve primarily to settle payments, and play a subordinate role in terms of the amount; they were already valued at their market rates on December 31, 1998.

For the dissolution of the "Revaluation accounts" see also the notes in section 2 above "Changeover to market-price valuation".

Capital and reserves

This item corresponds to the former liability items 11 "Capital" and 12 "Reserves", after the restructuring of the equity capital, including the partial dissolution of the reserves, had been effected in the 1998 annual accounts.

Unappropriated profit for 1998

This item corresponds to liability item 13 "Unappropriated profit" in the 1998 annual accounts.

4. Transfer of foreign reserve assets

Transfer of gold and foreign exchange to the ECB

In accordance with Article 30 of the ESCB Statute, the national central banks participating in the Eurosystem transferred foreign reserve assets equivalent to EUR 39,469 million to the ECB during the first week of January 1999. The Bank's share in the foreign reserve assets to be transferred came to EUR 12,247 million (15 % of which was in gold and 85 % in foreign exchange):

	EUR million
Gold equivalent to	1,837
Foreign exchange (including securities) equivalent to	10,410
	12,247

The claim on the ECB resulting from this transfer at market prices is shown in sub-item 8.2 "Claims arising from the transfer of foreign reserve assets to the ECB" from the date of transfer.

Branch Offices of the Deutsche Bundesbank

on April 1, 1999

Locality number	Bank place	Land central bank[1]
390	Aachen	NRW
614	Aalen	BW
653	Albstadt	BW
752	Amberg	BY
765	Ansbach	BY
464	Arnsberg	NRW
795	Aschaffenburg	BY
720	Augsburg	BY
662	Baden-Baden	BW
532	Bad Hersfeld	H
560	Bad Kreuznach	RS
710	Bad Reichenhall	BY
770	Bamberg	BY
855	Bautzen	STH
773	Bayreuth	BY
100	Berlin	BBB
480	Bielefeld	NRW
428	Bocholt	NRW
430	Bochum	NRW
380	Bonn	NRW
270	Braunschweig	BNS
290	Bremen	BNS
292	Bremerhaven	BNS
663	Bruchsal	BW
257	Celle	BNS
870	Chemnitz	STH
180	Cottbus	BBB
241	Cuxhaven	BNS
508	Darmstadt	H
741	Deggendorf	BY
805	Dessau	BNS
476	Detmold	NRW
722	Donauwörth	BY
440	Dortmund	NRW
850	Dresden	STH
395	Düren	NRW
300	Düsseldorf	NRW
350	Duisburg	NRW
820	Erfurt	STH
763	Erlangen	BY
360	Essen	NRW
611	Esslingen	BW
215	Flensburg	HMS
500	Frankfurt/M.	H
170	Frankfurt/O.	BBB
680	Freiburg	BW
530	Fulda	H
703	Garmisch-Partenkirchen	BY
420	Gelsenkirchen	NRW
830	Gera	STH
513	Giessen	H
260	Göttingen	BNS
268	Goslar	BNS
478	Gütersloh	NRW
384	Gummersbach	NRW

Locality number	Bank place	Land central bank[1]
450	Hagen	NRW
800	Halle	BNS
200	Hamburg	HMS
207	Hamburg-Harburg	HMS
254	Hameln	BNS
410	Hamm	NRW
506	Hanau	H
250	Hannover	BNS
672	Heidelberg	BW
620	Heilbronn	BW
259	Hildesheim	BNS
780	Hof	BY
594	Homburg (Saar)	RS
217	Husum	HMS
721	Ingolstadt	BY
445	Iserlohn	NRW
222	Itzehoe	HMS
540	Kaiserslautern	RS
660	Karlsruhe	BW
520	Kassel	H
733	Kempten	BY
210	Kiel	HMS
324	Kleve	NRW
570	Koblenz	RS
370	Köln	NRW
690	Konstanz	BW
320	Krefeld	NRW
548	Landau	RS
743	Landshut	BY
285	Leer	BNS
860	Leipzig	STH
266	Lingen	BNS
683	Lörrach	BW
604	Ludwigsburg	BW
545	Ludwigshafen	RS
230	Lübeck	HMS
458	Lüdenscheid	NRW
240	Lüneburg	BNS
810	Magdeburg	BNS
550	Mainz	RS
670	Mannheim	BW
840	Meiningen	STH
731	Memmingen	BY
490	Minden	NRW
310	Mönchen-gladbach	NRW
362	Mülheim	NRW
700	München	BY
400	Münster	NRW
150	Neubranden-burg	HMS
574	Neuwied	RS
256	Nienburg	BNS
760	Nürnberg	BY

Locality number	Bank place	Land central bank[1]
365	Oberhausen	NRW
505	Offenbach	H
664	Offenburg	BW
280	Oldenburg	BNS
265	Osnabrück	BNS
472	Paderborn	NRW
740	Passau	BY
666	Pforzheim	BW
160	Potsdam	BBB
650	Ravensburg	BW
426	Recklinghausen	NRW
750	Regensburg	BY
640	Reutlingen	BW
403	Rheine	NRW
711	Rosenheim	BY
130	Rostock	HMS
642	Rottweil	BW
590	Saarbrücken	RS
593	Saarlouis	RS
622	Schwäbisch-Hall	BW
793	Schweinfurt	BY
140	Schwerin	HMS
386	Siegburg	NRW
460	Siegen	NRW
603	Sindelfingen	BW
742	Straubing	BY
600	Stuttgart	BW
673	Tauber-bischofsheim	BW
585	Trier	RS
641	Tübingen	BW
258	Uelzen	BNS
630	Ulm	BW
694	Villingen-Schwenningen	BW
602	Waiblingen	BW
753	Weiden	BY
356	Wesel	NRW
510	Wiesbaden	H
282	Wilhelmshaven	BNS
587	Wittlich	RS
790	Würzburg	BY
330	Wuppertal	NRW

1 Abbreviations

BW = Baden-Württemberg (Baden-Württemberg)
BY = Freistaat Bayern (Free State of Bavaria)
BBB = Berlin und Brandenburg (Berlin and Brandenburg)
BNS = Freie Hansestadt Bremen, Niedersachsen und Sachsen-Anhalt (Free and Hanseatic City of Bremen, Lower Saxony and Saxony-Anhalt)
HMS = Freie und Hansestadt Hamburg, Mecklenburg-Vorpommern und Schleswig-Holstein (Free and Hanseatic City of Hamburg, Mecklen-burg-Western Pomerania and Schleswig-Holstein)
H = Hessen (Hesse)
NRW = Nordrhein-Westfalen (North Rhine-Westphalia)
RS = Rheinland-Pfalz und Saarland (Rhineland-Palatinate and Saarland)
STH = Freistaaten Sachsen und Thüringen (Free States of Saxony and Thuringia)