Deutsche Bundesbank

Annual Report 2001

We mourn the death in the year 2001

of the former President of the Land Central Bank in the Free and Hanseatic City of Hamburg and Member of the Central Bank Council
Friedrich Wilhelm von Schelling
† 27 February 2001

of the former President of the Land Central Bank in Bavaria and Member of the Central Bank Council
Carl Wagenhöfer
† 3 March 2001

of the former President of the Land Central Bank in the Free and Hanseatic City of Hamburg and Member of the Central Bank Council
Hans Hermsdorf
† 30 December 2001

and of the following members of our staff:

Bernd Schultze	8 February 2001
Manfred Arndt	5 March 2001
Ulrich Klopke	29 March 2001
Rainer Fischer	19 April 2001
Wolfgang Thiel	30 April 2001
Heidrun Stahl	16 May 2001
Lutz Wollmann	19 May 2001
Peter Szynka	27 May 2001
Horst Breuer	20 June 2001
Konrad Gronwald	10 July 2001
Denise Schöffler	5 August 2001
Frank Hugendubel	9 September 2001
Theodor L'Honneux	21 September 2001
Peter Schultz	26 September2001
Dr. Achim Hennecke	28 September 2001
Cornelia Soest	6 November 2001
Christa Linke	18 November 2001
Gudrun Graetz	21 November 2001
Peter Wolfraum	14 December 2001
Gerd Fischer	28 December 2001
Günter Kratzke	31 December 2001

We also keep in remembrance the retired staff members of the Bank and of the former Deutsche Reichsbank who died in 2001.

We will honour their memory.

DEUTSCHE BUNDESBANK

Members of the Central Bank Council of the Deutsche Bundesbank

on 11 April 2002

Ernst Welteke
Chairman of the Central Bank Council

Dr Jürgen Stark
Deputy Chairman of the Central Bank Council

Professor Rolf Eggert

Dr Hans Georg Fabritius

Dieter Haferkamp

Dr Eberhard Heinke

Hans-Jürgen Koebnick

Hans-Helmut Kotz

Klaus-Dieter Kühbacher

Edgar Meister

Dr Christian Milow

Dr Hans Reckers

Professor Hermann Remsperger

Helmut Schieber

Professor Franz-Christoph Zeitler

Members of the Directorate of the Deutsche Bundesbank

from 4 April 2001
to 11 April 2002

Ernst Welteke
President
of the Deutsche Bundesbank

Dr Jürgen Stark
Vice-President
of the Deutsche Bundesbank

Dr Hans Georg Fabritius

Dieter Haferkamp

Edgar Meister

Professor Hermann Remsperger

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from 4 April 2001
to 11 April 2002

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Franz-Christoph Zeitler
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Dr Erich Fein
Vice-President

Günter Bäumer

Berlin and Brandenburg

Klaus-Dieter Kühbacher
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Free Hanseatic City of Bremen, Lower Saxony and Saxony-Anhalt

Hans-Helmut Kotz
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Horst Langefeld
Vice-President

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

Professor Hans-Jürgen Krupp
President
(until 30 April 2001)

Professor Rolf Eggert
President
(from 1 May 2001)

Georg Kutter
Vice-President

Hesse

Dr Hans Reckers
President

Jürgen Hettinger
Vice-President

North Rhine-Westphalia

Dr Eberhard Heinke
President

Friedel Fleck
Vice-President

Dr Axel Stier
(until 31 January 2002)

Rhineland-Palatinate and Saarland

Hans-Jürgen Koebnik
President

Bolko Leopold
Vice-President

Free States of Saxony and Thuringia

Dr Christian Milow
President

Dietmar Girst
Vice-President

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Contents

Operations of the Deutsche Bundesbank

Tables (cont'd)

Charts

Charts (cont'd)

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

European monetary union (EMU) was completed by the introduction of euro currency on 1 January 2002 – 11½ years after the launch of what was known as Stage One, and three years after the introduction of the euro in the financial markets. The euro is now the sole legal tender for over 300 million people. Thanks to the sterling efforts made by all those concerned, the changeover was accomplished smoothly. The national currencies have relinquished their previous legal status; even so, the Bundesbank will continue to redeem Deutsche Mark notes and coins for an indefinite period, free of charge.

The currency changeover unquestionably marks a watershed in the economic life of all the member states of EMU. For Germany, it signifies the end of the Deutsche Mark era, after just over 53 years. The Deutsche Mark was the symbol of reconstruction and prosperity following the Second World War, and it also turned out to be a major milestone on the way to German reunification. Its stability over many decades set the standard by which the euro will inevitably be judged. For monetary and economic policy decision-makers in the euro area, that implies a heavy responsibility. Given appropriate stability, over the longer term the euro could become an identifying symbol of European integration; after all, following the relinquishment of their national currencies, the countries of EMU are linked even more closely in a "Community sharing a common destiny".

It is not only the successful introduction of the euro but also the more favourable macroeconomic conditions that warrant our looking into the future with greater optimism after a difficult year in 2001. The sense of insecurity felt by market players after the terrorist assaults of 11 September 2001 is gradually waning, even if we shall never manage to forget the terrible things we saw. The emergency systems in place in the financial markets duly functioned, and the close cooperation prevailing between central banks prevented any loss of confidence.

Many current indicators suggest that global business activity has now at least bottomed out, or even that the lowest point may have been passed. Presumably that also applies to the euro area, where economic growth came to a halt at the end of 2001. Moreover, price conditions, which had clouded over at times owing to external influences and special factors, began to brighten somewhat in the course of last year. The rosier outlook for inflation enabled the Eurosystem progressively to relax its monetary policy. Hence there are no obstacles to an economic recovery from the financing angle.

From the German standpoint, economic developments do not look quite so encouraging as in some other countries. Within the euro area, Germany is lagging behind in economic terms. Although the 2001 tax reform and the pension reform were steps in the right direction, improving the underlying macroeconomic set-up, the sluggish pace of economic growth (it was only 0.6% in 2001) and the growing unemployment make further structural reforms to strengthen the expansionary forces appear imperative. Besides, there is a marked need for consolidating the public sector budgets if the fiscal goals set are to be attained.

On 1 March 2002, the Bundestag passed the act reforming the Bundesbank, which provides that the Bundesbank will be headed in future by an Executive Board comprising eight members. All the Main Offices of the Bundesbank will be retained; however, the designation "Land Central Bank" will be dropped, as will their "reserved responsibilities". The reform of the management structure will enable the Bundesbank to discharge more efficiently the duties assigned to it by Parliament. At the same time, it will strengthen the role of the Bundesbank within the Eurosystem, especially since the Bank also has a crucial part to play in the integrated financial-services-supervision system, which has likewise been restructured.

The present Annual Report initially gives an account of the introduction of euro currency. On the basis of an analysis of the international and European setting, some comments on the Eurosystem's monetary policy last year follow. The Report also analyses economic trends in Germany and more recent developments in international and European cooperation. At the same time, the Bank presents in this Report its annual accounts for 2001, which have been audited (and certified) by two firms of auditors, and which were approved by the Central Bank Council on 11 April 2002.

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 members of the Bank's staff for the work they did in 2001. My thanks are due not least to those who contributed, with great commitment and long working hours, to the successful introduction of euro currency. I am likewise most grateful to the staff representative bodies for their cooperation, as always in a spirit of mutual trust.

Frankfurt am Main, April 2002

Ernst Welteke
President, Deutsche Bundesbank

Completion of European monetary union through the introduction of euro banknotes and coins

1 Technical implementation

Decisive phase of the preparations

In 2001 preparations in the member states of the euro area for the changeover to euro banknotes and coins entered the decisive phase. Within the framework laid down by the European Union and the European Central Bank, the participating countries were responsible for defining the changeover scenario in accordance with their national currency infrastructures and the needs of the cash-handling parties involved.

Legal framework for the introduction of euro cash

Pursuant to the European Council Regulation on the introduction of the euro, euro cash became legal tender in all euro-area member states on 1 January 2002. The banknotes and coins denominated in national currency units, which were the sole legal tender within their territorial limits up to the end of 2001, were permitted to remain legal tender for a further six months at most (Article 15), but this period could be shortened by national legislation. In November 1999 the EU economics and finance ministers had issued a joint declaration agreeing to limit the dual circulation of national and euro banknotes and coins as legal tender to a maximum of two months. This phase was shortened further in the Netherlands (28 January 2002), Ireland (9 February), France (17 February) and Germany. In Germany the national currency ceased to be legal tender at the end of 2001 (Third Act on the introduction of the euro of December 1999, constituting a "legal big bang"). Back in October 1998, however, the central associations representing the banking sector, the cash-operated machine industry, the retail trade and other service providers had agreed to issue a "Joint Declaration" which was prepared under the auspices of the Federal Ministry of Finance and with the involvement of the Bundesbank. In this declaration they agreed to accept cash denominated in Deutsche Mark up to the end of February 2002. This meant that D-Mark notes and coins could continue to be used for a limited period, thus facilitating the desired aim of switching over to euro cash as rapidly as possible. The Joint Declaration and the "legal big bang" formed part of the modified reference-date arrangement and were intended to minimise the burdens and costs which a dual circulation of two currencies with legal-tender status would have entailed. The Bundesbank – in line with past practice – will continue indefinitely to exchange D-Mark banknotes and coins for euro at the officially fixed exchange rate free of charge. Similar commitments have been made by some other member countries; the shortest deadline for accepting national coins is the end of 2002 (Portugal) and for national notes February 2012 (Greece, France, Italy and Finland).

Modified reference-date arrangement in Germany

Production of euro cash

Series production of individual coin denominations began in the second quarter of 1999 and of euro banknotes in July 1999. The euro cash was produced at 15 banknote printing works and 15 mints in the EU. Each national central bank was responsible for producing the initial supply of euro currency for its territorial area. Altogether some 15 billion banknotes representing a value of €630 billion and over 51 billion coins representing a value of €16 billion had been produced by the end of 2001. A major part of this total is a logistical reserve stock designed, among other things, to enable the Eurosystem to respond immediately to any changes in demand.

Test centres for converting vending and slot machines

To prepare for a speedy conversion of cash dispensers, vending machines, automated ticket dispensers and the like, an international test centre for euro banknotes was set up at the start of May 2000 by the Land Central Bank in Hesse under the aegis of the ECB. On top of this, each national central bank offered the option of further tests in its country from March 2001. In Germany test centres for euro coins were set up at five Land Central Banks from 1999 onwards so as to adapt the roughly 2.4 million cigarette machines, vending machines, slot machines and ticket dispensers to take euro coins. Here the manufacturers were able to measure the coins, to adapt their coin acceptor/rejector units and test such units that had already been adapted to take euro.

Reference scenario for even burden-sharing

In Germany, as envisaged in the Joint Declaration agreed by the central associations, the 24 associations representing the parties involved in cash handling, three Federal ministries and the Bundesbank (acting in a coordinating role) presented the final version of the "Joint strategy for putting euro banknotes and coins into circulation in the Federal Republic of Germany" (Joint Strategy) in early April 2001 following around 2½ years of planning. In this reference scenario for the cash changeover the central associations pledged, with a view to ensuring a smooth transition, to "prevail upon their affiliated enterprises to dependably accommodate the recommendations made in the Joint Strategy within the framework of their individual planning situation". The Joint Strategy provided for the even sharing of burdens among the cash-handling parties involved, notably between the retail trade and the banking sector (in the light of the stated aim of limiting the amount of loose change needed by the retail trade at the start of 2002). This was underpinned by practical guidance given to the general public aimed at winning their active support for the reference scenario through the dissemination of harmonised information and messages.

Information campaigns on the introduction of euro cash

In order to familiarise the public with the details of the euro banknotes and coins, the security features and the modalities of the changeover procedure, the ECB and the national central banks supplemented the information activities of the governments, the European Commission and other private and public agencies with a broadly based information campaign. This was conducted in all the participating countries largely according to the same principles and timetables and using the same information media. To foster extensive and comprehensive public awareness among all sections of the population, the ECB and the national central banks in the Eurosystem initially enlisted the support of partners and multipliers from all economic sectors and social segments so as to make the base of the euro information campaign as wide as possible. The information campaign was stepped up in the second half of 2001, especially after the security features of the euro banknotes had been made public on 30 August 2001. The focus was on addressing the public directly via the mass media under the common slogan "theEURO.OURmoney". The campaign also covered non-EU countries where the euro is likely to play an important role. Independently of the ECB's international activities, the Bundesbank carried out its own euro information campaigns in countries in which the Deutsche Mark was widely used. This primarily concerned countries in central and eastern Europe plus Turkey. To an extent while the Joint Strategy was being elaborated, intensive local discussions were held in Germany, especially between the Land Central Banks and the credit institutions. At all branch offices of the Bundesbank, designated "euro contact persons" played an active role in the implementation of the reference scenario by answering logistical and other questions and enquiries relating to the currency changeover from the other parties involved in cash handling. In addition, euro task forces were set up in many cities to coordinate the changeover plans of the individual cash-handling parties.

Staggered timetable for the cash changeover …

… through early reduction of volume of national currency still in circulation

To extend the currency exchange process over a longer period of time and thus effect a smooth changeover with the finite resources available, measures were taken in the euro-area countries to reduce the amount of legacy currency in circulation ahead of the changeover date. Thus on World Savings Day 2000 and then from May 2001, the Bundesbank and the banking industry jointly ran a high-profile advertising campaign aimed at the early return of Deutsche Mark cash to banks – especially coins stored in piggy banks or jars. In the course of 2001 some 11.6 billion D-Mark coins were collected in Germany, with the result that the volume of D-Mark coins in circulation (expressed in euro) fell from €8.2 billion to €6.4 billion. The outstanding volume of banknotes put into circulation by the Bundesbank declined during this period by 0.9 billion banknotes (representing a value of €54½ billion) to €76½ billion. In the Eurosystem as a whole the volume of banknotes in circulation contracted in 2001 by around €110 billion to €270 billion.

Frontloading of euro banknotes and coins

To ensure a smooth cash changeover, it was crucial to provide credit institutions with sufficient stocks of euro banknotes and coins ahead of the official launch (frontloading) and for them to provide their business customers with sufficient advance stocks (sub-frontloading). Given the limited cash-in-transit and other handling capacities, the planners in Germany agreed that the entire permissible period stipulated by the European Central Bank for frontloading euro cash to banks (ie from September to the end of 2001) would be used. The objective was to ensure that, right from 1 January 2002, credit institutions, retailers and service providers throughout Germany would have enough euro banknotes and coins. In other member countries frontloading and sub-frontloading began later, in some cases not until December. In addition, euro-area credit institutions were allowed to frontload euro cash to banks outside the euro area from 1 December 2001 onwards. A survey on likely frontloading requirements which the Bundesbank carried out among its business partners in spring 2001 indicated that, in line with the recommendations of the Joint Strategy, there would be a large demand for low-denomination banknotes, which would greatly help to limit the amount of change required in shops and other retail outlets. This prompted the Bundesbank to increase the production volume of €5 and €10 banknotes. During the four-month frontloading phase the Bundesbank supplied around 12.4 billion coins with a value of €4.3 billion and approximately 2.6 billion banknotes worth €57.0 billion. Around four-fifths of the frontloaded banknotes consisted of €5, €10 and €20 notes. From 1 December 2001, in order to expand the supply of currency to the non-euro area, the Eurosystem released euro banknotes and coins totalling some €4 billion direct to 26 central banks and certain credit institutions active in international currency trading outside the euro area. The Bundesbank's share of this came to around €3.2 billion. Altogether the Eurosystem distributed more than 6 billion euro banknotes with a value of €133 billion and more than 37.5 billion euro coins with a total value of roughly €12.4 billion during the frontloading phase.

Prior issue of coins to the general public

To enable the public to familiarise themselves with the euro coins in good time and to start using them right from 1 January 2002, the Eurosystem arranged for the fee-less issue of over 150 million packs of assorted euro and cent coins, known as starter kits, from 14 December onwards. Their precise composition varied from country to country. Starting on 17 December 2001, the Bundesbank made available a total of 53.5 million starter kits with a value of almost €550 million.

Additional support for frontloading

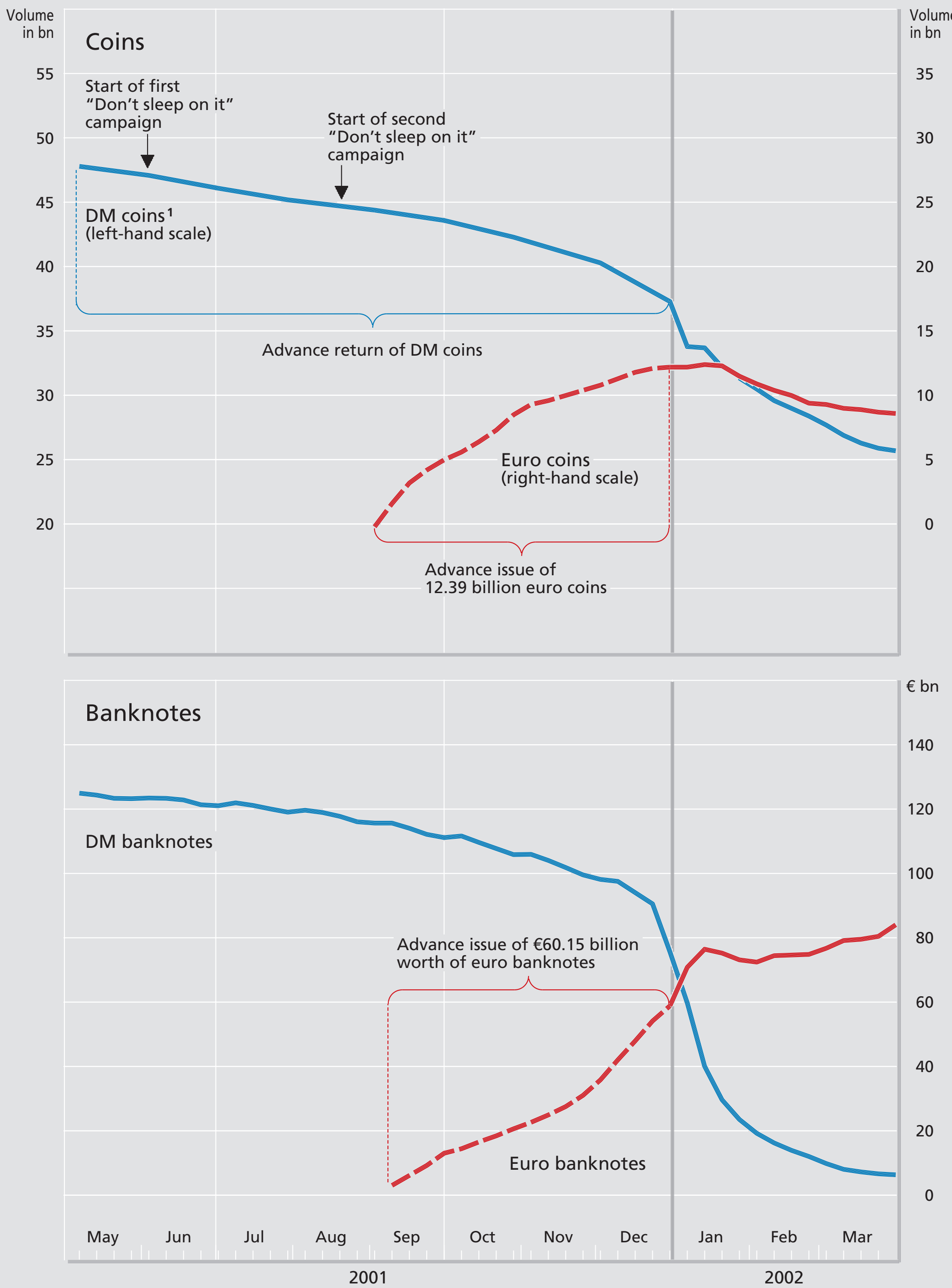
With a view to ensuring a rapid, nationwide and commensurate supply of euro cash to shops and service outlets, the Bundesbank contributed towards the costs of preparing the starter kits of coins and provided banknote assortments representing a total value of over €4 billion. To ensure that the available resources were utilised as evenly as possible, the Bundesbank also granted discounts for the early acceptance of euro banknotes by banks.

Rapid and smooth currency changeover

Thanks to these extensive and comprehensive preparations, the currency changeover was accomplished rapidly and smoothly and met with a high degree of acceptance from the public. The amount of national banknotes of the euro-area countries still in circulation at the end of 2001 (€270 billion) had dwindled to €92½ billion by the end of January and at the end of March amounted to only just over €23 billion. At the same time, the volume of euro banknotes in circulation increased continuously in January – starting from the frontloaded base-stock of €133 billion – to €221½ billion; at the end of March this figure had risen to €267½ billion. However, the total volume of banknotes in circulation at the end of the first quarter of 2002 was 17% below last year's corresponding level. It remains to be seen whether the currency changeover will lead to reduced cash holdings in the longer term, too. The exceptionally volatile daily changes in banknote circulation at the beginning of 2002 could not be precisely anticipated by the Eurosystem's liquidity managers; sizeable errors in estimating banks' liquidity requirements were therefore inevitable in the short run. To enable credit institutions nonetheless to smoothly meet their reserve requirements in January and to avoid frictions in the overnight money market, the Eurosystem supplemented its regular refinancing operations with two short-dated quick tenders which injected liquidity into the market. In gauging the required magnitude of the open market operations, the Eurosystem also had to take into account the fact that the equivalent of the euro currency frontloaded to banks up to the end of 2001 was debited to their accounts on the main tender dates of 2, 23 and 30 January 2002. On balance, interest rates in the money market were little affected by the currency changeover.

Coin and banknote circulation during the changeover to euro cash*

Chart 1



* Including frontloading. — 1 Including natural losses estimated at 20 billion coins or around 40% of the original total volume of coins in circulation.

Deutsche Bundesbank

2 Price developments

Price developments in January 2002

The impact of the introduction of euro cash on the German inflation rate in January was quite small overall, even though sharper price changes were recorded for individual goods and services. In January 2002 consumer prices in Germany rose at the accelerated rate of 0.9% compared with December 2001. This was also perceptibly higher than the December-January change in previous years; the year-on-year increase, too, climbed from 1.7% to 2.1%. However, major factors behind the higher price level were the further increment in energy taxes and the raising of insurance and tobacco taxes. This was compounded by inclement weather in southern Europe which pushed the cost of fresh fruit and vegetables way above the normal seasonal level at that time of the year. Taken together, these factors account for around 0.8 percentage point of the overall month-on-month rise. Hence only the remaining fraction of the increase might conceivably have been related to the price changeover from Deutsche Mark to euro. It should be remembered in this context that the price acceleration also contains price adjustments which are traditionally made at the start of the year.

Exceptional features of the price formation process at the consumer level

When assessing the rate of price increases in January it should also be borne in mind that the price formation process at the consumer level is characterised by certain exceptional features. Consumer prices are normally either rounded to full figures so as to limit the associated transaction costs, as in the case of cinema tickets or fares on public transport, or they are set at psychologically attractive “threshold” or “comfort” prices such as €1.99. For this reason, individual consumer prices are normally adjusted not in small, marginal steps but rather in larger increments to the next or next-but-one attractive price. Moreover, in order to keep down the cost of adjusting consumer prices, they tend to be changed fairly infrequently. If the overall path of consumer price growth is nevertheless relatively steady as a rule and is not characterised by step-changes, this is due solely to the fact that the adjustments for the individual goods and services are normally spread over a longer period of time.

Price effects of the euro’s introduction

With the introduction of euro banknotes and coins on 1 January 2002 many prices were converted to euro. Owing to the preference for attractive prices, which rarely result from applying the official conversion rate of 1.95583, the conversion to euro was accompanied in many cases by price changes. In addition, the transition to the euro was an obvious juncture for making price adjustments that had already been planned. These may have been either delayed or anticipatory price adjustments. The introduction of the euro thus essentially affected the timing of price changes and, for a short while, also led to a spate of adjustments. However, this coincidence between the euro changeover and price adjustments was not always helpful from the point of view of sales psychology. While the currency changeover made it harder for consumers to compare prices over time, they could also be expected to be more vigilant than usual during the changeover period. Marketing considerations may therefore have made it expedient to round prices down to attractive euro amounts. Indeed, this is what appears to have happened in many cases. Other suppliers evidently took the view, however, that it would be easier for them to push through steep price increases during the changeover period since euro prices look lower than the equivalent Deutsche Mark prices.

Price effects by sector

As far as can be inferred from the official figures, reactions to the euro's introduction varied considerably across the economic sectors. In the retail food sector the prices of certain items were lowered in January 2002 as some supermarket chains rounded prices down. However, the prices of some of these foodstuffs had been increased earlier in 2001. By contrast, the prices of many services were raised in January 2002. Some suppliers in this sector appear to have taken advantage of the need to list prices in the new currency to make sharp upward price adjustments.

Medium-term price effects

It will not be possible to make a comprehensive assessment of the price effects of the introduction of euro banknotes and coins in Germany and in the euro area as a whole until mid-2002 at the earliest, by which time the process of adjusting prices to the euro should have been completed. In January, for example, some suppliers retained attractive Deutsche Mark prices. Furthermore, it is questionable whether all the new euro prices displayed in January will be able to withstand the pressure of market competition. Therefore, the Bundesbank intends to carry out further studies on the basis of the pool of individual price data collected by the Federal Statistical Office. One thing can already be stated, however: the currency conversion *per se* did not lead to any appreciable upthrust of prices in Germany.

3 Exchange rate effects

Euro firmer immediately following the cash changeover

The smooth introduction of euro cash and the often better-than-expected response of the general public to the new currency strengthened the euro in the foreign exchange market for a time. In the first few days of 2002 the single

European currency (on a weighted average) rose to levels last recorded in spring 2001. Subsequently, however, these exchange rate gains were cancelled out again.

Euro burdened by decline in currency in circulation?

As the aforementioned factors apparently determined market developments for a short time only, the question arises as to whether the cash changeover may also have been accompanied by longer-term consequences for the euro exchange rate. It has been suggested, for example, that the weak development of currency in circulation seen in recent years (particularly in Germany) has been depressing the exchange rate for some time. As evidence, reference is made, first, to the substitution abroad of US dollar banknotes for D-Mark owing to uncertainty about the modalities of the currency conversion and, second, to the liquidation of hoarded stocks of Deutsche Mark within Germany. According to this hypothesis, the exchange rate of the euro will start to rise again in the foreign exchange market only if and when it assumes the D-Mark's former role as a transaction currency and a store of value outside the present euro area, too.

Longer-term exchange rate effects

This explanation of the euro's exchange rate attaches very great importance to the volume of currency in circulation, especially in Germany. Insofar as the trend in German cash holdings is attributable to structural shifts within the euro area, this should have had no impact on the euro's exchange rate whatsoever. It therefore seems necessary at least to take the volume of currency in circulation in the euro area as a whole as the gauge. The problematic nature of the aforementioned hypothesis then shows up very clearly. Whereas the euro's exchange rate declined above all in 1999 and at the start of 2000, the aggregate volume of currency in circulation in the euro area did not decrease until 2001. Towards the end of that year, in particular, vast amounts of cash were shifted into sight deposits and into dollars, although this did not significantly slow the growth of the monetary aggregates and apparently had no adverse effect on the euro either (see also pages 52 and 38). Hence it appears problematical to focus the explanation of the complex developments in the foreign exchange market on just a few determinants such as currency in circulation. In the longer run the euro should be strengthened by the stability-oriented monetary policy pursued by the Eurosystem and the fact that the advent of euro cash has fused the euro area once and for all into a community with a common destiny. The (growing) use of euro banknotes outside the euro area which may well be associated with that development should then be seen more as a reflection of the new European currency's international recognition than as the driving force behind the euro's exchange rate movements.

4 Fiscal effects

Public finance boosted by coin seigniorage

The replacement of national currency stocks by the euro is having a direct impact on public finance in that the right to mint coins (the coinage prerogative) lies with the central governments. The national central banks merely put the coins into circulation on behalf of their government. The profit from issuing coins, which is the difference between the face value and the production cost of the coins, can be used for funding government budgets. Conversely, the return of coins to the central bank increases government financing requirements.

Increased borrowing requirement in 2001 due to high coin returns

The volume of Deutsche Mark coins circulating in Germany contracted significantly in 2001 in the run-up to the currency changeover (not least thanks to the "Don't sleep on it" campaign). Coins were returned to the Federal Government in the net nominal amount of DM3½ billion. Whereas in the second half of the 1990s coin seigniorage had contributed around DM0.1 billion to government revenue on an annual average, the sharp contraction of the outstanding coinage in 2001 led to a substantial additional borrowing requirement for the Federal Government.

Lower borrowing requirement in 2002 thanks to issuance of euro coins

In 2002 the volume of D-Mark coins in circulation will contract further. However, this will be offset by the issuance of the euro coins, the income from which will accrue to the central government accounts. On 2 January 2002, for example, the value of the euro coins which the Bundesbank frontloaded to banks last year (€4.3 billion) was credited to the Federal Government. The Federal budget for 2002 includes estimated net coin seigniorage of €2.7 billion. At the end of March the volume of euro coins issued had a total value of €3 billion, whereas the face value of the outstanding D-Mark coins had declined by a further €2.3 billion.

Return of old banknotes

In contrast to the volume of coins in circulation, changes in the amount of outstanding banknotes does not affect the fiscal position of central governments directly because the right to issue banknotes is the prerogative of the European System of Central Banks, so that changes in banknote circulation are reflected in its accounts. However, it is likely that some old banknotes will not be returned to the national central banks in the course of the currency changeover process or thereafter. This will increase future profit distributions by the national central banks to their owners if the non-returned old banknotes are charged off the accounts as a capital gain.

Seigniorage

Indirectly, however, the volume of banknotes in circulation has major implications for public finance. A central bank's interest-free liabilities arising from banknotes issued is counterbalanced by interest-earning assets; the resulting central bank profit – seigniorage – is distributable to its owners. In Germany the whole of the distributable profit is transferred to the Federal Government (although any amount exceeding €3½ billion (up to 2001: DM7 billion) is not booked to the central government budget accounts but is allocated to repaying the debt of the Redemption Fund for Inherited Liabilities). Not least owing to the comparatively strong demand for D-Mark banknotes, the Bundesbank posted large profits in past years.

Allocation of monetary income in the Eurosystem

The Statute of the ESCB stipulates that the monetary income which the national central banks earn on assets which they hold as counterparts to banknotes in circulation and deposits of credit institutions is to be pooled and allocated to the individual central banks in accordance with their respective paid-up shares in the ECB's capital. This method of allocation is being introduced in principle from 2002 – ie contemporaneously with the issue of euro banknotes and coins. As the respective national shares in the total volume of banknotes circulating within the Eurosystem differ markedly from the national shares as measured according to the capital key, it was evident that this would lead to considerable shifts in the income levels of the individual national central banks compared with the status quo; in particular, the Deutsche Bundesbank's profit will be reduced as a result. It has therefore been decided to set up a transitional arrangement under which the new regime of allocating income will be phased in progressively between 2002 and 2007; this will substantially mitigate the impact on current relative income positions of the central banks in the medium term.

5 Longer-term aspects

High costs of introducing the euro

All things considered, the changeover from the national currencies to the euro undoubtedly entailed high costs. The introduction of euro cash – the final phase of monetary union (Stage 3b) – placed particular financial strains on the public sector, credit institutions and the retail trade. It is virtually impossible, however, to precisely quantify the overall cost of this mammoth historical undertaking.

Longer-term benefits of monetary union predominate

In the longer run the one-off costs will be more than offset by the permanent benefits of monetary union. The positive aspects of EMU will become palpably apparent to the general public as they can now use the single currency both at home and abroad without having to pay any exchange fees. A similar objective is behind the efforts of the European Commission, the Eurosystem and the international banking associations to lower the fees charged for cross-border payments within the euro area to the level which prevails for domestic payment transactions. Less tangible, and hence less evident in everyday life, are the stimulatory effects which the euro is exerting on the financial markets and which *per se* will contribute to lowering financing costs in the euro area. Finally, the single currency will enhance price transparency within the euro area and thus intensify competition to the benefit of consumers. Yet perhaps the most important thing of all from Germany's perspective is that, since the changeover to monetary union, the burdens of external shocks are spread more evenly across the entire euro area. This contrasts with the situation in the past, when exchange rate changes and portfolio shifts with respect to the US dollar, in particular, tended to be concentrated on the Deutsche Mark, with the result that the German economy often had to bear a disproportionate share of the real adjustment burdens. Looking at the overall benefits of monetary union, these permanent macroeconomic gains far outweigh the advantages of reduced transaction costs. Compared with these benefits, the one-off changeover costs which were incurred over the past few months in connection with the introduction of euro cash pale into relative insignificance.

The currency and the economy

I The international and European setting

1 The global economic background

Downturn in global economic activity

2001 was marked by an unexpectedly sharp downturn in global economic growth. After the global value added had risen by just over 4½% in the preceding year, in 2001 the pace of output growth in the world economy halved to an estimated 2½%. The scale of the cyclical slowdown is reflected even more clearly in the movement of world trade, the growth rate of which decreased in the same period from 12½% to less than 1%.

Close international linkage of business activity

The worldwide slowdown is primarily due to the moderating impact of the oil-price increases in 1999-2000 and to the distinct cooling of economic activity in the United States towards the end of 2000. However, the direct and indirect implications of these developments for Europe, and especially for Germany, were long underestimated in the light of the relatively few bilateral trade links with the US economy, especially since US demand for imports remained decidedly buoyant in the first few months of 2001. If things developed differently from what had originally been expected, that was partly because of the particular conditions and factors that had ushered in the sudden downswing in the United States. The first point that should be mentioned in this connection is the abrupt reappraisal of the prospects of the "new economy" following the earlier exaggerations in the IT sector and in the financial markets. Although the reversal of sentiment emanated from the US economy, it quickly spread to the new "growth sectors" throughout the world. Hence the adjustment in the US financial markets did not stop at the US border. Instead, it spread without much delay to the European stock markets and to the major financial centres in eastern Asia. The sense of disillusionment felt throughout the world ultimately paralysed the propensity to invest in the United States, as well as in other advanced economies.

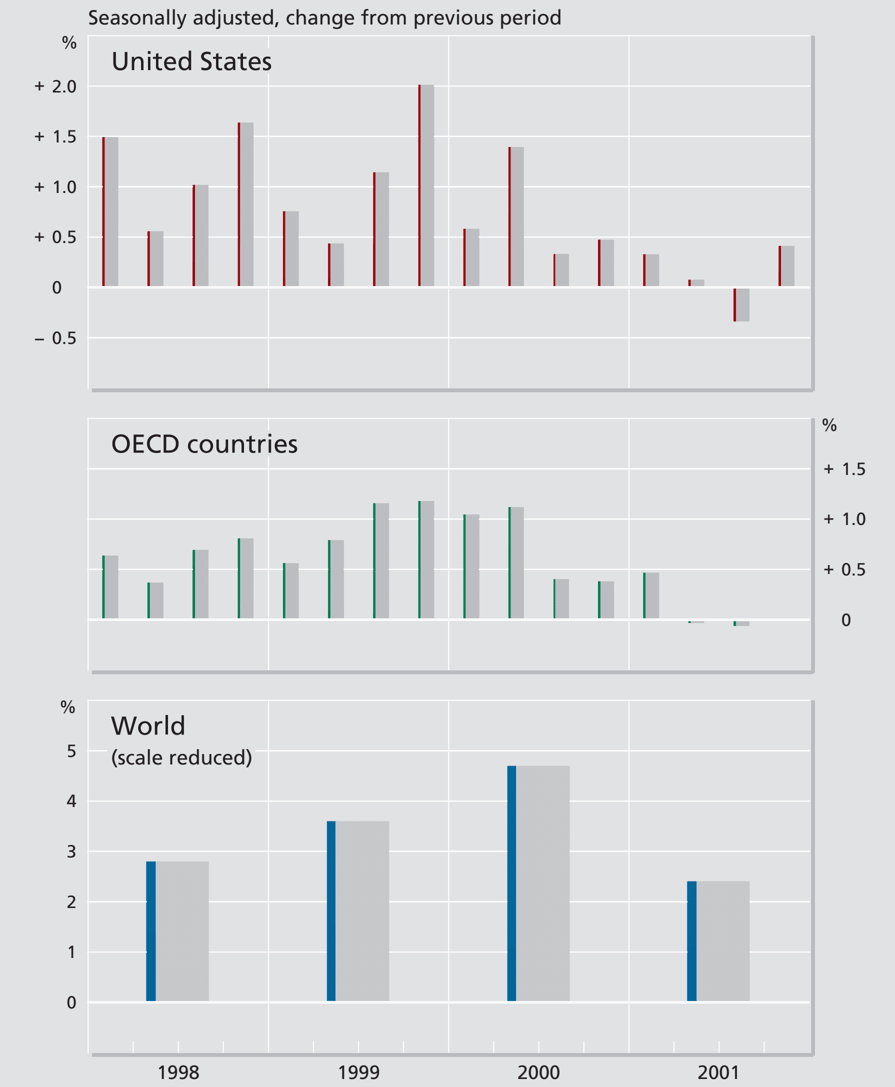
Downswing exacerbated by the terrorist attacks of 11 September

The nosedive in the world economy was reinforced in the second half of the year by the consequences of the terrorist attacks of 11 September. Fear of further assaults and the danger of an escalation of the war in central Asia posed unprecedented challenges to all economic activity and planning.

On the other hand, a number of factors moved in a favourable direction in the course of last year, and thus paved the way for a change for the better. After

US and global economic growth

Chart 2



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Underlying global economic conditions pick up slightly again

the dramatic rise in the two preceding years, oil prices went down distinctly, especially in the second half of 2001, with the result that the expansion of real income in the oil-consuming countries was not curbed as much as the growth of output. That perceptibly reduced the risk of second-round effects engendering a further surge in costs. Along with the noticeable easing of business activity and the preceding adjustment of equity prices, inflation risks in the industrial countries had decreased significantly. Taking the average of the major industrial countries, consumer prices rose by just over 2%, with a slackening trend in the course of 2001. In connection with the distinct easing of monetary policy, interest rates in most countries are to be rated decidedly low by long-term standards. Volatility in the international foreign exchange markets has lessened (despite the events of 11 September). In particular, the euro has lost no further ground relative to the US dollar, and the exchange rate of the Japanese yen, which was long deemed to be overvalued, has now moved distinctly downwards.

United States: growth falters

Hopes of a "soft landing" of the US economy, which had dominated market players' expectations until almost the end of 2000, were dashed as early as the turn of 2000-2001, when it became apparent that growth in the United States had come to a halt. The US central bank responded quickly and vigorously to the changed situation by deciding to cut several interest rates in rapid succession. In that way, it fostered the markets' confidence in an early recovery of business activity, especially since it was assumed that the over-capacities in the IT sector that had been built up in the preceding boom period would be run down in a comparatively short space of time and without undue friction. As long as the cuts in output were confined to industry, and especially to the IT sector, it was believed that a downswing throughout the economy could be averted. However, the adjustment of the preceding exaggerations did involve increased shedding of labour, which was ultimately reflected in a slowdown in the growth of private consumption and of aggregate domestic demand, and thus affected the economy right across the board. That trend was reinforced by the retarding wealth effects of the price losses in the equity markets.

Relaxation of monetary policy ...

The hopes of a swift improvement in the economic situation, which were by then dwindling anyway, were succeeded after the terrorist attacks of 11 September by a strong sense of insecurity, which gave rise to a dramatic downturn in the confidence of consumers and investors alike. The US central bank sought to counteract that confidence loss by means of further interest-rate cuts. Overall, the short-term target interest rate controlled by the Federal Reserve had fallen by 4.75 percentage points in all to 1.75% by the end of the year. That was the lowest level since 1961.

... and expansionary shift in fiscal policy

In addition, US fiscal policy, starting from a high surplus position, shifted to a highly expansionary stance in 2001. Alongside the tax reform, some of which had come into force retroactively at the beginning of 2001, the US administration adopted a package of emergency measures in order to mitigate the direct material damage caused by the terrorist assaults. Those measures were joined by moves to enhance internal and external security and to aid the worst-hit economic sectors.

Macroeconomic benchmark figures of selected industrialised countries — Table 1

Country	Real GDP		Consumer prices 1		Current account balance		Unemployment rate 2	
	2000	2001 p	2000	2001 p	2000	2001 p	2000	2001 p
	Change from previous year in %				as % of GDP		in %	
OECD *of which*	3.9	1.2	4.1	3.6	.	.	6.3	6.5
EMU	3.4	1.5	2.3	2.5	– 1.0	– 0.1	8.8	8.3
United Kingdom	3.0	2.2	3.0	1.8	– 1.8	– 1.3	5.4	5.0
United States	4.1	1.2	3.4	2.8	– 4.5	– 4.1	4.0	4.8
Japan	2.4	– 0.5	– 0.7	– 0.7	2.4	2.3	4.7	5.0
Canada	4.4	1.5	2.7	2.6	2.5	3.0	6.8	7.2

Sources: IMF, ECB, OECD and national statistics. — **1** Consumer price index. — **2** Standardised unemployment rate, based on OECD and Eurostat calculations.

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Price losses in the equity market

Crumbling prices in the equity market hampered the raising of equity capital, in particular. For instance, in the area of "growth stocks", the US equity markets recorded price losses of about 30% between the start of 2001 and 10 September alone, and even the leaders fell by about 17% in the same period. On the other hand, the market recovered astonishingly fast from the even greater price falls immediately following the events of 11 September. At the beginning of 2002, losses of confidence among investors temporarily depressed market sentiment again as a result of a number of spectacular corporate failures. In the meantime, however, price movements are being buttressed by more favourable economic indicators.

Low interest rates in the US bond market

In the US bond markets, the massive relaxation of interest rates by the monetary policy makers, along with the expansionary shift in fiscal policy, has tended to lead to greater restraint among investors since last autumn. After US capital-market rates in the 10-year field had fallen well below 5% during the spring and summer months, they have risen perceptibly again since then.

Japan: additional impediment

Global economic activity has been additionally handicapped by the persistent sluggishness of the Japanese economy. It produced 0.5% less than in the previous year. It is true that Japan is suffering particularly harshly from the economic downturn in the United States and the global decline in the demand for IT products, but it is primarily structural problems which have been evident for years that are crippling the expansionary forces. The associated weakness of the economy, which has meanwhile spread to all areas of domestic demand, has evidently proved impervious to macroeconomic expansionary measures. The fiscal stimulatory programmes of the 1990s failed to have any lasting impact on growth. Owing to the huge increase in public debt, the State is now very restricted in its freedom of movement.

Impotent monetary policy

Against this background, the Bank of Japan responded with further attempts at monetary relaxation, but without really getting a grip on deflationary trends. As an annual average, prices fell against the previous year by 0.7%; towards the end of the year, the decline in prices actually accelerated to over 1% per annum. That fostered buyers' tendency to "wait and see" and increased the real debt burden.

East Asian emerging economies and China

For the whole of the East Asian region, which, because of its strong orientation towards IT products, was affected relatively soon by the global slowdown in business activity, Japan remained an additional impediment to growth last year. China was apparently hit less hard, even though it is participating increasingly in international trade, and became a member of the WTO at the end of the year. That country's relatively low degree of openness overall and, in particular, China's completely different production patterns and foreign trade structures, by comparison with the advanced market economies in Eastern Asia, are an explanation for that.

Further progress by the central and eastern European EU accession candidates

The central and eastern European EU accession candidates likewise benefited from their less technology-oriented economic structures and continued their economic catching-up process. Their economic growth, averaging about 3%, was almost twice as high as that of the European Union. In the Annual Progress Report by the EU Commission, further successes in their efforts at reform are acknowledged, although that does not apply equally to all the candidates (see page 112).

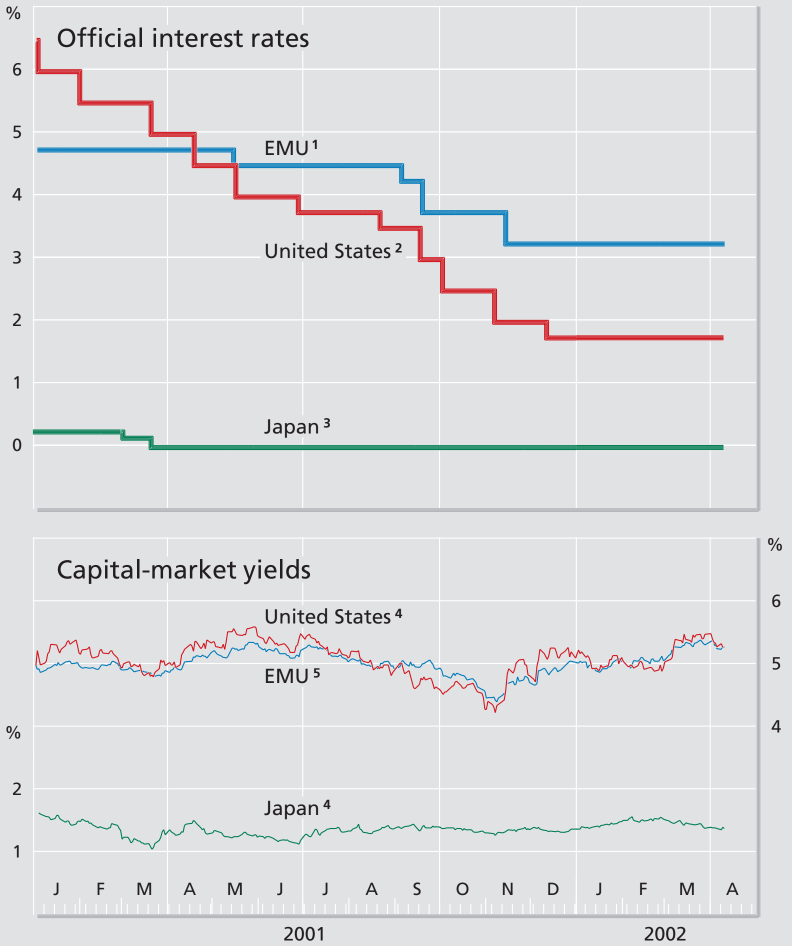
Buoyant economic growth in the CIS, but also risks for the future

Russia and the other members of the Commonwealth of Independent States (CIS) were also affected only marginally by the global downturn in growth on account of their comparatively low dependence on exports of industrial goods and the persistently abundant flow of receipts from oil. After China, that region

Major official interest rates and capital-market yields

Chart 3

Daily values



1 Main refinancing operations, minimum bid rate. — **2** Target for the Fed funds rate. — **3** Target for the overnight call rate. — **4** Yield on domestic government bonds outstanding with a residual maturity of about ten years, expressed in terms of an annual coupon. — **5** Average capital-market rate in the euro area (GDP-weighted yield on ten-year government bonds).

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showed the highest growth rates of economic output in the world, even though growth slowed down there, too, from just under 8% in the previous year to a good 6%. That, however, should not blind us to the fact that future developments involve risks. Should conditions in the oil markets ease again or prices of other raw materials fall, those countries could well be confronted with more serious problems again in the future.

Financial crises in Argentina ...

Last year, and even before that, Argentina and Turkey were faced with persistently serious financial and monetary crises. After it had become obvious, in the case of Argentina, that the country was politically incapable of implementing the radical reforms by which the looming national bankruptcy might have been averted, last autumn the International Monetary Fund had no option but to refrain from granting any further financial assistance for the time being. By means of (formally voluntary) debt-rescheduling measures and restrictions on payments (including on the withdrawal of domestic banknotes), the Argentine Government tried in vain to prevent the collapse of the monetary system, and to retain the fixed peg to the US dollar. Even so, in December 2001 the Argentine Government had to discontinue the servicing of its foreign currency liabilities as a result of a dramatic crisis of confidence and owing to a shortage of reserve assets. Moreover, under the impact of its economic problems, Argentina was obliged in January 2002 to abandon its earlier Currency Board regime, with the mostly foreign-owned banking system being particularly hard hit by the ordering of an asymmetrical conversion of dollar claims and dollar liabilities into pesos (in the ratio of 1:1 and 1:1.4), without the government having committed itself as to whether, and if so, how, it intended to compensate the banks. The new government, which took office at the beginning of 2002 after massive citizen protests, is facing the difficult task of creating a new confidence basis. That implies, above all, consolidating public finances, not misusing monetary policy to reduce the debt burden denominated in domestic currency, and lowering, in negotiations with private creditors, the high level of national foreign exchange debt to dimensions that are sustainable over the long term. In the absence of a credible adjustment programme, including these focal points, further international financial assistance is inconceivable.

... and Turkey ...

By contrast, conditions in Turkey did not come to a head in a similar way. At the beginning of last year, to be sure, political disputes there had resulted in a resurgence of the monetary and financial crisis which had been smouldering for years, and in the course of which the Turkish lira had been devalued by 52% against the US dollar. But in March 2001 the situation stabilised again, after the government had reached agreement with the IMF on a comprehensive programme of reform and further financial assistance.

... but no spread of the contagion to neighbouring countries

The events in both countries once again put the global financial system to an acid test. Hence it must be rated a success of the international efforts to maintain the system's stability that it at least proved possible to regionally contain the critical developments, and to stop them spreading to other emerging economies (unlike the situation during the crises in Mexico, South-East Asia and Russia during the 1990s). Even so, the difficulties in the said two crisis countries were not without adverse consequences for the emerging market economies in South-

East Asia and Latin America. In a number of cases, the formerly abundant inflows of funds on favourable terms largely dried up. The more cautious assessment of risks on the part of potential investors which this development reflects, and which has contributed materially to it, is not, however, to be deplored. Rather, it suggests that the right lessons have been learned in the financial markets from the experiences of the past decade. Due risk awareness on the part of market players not only reinforces the stability of the financial system and reduces its susceptibility to crises, it also gives the recipient countries the necessary incentives to engage in structural reforms and to exhibit greater transparency.

2 The economic performance of the European monetary union

(a) Macroeconomic trends

Distinct slackening of growth in 2001 ...

In 2001 aggregate output in the euro area grew more slowly than at any time since 1996. At 1½%, economic growth fell one-half of a percentage point short of the average pace of expansion between 1992 and 2000. Moreover, the growth of the real gross domestic product (GDP) – unlike the situation in the year 2000 – did not nearly keep pace with the expansion of potential output, which fell within a range of 2 to 2½%. Consequently, the degree of utilisation of productive capacity declined, and it seems to have averaged only a little above the standard level of utilisation in 2001.

... and its reflection in the domestic economy

The slowdown in growth began in the second half of 2000, when the steep rise in oil prices sapped the momentum of private consumption and also burdened enterprises' cost accounts. Moreover, investment activity was curbed by the sharp drop in equity prices from the spring of 2000, which increasingly hampered the procurement of equity capital through the issuance of new shares. Business conditions in the euro area cooled down appreciably in the later part of 2000, when contractionary forces progressively gained the upper hand in the United States, after an upswing lasting almost ten years. Hence the European economies entered the new year without much elan.

After the turn of 2000-2001, tax reforms came into force in a number of countries and resulted in a distinct upturn in households' nominal disposable income. Although that stimulated private consumption at times, the favourable effect on incomes was largely offset in the spring by the relatively heavy drop in the purchasing power of money. The price pressures eased after mid-year 2001, with the result that the previously imposed burdens diminished. However, this consumption-promoting effect was masked by the clouding of consumer sentiment on account of the terrorist attacks in the United States on 11 September. Taking the average of the year, inflation-adjusted private consumption increased by only 1¾%, compared with 2½% in 2000. The general slowdown in business activity and, later on, the "psychological" effects of 11 September adversely affected enterprises' propensity to invest. Aggregate real spending on new equipment and buildings was ¼% lower than a year before, when it had risen by 4½%. In addition, the sizeable liquidation of inventories in 2001 – after a similarly large accumulation of stocks in the preceding year – perceptibly curbed macroeconomic expansion. That alone reduced aggregate growth by one-half of a percentage point.

External economic considerations

The sluggish pace of domestic demand likewise depressed imports in the course of last year. As an annual average, they went up by no more than 1¾%, compared with 11% in 2000. The expansion of real exports (as defined in the national accounts) moderated to a similar extent during the year, namely from 12¼% to 3½%. A conspicuous feature here is that the intra-EMU merchandise exports included therein were tending to be weak as early as the beginning of 2001, whereas seasonally adjusted deliveries to countries outside the euro area remained at a high level right into the summer; thereafter, however, they tended to drop steeply. That qualifies the significance of the direct foreign trade channel as a transmission mechanism for adverse economic influences from abroad, at least in the initial phase of the downswing. Because the growth differential between total imports and total exports remained unchanged, by and large, the real foreign balance increased further; its share in the real GDP of the previous year rose by one-half of a percentage point to 2½%.

Signs of a cyclical improvement

The cyclical retarding effects in the euro area seem to have tailed off, however, in the meantime. At all events, seasonally adjusted industrial output did not decline any further in December-January. Moreover, the favourable economic signals have multiplied in the past few months. For instance, the indicator of industrial confidence has improved distinctly since the end of 2001. In addition, in January the order inflow was no longer rated as unfavourably as in October, and export expectations picked up, too. Consumer sentiment appears to have stabilised at the low level of last autumn. Altogether, there is plenty of evidence that the euro-area countries will benefit quite strongly from the global economic recovery that is in prospect. Because of the low level of output at the end of last

Economic performance in the euro area

Table 2

Country	Real gross domestic product		Consumer prices 1		Unemployment rate 2		Public sector financial balance 3	
	2000	2001 p	2000	2001 p	2000	2001 p	2000	2001 p
	Change from previous year in %				in %		as % of GDP	
Euro area	+ 3.4	+ 1.5	+ 2.3	+ 2.5	8.8	8.3	+ 0.2	– 1.3
Germany	+ 3.0	+ 0.6	+ 2.0	+ 2.4	7.9	7.9	+ 1.2	– 2.7
France	+ 3.1	+ 2.0	+ 1.9	+ 1.8	9.3	8.6	– 1.3	– 1.4
Italy	+ 2.9	+ 1.8	+ 2.6	+ 2.3	10.4	9.5	– 0.5	– 1.4
Spain	+ 4.1	+ 2.8	+ 3.5	+ 3.2	14.0	13.0	– 0.3	0.0
Netherlands	+ 3.5	+ 1.1	+ 2.3	+ 5.2	2.8	2.4	+ 2.2	+ 0.2
Belgium	+ 4.0	...	+ 2.7	+ 2.4	6.9	6.6	+ 0.1	+ 0.2
Austria	+ 3.0	+ 1.0	+ 2.0	+ 2.3	3.7	3.6	– 1.5	+ 0.1
Finland	+ 5.6	+ 0.7	+ 3.0	+ 2.6	9.8	9.1	+ 7.0	+ 4.9
Portugal	+ 3.4	...	+ 2.8	+ 4.4	4.1	4.1	– 1.5	– 2.2
Greece	+ 4.3	...	+ 2.8	+ 3.7	10.9	10.2	– 0.8	+ 0.1
Ireland	+ 11.5	...	+ 5.2	+ 4.0	4.2	3.8	+ 4.5	+ 1.7
Luxembourg	+ 7.5	...	+ 3.8	+ 2.4	2.4	2.4	+ 5.8	+ 5.0

1 Harmonised consumer price index (HCPI). — **2** Standardised unemployment rate according to calculations by Eurostat (ILO definition). — **3** As defined in the Maastricht Treaty, and in 2000 including the special revenue from the auction of UMTS licences.

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year, however, only a relatively low average annual growth rate of real GDP is to be expected in 2002.

Cyclical differences again weaker

The differences in growth rates within the euro area decreased further in 2001. The spread of expansion rates between the upper end of the growth scale, which is occupied by Greece (an estimated +4%) and the "bottom of the class", Germany (+½%), at 3½ percentage points, was distinctly narrower than a year before, when it ranged from 11½% in Ireland to almost 3% in Italy. In terms of the unweighted standard deviation, too, the differences within EMU have decreased from 2½ to almost 2 percentage points. But the standard deviation, weighted with the share in EMU GDP, shows only a small decrease in the scattering of the expansion rates, not least because the growth shortfall of Germany – the largest economy – relative to the EMU average in 2001, doubled to one percentage point.[1]

The marked weakness of growth in Germany in 2001 was mainly due to the ongoing adjustment process in the construction sector and the high degree of

1 Where countries have not yet published any annual figures on GDP growth, IMF estimates have been used as a basis.

susceptibility (which has been evident for quite a long time) to adverse influences from abroad. Last year, that was particularly apparent in the case of investment in machinery and equipment. Another characteristic feature of 2001 was that the pace of activity in most of the previously particularly dynamic countries slackened more than in the other member states. That applies especially to Finland, Ireland and Luxembourg, whose growth rates were 3½ to 5 percentage points lower. In the cases of Ireland and Finland, that was mainly because the demand for IT and CT products fell particularly sharply last year. Among the larger EMU member states, France and Italy turned out to be comparatively resilient.

Stagnation on the labour market

The decline in unemployment that had started (owing to favourable economic trends) in 1997 came to a halt in the course of 2001. As an annual average, the standardised unemployment rate, at 8.3%, was one-half of a percentage point below the average of the previous year. Since the last peak in underemployment at the beginning of 1997, the authorities have therefore succeeded in lowering the ratio of unemployed persons to the labour force by three percentage points. Altogether, there is much evidence that this owes something not only to temporarily strong economic growth but also to more employment-friendly labour-market structures in parts of the euro area. In 2001 it was above all the Dutch labour market that proved to be crisis-proof. In France, the number of unemployed has been rising again since May 2001; as an annual average, however, the standardised ratio dropped to 8.6%. In Italy and Spain the authorities have likewise succeeded in reducing unemployment further; even so, 9.5% and 13% of the labour force, respectively, were out of work there in 2001.

Improvement in price conditions

The temporary clouding over of prices in EMU gave way to a brightening in the course of 2001. After the inflation rate, as measured by the year-on-year rise in the HCPI, had risen to a peak of 3.4% in May, it moderated thereafter to 2.0% in December. Seasonally adjusted and viewed over the course of the year, price rises in the first half of 2001 amounted to 1.7%; in the second half of the year they were only 0.4%. Until the late spring, it was particularly higher energy prices and the steep increase in the cost of food (owing to animal diseases and the exceptionally bad weather conditions) that affected general price movements. After mid-year, oil prices tended to fall distinctly again and the upward trend in food prices slackened. In the field of industrial goods and services, price-setting proceeded more steadily. The index excluding unprocessed foodstuffs and energy, which is often used to characterise medium-term price trends, increased its difference from the preceding year right up to the autumn. As an annual average, the core rate was 2.0%, compared with an overall inflation rate of 2.5%.

Spread of inflation rates

The regional spread of inflation rates remained largely unchanged in 2001. As measured by the weighted standard deviation, it was nearly as wide as in 2000. As an annual average, the lowest price rises were again recorded by France, at a rate of 1.8%. All other countries were above the medium-term stability standard – some of them considerably so. In 2001, too, the unweighted average of inflation rates was distinctly higher than the weighted average inflation rate for the euro area. That was mainly because the inflation rates in the smaller countries were mostly higher than those in the larger member states, not least because of their generally more favourable economic performance.

(b) External economic developments of the euro area

Exports ...

With the slackening of global business activity, the merchandise exports of the euro area to the rest of the world distinctly lost momentum in 2001. At 6%, the annual outcome still shows a sharp rise in turnover; but that chiefly reflects the buoyancy of foreign business at the end of 2000. After the turn of 2000-2001, export business could largely be kept at the high level it had then reached, but it fell in the second half of the year. In volume terms, average annual merchandise exports to third countries rose appreciably more slowly, which was fully consistent with the much slower growth of export markets.

... and imports marked by slackening of economic activity

On the other hand, the growth of import turnover was curbed both by the sluggishness of aggregate demand in the euro area and by the decrease in oil prices. Especially at the beginning of the year, import values had dropped very markedly, and had gone on falling in the second half of the year. Taking the average of 2001, they fell slightly short of the previous year's figure in value terms. But since the prices of imports from third countries actually increased somewhat on average, on account of the steep rise during the preceding year, the real volume of imports declined even more, reflecting rather clearly the economic slowdown in the euro area.

Lower current account deficit

As a result of the cyclical slackening of import demand and the more favourable terms of trade, in 2001 the trade surplus of the euro area with third countries rose by €62½ billion to €74 billion. The current account likewise improved perceptibly; after a deficit of €70 billion had been recorded in 2000, the negative balance fell to €9½ billion last year, with the result that the current account was almost in equilibrium. Besides the massive surplus on merchandise trade, that owed something to the swing on services account, which showed a slight surplus (€1½ billion) in 2001, after a deficit of €5 billion in 2000. That surplus was accompanied, however, by distinctly higher net spending on factor income (€37½ billion, against €27½ billion in 2000). Current transfers, which also include net payments of euro-area countries to the EU budget, at €47 billion net, ran at about the same level as in the previous year.

Euro under slight downward pressure until the early summer ...

Towards the end of 2000, when the growth of the US economy started to flag, the euro ended its nosedive and began to gain distinct ground against other major currencies. After the turn of 2000-2001, however, it had to relinquish a large part of its gains. Yet, throughout the whole of last year, the lows of October 2000 marked a watershed which was not to be undershot again. The main reason for that was the trend against the US dollar, which was mostly determined in the first half of last year by hopes of a rapid recovery of the US economy, and less by corresponding changes in the current fundamentals.

... especially against the US dollar

For one thing, after the sharp downturn in US business activity, the growth differential between the United States and the euro area, which at times had been one of the mainsprings of the weakness of the euro/dollar rate, had shifted in favour of the euro area and, for another, the interest-rate advantage of the US dollar at the short end of the market was lessened by the interest-rate cuts with which the US Federal Reserve responded to the changed economic situation. At the same time, the yield differential between the bond markets of the two currencies had dwindled to zero. At times, indeed, it moved into negative figures. According to traditional notions, that ought to have contributed, in itself, to a weakening of the US dollar or a strengthening of the euro. But as regards rate formation in the foreign exchange market, it was evidently expectations about future developments that ultimately played the key role. Thus, the interest-rate measures taken by the US central bank made the prospects for the US economy appear in a more favourable light again, whereas, in the estimation of market players, the outlook for economic activity in the euro area was not improving much.

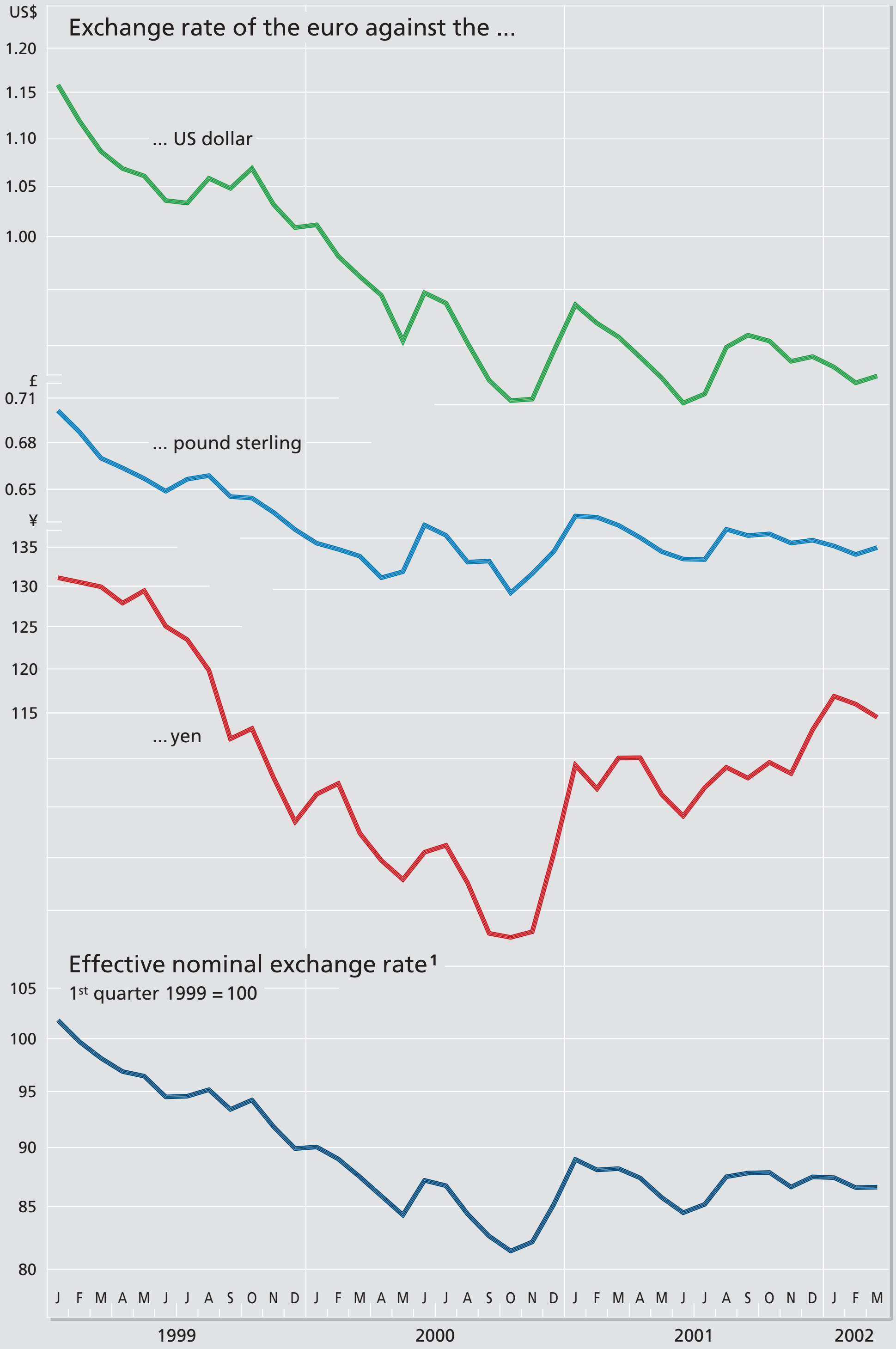
Stabilisation of the euro in the second half of the year

There was a marked adjustment of the rate against the US dollar only in the late summer, after the US central bank had drawn attention, in mid-July, to the risks still faced by US business activity, and the doubts obtaining as to a rapid recovery of the US economy had been reinforced by the publication of unexpectedly gloomy economic statistics from the United States. The US dollar was also ad-

Exchange rate of the euro

Chart 4

Monthly averages, log scale



1 According to calculations by the ECB, against the currencies of 13 or (from 2001 onwards) 12 countries.

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versely affected at times by the terrorist attacks of 11 September. But after the sense of security of market players had been somewhat assuaged, the US dollar regained the ground it had previously lost against the euro. In much the same way, the euro appreciated temporarily in connection with the successful introduction of euro currency at the beginning of January. Apart from these fluctuations, exchange-rate movements have been minimal since last autumn, the rate moving within a band between US$0.86 and US$0.92.

Divergent movements against sterling and the yen

Against the pound sterling, the euro exhibited much the same pattern as against the US dollar, although the fluctuations over the entire year were very limited. After the euro had appreciated markedly against the yen towards the end of 2000, exchange-rate movements against the Japanese currency were likewise comparatively small until late last autumn. Since then, however, the euro has once more appreciated noticeably against the yen. The main reasons for that were presumably market players' disappointment at Japan's inability to implement reforms and at the virtual incapacity of major macroeconomic policy areas to take action.

Effective exchange rate little changed

As a weighted average against the twelve principal partner currencies, at the beginning of 2002 the euro was a little higher than a year before. In the further course of the new year, too, the external value of the euro did not change much. In the light of the competitiveness of German exporters and their traditional pacemaker role in an upswing, these are, on the one hand, favourable prerequisites. On the other hand, in future, possible upward exchange-rate adjustments will be felt to be all the more burdensome by enterprises, the longer the enterprises have been accustomed to the decidedly low valuation of the euro by long-term standards. The foreign exchange markets might see "upside potential" if international capital flows were to shift further in favour of the euro area after the portfolio adjustments, which have largely been completed and which were sparked off by the changed monetary conditions following the transition to monetary union.

Lower capital outflows from the euro area

Rudiments of such a development were already manifest last year. While net capital outflows in the fields of securities transactions and direct investments reached a magnitude of €87½ billion in 2000, last year they amounted to only €53 billion. The principal reason for the lower net capital exports in those segments of capital movements – against the backdrop of a downward tendency overall in cross-border transactions – was primarily the perceptibly decreasing interest of euro-area residents in investments in third countries.

II Monetary policy and financial markets

1 The monetary policy of the Eurosystem

(a) Significant relaxation of monetary policy stance in course of year

Policy of lowering interest rates geared to medium-term price outlook

The Eurosystem continued its stability-oriented policy in the reporting year. The monetary policy decisions of the ECB Governing Council were invariably consistent with the assessment of the medium-term risks to price stability based on the two pillars of the Eurosystem's monetary policy strategy. This provided the foundation for an open and clear exposition of the Governing Council's decisions. The transparency of the factors underlying the decisions has also been enhanced since the end of 2000 by the biannual publication of Eurosystem staff macroeconomic projections for the euro area. As there was a gradual improvement in the outlook for stability last year, the Eurosystem gradually reduced official interest rates from the spring of 2001. These had been raised several times in 2000. Overall, official central bank interest rates were lowered by a total of 1½ percentage points. Owing to initially persisting risks to price developments, the Eurosystem was rather cautious in making these cuts. In the autumn months, when medium-term inflationary pressure was easing more significantly, the Governing Council made a fairly sharp cut in rates. By doing so, the Governing Council also intended to nip in the bud any potential systemic risks following the 11 September terrorist attacks in the United States and to counter any general uncertainty. As a result of its forward-looking monetary policy, the Eurosystem was able to keep expectations regarding medium-term price developments in line with its definition of price stability, thus playing a major part in creating an environment that was conducive to growth.

After pursuing a steady course in interest-rate policy ...

In the spring of last year the Governing Council of the ECB left official interest rates unchanged at the level reached in October 2000. The fact that risks to price stability emanating from the monetary side and from the real economy were more balanced than they had been towards the end of 2000 argued in favour of pursuing a steady policy course. The pace of monetary expansion and growth in lending was decelerating. The economy was slowing down, but estimates of growth for the euro area were still within the bounds of trend potential growth. The rate of increase in consumer prices did accelerate in the spring, but this was due mainly to special factors (agricultural crises/BSE and foot-and-mouth disease) and one-off effects (increases in administered prices and indirect

Record of domestic and external monetary policy measures

1 January 2001
Greece joins the Eurosystem, thus becoming the twelfth EU member state to adopt the euro.

4 January 2001
The Governing Council of the ECB decides to allot an amount of €20 billion in each of the longer-term refinancing operations to be conducted in 2001. It announces that it may adjust the amount allotted in the event of unexpected developments in liquidity requirements during the year.

10 January 2001
The Bank commissions the five German mints to strike one million DM1 gold coins to commemorate the phasing-out of the Deutsche Mark. The issue will start on 26 July 2001, the anniversary of the signing of the Bundesbank Act in 1957. The net proceeds of sales of the coins are to accrue to the foundation "Money and Currency" – which is yet to be established – up to the amount of DM100 million.

23 March 2001
The Central Bank Council endorses in principle the Federal Finance Ministry's proposals concerning the reform of the Bank's structure, which provide, *inter alia,* for a new Executive Board to be established as the Bank's central governing and decision-making body, and for the preservation of the Land Central Banks, though their present areas of sole responsibility and the involvement of the LCB Presidents in the management of the Bank are abolished. As far as the restructuring of financial supervision is concerned, there are, in the Central Bank Council's view, cogent reasons for integrating banking supervision in the Bank. In the event of the creation of a new cross-sector supervisory agency to oversee banking, insurance and securities-trading operations, the Bank must remain closely involved in ongoing banking supervision, and in the shaping of the regulatory framework.

29 March 2001
The Governing Council of the ECB decides that €1.6 billion of the ECB's profit for the year is to be transferred to the NCBs.

2 April 2001
The "Joint approach to putting euro notes and coins into circulation in the Federal Republic of Germany" is presented, under which 24 associations, several Federal Ministries and the Bank have agreed on a reference scenario for the changeover to euro currency.

4 April 2001
The Central Bank Council approves the Bank's annual accounts for the financial year 2000. The profit for the year, amounting to €8.35 billion, is paid over to the Federal Government.

4 May 2001
The Bank and the banking industry launch a public-relations campaign for an early return of D-Mark currency under the slogan "Don't sleep on it".

10 May 2001
The Governing Council of the ECB lowers the interest rates on the marginal lending facility and the deposit facility by one-quarter of a percentage point, to 5.50% and 3.50%, respectively, both with effect from 11 May 2001, and the minimum bid rate for the main refinancing operations conducted from 15 May 2001 onwards by likewise one-quarter of a percentage point, to 4.50%.

30 May 2001
The Federal Government approves the bill concerning the reform of the Bundesbank. The bill is essentially in line with the Central Bank Council's comments of 23 March.

5 July 2001
Further to its decision of 14 December 2000 regarding the frontloading of euro banknotes outside the euro area, the Governing Council of the ECB approves the frontloading of euro banknotes to non-euro-area central banks from 1 December 2001.

14 July 2001
The Bundesrat rejects the Federal Government's bills concerning the reform of the Bundesbank. *Inter alia,* it calls for the retention of the LCB Presidents' involvement in the Bank's management.

30 August 2001
The Governing Council of the ECB lowers the interest rates on the marginal lending facility and the deposit facility by one-quarter of a percentage point, to 5.25% and 3.25%, respectively, both with effect from 31 August 2001, and the minimum bid rate for the main refinancing operations conducted from 5 September 2001 onwards by likewise one-quarter of a percentage point, to 4.25%.

The Governing Council of the ECB discloses the final design of the seven euro banknotes and their security features.

1 September 2001
The Bank starts frontloading euro currency to credit institutions. The euro currency delivered to them is debited to the banks in three equal amounts on 2, 23 and 30 January 2002.

13 September 2001
To ensure orderly market conditions in the wake of the terrorist attacks on the United States on 11 September, the Eurosystem conducts liquidity-enhancing fine-tuning operations (for the first time, on 12 September). In addition, the Federal Reserve System and the ECB agree on a swap arrangement in order to meet euro-area banks' dollar liquidity needs.

17 September 2001
In a concerted action with other central banks, the Governing Council of the ECB lowers the interest rates on the marginal lending facility and the deposit facility, by one-half of a percentage point, to 4.75% and 2.75%, respectively, both with effect from 18 September 2001, and the minimum bid rate for the main refinancing operations conducted from 19 September 2001 onwards by likewise one-half of a percentage point, to 3.75%.

5 November 2001
The Bank puts into operation the new liquidity-conserving real-time gross large-value payment system RTGS^{plus}, which constitutes Germany's access to TARGET.

8 November 2001
The Governing Council of the ECB lowers the interest rates on the marginal lending facility and the deposit facility by one-half of a percentage point, to 4.25% and 2.25%, respectively, both with effect from 9 November 2001, and the minimum bid rate for the main refinancing operations conducted from 14 November 2001 onwards by likewise one-half of a percentage point, to 3.25%.

The Governing Council of the ECB decides that, with immediate effect, it will determine the ECB's monetary policy stance only at its first meeting in a month. Accordingly, interest-rate decisions will

Record of domestic and external monetary policy measures

(continued)

normally be taken at that meeting.

6 December 2001
The Governing Council of the ECB decides that, of the total value of the euro banknotes to be issued by the Eurosystem from the start of 2002, the ECB will be allocated a share of 8%, while 92% of the euro banknotes will be issued by the NCBs of the participating countries. Each NCB will show in its balance sheet a share of the banknotes issued corresponding to its share in the ECB's capital.

The Governing Council of the ECB decides that, for the purpose of calculating monetary income, all banknotes will be included in the monetary liabilities of NCBs from 2002. The effect of such inclusion will be phased in progressively under a transitional regime that is intended to cushion the impact on the NCBs' relative income positions. After the expiry of the transitional period, which continues until the end of 2007, the monetary income will be allocated fully in line with the NCBs' paid-up shares in the ECB's capital.

The Governing Council of the ECB reviews and reaffirms the quantitative reference value for monetary growth, namely an annual growth rate of 4½% for the broad aggregate M3.

17 December 2001
Credit institutions in Germany start selling euro-coin "starter kits". This measure is intended to familiarise the general public with euro coins, so as to enable them to use them in payments from 1 January 2002. Starter kits contain 20 euro and cent coins totalling €10.23, which is equivalent to DM20.

1 January 2002
Euro-denominated banknotes and coins become the sole legal tender in Germany. In line with the "Modified reference-date arrangement for the introduction of euro banknotes and coins", retailers and credit institutions continue to accept D-Mark currency until 28 February 2002. The Bank will continue to exchange DM banknotes and coins for euros indefinitely at the exchange rate fixed and free of charge.

The foundation "Money and Currency" is set up, with the aim of preserving and promoting public awareness of the importance of stable money. It will foster economic and juridical research in the field of money and monetary systems.

3 January 2002
As in the preceding year, the Governing Council of the ECB decides to allot an amount of €20 billion in each of the longer-term refinancing operations to be conducted in 2002. It reserves the right to adjust the allotment

amount in the course of the year, in the event of unexpected developments in liquidity requirements.

7 February 2002
ECB President Dr Willem F Duisenberg announces that he will step down as President of the ECB prematurely on 9 July 2003.

1 March 2002
The Bundestag approves the Act on the Reform of the Bundesbank (Seventh Act Amending the Bundesbank Act) and the Act Concerning Integrated Financial Services Supervision.

21 March 2002
The Governing Council of the ECB decides that €1.46 billion of the net profit of the ECB is to be transferred to the NCBs.

22 March 2002
The Bundesrat passes the Act on the Reform of the Bundesbank and the Act Concerning Integrated Financial Services Supervision. The new Bundesbank Act will take effect on 30 April 2002.

11 April 2002
The Central Bank Council approves the Bank's annual accounts for the financial year 2001. The profit for the year, amounting to €11.24 billion, is paid over to the Federal Government.

taxes), which did not have an adverse impact on inflation expectations. Even so, owing to possible second-round effects in the case of wages, upside risks to price stability still existed.

... first interest-rate cut in May

In early May the Governing Council cut official interest rates by ¼ percentage point as medium-term inflationary pressure had receded somewhat. In particular, monetary developments no longer represented a risk to price stability since the annual growth rate of M3 – including the then better quantifiable statistical distortions (due to the high level of marketable financial instruments acquired by non-euro-area residents included in M3) – had fallen below the reference figure of 4½ %. With the slowdown in economic growth, inflation risks in the context of the second pillar of the ECB's strategy also declined. Although the ongoing rise in consumer prices remained at over 2 % owing to special factors, pay restraint continued to be exercised by both sides of industry.

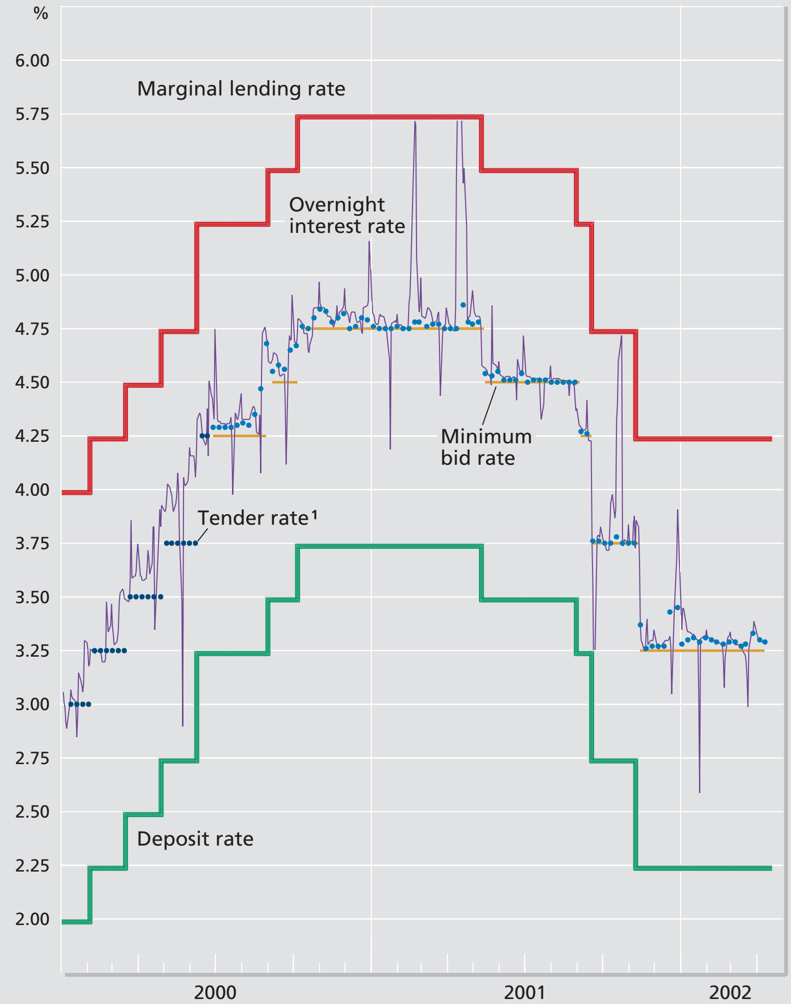
Sharp interest-rate cuts between August and November

After leaving rates unchanged in the summer months, the Governing Council of the ECB lowered official interest rates initially by ¼ percentage point at the end of August and then by ½ percentage point in mid-September and again in November. The interest-rate move in September was part of a concerted action with other central banks following the 11 September terrorist attacks in the United States. Since early November the rates of interest on the marginal lending facility and the deposit facility have thus been 4.25 % and 2.25 % respectively, and the minimum bid rate for the main refinancing operations has amounted to 3.25 %. The outlook for price developments improved significantly in the autumn months. The underlying pace of economic growth in the euro area slowed down further, contributing to a dampening of pressure on prices. The forecasts for future economic development were revised downwards several times. After the inflation rate had peaked at 3.4 % in May 2001, the rates of price increase declined successively thereafter. All the projections for 2002 and 2003 indicated that price stability would not be at risk over the medium term. Owing to intense competitive pressure, the changeover to euro banknotes and coins at the start of 2002 was expected to have a limited impact, at most, on consumer prices. The rapid pace of monetary growth did not run counter to the positive outlook for prices, since the former was mainly a reflection of portfolio effects owing to a comparatively flat yield curve, weakness in the share markets and the generally heightened uncertainty on the financial markets. Furthermore, the pace of growth in lending continued to decline. Since the late autumn the Eurosystem has been pursuing a steady monetary policy, leaving the official central bank interest rates unchanged. The formerly inverse yield curve on the

Official interest rates and overnight interest rate

Chart 5

Daily values



1 Interest rate for main refinancing operations; single allotment rate (fixed rate tenders) and, from 28 June 2000, marginal rate (variable rate tenders).

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money market has noticeably flattened since the November interest-rate cut, pointing upwards after the turn of the year.

Markets not surprised by Interest-rate moves

The Eurosystem's interest-rate cuts in 2001 were largely expected by the markets. There had been an inverse term structure on the money market since December 2000. Forward quotations on the money market invariably went down in the run-up to the individual adjustments in the official rates. Even so, the markets did not have perfect foresight, either in terms of the scale or the timing of the individual moves. The interest-rate cuts of mid-September and early November, for example, exceeded the expectations of some market players. Also, as early as February and April of last year – in other words, weeks ahead of the decision taken in May – there was distinct speculation about interest rates being lowered. Much the same happened again in October.

Underbidding in the main refinancing operations

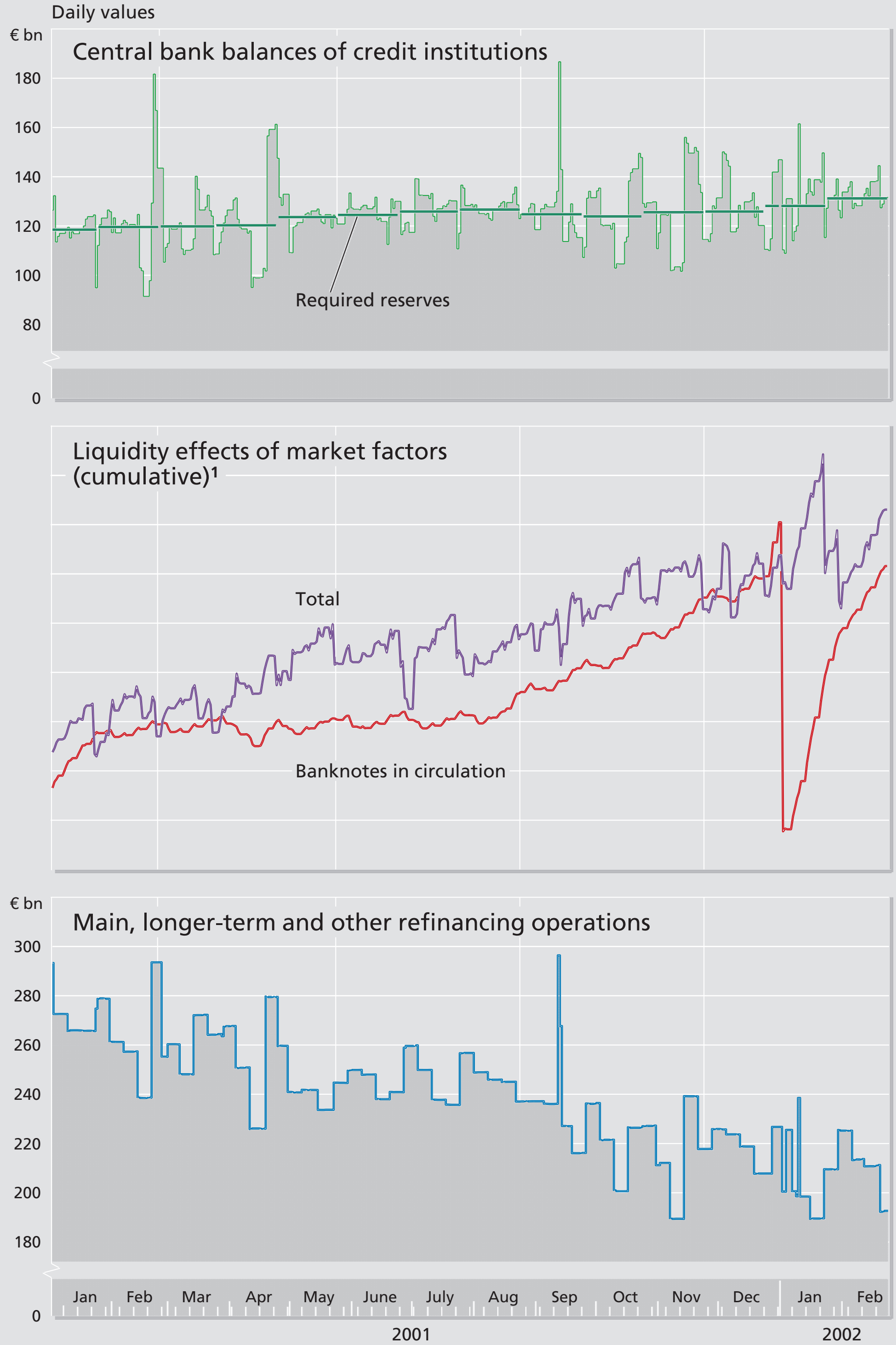
During such periods the overnight market interest rate (EONIA) and the marginal rate in the weekly variable rate tenders fell to the level of the minimum bid rate. Although the minimum bid rate proved to be an effective line of defence for the quotations on the market for overnight money, there was a decline in the level of the banks' participation in the main tenders, and the volumes of bids frequently remained below the short-term liquidity needs on the money market. The ECB did not counter this underbidding and the resulting shortage of funds by means of liquidity-providing fine-tuning operations – which would have relieved the banks of the risks of possible costs arising from their action – but, instead, by what tended to be a higher allotment amount in the next main tender of the same reserve period. Furthermore, the Eurosystem mostly left the banks a residual requirement, which they covered by making greater use of the marginal lending facility as part of their concluding minimum reserve arrangements. Accordingly, overnight money was quoted close to the marginal lending rate on several occasions at the end of the reserve maintenance period. A further outcome of the underbidding was a clear divergence in the tender volumes. In order to bring the amounts to be purchased more closely into line with each other again, at the end of April 2001 and in November 2001 the Eurosystem conducted an additional refinancing operation in the form of a variable rate tender simultaneously with the standard two-week tenders. The variable rate tender had a maturity of one week but otherwise the same terms and conditions. In this way, the Eurosystem regained the ability to provide liquidity flexibly and in line with requirements at all times by means of main tenders. In order to reduce the sets of expectations for underbidding in future, the Governing Council additionally announced that, from December 2001, it would be taking interest-rate policy decisions, as a rule, only at the first meeting in the month.

Ensuring orderly market conditions after 11 September

The Eurosystem responded immediately to the terrorist attacks in the United States on 11 September. When – despite a balanced liquidity situation – the overnight money market became tighter as an immediate reaction to the terrorist attacks, the Eurosystem countered this with liquidity-providing quick tenders with one-day maturities on 12 and 13 September. In doing so, it filled all bids amounting to a total of €69½ billion and €40½ billion respectively. This supported the normal functioning of the financial markets. The same holds true for the

Liquidity management in the Eurosystem

Chart 6



1 Banknotes in circulation, general government deposits with the Eurosystem, net foreign reserve assets of the Eurosystem and other factors; provision (+) or absorption (–) of central bank balances.

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swap agreements between the US Fed and the ECB, which served the purpose of covering the banks' dollar liquidity needs in the euro area.

Primacy of main refinancing operations

The instrumental implementation of monetary policy continued to be focused on the main refinancing operations. In 2001 their annual average volume amounted to just over €158 billion. The Bundesbank's business partners, which were generally net providers of central bank balances on the euro money market, accounted for roughly half of this amount. As in previous years, the volume of the main tenders had a share of around three-quarters in refinancing as a whole. The number of bidders per tender declined to an average of just over 300 during the year. Persistent expectations of lower interest rates and the advancing processes of concentration in the financial sector are both likely to have played a part in this. The marginal rates of allotment as well as the weighted average rates of all successful bids were in most cases close to the minimum bid rate, which thus fulfilled its function of signalling the interest rate policy stance and served as an anchor for interest rates on the money market. As before, the longer-term refinancing operations were offered as variable rate tenders. In line with the Governing Council's decision, at the start of the year, to raise the allotment amount by €5 billion per operation, the amounts purchased per basic tender in 2001 amounted in all cases to €20 billion. Their share of the overall refinancing volume remained more or less stable at around one-quarter (just over €57 billion on an annual average). German bidders accounted for over 60 % of that figure. The number of participants in the basic tender also declined. In early January 2002 the Governing Council decided to retain the allotment amount of €20 billion for the current year. As in previous years, most of the open market operations and credits raised through the marginal lending facility were collateralised by tier-one debt instruments. In 2001 there was a further increase in the number of links between securities settlement systems which are authorised by the Governing Council for the cross-border transfer of foreign collateral in monetary policy operations and which assist the integration of the financial markets in the euro area.

Liquidity management ...

In the year under review, the aim of ongoing money market management continued to be a prompt neutralisation of the liquidity effects that autonomous market factors have on the credit institutions' central bank balances and making it possible for the banks to fulfil their minimum reserve requirements in a comparatively steady manner. In doing so, the main factors which the Eurosystem had to take into account were the high level of volatility of government deposits within the euro area and the rapidly declining volume of banknotes in circula-

Factors determining bank liquidity *

Table 3

€ billion; changes during the period

Item	24 Feb 1999 to 23 Feb 2000	24 Feb 2000 to 23 Feb 2001	2001 – 2002: 24 Feb to 23 Aug	24 Aug to 23 Nov	24 Nov to 23 Feb	Total
I Provision (+) or absorption (–) of central bank balances by						
1 Change in banknotes in circulation (increase: –)	– 18.3	– 7.2	+ 7.2	+ 36.3	+ 5.1	+ 48.6
2 Change in general government deposits with the Eurosystem (increase: –)	– 8.2	– 7.8	+ 8.2	+ 2.7	– 3.5	+ 7.4
3 Change in net foreign reserves 1	+ 39.6	+ 10.1	+ 24.2	– 17.1	+ 1.0	+ 8.1
4 Other factors 2	– 35.3	– 22.1	– 15.5	+ 8.7	+ 7.9	+ 1.1
Total	– 22.2	– 27.0	+ 24.1	+ 30.6	+ 10.5	+ 65.2
II Monetary policy operations of the Eurosystem						
1 Open-market operations						
(a) Main refinancing operations	+ 26.3	+ 58.0	– 24.9	– 31.7	– 5.0	– 61.6
(b) Longer-term refinancing operations	+ 36.3	– 20.7	+ 10.2	+ 0.0	– 0.0	+ 10.2
(c) Other operations 3	– 30.0	± 0.0	± 0.0	± 0.0	± 0.0	± 0.0
2 Standing facilities						
(a) Marginal lending facility	– 3.7	+ 2.5	– 2.5	+ 0.1	+ 0.0	– 2.4
(b) Deposit facility (increase: –)	+ 1.1	– 0.2	+ 0.2	– 0.1	+ 0.2	+ 0.3
Total	+ 30.0	+ 39.6	– 17.0	– 31.7	– 4.8	– 53.5
III Change in credit institutions' current accounts (I + II)	+ 7.8	+ 12.6	+ 7.1	– 1.1	+ 5.9	+ 11.9
IV Change in the minimum reserve requirement (increase: –)	– 9.1	– 12.6	– 7.0	+ 1.1	– 5.6	– 11.6
Memo items: 4						
Main refinancing operations	130.9	188.9	164.0	132.3	127.3	127.3
Longer-term refinancing operations	70.5	49.8	60.0	60.0	60.0	60.0
Other operations	–	–	–	–	–	–
Marginal lending facility	0.1	2.6	0.1	0.2	0.2	0.2
Deposit facility	0.2	0.4	0.2	0.3	0.1	0.1

***** Calculated on the basis of daily averages in the last reserve maintenance period of the period under review. — **1** Including liquidity-neutral valuation adjustments at the end of the quarter. — **2** Including outright transactions and the issuance of debt certificates (overhanging from stage two). — **3** Figures for 1999 include monetary policy operations concluded in stage two and maturing at the start of stage three; excluding outright transactions and the issuance of debt certificates. — **4** Amounts outstanding on an average of the last reserve maintenance period of the period under review.

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tion in view of the approaching introduction of euro banknotes after the turn of the year. By contrast, the Eurosystem's estimates of liquidity needs (for the days up to the next operation or up to the end of the reserve maintenance period), which are published together with the announcement of the main tenders, had a stabilising effect on the overnight money rate (EONIA). Overall, the volatility of the very short-term money market quotations remained very limited. Major fluctuations in the overnight rate in 2001 were due to short-term liquidity shortages caused by prior speculative underbidding.

... under more difficult conditions in early 2002

With their introduction into circulation on 2 January, the euro banknotes were shown in the central bank balance sheets, and this led temporarily to an enormous expansion of banknotes in circulation. The equivalents of the euro cash (€133 billion in notes and just over €12 billion in coins) that was supplied in advance to the credit institutions were not all debited at the same time to the credit institutions' accounts at the central banks, however. Instead, one-third was debited on each of the dates of the main tenders on 2, 23 and 30 January 2002. This delayed debiting meant that the banks' refinancing costs were lowered. The precise scale and the timing of subsequent increases in the volume of euro banknotes in circulation since the start of 2002 and of the return flow of cash denominated in national currency were difficult to forecast over the short term. The additional demand for euro banknotes did, in fact, exceed the Eurosystem's expectations while the old notes flowed back more slowly than forecast. As a response to the resultant, unforeseeable shortages of liquidity, the Eurosystem held two quick liquidity-providing variable rate tenders in the first two weeks of January in addition to the usual main refinancing operations. The overall outcome was that the cash changeover in the euro area was also managed smoothly on the money market.

Lower refinancing needs

In the 12 months up to the end of February 2002, the credit institutions' refinancing needs were considerably less than in the preceding year (see the table on page 51). The rise in the minimum reserve requirement and the decline in the net foreign reserves (adjusted for the liquidity-neutral valuation adjustment and for interest income on foreign currency assets) did have the effect of withdrawing liquidity from the banks. This was accompanied, however, by major inflows stemming from the reduction of government deposits in the Eurosystem and the sharp decline in the volume of banknotes in circulation in the euro area. The market inflows of liquidity and the increase in the volume of the basic tender to €60 billion were offset by a sharp reduction in the main refinancing operations to €127.3 billion.

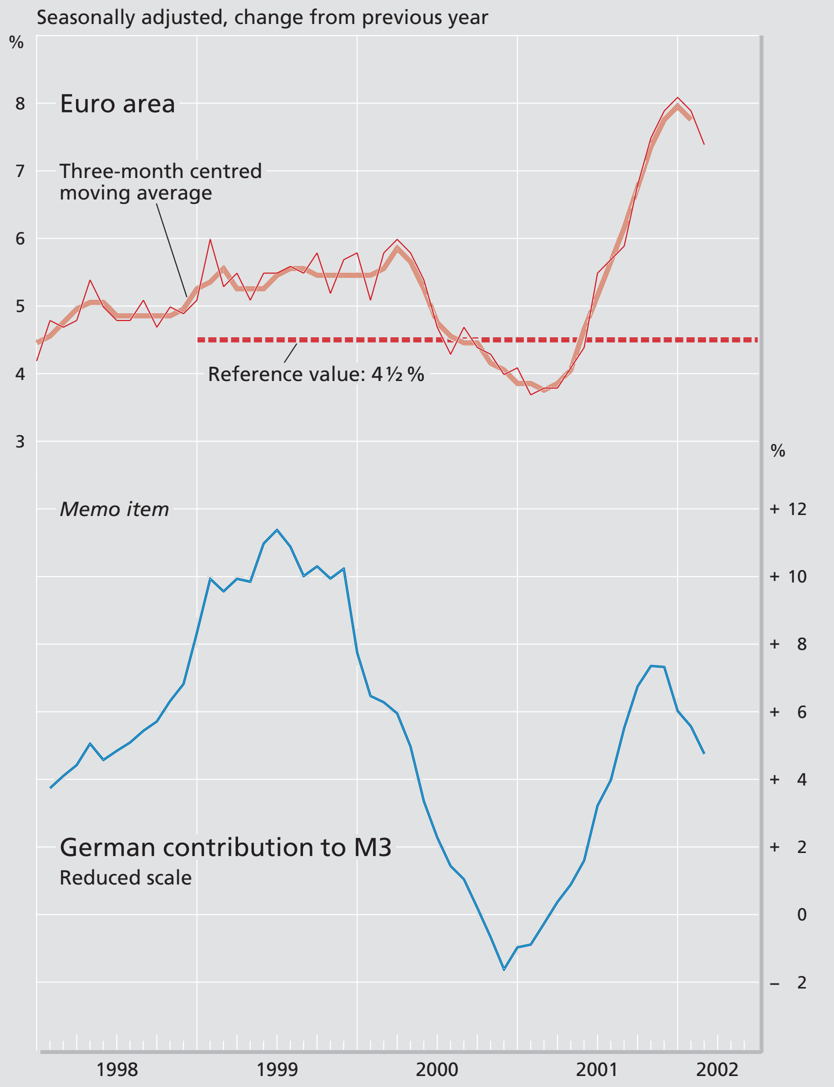
(b) Sharp monetary growth

Faster monetary growth

In the year under review, there was a sharp increase in the rate of M3 growth in the euro area. Owing to the largely weak monetary expansion in 2000, the moving three-month average of the annual growth rates of M3, adjusted for non-residents' purchases of marketable components, was still below the 4½ % reference value at the start of 2001 but exceeded it by an increasing margin from the spring months. On an average of the months of October to

M3 growth in the euro area

Chart 7



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December 2001, the monetary aggregate M3 was 7.8 % higher than in the corresponding period of 2000, compared with a year-on-year figure of 4.1 % in the final quarter of 2000. In February 2002 M3 was 7.4 % above its level a year earlier.

M3 growth due to temporary factors

The accelerated monetary expansion was due to a number of factors on the money demand side. In the first half of the year, a normalisation of the subdued dynamics of M3 in the previous year was probably among the contributory factors in this, as were larger cash holdings owing to the temporary sharp rise in the general price level. One indication of this is the fact that money holdings, in real terms, had already fallen below their long-term equilibrium value during 2000.[1] Moreover, monetary expansion had also been fostered by the persistently weak equity markets and the initially relatively flat yield curve. Later, demand for liquid and secure forms of investment contained in the monetary aggregate M3 again increased perceptibly owing to growing uncertainty about future economic developments – uncertainty that was intensified by the terrorist attacks on 11 September. At the same time, however, there was a further slowdown in the expansion of credit. Taking all factors into account, the recent strong monetary growth was determined, above all, by temporary portfolio shifts. For that reason it did not indicate inflation risks. The moderate monetary growth at the turn of the year seems to suggest that the portfolio-induced shifts are now gradually coming to an end. Even so, future monetary developments will require a careful analysis.

Development of M3 components

Of the components of the monetary aggregate M3, overnight deposits showed an especially large increase in the reporting year. Individuals, in particular, stepped up their liquid money holdings significantly although non-MFIs did so, too. The increase in sight deposits, however, was accompanied by an extremely sharp decline of €116 billion, or one-third, in the amount of cash in circulation. During the run-up to the introduction of euro banknotes and coins, especially in the second half of the year, currency holdings were massively reduced. In addition to a reduction in cash hoarded by euro-area residents, the large return flow of cash from outside the euro area also played a part in this. In 2001 there was a perceptible increase in deposits redeemable at notice of up to three months. These deposits had been run down on a very large scale in the previous year. In the case of deposits with agreed maturities of up to two years, the increase was noticeably smaller than in 2000. These contrasting movements are likely to be mainly a reflection of the fact that last year's decline in the rate of interest on short-term savings deposits was significantly less than that in the case of short-term time deposits which carry a market rate of interest. During the year, the interest rate spread of short-term time deposits over short-term savings deposits was halved. Short-term savings deposits additionally benefited from the decline in cash holdings. At an annual rate of just over 19½%, marketable financial instruments (repurchase agreements, money market fund shares/units, money market paper, and bank debt certificates with original maturities of up to two

1 This is the value produced based on the long-term money demand given GDP growth on the potential-oriented path and equilibrium short and long-term interest rates.

years) also expanded sharply in 2001.[1] These forms of investment were in demand especially in the second half of the year. Given their market rates of interest, they were particularly suited to parking funds over the short term in a secure, liquid and attractively remunerated way.

4½ % reference value retained

In its annual review of the reference value for monetary growth, the Governing Council of the ECB decided at its meeting on 6 December 2001 to reconfirm the existing reference value of 4½ % on the grounds that no change had occurred in the underlying benchmark figures. In addition to retaining the quantitative definition of price stability as an increase in HICP inflation for the euro area of below 2 %, the Governing Council adhered to the assumptions of medium-term growth in real GDP of between 2 % and 2½ % and a trend decline in M3 income velocity of between ½ % and 1 % per annum – the last-named including the adjustments made for marketable paper held by other euro-area residents outside Germany. As in the year before, the Governing Council stressed that decisive structural reforms in the labour and goods markets could achieve a significant increase in potential output growth in the euro area.

German contribution

The German contribution to M3 growth also increased sharply in 2001 after showing a slight fall in 2000. The faster pace of growth is revealed most clearly by the turnaround in deposits with an agreed notice of three months and by the sharp increase in overnight deposits. This was fostered by investors' marked preference for liquidity and the decline in the volume of currency in circulation. The distinct preference for liquidity was also reflected in a significant increase in the sale of money market fund shares/units and bank debt certificates with original maturities of one to two years. The latter are also likely to have benefited from portfolio shifts to the detriment of money market paper since the interest rate spread of the somewhat longer maturities had tended to increase in the course of the year.

1 It had become apparent that the marketable financial instruments issued by domestic MFIs were increasingly being acquired by other euro-area residents outside Germany, resulting in M3 growth being distorted upwards. In May 2000 the ECB therefore decided, as an initial step, to exclude the money market shares/units held by other euro-area residents outside Germany when calculating M3. This meant that reliable data on money market paper and short-dated bank debt certificates in euro-area countries other than Germany became available in November, making it possible to undertake a further adjustment of the monetary aggregate and bringing the statistical recording of M3 into line with its definition as the liquid assets of domestic non-MFIs held with MFIs located in the euro area.

(c) Determinants of monetary growth

Slowdown in growth of lending to private sector

In the year under review, lending in the euro area grew at a slower pace. MFIs expanded their credit to domestic enterprises and individuals by €470½ billion, ie one-quarter less than in 2000 when lending had been boosted by auctions of UMTS licences, large-scale corporate acquisitions, booming property markets in some parts of the euro area, and high levels of direct investment in countries outside the euro area. The year-on-year growth rate of lending to the private sector fell from 10% at the end of 2000 to just under 7% at the end of the reporting year. The slower pace of growth in the year under review is likely to have been due, above all, to weak euro-area economic growth as well as to the declining impact, or indeed absence of, the special factors mentioned above. This is indicated by the fact that private sector demand for credit successively decelerated in line with economic activity during the year. The slowdown affected all categories of large borrowers. Fewer loans were taken up by non-financial corporations and individuals, and for the purpose of housebuilding, than in 2000. The expansion of securitised lending by domestic MFIs to enterprises in the euro area, at €95½ billion in 2001, was only somewhat slower than in the previous year €102 billion. This was accompanied by a shift in emphasis from equities to bonds.

Securitised loans to general government show net rise

MFIs' lending to general government in the euro area increased only slightly in 2001. On balance, this rise was exclusively due to a growth of securitised lending, which went up by €12 billion, while direct lending was cut back by €9 billion. At the same time, central governments reduced their deposits with domestic MFIs by €27 billion. These deposits consisted largely of invested UMTS receipts, which the Federal Government used for redeeming equalisation claims amounting to €33 billion.

Monetary capital formation remains subdued

In a setting characterised by pronounced investor uncertainty, monetary capital formation with domestic MFIs was again low, at €173½ billion, in 2001. Excluding capital and reserves, monetary capital increased by no more than 3.4% during the year, compared with 3.1% in 2000. Interest in longer-term bank deposits disappeared entirely. Deposits with agreed periods of notice of over three months were run down by €11 billion, not least on account of the sharp decline in the interest rate advantage they had over short-term savings deposits. Deposits with agreed periods of notice of more than two years declined by €3½ billion. By contrast, at €110 billion, significantly more bank debt certificates with maturities of over two years were sold outside the MFI sector than in the previ-

Monetary developments in the euro area

Table 4

Changes in the course of the year

Item	Euro area 2000	Euro area 2001	*Memo item* German contribution 2000	*Memo item* German contribution 2001
	in %			
I Growth of the monetary aggregates 1				
M1 2	5.3	5.4	3.2	4.0
M2 3	3.6	6.3	– 0.8	4.0
M3 4	4.1	8.1	– 0.9	6.1
	€ bn			
II Money stock and its counterparts				
Money stock M3 (=1+2–3–4–5)	196.6	385.7	– 11.8	86.6
Currency in circulation and overnight deposits	111.5	103.0	17.6	25.9
Other shorter-term bank deposits	41.8	159.3	– 27.4	29.5
Marketable instruments	43.3	123.5	– 1.9	31.3
Balance sheet counterparts				
1 Credit to non-MFIs in the euro area	494.9	473.4	123.2	55.1
Credit to general government	– 135.1	2.7	– 10.4	– 19.6
Credit to non-MFIs in the euro area	630.0	470.7	133.6	74.7
2 Net claims on non-euro-area residents	– 142.3	1.0	– 24.7	60.2
3 Deposits of central government	21.0	– 27.1	23.1	– 20.5
4 Longer-term financial liabilities to other non-MFIs in the euro area	161.1	173.5	40.9	26.0
5 Other counterparts of M3	– 26.1	– 57.7	46.3	23.2

1 Seasonally adjusted. — **2** Currency in circulation and overnight deposits held by euro-area residents with MFIs in the euro area. — **3** M1 plus other shorter-term bank deposits held by euro-area residents with MFIs in the euro area (deposits with an agreed maturity of up to two years and deposits redeemable at notice of up to three months). — **4** M2 plus marketable instruments (repurchase agreements concluded by MFIs with non-MFIs in the euro area, debt securities issued with a maturity of up to two years and money market fund units and money market paper issued by MFIs in the euro area).

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ous year (+€70½ billion). Some of this paper is likely to have been bought by other euro-area residents outside Germany, however, which means that the low level of monetary capital formation shown in the statistics is, if anything, actually somewhat overstated.

Net external asset position virtually unchanged

In the year under review, the net external asset position of MFIs in the euro area remained virtually unchanged (+€1 billion) whereas it had declined by €142½ billion in 2000. In the first half of 2001, outflows of funds as a result of domestic non-MFIs' payment transactions with other euro-area countries still predominated. In the summer months, however, a reversal of the payment flows set in when German residents' investment in foreign equities waned perceptibly while residents outside the euro area continued to acquire domestic equities on a large scale – as they had started to do in the spring months.

2 The financial markets in the euro area

(a) Long-term bond rates affected by changing expectations of inflation and growth

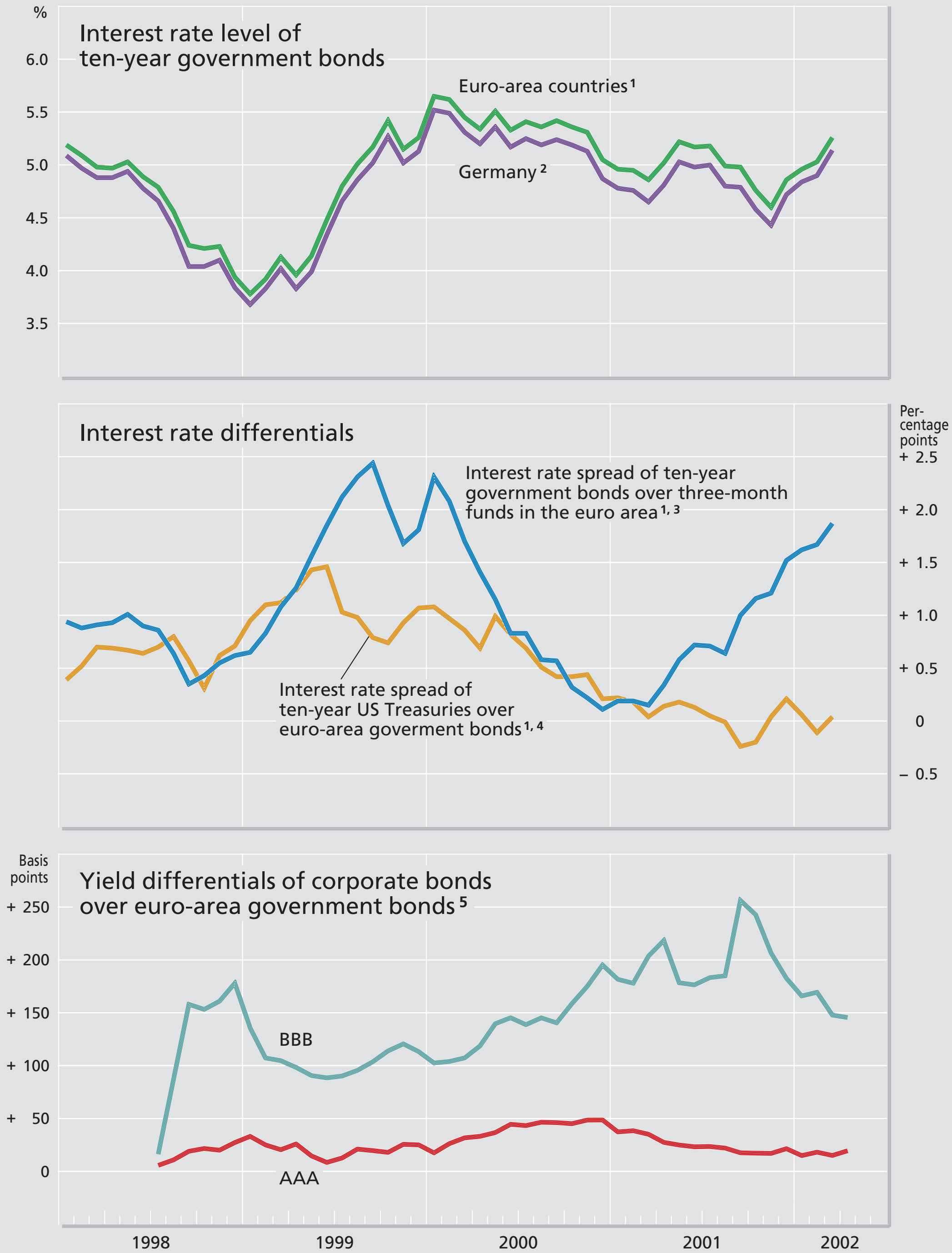
Interest rates

Despite fairly wide fluctuations in the course of 2001, there was little change in the euro-area long-term bond rates. The decline which began in the autumn of 2000 persisted initially. At the same time, the interest rate differential compared with the United States narrowed as a result of plummeting yields in the USA. As the year went on, long-term interest rates followed a largely parallel course on both sides of the Atlantic owing to the very similar economic climate in both areas. Burgeoning fears of inflation in the USA, in particular, led to a temporary increase in long-term interest rates in the second quarter; in the euro area this amounted to roughly ½ percentage point. Halfway through the year interest rates began to fall as the outlook for inflation and growth deteriorated; this fall gathered pace in the wake of the terrorist attacks on 11 September. At the start of November euro-area interest rates reached a low of just under 4½%. At the time of going to press (April 2002) they had climbed back up to just over 5¼%. This increase reflected, in particular, market participants' improved growth expectations at the end of the year, which were only partly backed by "hard" economic indicators. This discrepancy between market expectations and real economic indicators is also likely to have contributed to a temporary increase in interest rate uncertainty on the capital market, as measured on the basis of the implied volatility of options on the Bund Future. The gap between short-term and long-term interest rates widened distinctly during the year. This development was driven initially by the interest rate increase at the long end and then in the second half of the year by the Eurosystem's interest rate cuts. During the course of the year, real long-term bond rates went down, although they picked up again when nominal interest rates rose towards the end of the year as expected inflation remained comparatively low. Around the time of going to press, the ten-year bond rate adjusted for the expected inflation (based on Consensus Forecast surveys) was just under 3½%, slightly more than ½ percentage point

Interest rates in the euro-area bond market

Chart 8

Monthly averages



Source: Bloomberg. — **1** Euro-area capital market rate: GDP-weighted yield of ten-year government bonds of all euro-area countries. — **2** Unweighted yield on outstanding Federal securities eligible for delivery on Eurex with residual maturities of nine to ten years. — **3** Euro-area three-month funds: up to the end of 1998 GDP-weighted average of euro-area countries, thereafter three-month Euribor. — **4** Ten-year US government bonds. — **5** With a residual maturity of ten years.

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below the average of the past 40 years. Despite the most recent increase in interest rates, financing terms continued to be good.

Higher interest rate premium on corporate bonds even before 11 September

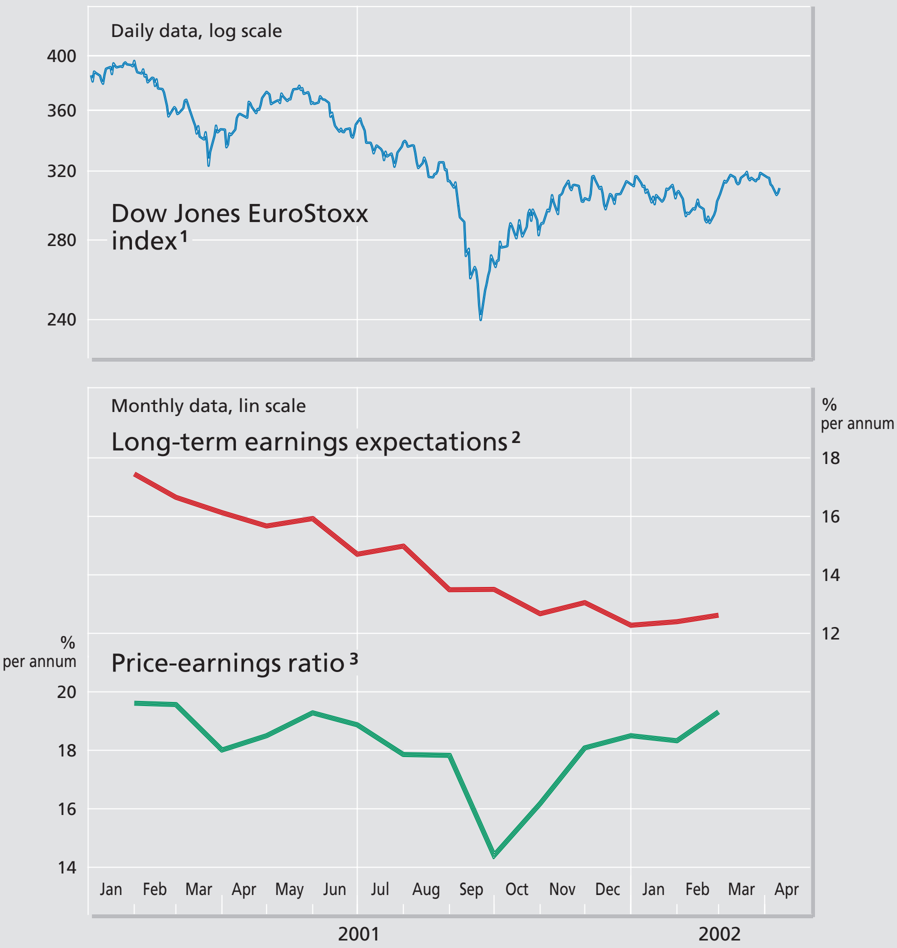
Market participants' changing economic expectations were also reflected in broad fluctuations in interest rate premiums on corporate bonds. In contrast to 2000, however, developments varied considerably across the different bond market sectors. In 2000 the interest rate premium on virtually all securities increased vis-à-vis benchmark bonds as the economy slowed down. In the year under review the upward trend continued only in the case of securities with a lower credit rating. In the spring of 2001 the yield on BBB-rated bonds was almost 250 basis points higher than that on Federal bonds (Bunds), compared with a mark-up of 120 basis points in 1999. Following a temporary lull, interest rate spreads for these bonds widened again in the summer. In the weeks following 11 September they soared rapidly to more than 300 basis points. Since then, the spreads of BBB-rated bonds have being narrowing again, in keeping with more upbeat economic expectations on the markets; at the time of going to press, they were around 160 basis points. The yield premiums of higher-rated securities were not subject to ups and downs of this sort. They had been declining from their peak at the end of 2000 and were hardly affected by the events of 11 September. The interest rate spreads between government bonds of the various euro-area countries were somewhat down on one year previously.

(b) Sharp fall on the equity markets

Share price movements

The virtually continuous decline in share prices from their peak in March 2000 persisted well into autumn 2001, gathering more speed immediately after the attacks of 11 September. Shares in airline companies, banks and insurance companies were especially affected by the slump. As in the United States, the downturn did not last long, however, and the market participants' more positive economic expectations worked through to prices on the equity markets. As early as the end of October, euro-area share prices were back to their level before the terrorist attacks. Despite the more favourable economic outlook, they declined again at the start of 2002. Investor uncertainty relating to the questionable accounting practices of some enterprises in the United States is likely to have been the major factor in this development. The decline did not last long, however, and gave way to a strong recovery at the end of February. Nonetheless, the broad EuroStoxx index fell by just over one-third from its peak in March 2000.

Share prices and earnings expectations Chart 9



1 End of 1991 = 100. Source: Deutsche Börse AG. — **2** Based on analysts' estimates according to I/B/E/S of earnings of enterprises on the Dow Jones EuroStoxx index in the next three to five years. Source: Thomson Financial. — **3** Based on current earnings expectations for 12 months according to I/B/E/S. Source: Thomson Financial.

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Valuation levels

In 2001 share price movements were not linked to a fundamental revaluation of share prices. The price-earnings ratio of European equities receded from its peak of 27 in spring 2000 to figures of just under 20 at the start of 2001. Subsequently, however, it remained steady at that level (apart from the price collapse immediately following the attacks). By contrast, market analysis shows that long-term earnings expectations more or less paralleled share prices up to the summer but then ceased to do so. Both the sharp decline in prices after 11 September and the strong recovery towards the end of the year far exceeded the changes in long-term earnings expectations. All in all, these expectations declined more sharply than share prices, which raises questions about current valuation levels. However, the valuation of share prices is far from straightforward and is fraught with considerable uncertainty. One indication of this is the currently high standard deviation between assessments by different analysts. It is therefore difficult to reach any definite conclusions about the appropriateness of the current level of share prices.

3 The financial markets in Germany

(a) Economic downturn leaves its mark on the German capital market

Federal bonds as the euro-area benchmark

In 2001 ten-year Federal bonds (Bunds) maintained their benchmark position in the long-term sector of the euro bond market. The key role played by the Bund derives not only from the large volumes of individual issues, which are vital to the liquidity of a secondary market, but also from the status of the Bund future as the most important instrument for trading interest rate risks in the euro area. However, compared with the government bonds of other euro-area countries, the interest bonus of ten-year Federal bonds, which is linked to their benchmark function, went down by roughly ⅓ percentage point in the second half of 2000 to 18 basis points at the end of the period under review. One of the reasons for this is the worsening of the public sector budgetary position. Concern about a future shortage of Federal bonds had previously emerged in view of the large proceeds from the auction of UMTS licences and the favourable economic climate in summer 2000 and had depressed the yields on Federal bonds in comparison with other bonds. However, such fears were no longer a factor.

Declining bond sales

In 2001 there was a further increase in the volume of bonds issued in the German bond market. Despite a rise in gross sales (€809 billion from €740 billion in the previous year), net sales after redemptions and changes in issuers' holdings of their own bonds decreased from €158 billion to €87 billion. At the same time, foreign issuers sold more bonds than one year previously (€94 billion compared with €71 billion). All in all, recourse to the German capital market was of the order of €180 billion. Domestic credit institutions, in particular, sold far fewer of their own debt securities (€56 billion net) than in 2000 (€120 billion). As in 2000, the largest losses were in sales of public Pfandbriefe, the amounts outstanding of which fell by €9 billion. At €33 billion, sales of debt securities of specialised credit institutions were also well down on the previous year (€54 billion). General government borrowing in the bond market rose by €16 billion, which was also less than in 2000 (€25 billion). The Federal Government sold

Sales and purchases of securities

Table 5

€ billion

Period	Sales					
	Bonds		Equities		Investment fund certificates	
	Total	*of which* Foreign bonds	Total	*of which* Foreign equities	Total	*of which* Investment funds open to the general public
1997	170.1	41.9	61.1	49.7	74.5	16.1
1998	214.2	56.6	127.5	102.6	95.9	19.9
1999	292.7	94.7	150.0	114.0	111.3	37.7
2000	229.2	71.2	138.5	115.8	117.7	39.7
2001	180.4	93.7	80.1	62.5	95.9	35.5
2001 Q1	52.7	32.0	12.5	8.4	30.3	12.1
Q2	39.2	29.8	53.5	50.5	13.3	5.6
Q3	43.8	7.4	0.9	– 3.6	14.2	4.5
Q4	44.7	24.6	13.2	7.2	38.2	13.4
	Purchases					
	Non-residents		Domestic non-banks		Domestic credit institutions (including Bundesbank)	
	Domestic bonds	Domestic equities	Bonds	Equities	Bonds	Equities
1997	65.6	11.6	30.8	45.1	73.7	4.4
1998	88.4	51.0	21.8	66.2	104.0	10.4
1999	136.9	46.5	81.1	84.9	74.7	18.6
2000	72.6	– 17.7	65.1	133.0	91.4	23.3
2001	22.9	86.8	121.6	8.1	35.8	– 14.7
2001 Q1	– 5.1	5.9	35.0	– 23.2	22.8	29.8
Q2	– 1.4	71.4	17.5	8.1	23.1	– 26.1
Q3	17.1	10.5	34.8	6.6	– 8.2	– 16.3
Q4	12.3	– 1.1	34.3	16.4	– 1.9	– 2.2

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more bonds, in the amount of €43 billion; these were offset, however, by redemptions of various special fund securities amounting to €50 billion. By contrast, the *Länder,* whose budgetary position worsened perceptibly, had far greater recourse to the bond market, at €23 billion, than in the previous year (€7 billion). At €15 billion, sales of corporate bonds exceeded the record achieved in 2000 (€13 billion). However, this kind of paper still does not play a major role in the German bond market.

Bond purchases

In 2001 domestic non-banks purchased €122 billion net worth of debt securities, thus overtaking the credit institutions (€36 billion) as the leading new investor on the bond market. In contrast to the previous year, foreign investors played only a secondary role. They acquired domestic paper with a market value of €23 billion, barely one-third of the previous year's figure. At the banks, the trend towards internationalisation of securities portfolios continued; on balance they purchased only foreign bonds and notes (€38 billion). Among the non-banks, however, domestic securities (€66 billion) and foreign bonds (€56 billion) were roughly in balance, with the share of foreign bonds in their portfolios showing little change. Most of the foreign bonds sold in Germany were denominated in euro. A large share of foreign paper in bond portfolios is therefore not necessarily accompanied by a broader spread of currency risks.

Shares

In 2001 share prices performed somewhat better in Germany than in the rest of the euro area. However, they were only able to recover some of the ground lost since the marked slump in prices which began in March 2000. In mid-April 2002 the broad CDAX index was almost 40% below the record figure recorded in spring 2000. The Neuer Markt was particularly affected by the fall in prices. Although quotations in the technology-oriented market sector initially made a particularly impressive recovery from their low following the terrorist attacks on 11 September, the NEMAX All-Share index fell by nearly 90% compared with its March 2000 position. The unfavourable development of share prices left its mark on the primary market too. Although 17 enterprises made IPOs on the Frankfurt stock exchange between January and July 2001 (10 of them on the Neuer Markt), the market for new issues then came to a standstill. Between August 2001 and February 2002 there were no IPOs on the Frankfurt stock exchange. All in all, sales of domestic shares amounted to €18 billion (market value) in 2001, compared with €23 billion in 2000. Most of these were, however, unlisted. Sales of foreign shares fell by just under half to €63 billion. Taken together, domestic and foreign shares to a market value of €80 billion were sold in 2000. On balance, purchases of participating shares were mainly made by foreign investors (€87 billion). The share portfolios of domestic non-banks increased by €8 billion, although this conceals major shifts from domestic to foreign paper. Much as in the case of the comparatively large volume of German shares purchased by non-residents, one exchange of shares played a major role in the context of a corporate takeover. By contrast, domestic credit institutions sold €15 billion worth of paper.

Market for venture capital

In 2001 the growth of the German market for venture capital was less dynamic than in previous years. Whereas venture capital investment companies had added €3½ billion to their portfolios in 2000, in the year under review invest-

Net borrowing in
the German capital markets

Chart 10

1 At market value less redemptions and changes in issuers' holdings of their own bonds. — 2 Sales at market values. — o From 1999 in euro.

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ments after deduction of disposals increased by only €2½ billion to €16 billion. The main reason for this loss of momentum is likely to have been the collapse of prices on the Neuer Markt and the associated lack of IPO activity. This meant that venture capital financiers lost an important alternative investment route. The hi-tech sector was particularly affected. Its share in venture capital investments fell from 48% in 2000 to 36% in 2001. The reduced propensity of investors to enter into new projects was evident from the lower share in start-up financing which covers the financing stages of business concept development and the setting-up of an enterprise. Owing to statistics being extended to some large buy-out investors, corporate takeovers gained in significance, particularly in traditional sectors. The reduction in sales options for venture capital projects was reflected in the overall losses, which doubled. Meanwhile, trade sales were down, while buy-backs by former associates became a slightly more important factor.

Investment funds

The unfavourable development of stock market prices also affected the investment sector. For the second year in succession, sales of share certificates issued by domestic investment funds were slightly in decline, with funds open to the general public and specialised funds being equally affected. In 2001 they sold €36 billion and €41 billion worth of certificates respectively. At €19 billion, non-resident funds were well down on their previous year's figure of €33 billion. Funds open to the general public were able to offset at least some of the sharp losses in share-based funds (€5 billion compared with €39 billion in 2000) by an increase in open-end real estate funds and money market funds. In the case of specialised funds, most of the resources raised came from mixed funds, which may to a certain extent shift paper from shares to other types of securities. In the long run the "Riester pension" is opening up new perspectives for fund business, leading to expectations of a certain increase in and a stabilising of the total amount of incoming funds.

(b) No further stock exchange consolidation in Europe

Little progress in stock exchange consolidation

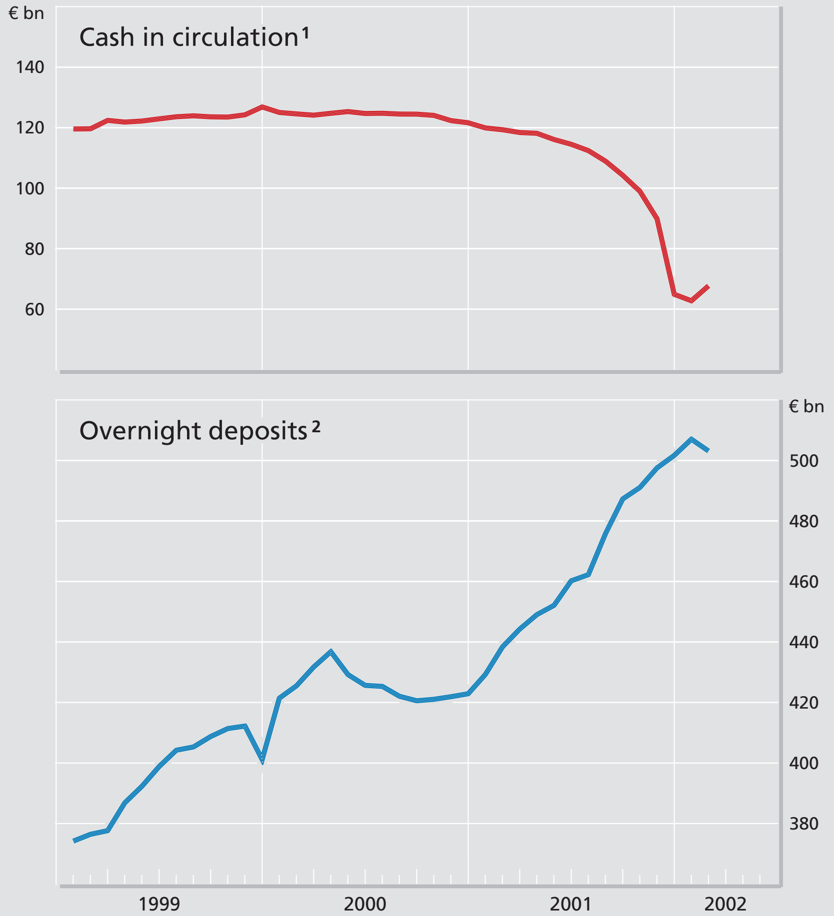
European stock exchange consolidation more or less marked time in 2001. More than 70% of stock exchange trading in Europe was carried out in almost equal proportions by the three major blocs of Deutsche Börse, Euronext and the London Stock Exchange. All three stock exchanges have the critical size needed for a "go-it-alone" approach and are therefore not directly affected by pressure to consolidate. The Deutsche Börse and Euronext used IPOs to increase their capital, thus acquiring the liquidity needed for further takeovers. The transactions financed in this manner, especially Deutsche Börse's acquisition of complete control of the securities settlement company Clearstream, tended, if anything, to reinforce the bloc-building currently going on in Europe. Euronext strengthened its derivatives business by purchasing Liffe, the London futures exchange, and may well constitute a clear counterweight to Eurex in future.

Despite multiple quotations, relatively high concentration of liquidity per security

The fragmented stock exchange scene in Europe is frequently held responsible for the alleged lack of a consolidation of liquidity on the cash stock markets. In fact, the shares of numerous enterprises are listed in various countries. However, this is put into perspective when the situation is examined more closely since, Cash in circulation and overnight deposits in Germany

Chart 11

Seasonally adjusted, end-of-month



1 Excluding MFIs' cash holdings; up to December 2001 cash in circulation in Deutsche Mark, thereafter in euro (the Bundesbank's euro banknotes in circulation as per the accounting procedure selected by the Eurosystem and the euro coins put into circulation by the Bundesbank) plus Deutsche Mark banknotes and coins still in circulation. — **2** Credit balance of domestic non-banks at German MFIs.

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generally speaking, trading is generally clearly focused on the home market. It is therefore irrelevant whether a security's home market is a small or large national stock exchange. So far, the parallel electronic exchanges have done little to change things. Their share of turnover in relation to the home market is negligible even in the case of European blue-chip securities. There are therefore hardly likely to be any advantages to be gained from concentrating trading on a European stock exchange solely for reasons of liquidity.

(c) Uneven development in the investment and lending business of German MFIs with domestic customers

Sharp increase in overnight deposits

In 2001 domestic investors added considerably to their overnight deposits at German MFIs. These deposits went up by €83 billion, or just over 19%, compared with €22½ billion, or 5½%, in 2000. The pace of the increase was particularly rapid at the start of the year and in early autumn. This evident clear preference for liquidity is likely to be essentially due to the same factors which underpin the acceleration of M3 growth in the euro area as a whole (see page 52). In addition, Deutsche Mark cash holdings were shifted into overnight deposits in the second half of the year. To an extent, however, the reduction in the volume of cash in circulation was caused by return flows of banknotes from abroad.

Strong growth in short-term savings deposits and ...

... moderate growth in short-term deposits

In 2001 deposits with an agreed maturity of three months also benefited from the release of stockpiled cash. They were also in demand because their remuneration had become more attractive. Short-term savings rates – including special savings forms with a higher rate of interest – decreased far less than the interest rates on comparable fixed-term deposits, with the result that the interest rate advantage of short-term deposits dwindled perceptibly. In 2001 a total of €11½ billion was added to savings deposits with a three-month period of notice, compared with a reduction of €53½ billion in 2000. At €16 billion, however, there was noticeably less interest in deposits with an agreed maturity of up to two years than there had been in 2000 (+€27 billion). Instead, investors focused more strongly on other types of short-term investment; for example, in 2001 shares in German money market funds recorded their highest growth since their upward leap in 1994.

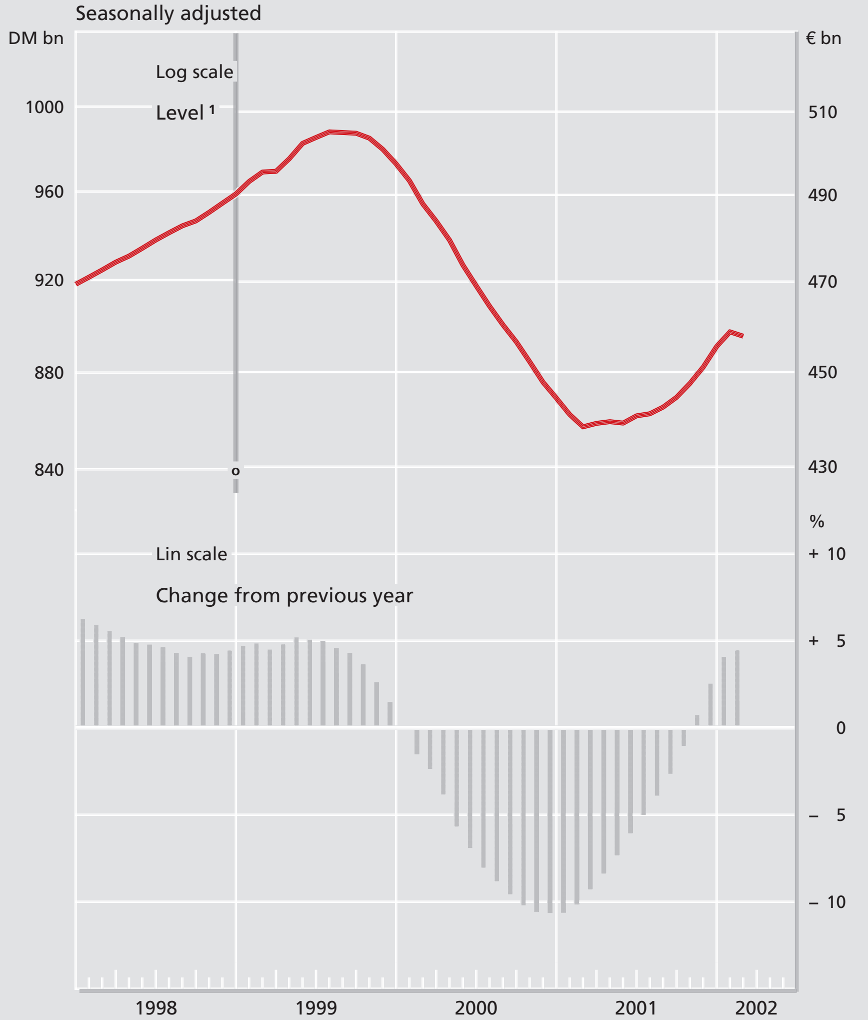
On balance, decrease in longer-term bank deposits

Of longer-term bank deposits, deposits with an agreed maturity of more than two years increased by €5 billion only, which meant that their growth was again down on the previous year (+€11 billion). In particular, there was little interest in longer-term time deposits among domestic insurance companies. Deposits with an agreed period of notice of more than three months were run down by €10½ billion, after having been increased by €13 billion in 2000, when conditions were attractive. In the majority of cases, longer-term savings deposits are likely to have been converted into short-term deposits.

Lending by German MFIs to the domestic private sector was very weak in 2001. Loans expanded by a mere €50½ billion, or 2%, compared with €116½ billion,

Short-term savings deposits
of domestic non-banks at German MFIs

Chart 12



1 End of month; statistical changes eliminated. — **o** From 1999 in euro.

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Weak lending to the private sector

or 5%, in 2000. First, having reduced their share holdings perceptibly, domestic MFIs only purchased €2½ billion worth of securities issued by German enterprises in 2001, compared with €27½ billion in the previous year. Second, the deterioration of the economic outlook and the associated uncertainty put a definite damper on households' and enterprises' propensity to borrow from domestic MFIs despite financing terms being favourable. There was virtually no increase at all in consumer loans and lending to the private business sector increased only marginally. The decline in borrowing by the corporate sector affected all business areas but was particularly marked in the services sector. The manufacturing sector even reduced its level of debt slightly. There was also decidedly little take-up of loans for home-building, which mirrored the ongoing unfavourable situation in housing construction.

Further reduction in lending to the public sector

German MFIs reduced their lending to the domestic public sector by €26½ billion in 2001. Unsecuritised loans shrank by €10 billion, following a decrease of €7 billion in the previous year. Securitised loans fell by €16½ billion. On balance, these consisted solely of equalisation claims which the Federal Government redeemed at the start of January 2001 and which German MFIs had held in the amount of €28½ billion. Correspondingly, the Federal Government's deposits with German MFIs declined in 2001 (-€20½ billion); these had been built up by almost the same amount in 2000 with the proceeds from the UMTS auction (+€21½ billion)

(d) Developments in the banking sector

Lending operations by bank category

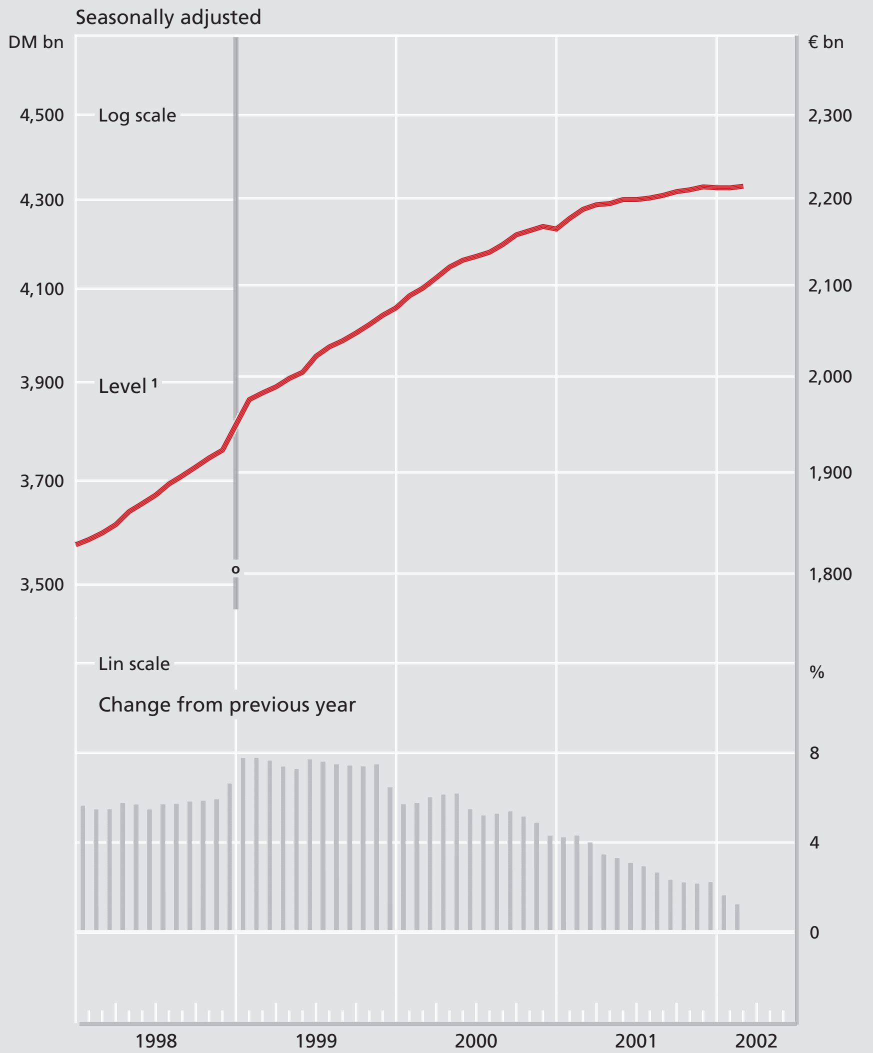
In 2001 it was mainly the banks with special functions, the savings banks and the *Land* banks which expanded their market share of lending to domestic non-banks. The overall 6% increase in their unsecuritised loans was, for the banks with special functions, just under 3½% and, for the savings banks and *Land* banks, just under 3% stronger than unsecuritised lending by the banking sector as a whole (1½%). The regional and other commercial banks also made an increase in their loans that was well above average (just over 3%). However, as the big banks simultaneously reduced their lending to domestic non-banks by 2½%, the commercial banks only recorded a moderate overall increase in their unsecuritised loans to domestic non-banks. The credit cooperatives held on to their market share with an increase of 1½%. By contrast, lending by mortgage banks remained practically unchanged and the regional institutions of credit cooperatives cut back their loans to domestic non-banks by slightly more than 10½%.

Provisional earnings trend in 2001

The income of the German commercial banks had already come under pressure in financial year 2000. According to the information currently available, a further worsening of their earnings position is to be expected for financial year 2001 overall. In terms of the balance sheet total, the operating result and the pre-tax profit for the year are likely to show a further decline. Given that the yield curve has been flat for some time, the interest rate spread has probably narrowed further. In the light of perceptibly lower stock exchange turnover, net commission income is likely to have declined too. It is difficult to estimate the result in own-account trading because of the at times turbulent developments

Loans to enterprises and individuals in Germany

Chart 13



1 End of month; statistical changes eliminated. — o From 1999 in euro.

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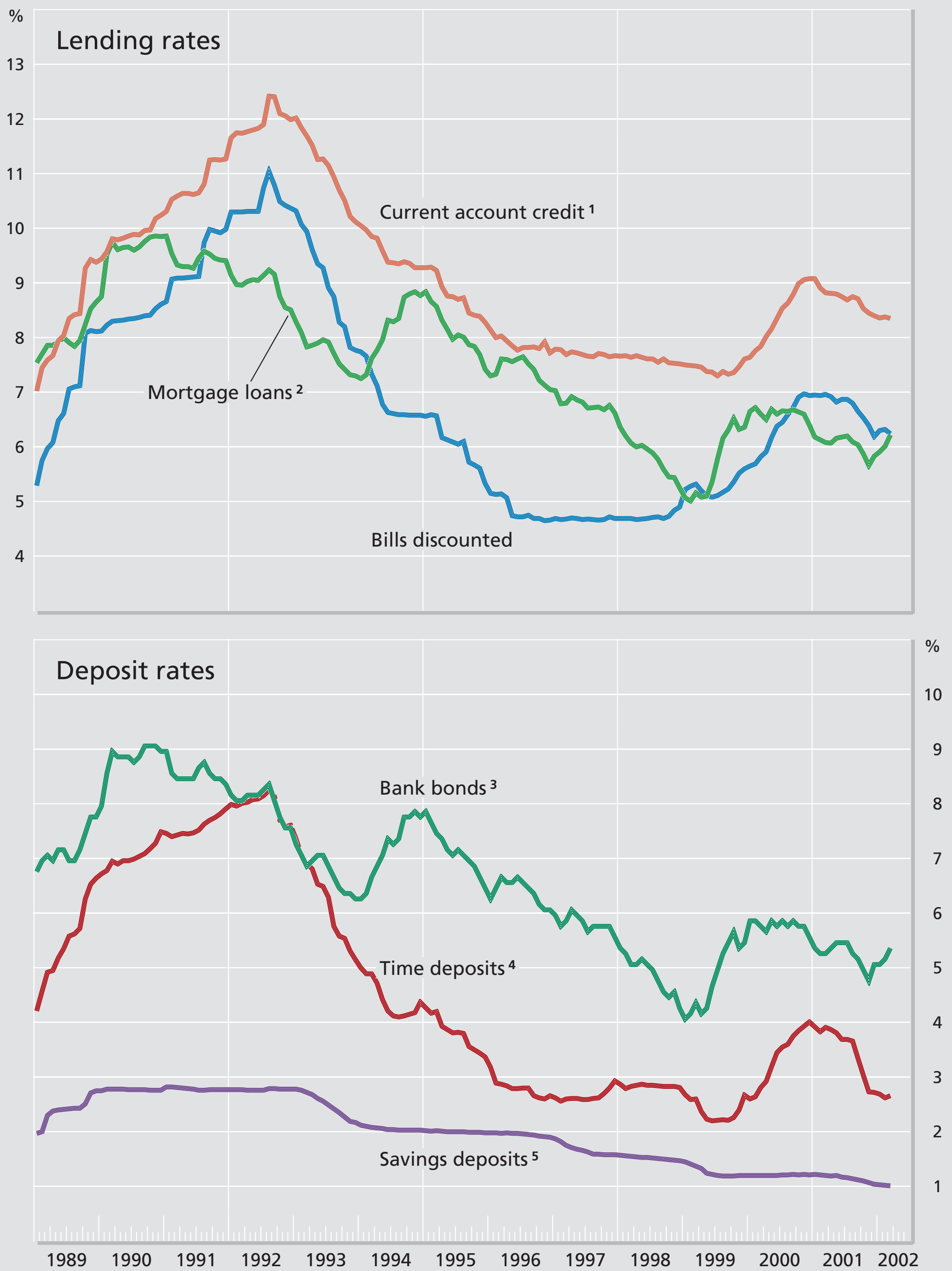
on the financial markets. In addition, the situation is not helped by the fact that net income or net charges from the valuation of assets is likely to be affected by an appreciably higher need to write off loans and advances – not only on account of the unfavourable economic situation but also due to developments in Argentina. By contrast, there will probably be very few write-downs of fixed-interest securities. The sale of some financial assets has also had the effect of stabilising income. Administrative expenditure remained steady at a comparatively high level. The announced extensive cost-cutting measures, some of which have already been introduced, will impose a number of additional tem-

Selected bank interest rates *

Chart 14



* Since January 1991 including the rates applying in the new *Bundesländer*. — **1** Of €500,000 and more but less than €2.5 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 €50,000 and more but less than €500,000. — **5** Up to the end of June 1993 savings deposits at statutory notice, thereafter at three months' notice; earning minimum/basic interest.

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porary strains. This means that a significant improvement in cost structures can be expected only over the next few years.

Ongoing structural change

In line with the no more than moderate increase in lending in 2001, the share of loans to domestic non-banks in the balance sheet total – calculated as an average of all banks – fell by more than 1½ percentage points to just over 47%. In the case of savings banks and credit cooperatives, whose loan business with domestic customers had been more or less stable for a fairly long time, this share was also down; nonetheless, at 67½% and 65½% respectively, it remained well above average. As an average of all banks, the share of loans to non-resident non-banks went up to 9% and interbank loans increased slightly to 35½%. The development which had been observable for some time therefore continued in 2001. In terms of liabilities, the share of non-bank deposits in overall borrowing increased slightly to just under 37½%; this was due to domestic customers' marked preference for liquidity, and the sharp increase in sight deposits in particular. Year on year the number of credit institutions went down by 219 to 2,521. This decrease mainly affected credit cooperatives. However, consolidation continued among the savings banks. Finally, there were some large-scale mergers among the regional institutions of credit cooperatives and in the case of the mortgage banks.

III Economic trends and economic policy in Germany

1 Sharp economic decline with high risks

Overall balance in 2001 disappointing

The year 2001 represented an exceedingly difficult period in the present economic cycle for German trade and industry. Initially, many had held on to the hope that the trend towards stagnation which had emerged in the summer of 2000 could be increasingly overcome during the year, but this hope was not fulfilled. Instead, the contractionary forces gained further ground in the second half of the year and have also clearly left their mark on the labour market since the autumn. Real gross domestic product grew by no more than ½% compared with an impressive rate of 3% a year earlier. This meant that once again Germany's economic performance was among the poorest in the euro area. Furthermore, the country's cyclical downturn was even greater than the euro-area average if it is measured in terms of the decrease in the rate at which macroeconomic capacity was being utilised.

Debate about recession

This was one of the main grounds for the hypothesis that the German economy was already in a recession which economic policy makers had to avert with vigorous short-term countermeasures. Traditionally, however, a recession has been defined as a serious demand-side disturbance in the macroeconomic equilibrium with self-perpetuating downward forces. Analysing growth rates without regard to the levels of macroeconomic output and capacity utilisation is just as inadequate as a failure to take account of the time dimension. It is true that the global shock to sentiment following the events of 11 September caused a rapid increase in risk potential for a time. Yet the prospect of a resumption in growth in 2002 remained unaffected. The stabilising effects and recovery trends which set in at the turn of 2001–02 and which have now become apparent confirm this opinion.

International environment: old and new transfer channels

The cyclical downturn in the United States and the clouding of the international economic climate which partly resulted from it had a decisive impact on the German economy in 2001. Even so, this occurred to a lesser extent through the direct "foreign trade channel" than had been the case in previous downturns. This time the cyclical weakness was transmitted by other means, notably through the more tightly integrated financial markets, closer corporate ties and a similarity in mood internationally. This is also apparent from the findings of the Ifo business survey, namely that export expectations in Germany were already becoming less optimistic in the summer of 2000 whereas the number of transactions concluded did not begin to decline – from what was already a very high level – until the end of 2000 and did so, moreover, at a slower rate than expected. In the case of export deliveries large order books meant that the positive trend actually continued into the third quarter of 2001 before a decline set in here, too. The fall in demand expected on international markets and the loss of confidence worldwide were among the factors that induced German enterprises to revise their investment plans distinctly downwards. The poor climate on international stock markets, which made it increasingly difficult for enterprises, especially young ones, to acquire capital through the issue of new shares, probably also played a role here. In many cases the pessimistic sales expectations were also a reason for extensively reducing warehouse stocks.

The change in the international environment is by no means the only explanation for the striking downturn in macroeconomic expansion in Germany last

Key economic variables in Germany

Table 6

Percentage change from previous year

Item	1998	1999	2000	2001
Growth (real) [1]				
Private consumption	+ 1.8	+ 3.1	+ 1.4	+ 1.1
Government consumption	+ 1.2	+ 1.6	+ 1.2	+ 1.7
Expenditure on machinery and equipment	+ 9.2	+ 7.2	+ 8.7	– 5.0
Buildings	– 1.0	+ 1.5	– 2.5	– 5.8
Other investment	+ 10.7	+ 13.7	+ 8.9	+ 6.0
Stockbuilding				
Change (in € billion)	.	– 8.1	+ 7.1	– 17.1
Domestic demand	+ 2.4	+ 2.6	+ 2.0	– 1.0
External balance of goods and services [2]				
Change (in € billion)	.	– 13.2	+ 20.2	+ 30.7
Exports	+ 6.8	+ 5.6	+ 13.2	+ 4.7
Imports	+ 8.9	+ 8.5	+ 10.0	+ 0.1
Gross domestic product	+ 2.0	+ 1.8	+ 3.0	+ 0.6
Contribution to GDP growth in percentage points				
Domestic demand (excluding stocks)	+ 1.9	+ 3.0	+ 1.6	– 0.1
Stockbuilding	+ 0.5	– 0.4	+ 0.4	– 0.9
External balance of goods and services	– 0.4	– 0.7	+ 1.1	+ 1.6
Employment				
Employed [3]	+ 1.1	+ 1.2	+ 1.6	+ 0.2
Average working time per employed person	– 0.4	– 0.7	– 1.0	– 1.0
Total number of hours worked	+ 0.7	+ 0.5	+ 0.6	– 0.8
Unemployed (in thousands) [4]	4,279	4,099	3,889	3,852
Western Germany	2,904	2,756	2,529	2,478
Eastern Germany	1,375	1,344	1,359	1,374
do. as percentage of the civilian labour force	11.1	10.5	9.6	9.4
Western Germany	9.4	8.8	7.8	7.4
Eastern Germany	18.2	17.6	17.4	17.5
Prices				
Consumer price index	+ 1.0	+ 0.6	+ 1.9	+ 2.5
Producer prices of industrial products [5]	– 0.4	– 1.0	+ 3.4	+ 3.0
Overall construction price level	– 0.2	– 0.3	+ 0.7	+ 0.2
Import prices	– 3.2	– 0.5	+ 11.2	+ 0.6
Export prices	– 0.1	– 0.5	+ 3.5	+ 1.0
Terms of trade	+ 3.2	– 0.0	– 6.9	+ 0.3
GDP deflator	+ 1.1	+ 0.5	– 0.4	+ 1.3
Productivity and labour costs				
GDP per hour worked by employed persons [1]	+ 1.3	+ 1.3	+ 2.3	+ 1.4
Compensation per hour worked by employees [3]	+ 1.5	+ 2.0	+ 2.3	+ 2.8
Labour costs per unit of value added in real terms in the economy as a whole [6]	+ 0.2	+ 0.7	– 0.1	+ 1.4

Sources: Federal Statistical Office; Federal Labour Office. — **1** At 1995 prices. — **2** Balance of transactions in goods and services with the rest of the world. — **3** Work-place concept. — **4** As defined by the Federal Labour Office. — **5** Domestic sales. — **6** Gross compensation generated in Germany per hour worked by employees divided by real GDP per hour worked by employed persons.

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Weakness in growth is home-made

year. Another detrimental factor was the further deterioration in the readjustment crisis faced by the construction industry. Although consumer spending by individuals and the state had a stabilising effect on balance, it did not increase nearly enough to offset negative developments, especially in investment.

Exogenous shocks and a flat growth trend

The year 2001 has again highlighted Germany's difficulties in starting off a process of growth borne by domestic demand or in keeping it going. This fact carries all the more weight as the growth path in Germany over the past decade has been fairly flat both in a historical context and by comparison with that of many other countries, given an annual average German growth rate of 1½% of real gross domestic product. It is not difficult in such circumstances for negative exogenous shocks to retard the upward movement markedly or even – as happened during 2001 – to bring it to a standstill.

Macroeconomic policy in 2001 underpins economy

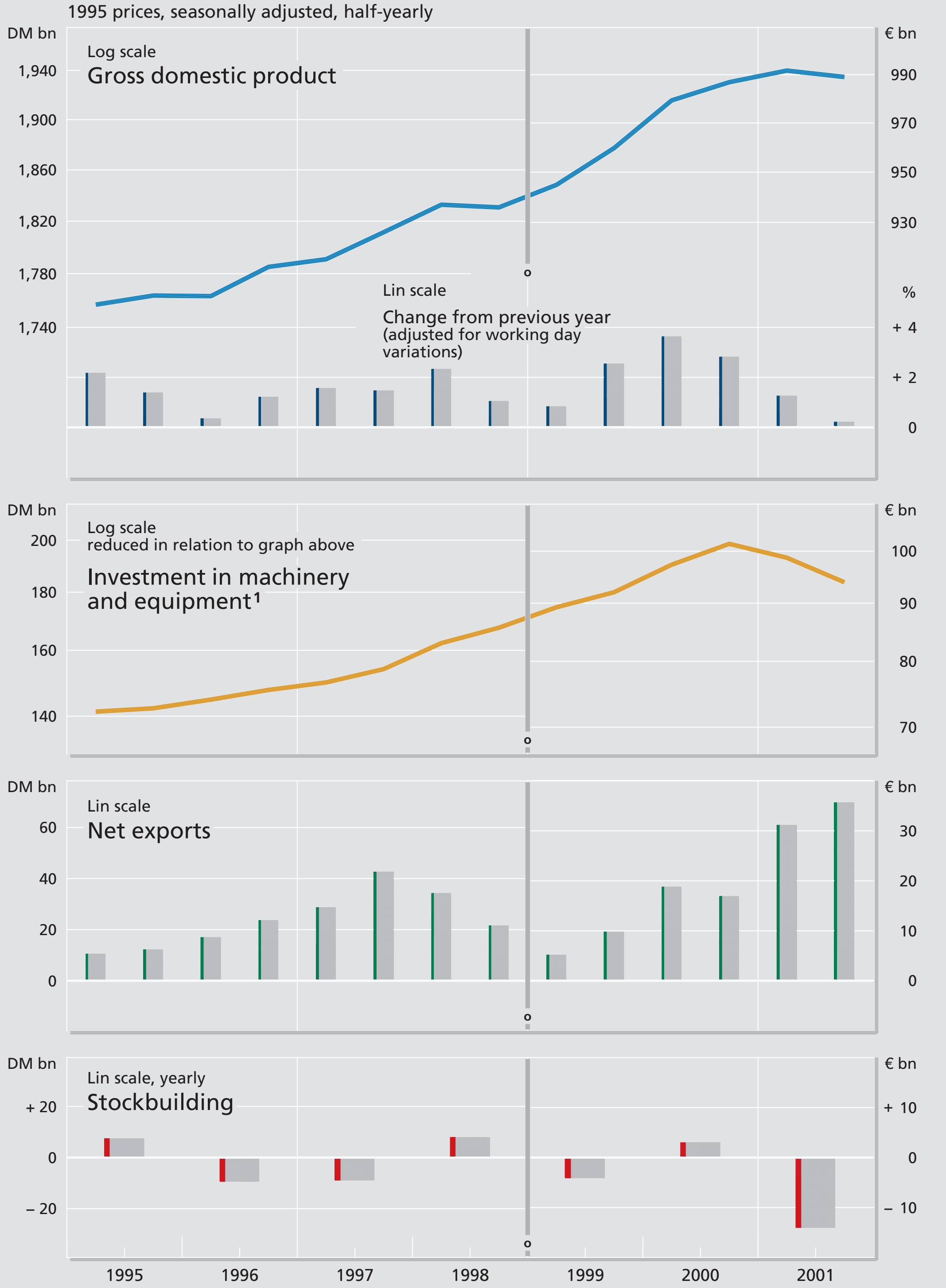
In view of the increasing international division of labour, advanced global integration, especially of the capital markets, and the consequently stronger and, more importantly, faster transfer of global shocks to the domestic economy, it is important to fashion the underlying domestic market conditions in such a way that the expansionary forces are permanently fostered and the likelihood of failures is thereby reduced. The tax reform and the associated relief for enterprises and individuals represented a major change of course in this regard. It was also an important means of boosting the economy in Germany at a difficult time. Monetary policy makers also assisted in adding to stability with the interest rate cuts that were introduced in May 2001 even if the full impact of these measures is likely to be felt only gradually owing to the usual time lag.

External stimuli wane

Sooner or later, global economic weakness had to affect exports. After a record year in 2000, when real exports of goods and services had grown by more than 13%, the increase in exports last year declined to 4¾%. Even so, that represented a further strengthening of Germany's external position in 2001 because the foreign markets of German exporters and world trade as a whole grew far less. Even if these gains in market share can be partly explained by the euro's earlier depreciation against major currencies, they are also an indication that German exports are regionally well diversified and in view of the quality of the range of goods offered are highly competitive. As real imports, which had risen by 10% in the previous year, stagnated in 2001, real net exports provided an even greater boost of just over 1½ percentage points to macroeconomic growth than in the previous year. However, such a mechanical analysis of the balances ignores the fact that the restrained movement in imports last year has to be seen first

Gross domestic product and selected expenditure components

Chart 15



1 Including other assets. — o From 1999 data in Euro.

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and foremost in connection with the weakness in overall demand and can therefore be largely explained endogenously. Another factor is that some exports were probably taken from stock and therefore did not stimulate production, or at least did not do so directly. Consequently, external stimuli through foreign trade were much less pronounced last year.

Investment in machinery and equipment slumps

Gross fixed capital formation, which declined by almost 5% in 2001 after increasing by 2¼% in 2000, had a particularly detrimental effect on macroeconomic growth last year. This is primarily a reflection of the fact that real fixed capital formation (including other assets) declined by 3½% whereas in the previous three years it had grown on average at an annual rate of 8½%. This is yet another illustration of how responsive industrial investment is to global shocks and risks. Another possible factor was that acquisitions which had been planned for 2001 were brought forward to 2000 owing to the less favourable write-down arrangements from 1 January 2001 following the introduction of the first stage of the tax reform; these acquisitions were then absent, so to speak, in 2001. There was also a marked reduction in the range of financing options during both 2000 and 2001. As mentioned elsewhere, it became increasingly difficult after the end of the bull market to acquire equity capital by issuing new shares, for example. Raising loan capital probably also became harder as a result of the hefty markdown in the market value of equity capital. Even so, the decline in investment in machinery and equipment can be put into perspective by the fact that, owing to the momentous surge in investment over the previous few years, the investment ratio of 10%, measured in terms of the relationship between real capital investment (including other assets) and gross domestic product, had reached a level in 2000 that was last recorded in the boom year of 1991. Last year the investment ratio measured in this way was still almost 1 percentage point higher than its average during the 1990s.

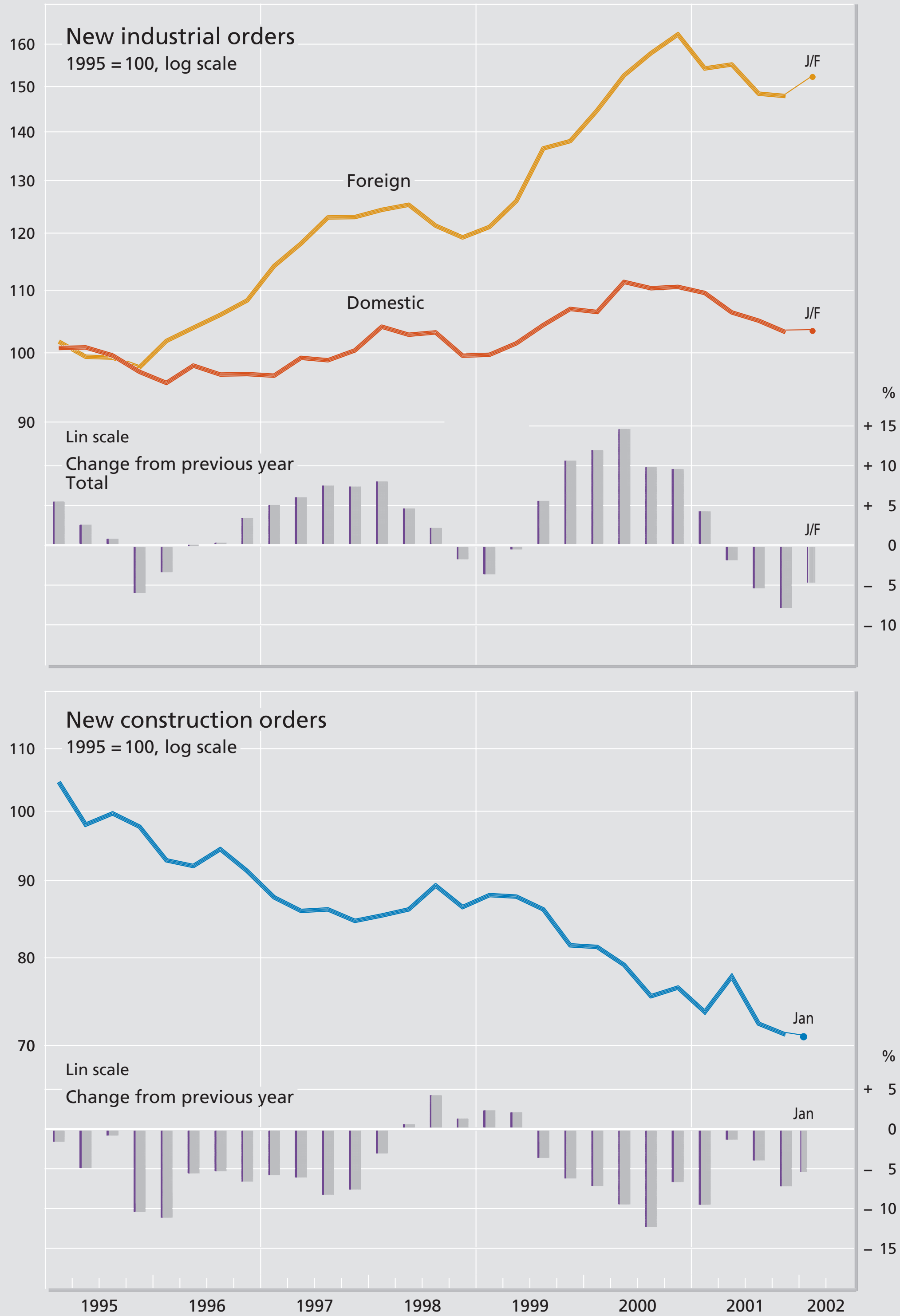
Adjustment crisis in construction worsens

The structural adjustment crisis in the construction industry, which continued to worsen during the year under review, proved yet again to be a special type of problem. In view of the large stock of unoccupied properties, the fall in the number of people living in eastern Germany and the generally satisfactory provision of residential accommodation in western Germany, investment in housebuilding, when calculated at 1995 prices, was no less than 7% below the previous year's level. However, the decline in investment in non-residential buildings also accelerated further, a development which may to some extent be associated with the downturn in acquiring machinery and equipment. Overall, real

Demand trends

Chart 16

Volume, seasonally adjusted, quarterly



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building investment declined by 5¾%, which was more than twice as much as in the previous year.

Reduction in warehouse stocks

The extensive reduction in warehouse stocks was another contributory factor to last year's poor performance. These changes in stocks provided a negative "contribution to growth" of 1 percentage point compared with a positive contribution of ½ percentage point a year earlier. Even if the extent of the stock-cycle effects is surprising, adjusting warehouse stocks to falls in demand during periods of cyclical weakness is quite a normal procedure. Depleting these stocks is an important means of preparing the way for the next upturn, which, judging from experience, does not fully develop until stocks are low and an increase in final demand can stimulate output without any major delay.

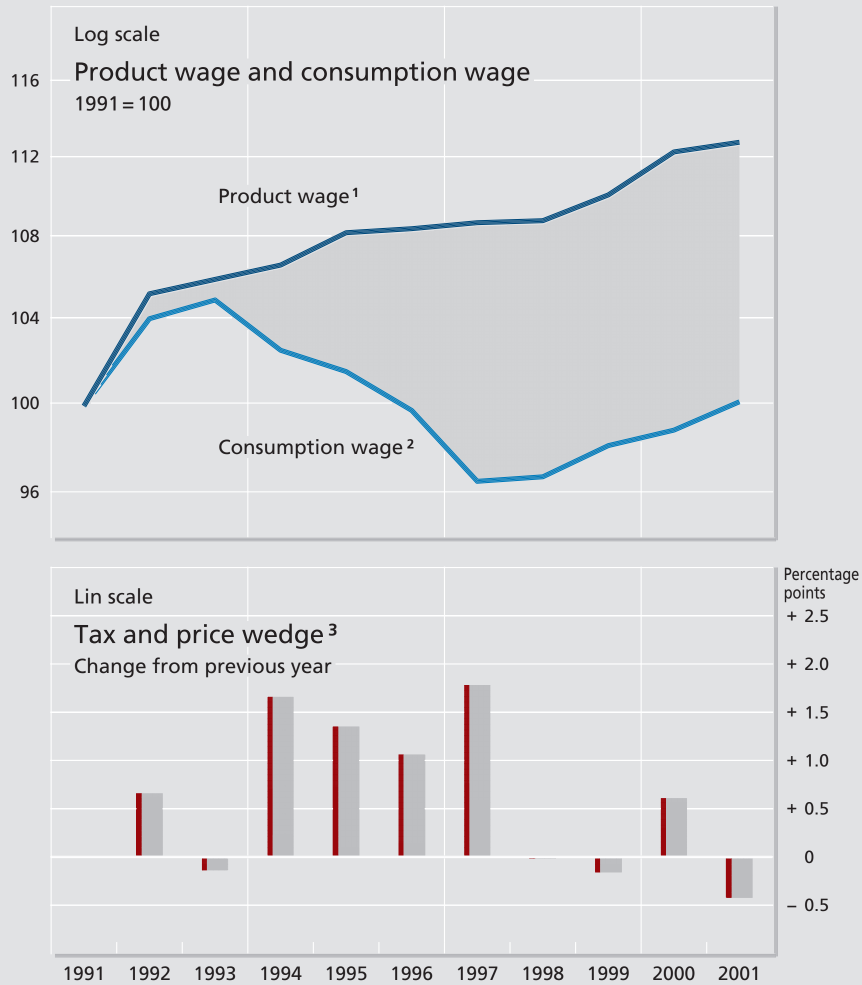
Private consumption less of an economic force

Spending on private consumption rose by just over 1% at constant prices in 2001, which was somewhat less than in the previous year. Although private consumption stimulated economic activity, it was disappointing in that a much stronger surge in demand had been expected from the tax relief provided by the first stage of the tax reform, which came into effect on 1 January 2001. After all, households' nominal disposable income rose by 3½% in 2001, which was its fastest rate of growth for quite some time. Tax relief accounted for an estimated one-third of this growth, and its effect is particularly noticeable in wages and salaries. Given a 2% increase in gross earnings, net wages and salaries rose by 3½%, mainly as a result of lower income tax. However, real consumer spending could not keep pace with the sharp rise in income because significant losses in purchasing power had to be taken into account and households' savings ratio rose for the first time since the beginning of the 1990s, namely from 9¾% to 10¼%. This increase was initially a reflection of the delayed adjustment in consumer spending to the greater freedom in disposing of income following the additional tax relief at the beginning of the year. Declining consumer confidence probably played a major role later in the year.

"Small" wage round in 2001

Only a comparatively small number of economic sectors were involved in negotiating new wage agreements in 2001. A year earlier management and the trade unions in many sectors had reached fairly long-term wage agreements, most of which were valid until the spring of 2002 and provided for increases in negotiated wages and salaries of somewhat more than 2% in 2001. It is true that the new agreements that were concluded in the spring of 2001, for example those relating to the insurance industry, private banking and the retail trade, exceeded that level. However, the average negotiated wage and salary

Wage and salary trends, and tax and price wedge — Chart 17



1 Real labour costs per employee. — **2** Real net wage or salary per employee. — **3** Difference between the real labour costs and the real net wage or salary as a percentage of the real labour costs, calculated per employee in each case.

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level in the economy as a whole, when measured over the whole of 2001 and taking account of the baseline effects arising from one-off payments, rose by no more than 2%, as in the previous year. The increase in actual earnings was somewhat less at 1¾% although the longer-term trend towards part-time work and the gloomy economic situation, which was partly reflected in more short-time working and reduced bonus payments, contributed in equal measure to this negative wage drift. Owing to the distinct cyclical flattening-out of productivity growth, unit labour costs went up by 1½% whereas in the previous year they had fallen slightly. All in all, the moderate rise in earnings in 2001 helped to keep the pressure of labour costs in check, and that, in turn, had a stabilising effect on employment. In the final analysis wage policy was fully consistent with the difficult economic situation.

No distortion in income distribution

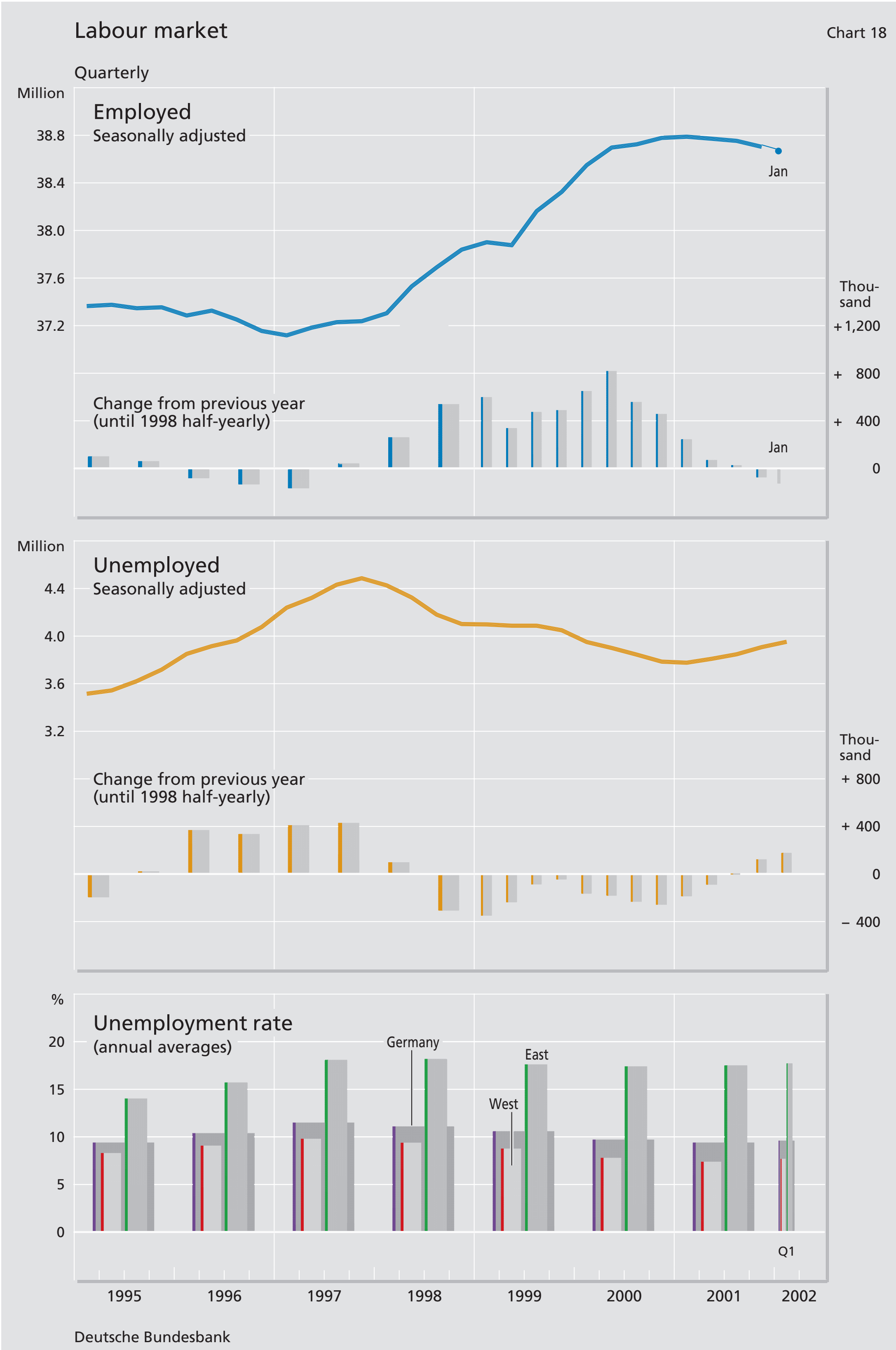
As in 2000, there was no macroeconomic distortion in income distribution to the detriment of labour as a factor of production either last year, despite the comparatively moderate rises in the wages and salaries of employed persons. It must be remembered in this context that, owing to the poor economic situation, the real value of national disposable income stagnated for the first time since 1993. This means that ex post the real room for manoeuvre in distributing income in 2001 was much less than expected. In terms of national income, which is reported only in nominal terms and increased by no more than 1¾% in 2001, labour's 72¼% share in the national income in 2000 rose to 72½%. At the same time, the tax wedge in the labour market decreased owing to the increased tax relief because in real terms consumption wages rose more sharply than product wages.

Moderate response from employment

The level of employment initially reacted moderately to the economic downturn. In expectation of an economic recovery, many enterprises retained their staff, where possible, and compensated for the reduced need for labour by applying flexible working-hour arrangements and reducing overtime. For example, the volume of work in 2001 declined by 0.8% compared with the previous year while the annual average number of employed persons exceeded the previous year's figure by 67,000 or 0.2%. Part-time employment and low-paid jobs presumably increased further even if the rate of growth was slower. In the course of the year there was a rise in short-time working, especially in industry. Overall, this affected 40% more workers, or approximately 125,000 persons on an annual average, than in 2000. The reduction in the numbers employed did not gather pace until the autumn; in December 2001 almost 100,000 fewer persons were employed than 12 months earlier.

Employment by sector

A varied picture of the employment situation emerges if economic sectors are examined individually. Service enterprises actually expanded in 2001 even if the 1% rise in the numbers employed was much lower than in the previous year. In industry as a whole the annual average level of employment was only just maintained. In the second half of 2001, however, the difficult situation in the mobile telephone and telecommunications sector resulted in significant job losses among the growth leaders in previous years, namely the manufacturers of television and radio transmitters and IT equipment. The numbers employed in the manufacture of consumer goods also declined further. However, by far the


Labour market
Chart 18
Quarterly
Million
Employed
Seasonally adjusted
38.8
38.4
38.0
37.6
37.2
Jan
Thou-
sand
+ 1,200
+ 800
+ 400
0
Change from previous year
(until 1998 half-yearly)
Jan
Million
Unemployed
Seasonally adjusted
4.4
4.0
3.6
3.2
Thou-
sand
+ 800
+ 400
0
– 400
Change from previous year
(until 1998 half-yearly)
%
Unemployment rate
(annual averages)
20
15
10
5
0
Germany
East
West
Q1
1995
1996
1997
1998
1999
2000
2001
2002
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greatest losses of jobs occurred in construction where yet again there was a year-on-year fall of 6½% in the numbers employed.

Cyclical rise in unemployment

The number of unemployed registered at the labour exchanges increased steadily in the course of last year and in seasonally adjusted terms was about 3.96 million at the end of December 2001 and the beginning of January 2002. That was about 175,000 more than 12 months earlier when the number of unemployed had reached its previous low. In western Germany the number of unemployed persons grew more sharply both in absolute and in relative terms than in the east of the country where the responsiveness of unemployment to cyclical change was much less pronounced – owing *inter alia* to the different employment patterns – both in the previous upswing and in the present downturn. Overall, it was mainly men who lost their jobs. Generally speaking, more men are employed in trades and professions that are susceptible to cyclical swings than women. By contrast, the number of unemployed registered at the labour exchanges who are over 55 years of age continued to decline not only for demographic reasons but also because this was encouraged by labour market policy measures. On an annual average, there was about a 50% year-on-year increase in the numbers taking advantage of the pre-retirement part-time working arrangement, for example. The number of persons receiving benefit who are over 58 years of age and who, at their own request, are no longer available for work had grown to 250,000 by the end of last year. A year earlier 190,000 persons had taken advantage of this regulation.

Labour market policy makers try new approaches

In 2001 the main aims of labour market policy shifted further towards supporting regular employment. Settling-in allowances and assistance provided by the Federal Labour Office in addition to the regulated programmes were increased while job creation measures and the structural adjustment measures declined by about one-quarter on an annual average. Further education courses were likewise reduced somewhat. Even so, the activities of labour market policy makers remained at a fairly high level, especially in eastern Germany. The purpose of the nationwide introduction of the *Kombilohn* (state-subsidised pay) is to provide additional incentives to take up a low-paid job, thereby ensuring increased employment. In the opinion of employers, however, the changes to the regulatory framework – for example the amendment to industrial constitutional law or the right to part-time work – have impaired the general climate on the labour market, if anything. Government labour market policy as a whole is now to be critically examined as part of the reform of the labour exchanges introduced at the beginning of 2002.

While the level of unemployment rose last year, the number of job vacancies reported fell slightly (by about 1½%) on an annual average of 2001; in December and January there were about 470,000 registered vacancies, seasonally adjusted. Experience has shown that only about one-third of vacancies are reported to the labour exchanges, and so this means that about 1¼ million jobs were available. Thus, the number of jobs remained at a comparatively high level despite the cyclical downturn, with the result that the labour market is, at one and the same time, displaying a fairly high degree of structural unemployment, on the one hand, and a shortage of suitably qualified workers, on the other.

Significant price rises

Price movements in 2001 were clearly split into two categories. The beginning of the year was marked both by a sizeable overhang and by further indirect tax increases, which were accompanied in subsequent months by waves of higher prices for food. Later, particularly the marked price reduction on the international oil markets had a retarding effect. At the end of 2001 the rise in prices had again been considerably reduced. Measured in terms of the consumer price index of all households, however, consumer prices increased on an annual average by 2.5% compared with 1.9% a year earlier.

Extensive rises in taxes and levies

The higher inflation rates were initially due to the second stage of the ecology tax on fuel and electricity. Moreover, motor vehicle tax on private cars that do not meet the strict criteria on exhaust gases was increased dramatically. There were also significant increases in radio and television licence fees. The Federal Statistical Office estimates that the increases in taxes and levies resulted in a rise of 0.4 percentage point in consumer prices. That was the main reason why the annual rate of change for services in the consumer price index actually doubled to 2.7% in January 2001 but remained largely constant after that.

Turbulence in food prices

There was then strong turbulence in food prices in the spring. In addition to sharp price rises following unseasonal weather there were dramatic increases in prices for animal products which were caused by BSE and foot-and-mouth disease. Although the fall in demand brought the producer price of beef down by a maximum of just under one-third, the simultaneous surge in the prices of pork and poultry owing to shifts in demand resulted in a sharp rise in the price of food as a whole. At the consumer level the prices of these products in the middle of 2001 were almost 7% higher than those of the previous year; on an annual basis the rise still amounted to 5.2%.

Oil prices bring relief

As the impact of agricultural prices receded in the course of the second half of 2001, the retarding effects emanating from the fall in oil prices increasingly determined the overall picture. On the international markets the quotations for crude oil – measured in terms of North Sea Brent crude – declined to less than US$20 per barrel (at the time this report went to press, however, it was again being quoted at just under US$27). That represents a fall of more than one-third from its previous high of more than US$32 in the autumn of 2000, which was quickly reflected in German import prices. The latter have been declining continually since June 2001; at the end of last year they were 4.7% lower than a year earlier. For households, petrol and heating oil in December 2001 were just over one-tenth cheaper than they had been 12 months before. If the prices of gas and district heating, which likewise fell, are included, the energy component made a significant contribution to the deceleration in consumer price increases.

Prices of industrial goods rise

If food and energy are excluded, however, there was a slight acceleration in price increases over the year as a whole. The main reason for this was the moderate but steady increase in the prices of industrial goods. After all, the annual rate of change of approximately 0.5% at the beginning of 2001 had risen to more than 1% by the end of the year. This rise applied in particular to the purchase prices of furniture and fittings and to carpeting and home textiles. However, motor vehicles also became more expensive. Above-average price movements in these products can likewise be observed in German industrial producer prices. In the case of corresponding imports, by contrast, the sharply increased price rises which had been evident in 2000 eased again last year.

Slight rise in residential rents

The rise in rents for houses and flats was again very moderate last year. At an annual average of 1.3%, the rise was almost half the increase in the cost of living as a whole. A largely saturated housing market curtailed movements in rents and led to stagnating prices for building services. Incidental rent expenses were 1.6% higher on an annual average than in the previous year when they had increased by 2%.

Outlook for 2002

The sharp rise in consumer prices in January 2002, which was due primarily to weather-related crop failures and increases in indirect taxes, was followed in March by higher energy prices, which disrupted the underlying moderate trend. If, however, oil prices decline again, price prospects for the current year may still be considered favourable; that means that a major requirement for economic recovery has been fulfilled.

Domestic prices

Chart 19

Change from previous year, quarterly

1 Calculated by the Bundesbank.

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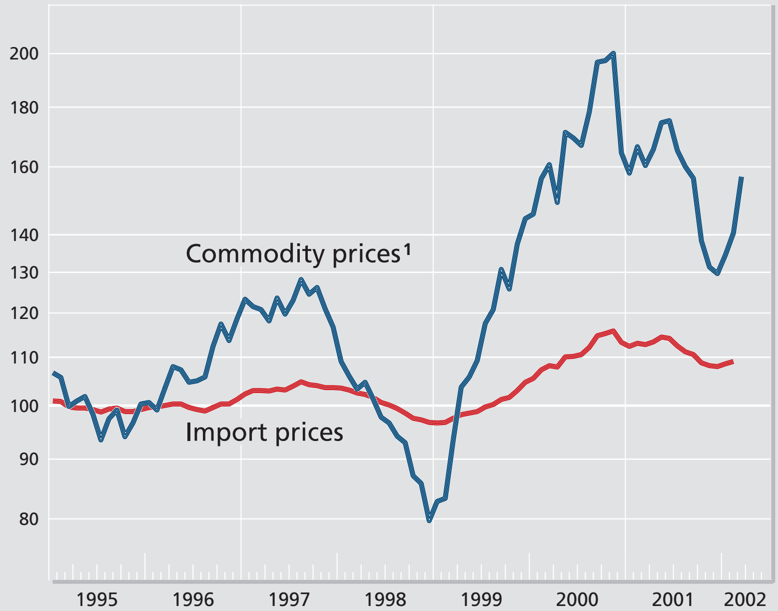
International commodity and import prices

Chart 20

1995 = 100, monthly, log scale



1 HWWA index of commodity prices on a euro basis (up to 1998 on a Deutsche Mark basis).

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Leading economic indicators over the past few months have suggested that the stabilisation of output and order books which emerged at the turn of the year might result in an economic upturn later in the year. It is important to note that enterprises have recently shown more confidence regarding future developments. Despite some residual risks, this has largely been a reflection of the positive signals coming from the US economy, which will assume a key role for global economic events this year.

In view of their generally good competitive position, the German exporting sectors will probably receive new stimuli soon from an improvement in the global economic situation. In the coming months this will also encourage industrial investment, which is still fairly restrained. The construction sector, by contrast, will probably need some more time before it begins to pick up again. If the low output level at the beginning of the year is also taken into account, macroeconomic growth for 2002 as a whole will again be very modest. Accordingly, the real distribution of income is limited. Management and unions should take account of this fact during this year's wage bargaining by continuing the employment and stability-oriented course of the past two years.

2 Foreign trade: restraining influence of world economy

Clear downturn in export developments

German exporters were already feeling the effects of the distinct cooling of the global economic climate at the beginning of 2001. Following almost two years of dynamic growth in turnover, they again saw themselves facing a decline in incoming export orders, a development which, with only a minimal time lag, was already being reflected during the first few months of the year in a significant levelling-off in exports. In a year-on-year comparison German exports of goods did rise by 6½% in value and by 5½% in real terms; however, the increase was essentially the result of the sharp growth in exports up to the end of 2000.[1] In the course of 2001 Germany's export turnover exceeded only temporarily the level reached at that time.

Market position maintained, however

Growth in German export markets weakened slightly faster, however, with the result that German exporters as a whole were well able to hold on to their market position. They benefited here from two factors in particular. The relative weakness in the euro, together with corporate expenditure restraint, again provided competitive advantages in markets outside the euro area last year, and Germany was not as badly affected as other industrial countries by the worldwide slump in demand in the IT sector because the range of its export goods is not unduly dominated by high-tech products. For example, demand from the United States remained relatively brisk despite the general weakness in US economic growth late into the summer of 2001. The car industry in particular was able to report export results that were still relatively satisfactory last year. Demand from central and eastern Europe also had a stabilising effect. By contrast, Germany recorded substantial falls in turnover in Asia, a development which was consistent with the fact that it was particularly the producers of IT goods who felt the full effects of the harsh adjustment processes in this sector. However, German exports of goods to the other euro-area countries, which were likewise unable to escape the worldwide economic downturn, were also relatively sluggish.

Weak imports produce large trade surplus ...

The sluggish pace of economic activity in Germany and its major trading partners meant that imports of goods stagnated in real terms in 2001. The value of these imports increased by ½% but that was due to the delayed effects of the sharp price rises on the crude oil markets that persisted until almost the end of

1 The data on trade in goods as a whole also contain supplementary trade items and are calculated on an fob/fob basis, ie without the freight and insurance costs payable on imports, which are shown under services.

2000 and the fact that the full effect of the significant price reductions in the second half of 2001 had not yet fully permeated through to the annual aggregates. There was a slight improvement (of just under ½%) in the terms of trade in 2001 on average. The fairly sharp fall in imports resulted in a year-on-year increase of €37 billion in the German trade surplus (of €100 billion) despite the marked downturn in export growth.

... and substantial current account surplus

The very much larger cyclically induced trade surplus also had an impact on the current account. Although, at the same time, the deficit on invisible transactions with non-residents was larger, at €97 billion, than in the previous year, the deterioration (of €11½ billion) was much smaller than the improvement in the export surplus. Both the deficit on services and, more importantly, that on cross-border factor income were larger than in 2000 whereas in the case of current transfers reduced payments to the EU budget meant that a somewhat smaller deficit was recorded. The upshot was that the German current account ran a surplus last year for the first time since the beginning of the 1990s (€2½ billion compared with a deficit of €22½ billion in 2000).

Financial transactions in a year marked by uncertainty

The weak global economy and the increased uncertainty following the terrorist attacks in the United States also had an effect on the German financial transactions with the rest of the world. The economic environment, which in the course of the year became increasingly less promising, and the deteriorating profit expectations, especially in the United States, prompted many investors to exercise a greater degree of caution in their operations, particularly when investing in shares. Owing to this greater risk awareness, investors reacted to the news of the terrorist attacks in the United States by "fleeing" out of shares and into the safer havens provided by first-class bonds, the result of which was sharp interest-rate reductions on the bond markets and, for a time, substantial markdowns on the share markets. However, these shock waves had begun to recede again towards the end of last year.

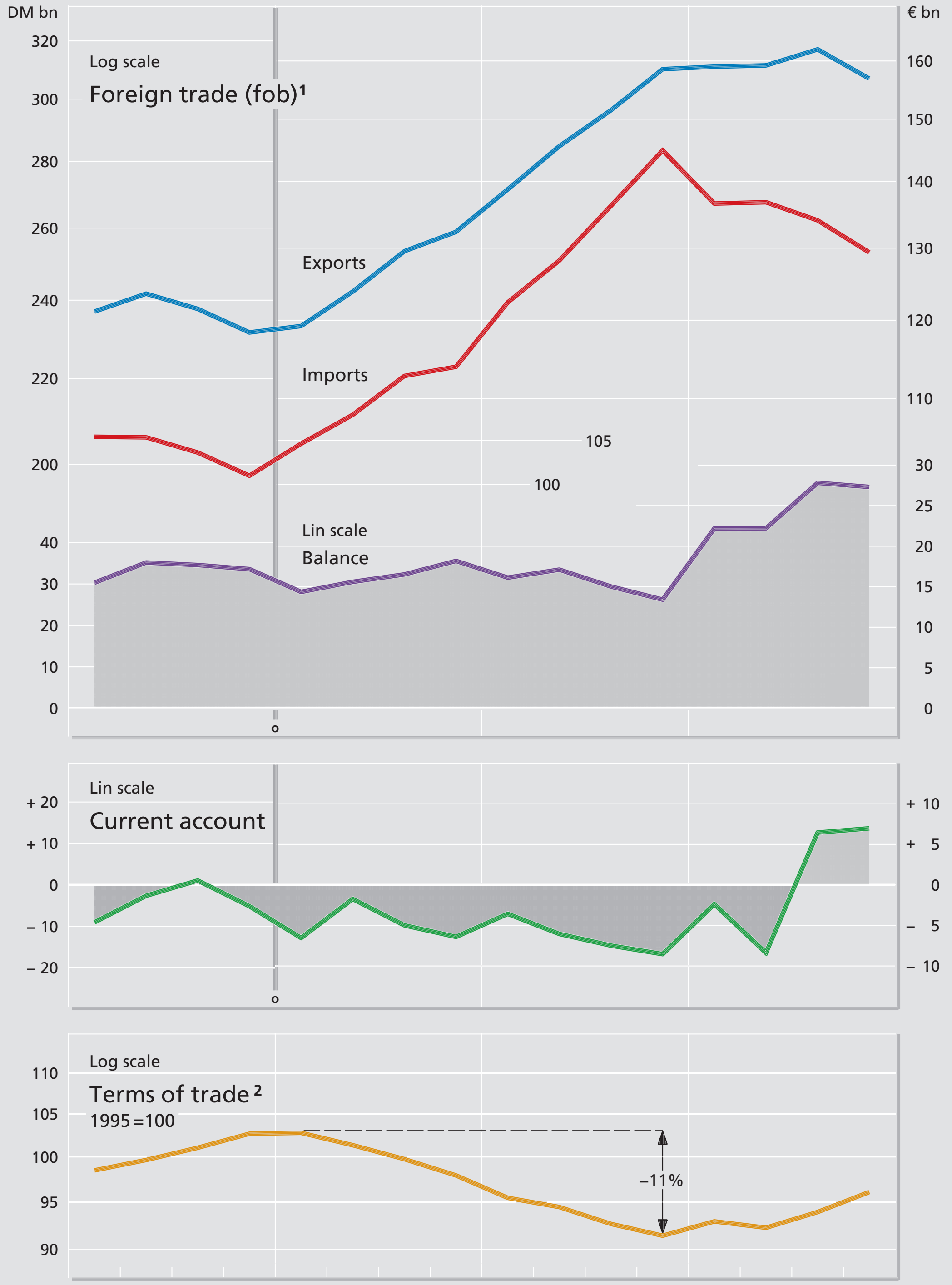
Net capital exports through portfolio investment

The repeatedly changing economic and political environment clearly left its mark on Germany's securities transactions with non-residents. For example, substantial net amounts of capital were exported during the first few months of last year; as hopes of a rapid recovery in the US economy receded, however, capital flows were redirected in the early summer, with the result that significant inflows of funds were recorded until the autumn. Foreign investors built up fairly large positions in Germany as a safe haven, especially just after the September terrorist attacks. Capital flows did not change direction again until the end of

Foreign trade and current account

Chart 21

Seasonally adjusted, quarterly



1 Including supplementary trade items. — **2** Export price index as a percentage of import price index. — **o** From 1999 data in euro.

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the year, possibly as a result of the dissolution of these assets. The interplay of these various factors in 2001 resulted in net capital exports through portfolio transactions amounting to €16 billion (compared with €159½ billion in the previous year).[1]

German residents show restraint in investing abroad

German residents invested €128½ billion in foreign financial centres in 2001; in terms of value this was much less than in 2000 (€208½ billion). The structure of German investments abroad also changed substantially in line with the decline in share prices on international stock exchanges and the shifts in global interest rate differentials. Whereas German investors had shown a preference for dividend-bearing paper (€105 billion) over bonds and notes (€73 billion) in 2000, exactly the opposite was the case last year, with €94½ billion being invested in bonds and €16 billion and €19 billion in shares and investment fund certificates respectively.

Sharp rise in foreign investment in Germany

Regarding portfolio investment in the opposite direction, foreign interest in German shares was remarkably high, by contrast, and led to investments of €89 billion although this sizeable influx of funds did not result in price movements on the German share market that were more favourable by international comparison. This may have been due to the fact that some of the statistically recorded acquisitions of shares occurred in the form of compensation for former non-resident shareholders who were "paid" with equity in the course of a corporate acquisition. By contrast, demand from foreign investors for German interest-bearing paper as a whole (bonds and money market paper) was extremely restrained last year (€23 billion). There were apparently significant shifts between the various investment instruments. Whereas foreign investors sold German money market paper, essentially bank bonds with a maturity of one year or less, worth €32 billion, they bought somewhat longer-dated bank bonds, with maturities of more than one year, for €60½ billion net. Evidently paper with maturities of between one and two years were in particular demand from non-residents as they combined maturities that investors could easily keep track of with the prospect of profit-taking in the event of a fall in interest rates. Federal bonds, which are regarded as first-class paper owing to their high degree of liquidity and security, found somewhat greater favour among foreign investors only during the autumn, which was a time of pronounced uncertainty. Over the

1 The analysis of the German financial account for 2001 has been made more difficult by the unusually large balancing item of €38½ billion in the German balance of payments, which cannot be ascribed to the individual categories of cross-border current and financial transactions. According to the information available, by far the largest amount of this sum can probably be allocated to the unclassified capital flows.

Balance of payments

Table 7

€ billion

Item	1998	1999	2000	2001
I Current account	– 5.6	– 17.9	– 22.6	+ 2.7
1 Foreign trade [1]	+ 69.9	+ 66.6	+ 63.0	+ 99.9
Exports (fob) [1]	487.5	509.7	596.9	636.7
Imports (fob) [1]	417.6	443.1	533.9	536.8
2 Services	– 41.4	– 49.8	– 55.1	– 58.0
of which				
Foreign travel	– 27.5	– 30.6	– 31.6	– 32.4
3 Factor income	– 6.8	– 9.0	– 3.3	– 12.6
of which				
Investment income	– 6.0	– 8.1	– 2.4	– 11.1
4 Current transfers	– 27.3	– 25.7	– 27.1	– 26.7
of which				
Net contributions to the EU budget [2]	– 15.1	– 13.3	– 14.9	– 12.3
Other official current transfers to non-residents (net)	– 3.9	– 4.1	– 4.1	– 4.8
II Capital transfers [3]	+ 0.7	– 0.2	+ 6.8	– 1.0
III Financial account (net capital exports: –)	+ 8.7	– 26.1	+ 34.3	– 46.1
1 Direct investment	– 57.8	– 51.3	+ 157.7	– 12.8
German investment abroad	– 79.9	– 102.7	– 54.0	– 48.3
Foreign investment in Germany	+ 22.1	+ 51.4	+ 211.8	+ 35.6
2 Portfolio investment	+ 4.6	– 10.8	– 159.4	– 15.8
German investment abroad	– 131.0	– 177.4	– 208.5	– 128.7
of which Shares	– 61.9	– 68.0	– 104.8	– 15.8
Bonds and notes	– 56.6	– 94.7	– 72.8	– 94.7
Foreign investment in Germany	+ 135.6	+ 166.6	+ 49.1	+ 112.9
of which Shares	+ 51.8	+ 21.9	– 34.5	+ 88.9
Bonds and notes	+ 78.5	+ 97.6	+ 69.2	+ 54.9
3 Financial derivatives	– 6.8	– 1.7	– 4.2	+ 6.7
4 Credit transactions	+ 73.0	+ 40.2	+ 42.4	– 22.9
Credit institutions	+ 73.6	+ 53.0	+ 13.8	– 76.3
of which short-term	+ 73.7	+ 60.4	+ 38.3	– 33.1
Enterprises and individuals	– 1.6	+ 40.4	+ 5.4	+ 10.4
of which short-term	– 9.4	+ 38.6	+ 0.5	+ 3.0
General government	– 0.7	– 3.6	– 19.2	+ 16.4
of which short-term	+ 4.4	+ 5.1	– 17.9	+ 16.8
Bundesbank	+ 1.8	– 49.5	+ 42.4	+ 26.6
5 Other investment	– 4.3	– 2.4	– 2.1	– 1.4
IV Change in the foreign reserves at transaction values (increase: –) [4]	– 3.6	+ 12.5	+ 5.8	+ 6.0
V Balance of unclassifiable transactions	– 0.2	+ 31.6	– 24.4	+ 38.4

1 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. — **2** Excluding collection expenses, EAGGF (Guidance Fund) and Regional Fund. — **3** Including the acquisition/disposal of non-produced non-financial assets. — **4** Excluding SDR allocation and changes due to valuation adjustments.

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year as a whole, however, these bonds lost ground (€5½ billion). The early redemption by the Federal Government of debt securities issued by the Currency Conversion Equalisation Fund at the beginning of 2001 was one of the main reasons for the overall result.

Fall in direct investment

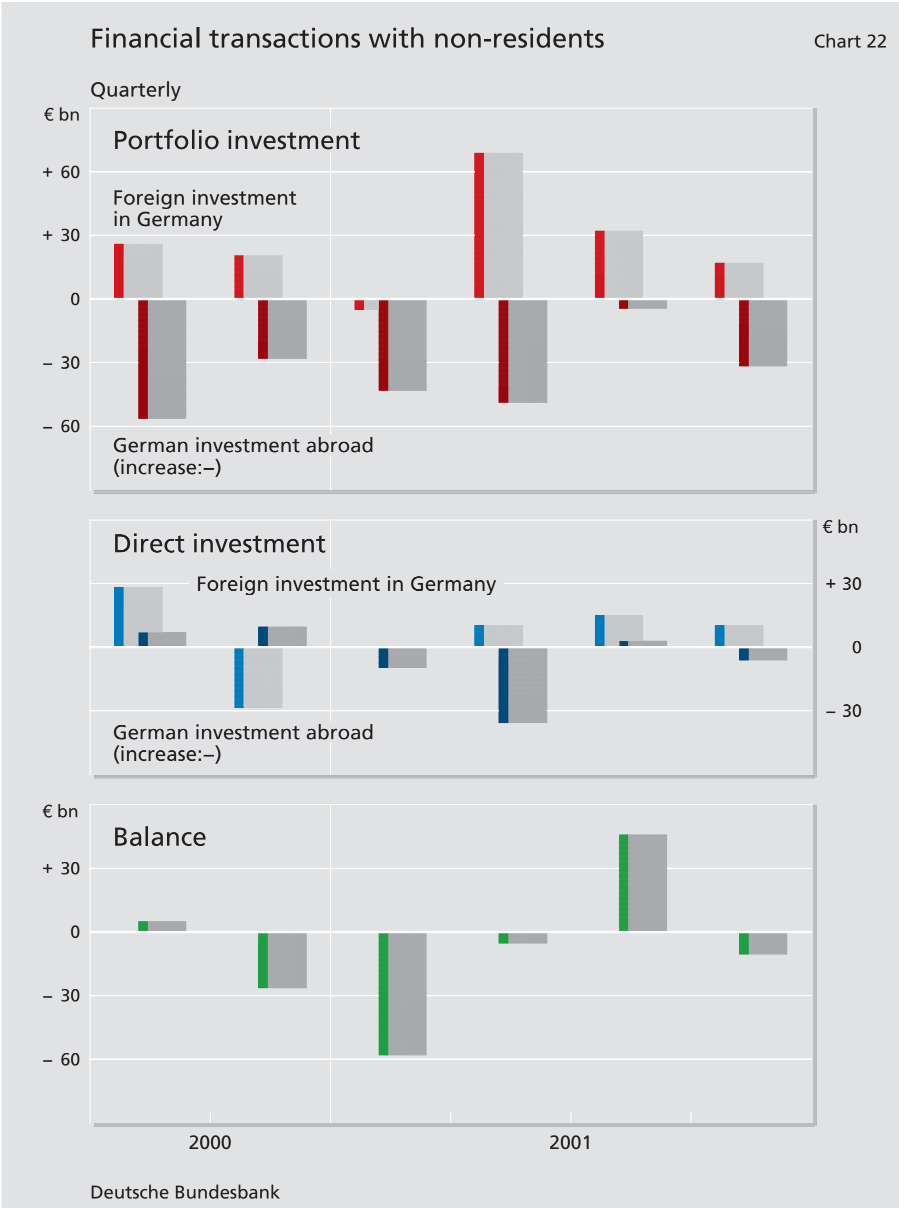
In the corporate sector the pace of globalisation slowed down somewhat in the course of the downturn in the world economy and the decline in corporate acquisitions. Thus, the record levels achieved in cross-border direct investment during the past few years were not attained again in either direction. However, the above-mentioned settlement of the acquisition of a US enterprise by a German group, which had been prepared and agreed in the previous year and which now appears as a latecomer, as it were, in the recent wave of mergers and acquisitions, did not have an inconsiderable impact on the overall result. Following the large capital inflows of the year 2000, which were the result of a single transaction, there were again net capital exports (of €13 billion) last year. German enterprises thereby consolidated their international presence by outward investments of €48½ billion including the aforementioned corporate acquisition. The favourite host countries, in addition to the United States, were the United Kingdom, France and Belgium. Imports of funds in the past calendar year were much smaller (€35½ billion) than the investable funds exported by German enterprises. It was particularly enterprises in the other euro-area countries that expanded their presence in Germany.

Net capital imports through credit transactions of non-banks ...

There were net capital imports of €27 billion in the statistically recorded non-securitised credit transaction of non-banks. Government operations accounted for €16½ billion of this. In the course of the aforementioned redemption of debt securities issued by the Currency Conversion Equalisation Fund the Federal Government drew on liquid funds that had been temporarily lodged abroad. The non-securitised credit transactions of enterprises and individuals likewise closed with net capital imports (€10½ billion) in 2001. However, the amount of funds usually repatriated from foreign banks, particularly at the end of the year, was comparatively small last year.

... and substantial outflows of funds from the banking system as a whole

The non-securitised cross-border financial movements of the banking system as a whole showed a variety of developments. In the case of domestic credit institutions, for example, there were net exports of €76½ billion, just under half of which (€33 billion) was at the short end of the market. This was partly the result of the securitisation of a book credit, by means of which a German bank had reduced part of its non-securitised foreign debt. As a result of those external



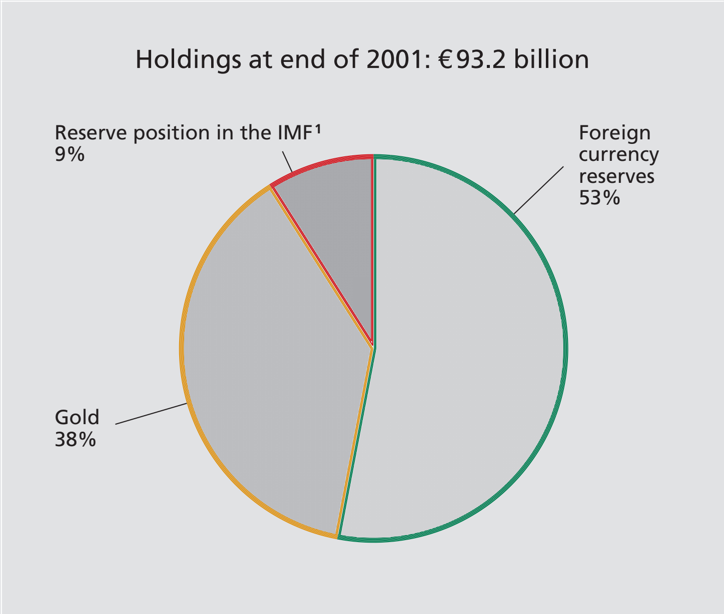
transactions of the Bundesbank that are classified as credit transactions, by contrast, there were inflows of foreign funds amounting to €26½ billion, most of which had arisen through balances within the EU payment system TARGET.

Significant fall in net external assets of the Bundesbank

The net external assets of the Bundesbank fell significantly, namely from €94 billion at the end of 2000 to €67½ billion at the end of 2001, primarily as a result of the aforementioned influx of funds. However, these large balances in TARGET – which, incidentally, are of a transitory nature and frequently change from a minus to a plus and vice versa – are in no way the result of a deliberate

Foreign reserves of the Bundesbank

Chart 23



1 Including special drawing rights.

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balance sheet policy but rather the reflection of the closely interlinked cross-border payment transactions within the European System of Central Banks.

Breakdown of the foreign reserves

At the end of 2001 the foreign reserves – valued at the market and exchange rates prevailing at that time – amounted to approximately €93 billion; this means that they were just under €1 billion below their previous year's level. Excluding the revaluation gains, ie using the transaction values recorded in the balance of payments, the decline in the foreign reserves amounted to €6 billion. At €49½ billion, the foreign exchange holdings shown in the balance sheet accounted for the largest part of the reserves in terms of value. The Bundesbank's monetary gold stood at €35 billion at the rates applying at the end of 2001. The reserve position in the IMF (including the allocated special drawing rights) accounted for just over €8½ billion.

3 Public finance facing greater consolidation need

(a) Developments in 2001

Structural deterioration of public finance

Last year the government deficit in Germany widened considerably for the first time since the mid-1990s. The general government deficit as defined in the national accounts – which is the relevant definition for assessing compliance with the Maastricht criteria – more than doubled compared with the corresponding figure for 2000 (adjusted for the effect of the UMTS proceeds) to 2.7% of GDP. This sharp deterioration was largely of a structural nature. It was mainly due to the substantial revenue shortfalls – amounting to around 1% of GDP – caused by the tax reform. Only the smaller part of the additional deficit vis-à-vis 2000 – equal to about ¼% of GDP – was attributable to cyclical influences. Although real economic growth was significantly lower than its medium-term trend, the resultant negative impact on public finance was limited. Thus unemployment decreased somewhat, measured over the whole year, and average actual compensation of employees grew fairly robustly. Furthermore, the nominal rate of economic growth was comparatively high.

Additional burdens vis-à-vis the budget plans

Not only did the deficit ratio increase sharply compared with 2000, it was also considerably higher than the figure estimated in the original budget plans for 2001 (1½%). Those plans had been based on the assumption of a distinctly above-average medium-term real economic growth rate of 2¾%. Hence the overrun was to a significant extent attributable to the large "growth gap" vis-à-vis the expectations. Another factor was the upward revision of the deficit ratio for 2000 by 0.3 percentage point, which had a certain knock-on effect on last year's ratio. Expenditure in the health sector also increased considerably faster than expected.

Development of the revenue and expenditure ratios

The government revenue ratio decreased by 1½ percentage points compared with 2000 to 46.1%, above all owing to the tax reform which came into force at the beginning of the year. By contrast, the government expenditure ratio persisted at 48.9%. Expenditure rose in line with nominal GDP by almost 2%. As a result, the German fiscal balance last year moved considerably further away from the requirements of the European Stability and Growth Pact, which stipulates that the budgetary position must be at least close to balance in the medium term. Germany currently has the highest deficit ratio in the EU.

Budget outturn in 2001

As defined in the government financial statistics – which differ from the methodology used in the national accounts and follow the budgetary appropriations and accounts – the deficit increase last year was mitigated by higher privatisation proceeds and loan repayments. The budget deficit of central, state and local government widened by almost €15½ billion compared with 2000 (excluding the UMTS proceeds) to €47½ billion and therefore significantly exceeded the target figure. However, the deficit of the Federal Government (€21 billion) actually undershot the budget estimate by €1½ billion and was nearly €3 billion lower than in 2000. The main reason for this was that the revenue shortfalls caused by the tax reform were offset by higher privatisation proceeds, the non-recurrence of the indemnification payments to wartime forced and slave labourers made in 2000, lower interest payments and smaller transfers to the Federal Railways Fund and to the EU. The fiscal outturn of the off-budget special funds improved by just over €6½ billion to show a surplus of almost €5 billion thanks primarily to the higher Bundesbank profit. By contrast, the *Land* Governments and the local authorities recorded a substantial deterioration in their results. The *Land* Governments' deficit more than tripled to almost €28 billion. It should be noted, however, that this was due not only to the tax reform but also, among other things, to exceptional factors in individual *Länder,* such as large equity injections for state-owned banks and the repayment of natural gas extraction royalties which, according to a court ruling, should not have been levied. As a result, the borrowing level of a number of *Land* Governments reached the constitutional limit. At the level of local government the unbroken sequence of surpluses since 1998 was superseded by a deficit of €4 billion. The social security funds recorded a deficit of almost €4½ billion following a balanced result in 2000. This was caused mainly by the less favourable development of the health insurance funds. The financial position of the statutory pension insurance scheme also worsened; its fluctuation reserves did not quite meet the statutory requirement of one month's expenditure.

Large tax shortfalls

On the receipts side, tax revenue fell by 4½%, as a result of which the national tax ratio – following a marked rise in the previous three years – decreased by 1½ percentage points to 21.6% (as defined in the government financial statistics). This was mainly due to the tax reform. The figure targeted in the comparable official forecast from autumn 2000, on which the budget plans were largely based, was likewise undershot by almost €13 billion. Other factors besides the economic slowdown also played a role. The shortfalls vis-à-vis the budget plans related chiefly to turnover tax, corporation tax and trade tax. With a decline of 1½%, turnover tax developed even less favourably than the VAT tax

General government finance *

Table 8

Item	1999 p	2000 pe, 1	2001 pe	1999 p	2000 pe	2001 pe
	€ billion			Change from previous year in %		
Central, state and local government						
Expenditure						
Compensation of employees	168.7	169	170	+ 1.4	+ 0	+ 0.5
Other operating expenditure	72.4	73.5	70	+ 3.1	+ 2	– 5
Transfers 2	202.7	205.5	213.5	+ 5.9	+ 1.5	+ 4
Interest payments	69.8	67.5	66.5	+ 2.1	– 3.5	– 1.5
Fixed capital formation	40.8	41	40.5	+ 0.1	– 0	– 1
Financial aid 3	38.0	38	39.5	– 6.8	– 0	+ 4
Total expenditure 4	592.9	595	601.5	+ 2.7	+ 0.5	+ 1
of which						
Federal Government 5	266.5	264.5	261	+ 5.2	– 0.5	– 1.5
West German *Land* Governments 6	196.6	200.5	208	+ 1.1	+ 2	+ 3.5
East German *Land* Governments	53.3	54	53	– 0.4	+ 1	– 1.5
West German local authorities	117.5	120	123	+ 1.6	+ 2	+ 2.5
East German local authorities	26.3	25.5	25.5	– 2.0	– 2.5	– 0.5
EU 7	20.6	22	20	– 5.8	+ 7.5	– 9.5
Revenue						
Tax revenue	453.1	467.5	446.5	+ 6.4	+ 3.1	– 4.5
Other receipts	115.1	97.5	108	– 7.4	– 15	+ 10.5
Total revenue 4	566.0	562.5	553.5	+ 3.2	– 0.5	– 1.5
of which						
Federal Government 5	240.3	240.5	240	+ 7.0	+ 0	– 0.5
West German *Land* Governments 6	191.6	195.5	184	+ 3.9	+ 2	– 6
East German *Land* Governments	50.0	50.5	49.5	+ 1.5	+ 1	– 2.5
West German local authorities	119.8	121.5	119	+ 1.3	+ 1.5	– 2
East German local authorities	26.1	25.5	25	– 1.0	– 2	– 3
EU	20.6	22	20	– 5.8	+ 7.5	– 9.5
Deficit (–)	– 26.9	– 32.5	– 47.5	.	.	.
of which						
Federal Government	– 26.2	– 24	– 21	.	.	.
West German *Land* Governments 6	– 5.1	– 5.5	– 24	.	.	.
East German *Land* Governments	– 3.3	– 3	– 3.5	.	.	.
West German local authorities	+ 2.3	+ 1.5	– 3.5	.	.	.
East German local authorities	– 0.2	+ 0	– 0.5	.	.	.
“German Unity” Fund	+ 0.3	+ 0.5	+ 1	.	.	.
Redemption Fund for Inherited Liabilities	+ 5.0	+ 0.5	+ 5	.	.	.
ERP Special Fund	+ 0.5	– 2.5	– 0.5	.	.	.
Social security funds						
Expenditure	425.7	433.5	447.5	+ 2.9	+ 2	+ 3
Revenue	429.1	433.5	443.5	+ 3.5	+ 1	+ 2.5
Surplus (+), deficit (–)	+ 3.5	– 0	– 4.5	.	.	.
General government, total						
Expenditure	948.8	957	972	+ 2.0	+ 1	+ 1.5
Revenue	925.4	924.5	920	+ 2.4	– 0	– 0.5
Deficit (–)	– 23.4	– 32.5	– 52	.	.	.

* As defined in the government finance statistics; excluding hospitals keeping commercial accounts, but including special accounts. — **1** Excluding UMTS proceeds (€50.8 billion). — **2** Mainly social expenditure and current grants to the enterprise sector. — **3** Expenditure on investment grants and loans to third parties, plus the acquisition of participating interests. — **4** Including differences in clearing operations. — **5** The supplementary Federal grants and the *Land* Governments’ shares in mineral oil tax are included here on a gross basis. — **6** Including Berlin. — **7** EU expenditure financed out of EU revenue in Germany.

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Record of general economic and fiscal policy measures

1 January 2001
Major fiscal policy measures come into effect: they include, in particular, the first stage of the Tax Reduction Act, a further increase in energy taxation, the associated lowering, by 0.2 percentage point, of the contribution rate to the statutory pension-insurance scheme (to 19.1%), the reform of the disability pensions, the new standard travel allowance for commuters and an increase in motor-vehicle tax for vehicles having a relatively high level of pollutant emissions.

31 January 2001
In its Annual Economic Report, the Federal Government expects real economic growth to slacken somewhat in 2001, to 2¾%, against 3% in the preceding year. The reasons for this are the more sluggish growth in the United States and the uncertainties surrounding oil-price movements. The consumer-price index is expected to go up by approximately 1¾%, and unemployment is forecast to decline distinctly.

16 February 2001
The "Supplementary Act Promoting Private Provision for Old Age" is passed by the Bundesrat. In order to curb the rise in the contribution rate, pension adjustments within the statutory scheme will be lower in future.

21 February 2001
The Federal Cabinet approves a benchmark bill on the apportionment of tax revenue between the public authorities in Germany, which – in line with a ruling by the Federal Constitutional Court – is intended to give concrete shape to the imprecise legal terms of the financial constitution by means of general standards, thus laying the foundation for a new revenue-sharing act, which is to be approved, in a further step, by the end of 2004.

3 April 2001
In one of its four rulings on the nursing-insurance scheme, the Federal Constitutional Court deems the present financing by contributions to be unconstitutional. It asserts that, in a pay-as-you-go social-security system, child-rearing constitutes a generative contribution and therefore has to be taken into account in assessing the monetary contribution. The Court calls on Parliament to approve a corresponding amending act before the end of 2004. Moreover, the implications of the ruling for other areas of social security will have to be reviewed.

11 May 2001
The "Act Promoting Private Provision for Old Age" is passed by the Bundesrat. This second part of the pension reform regulates the promotion of voluntary private pension provision by means of grants and tax relief.

30 May 2001
The Federal Cabinet approves the draft of a "Second Act Concerning Family Assistance Measures", under which, in a second stage, the Federal Constitutional Court's rulings of 1998 on extending the tax-exemption of the subsistence level of children are to be complied with. The key element of the draft is the increase in child benefit for the first and second child from DM270 per child to €154 a month, and the adjustment of the tax allowance for children to €3,648 from the beginning of 2002. In addition, the existing child-minding allowance of

DM3,024 is supplemented by a child-rearing component that brings the aggregate tax allowance to €2,160 from 2002. Moreover, for children under 14 years of age, a deduction for proven employment-induced child-minding costs up to a ceiling of €1,500 per child is introduced, provided that such costs exceed the existing child-minding allowance. On the other hand, the household allowance is gradually run down, and the special allowance for the employment of a household help is abolished.

In addition, a bill replacing the pharmaceutical and medicament budget is approved, in order to revoke retroactively doctors' collective recourse if the budget is overshot.

6 June 2001
In the Financial Planning Council, the Federal and *Land* governments and local authorities reaffirm their intention of confining the annual growth rate of public spending to not more than 2% over the medium term, in order to ensure compliance with the deficit ceiling specified in the Maastricht Treaty and to attain the objectives of the European Stability and Growth Pact.

13 June 2001
The Federal Cabinet approves the draft Federal Budget for 2002, involving total expenditure of €247.8 billion, which thus exceeds the amount budgeted for in 2001 (after adjustment for the return flow of coins) by 1.8%. The deficit amounts to €22.3 billion, and is therefore €0.4 billion higher than in the budget for 2001. It exceeds the figure of the previous year's financial plan by around €1 billion. According to the medium-term financial plan, which is presented at the same time, the growth rate of spending between 2003 and 2005 is to be limited to an average of 0.9% per annum, and the deficit is to be lowered to €5.4 billion in 2005. For the year 2006, a balanced Federal budget continues to be the target.

23 June 2001
The Federal and *Land* governments reach agreement on the restructuring of the revenue-sharing scheme between the public authorities in Germany, as required by the Federal Constitutional Court, and on a follow-up regulation for the Solidarity Pact, covering the period after 2004. In the revenue-sharing scheme, the compensatory rates are eased somewhat at the various levels, the present minimum replenishment limits are abolished and a 12% retention on a *Land's* additional tax revenue, over and above the average level of the *Länder,* against the previous year, is introduced (premium solution). On the other hand, local authorities' tax revenue is integrated to a greater extent than before in the *Länder* revenue-sharing scheme. The existing special circumstances of revenue-sharing are largely preserved. From 2005, the Federal Government will assume all the debt service for the "German Unity" Fund, the redemption of which, incidentally, will be extended further. Under the "Solidarity Pact II", the new *Länder* will continue to receive, up to 2019, on a gradually declining scale, substantial Federal aid in the total amount of €156 billion. €105 billion of this sum will be paid in the form of special-requirement-related supplementary Federal grants. The balance – to which no statutory right exists – is to be made up of disproportionately large payments from the Federal budget, for instance, payments for investments in transport infrastructure.

27 June 2001
The Federal Cabinet approves a bill reforming risk-structure equalisation in the statutory health-insurance scheme. From 2003, a risk pool for chronically sick persons is to be introduced. Over the medium term, risk-structure equalisation is to be supplemented by empirically-determined morbidity ratios.

15 August 2001
The Federal Cabinet approves a bill refining business-tax legislation. The bill is primarily designed to facilitate the restructuring of partnerships and, on the other hand, in the light of local authorities' budget positions, to rule out certain options in the field of trade tax.

In addition, a bill to combat tax evasion is approved, by which the scope for turnover-tax abuses is to be contained by means of enhanced monitoring procedures.

29 August 2001
The Federal Government presents a bill introducing a diagnosis-oriented single payment per case, which provides for hospital services being remunerated – voluntarily from 2003 and compulsorily from 2004 – by service-related lump-sum payments for each case.

19 September 2001
The Federal Cabinet approves a bill to finance the fight against terrorism. The bill provides for additional spending on internal and ex-

Record of general economic and fiscal policy measures

(continued)

ternal security amounting to €1.5 billion, to be financed by increasing tobacco tax by 2 cents per cigarette and raising insurance tax by one percentage point (to 16%), both with effect from 1 January 2002.

In addition, a bill prolonging the solidarity pact is approved, under which the agreement on restructuring the revenue-sharing scheme between the public authorities in Germany and the continuation of the solidarity pact are to be implemented. The objective of balanced budgets for the Federal and *Land* governments alike is to be enshrined in the Budget Principles Act.

Moreover, the Federal Government approves a bill amending pension benefits, under which the measures of the pension reform are to be transferred, with the same effects, to civil service pensions.

16 October 2001
The parliamentary groups of the governing parties present a bill cutting spending on medicaments. By raising the pharmacy discount to 4%, extending pharmacists' authority to sell pharmaceuticals with identical active ingredients and reducing the prices of pharmaceuticals not subject to fixed-amount regulations, savings of just over €1 billion are expected.

6 November 2001
The parliamentary groups of the governing parties present a bill defining the fluctuation reserves in the statutory pension-insurance scheme. It provides for a lowering of the required fluctuation reserves by one-fifth to an amount equivalent to the spending of 0.8 month, in order to prevent the contribution rate from rising by 0.3 percentage point to 19.4% in 2002.

21 November 2001
In its 2001–02 Annual Report, the German Council of Economic Experts notes that economic conditions in Germany deteriorated distinctly in 2001 and will initially remain unstable in 2002. Owing to the uncertainty, it juxtaposes an alternative calculation with the basic scenario, in which an average annual growth rate of 0.7% in the real gross domestic product (GDP) is expected in 2002. According to that alternative, under less favourable conditions for the world economy, a decline in real GDP by around ½% is deemed to be unlikely, but at any rate possible, in Germany.

30 November 2001
The Bundestag adopts the Federal budget for 2002, involving a deficit of €23.7 billion, which is therefore €1.5 billion above the amount budgeted for in the draft Federal budget. The additional loss of revenue resulting from the new tax estimate and the labour-market-induced rise in expenditure is to be partially offset by higher receipts from privatisation.

5 December 2001
The Federal Government presents an updated stability programme in which, despite the deterioration in the underlying situation relative to the previous year's programme, it abides by the objective of achieving balanced budgets overall by 2004. The programme is based on the assumption of real economic growth reaching 1¼% in 2002 and 2½% in each of the following years. Although the expected deficit ratios in 2001 and 2002 (at 2½% and 2%, respectively) are

one percentage point above those specified in the previous year's programme, a correspondingly greater deficit reduction is aimed at in subsequent years, via a steeper decline in the expenditure ratio, which is to be reduced from 48% in 2002 to 45½% in 2004 and to 44½% in 2005, the new final year of the medium-term financial projection. As a result of the further stages of the tax reform, the tax and social-security contribution ratio is to be reduced by another one percentage point (to 41%) by 2005, relative to 2002. The debt-to-GDP ratio is estimated to decline by 4½ percentage points (to 55½%) between 2002 and 2005. The programme also includes some alternative calculations based on less optimistic economic assumptions, and some less ambitious spending targets, according to which a balanced budget will not be achieved until 2006.

20 December 2001
The Bundesrat approves the Act Refining Business Tax Legislation, after the bill has been amended in a mediation procedure. Compared with the previous Bundestag decision, the new reinvestment reserve for partnerships is considerably extended. On the other hand, some of the projected relief (e. g. of tax on the acquisition of land and buildings) is dispensed with for corporations, and dividends on portfolio investments are included in trade tax.

1 January 2002
A number of fiscal policy measures come into effect: they include the pension reform, involving the new promotion of private pension provision, the further improvement of family assistance measures, the fourth stage of the "ecological tax reform", the raising of insurance tax and tobacco tax (which, contrary to the original bill, is initially being raised by only one cent per cigarette) and further amendments of business taxation.

11 January 2002
According to preliminary figures, the deficit in the 2001 Federal budget (adjusted for return flows of coins) amounted to €21.1 billion, and was thus €0.8 billion below the budget estimate. This is due to €2.1 billion less expenditure than provided for in the budget, with the labour-market-induced rise in spending having been more than offset by cuts in expenditure in other areas (in particular, in the case of interest payments and underwriting commitments). Receipts were €1.2 billion lower than had been budgeted for.

31 January 2002
In its 2002 Annual Economic Report, the Federal Government expects that expansionary global economic forces will regain the upper hand in the course of the year. Against that backdrop, business activity in Germany, too, should gradually pick up again. Real GDP is forecast to grow by an annual average of around ¾%.

12 February 2002
The Ecofin Council abstains from issuing an "early warning" to Germany, as recommended by the European Commission, pursuant to the Stability and Growth Pact, after the Federal Government has pledged to take due account of the concerns reflected in the Commission's recommendation. Further compliance with the 3% deficit ceiling this year is to be ensured by in-depth monitoring of the implementation of the budgets at all levels. Moreover, the Federal Government undertakes to avoid taking budget-burdening measures and to use any budgetary leeway available for cutting the deficits. In addition, it reaffirms that, in line with its previous commitments, a budgetary position close to balance will be achieved by 2004. To this end, as economic activity gathers pace, additional moves going beyond the measures implied in the updated stability programme may be required.

6 March 2002
The Federal Constitutional Court declares the divergent taxation of social security pensions and civil service pensions to be incompatible with the principle of equality pursuant to Article 3 of the Constitution, and requires Parliament to issue an amendment, which is to be enacted not later than the beginning of 2005.

21 March 2002
In the context of a meeting of the Financial Planning Council, the Federal and *Land* governments admit their responsibility for the commitments arising from the European Stability and Growth Pact, and reaffirm the fiscal objective of a balanced budget for the respective public authority. A corresponding amendment of the Budget Principles Act is to come into effect during the current legislative period, rather than as late as 2005. In addition, it is decided that, in order to meet the obligations of the Stability and Growth Pact, spending by the Federal Government is to be reduced by an average of ½% in the years 2003 and 2004, and the growth of the expenditure of the *Land* and local governments is to be limited to 1% each.

base. As well as shifts in the structure of private consumption towards tax-free or tax-reduced components, the strained liquidity situation of some enterprises and the increased number of insolvencies may also have been contributory factors. Corporation tax, receipts from which were depressed by the sharp cut in tax rates plus the distribution of profits retained in earlier years, showed a negative balance for the first time (-€½ billion), although this was accompanied by sizeable additional revenue from non-assessed taxes on earnings. The worsened profit situation and smaller payments in respect of earlier years likewise contributed to the disappointing corporation tax result as well as depressing trade tax receipts. By contrast, revenue from wage tax and assessed income tax – despite contracting in the wake of the tax reform – marginally exceeded expectations.

Social security contributions and other revenue

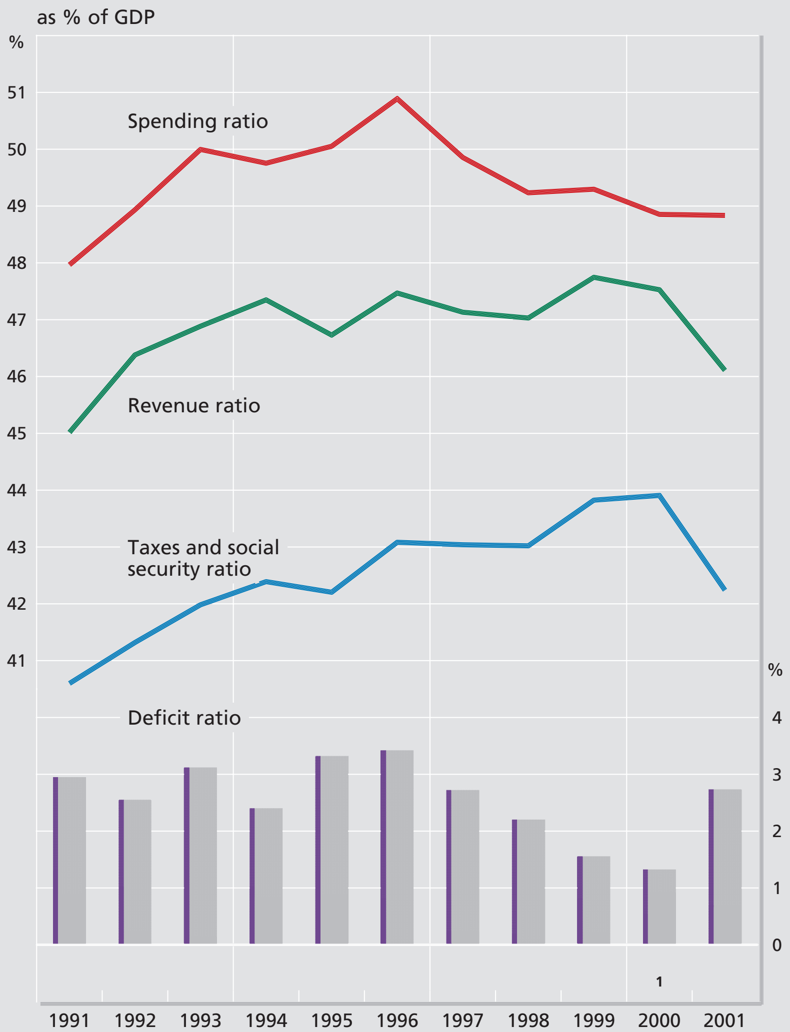
Revenue from social security contributions increased by 1½%. Its growth did not quite keep pace with that of compensation of employees because the contribution rate to the statutory pension insurance scheme was lowered by 0.2 percentage point in connection with the further increase in the government grant financed out of the "ecology tax". Of the other revenue accruing to government budgets, privatisation proceeds, loan repayments and the Bundesbank profit all rose considerably.

Marginally higher expenditure growth

The expenditure of central, state and local government grew marginally more significantly last year but still remained moderate at just over 1% in total. Compensation of employees increased by ½%. Additional burdens caused by the salary increase in the public sector and the growing number of recipients of non-contributory civil servant pensions were partly offset by a decline in staff numbers due, however, not least to outsourcing. Grants from the Federal budget to the social security funds rose sharply (+8%), primarily owing to the greater co-financing of pensions out of general taxation. Transfers to households also grew, partly because of higher benefit levels (+2½%). On the other hand, interest expenditure decreased further (-1½%) on account of the redemption of debt facilitated by the UMTS proceeds and the favourable refinancing terms. Moreover, fixed asset formation was curtailed, especially at local government level, in the light of the worsened financial position. The expenditure of the social security funds grew at the perceptible rate of over 3%, with spending on pensions increasing substantially owing mainly to a further rise in the number of pension recipients. Furthermore, expenditure on pharmaceuticals went up exceptionally steeply. Finally, public outlays were affected by a Constitutional Court ruling that bonus payments must be included in the earnings base from which unemployment benefits and sickness benefit, in particular, are calculated.

General government fiscal ratios*

Chart 24



* As defined in the national accounts. — **1** Excluding the proceeds from the UMTS auction.

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In the aggregate, general government expenditure increased by just over 1½% last year, compared with just under 1% in 2000.

(b) Further outlook and fiscal policy requirements

Need to underpin stability-orientated monetary policy with a medium-term balanced budget

Although fiscal policy in the member states of European monetary union is subject to national sovereignty, it is integrated into a European framework in which the states are committed by the Stability and Growth Pact to achieve a budget position that is close to balance or in surplus in the medium term. The credibility of this Pact is an important pillar of support for a stability-oriented monetary policy. Fiscal consolidation is necessary, too, in view of the additional future burdens posed by the ageing of the population. The task of reducing the high deficit must therefore have priority for German fiscal policy makers during the next few years. In order to preserve the credibility of the Stability and Growth Pact, care should be taken to ensure that the goal of a balanced budget does not become a "moving target". The updated stability programme put forward in December 2001 – like the preceding programme – envisaged reaching a close-to-balance budgetary position by 2004. At the meeting of the Ecofin Council on 12 February the Federal Government once again committed itself to meeting this objective. In the event that the economic situation improves, this includes the possibility of additional consolidation measures over and above those already contained in the updated stability programme.

National agreement

At a meeting of the Financial Planning Council on 21 March 2002, the Federal Government and the *Land* Governments stood by their responsibilities vis-à-vis European commitments and reaffirmed the fiscal policy objective of a balanced budget at every government level. Although it does not contain a concrete time frame for meeting this objective of a balanced budget, a corresponding amendment to the Budget Principles Act will come into force during the current legislation period. In order to comply with the commitments of the Stability and Growth Pact, it was also agreed that the Federal Government should reduce its spending by ½% on average in 2003 and 2004 and that the expenditure growth of both the *Land* Governments and local authorities should be limited to 1%. A general reorganisation of the governmental system, which is to include a financial reform of the local authorities, was also envisaged.

Large deficits continue in 2002

In the current year a sizeable reduction in the deficit is not expected because of the weak momentum of overall economic growth. Although the updated stability programme foresees a deficit ratio of 2% for 2002, the Federal Government has since revised the growth assumptions in its annual economic report downwards and now expects a ratio of 2½%. From the current perspective, however, the risk that the deficit ratio may reach the 3% ceiling appears to be limited. Firstly, the taxes and social security ratio will increase substantially in 2002. Thus the progressive scaling of the income tax regime will have a marked impact this year. Secondly, various revenue-boosting measures entered into force at the beginning of the year, such as the raising of taxes on mineral oil, tobacco and insurance. Thirdly, many health insurance institutions have raised their contribution rates appreciably. The government expenditure ratio will probably rise somewhat as spending is likely to grow noticeably faster. This growth will be

Indebtedness of central, state and local government

Table 9

€ billion

Item	2000	2001 pe	2000	2001 pe
	Level at year-end 1		Change from previous year 2	
Loans against borrowers' notes	444.1	435.1	– 16.4	– 9.0
Securities	722.7	779.0	+ 29.1	+ 56.3
Other debt	44.6	9.2	– 1.2	– 35.4
Total indebtedness	1,211.4	1,223.3	+ 11.5	+ 11.9
Federal Government 3	715.8	701.1	+ 1.8	– 14.7
West German *Land* Governments	282.4	305.8	+ 8.2	+ 23.4
East German *Land* Governments	55.7	58.8	+ 2.5	+ 3.1
West German local authorities 4	81.4	81.8	– 0.1	+ 0.4
East German local authorities 4	17.0	16.8	– 3.7	– 0.3
"German Unity" Fund	40.4	39.6	+ 0.3	– 0.8
ERP Special Fund	18.4	19.2	+ 2.4	+ 0.8
Indemnification Fund	0.2	0.3	+ 0.1	+ 0.1

1 In the definition relevant for compliance with the EMU convergence criterion, government indebtedness comes to €1,222 billion (2000) and €1,232 billion (2001). — **2** The change in the debt level differs from net borrowing, since it includes the assumption of old debt and transfers of items previously included in the general government accounts. — **3** Including the off-budget special funds not shown separately here. — **4** Including municipal special-purpose associations.

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driven by the increase in child benefit, a significant increase in labour market-related expenditure, the cost of internal and external security measures and interest payments. On the other hand, all levels of government are being forced by the strong financial pressures to strictly limit their expenditure in the course of implementing their budgets. Even if there is only a small change in the deficit ratio compared with last year, however, some consolidation progress is likely because the cyclical burdens are increasing and the structural part of the deficit is falling.

Greater consolidation efforts necessary during the next few years

Given the less favourable starting position both last year and this year, a balanced general government budgetary position can be reached by 2004 only by stepping up the consolidation efforts over the next two years. If, in addition, the burden of taxes and social security contributions is to be reduced further, expenditure must be curbed to an even greater extent. Ongoing retrenchment measures will necessitate not only staffing economies in the public sector but also curtailments of current benefit payments. In this connection all subsidies and social security payments need to be reviewed to see whether they are still indispensable in the context of the increased budgetary pressures. In particular, government benefits which considerably distort private incentive structures should be eliminated, also with a view to promoting stronger economic growth and higher levels of employment.

Further need for reform of the social security funds

There is also a considerable need for a reform of the social security funds. Not least on account of the high social security contributions, the tax burden on labour in Germany is still quite high, including by international standards. Even though a growing share of pensions is now financed out of general taxation, the overall contribution rate in the current year significantly exceeds the objective of 40% envisaged by the Federal Government, and has recently even begun to rise again. With measures having been adopted last year to reform the statutory pension insurance scheme, comprising both the reduction of the pay-as-you-go system and the promotion of funded private pension plans, the reform process now needs to focus on the unemployment insurance scheme and the health sector if the burden of social security contributions is to be successfully reduced.

IV European and international cooperation

1 European integration

(a) The completion of European monetary union

Introduction of the euro completed successfully and according to plan

The introduction of euro banknotes and coins in the twelve countries of the euro area has meant that the last stage of monetary union has been completed on time. The fact that the great challenges posed by the currency changeover have been successfully surmounted and that the new currency is now "tangible" will, along with the rapid acceptance of the euro among the general public, probably increase general confidence in the new currency. The completion of monetary integration has definitively welded the participating countries into a union sharing a common destiny. Each member state's economic policy thus has a major bearing on the internal and external stability of the single currency. The institutional safeguards created in this respect, especially the Stability and Growth Pact, are therefore of crucial importance.

The former attractiveness of the Deutsche Mark in Germany and abroad was based on the Deutsche Bundesbank's tried and tested stability orientation and

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

Table 10

Programme/country	Year the programme expires	Fiscal balance as % of GDP: 2001 1	Fiscal balance as % of GDP: Final year of the programme	Gross debt as % of GDP: 2001 1	Gross debt as % of GDP: Final year of the programme
Stability programmes (Euro-area countries)					
Austria	2005	0.0	0.5	61.8	52.1
Belgium	2005	– 0.2	0.7	107.0	88.6
Finland	2004	4.7	2.6	42.7	41.8
France	2005	– 1.4	0.0	57.1	52.9
Germany	2005	– 2.5	0.0	60.0	55.5
Greece	2004	0.1	1.2	99.6	90.0
Ireland	2004	1.4	– 0.6	35.8	34.1
Italy	2005	– 1.1	0.2	107.5	95.4
Luxembourg	2004	4.1	3.4	5.0	3.9
Netherlands	2004	1.0	1.0	51.8	42.0
Portugal	2005	– 2.2	0.4	55.9	53.2
Spain	2005	0.0	0.2	57.5	50.0
Convergence programmes (Other EU countries)					
Denmark	2005	1.9	2.1	43.5	35.1
Sweden	2004	4.6	2.3	52.3	45.2
United Kingdom	2 2006–2007	– 0.2	– 1.0	38.1	36.3

Sources: national stability or convergence programmes. — **1** Estimates given in the programmes have been adjusted, where applicable, for proceeds of sales of mobile phone licences. — **2** Fiscal years, each beginning on 1 April.

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Bundesbank's stability orientation completely adapted by Eurosystem

on an economic and fiscal policy enclosed within a clear regulatory-policy framework which enjoyed many years of success. The Deutsche Mark thus became at the same time a symbol of the successful social market economy model. The Bundesbank's successful stability orientation lives on in the Eurosystem, which has functioned smoothly in its inflation-fighting role since beginning operations. The confidence in monetary stability which has thereby been gained is reflected in low long-term interest rates.

Tangible benefits of European monetary union

The introduction of the single currency has already brought tangible benefits to all euro-area countries. Apart from the reduced interest rates which have fallen into the collective laps of erstwhile high-interest-rate countries, the single currency zone has reinvigorated the markets for private issues, thereby also improving the terms of finance. Moreover, EMU has shielded its members from the impact of sudden shifts in intra-European exchange rates in view of severe problems in the world economy, such as sharply rising oil prices, plummeting stock-market prices, new crises in emerging economies, a sharp economic downturn in the United States and a considerable slowdown in growth in Europe. In the past, such developments often caused tensions in the European Monetary System, which then amplified the impact of external shocks even further. However, one must not overlook the fact that the necessary economic convergence of the euro-area countries needs to be taken further. The increased competition associated with the single currency will probably exert salutary pressure. So far, though, expectations that the euro would act as a catalyst of enhanced economic reform have hardly been borne out.

(b) The ongoing monitoring of economic and fiscal policy

Increasing budgetary problems

According to the rules of the Stability and Growth Pact, EU member states are required to submit medium-term stability programmes or (if they are not participating in EMU) convergence programmes once a year. The Ecofin Council assesses, among other things, whether the multi-year fiscal plans set out in the programmes are compatible with the provisions of the pact. The latest programme updates take particular account of the fact that economic performance in Europe is much weaker than had been expected. Responsibility lies with the "home-grown" economic weakness afflicting major European nations. Europe has therefore been able to free itself from the US downturn only to a slight degree; in the new stability and convergence programmes, for example, real GDP growth in the EU was forecast to reach only 1.8% of GDP in 2001. For 2002, too, lower economic growth was projected for the EU, namely 2.1%. The stability programme assumes that GDP growth in Germany will be ¾% and 1¼% in 2001 and 2002, respectively; by European standards, these rates are especially low. All the same, in 2001 the vast majority of euro-area members had budgets that were either in balance or in surplus. By contrast, public finances were markedly worse in Germany, Portugal, France and Italy. In its December 2001 programme update, Germany registered a budget deficit of 2½% of GDP for 2001 and 2% of GDP for this year, the highest deficit figures in Europe. Since Germany's and Portugal's budgetary positions deviated considerably from the target paths spelled out in the earlier stability programmes and at the same time were perilously close to the pact's upper limit of 3% of GDP, the EU Commission, as required by law, proposed that the Ecofin Council issue to the governments of both countries the early warning envisaged in the Stability and Growth Pact so that the responsible authorities could undertake the necessary efforts to avoid running an excessive deficit in the consolidated budget of all levels of government and thus to achieve the medium-term consolidation goals. After due self-commitments by both countries, the Council refrained from issuing such an early warning in February 2002.

Effectiveness of the Stability and Growth Pact must be safeguarded

Sound government finances are imperative in order to take pressure off the ECB's monetary policy and to safeguard growth and employment over the long term. For that reason, the ratification of the Maastricht Treaty, and of the principle enshrined in it of avoiding excessive government budget deficits, set limits to national sovereignty in the field of budget policy. The Stability and Growth Pact gave specific shape to the Treaty provisions on the coordination and monitoring of economic and fiscal policy and streamlined the relevant procedures in order to safeguard lasting compliance with budgetary discipline in a credible manner. In the light of the current economic difficulties, the stability pact is now facing its first acid test. Disavowal of the goals and procedures of the pact would undermine the credibility of the Community's stability orientation in the eyes of the general public and the financial markets. Hence notions in the summer of 2001 of replacing deficit goals with spending goals were for the most part resoundingly rejected. By contrast, the rules of the pact explicitly provide for the built-in stabilisers to be allowed to work during the business cycle. The normal use of cyclically-adjusted deficit variables when evaluating budget developments provides crucial evidence on the extent to which nominal budget deficits are divided between structural and cyclical causes. However, that must not be used as an excuse to water down budgetary discipline, especially since the methods for calculating cyclical adjustment are not uniform. The Treaty's ceiling of a nominal deficit limit of 3% of GDP (which may be overshot without sanctions only in the case of a severe recession) accordingly calls for a sound budgetary policy which must begin by creating enough leeway for coping with cyclical strains on the budget. The initial effect of refraining from issuing early warnings to Germany and Portugal was to sow more uncertainty as to whether the Ecofin Council will actually invoke the Stability and Growth Pact, with all its consequences, in critical situations. Yet Germany and Portugal, with their self-commitment to balance their budgets by 2004, have taken due account of the misgivings reflected in the early warnings. What now matters is to underpin the self-commitment credibly by means of further consolidating measures.

Ireland followed recommendations to dampen demand

At the beginning of 2001, the Ecofin Council formally and publicly admonished the Irish government to take demand-dampening measures in the face of an overheating economy, which was already being reflected in steep price increases. The Council based its move on the broad guidelines of the economic policies of the member states and of the Community pursuant to Article 99 of the EC Treaty as well as on the procedure envisaged in the case of unwelcome developments. Ireland accordingly undertook further budgetary consolidation measures, despite already running a considerable budget surplus. Moreover, the faltering of the world economy visibly eased Ireland's situation. At the beginning of 2002, Ireland was deemed to be following a fiscal policy course which was basically cyclically neutral.

New code of conduct enhances comparability of the stability and convergence programmes

In July 2001 the Ecofin Council adopted a new code of conduct on the content and format of the stability and convergence programmes. The reformed rules require major standardisation of the programmes and the use of common assumptions regarding the global economic framework. These measures, along with the near-concurrent submission of programme updates, are intended to enhance their comparability and enable them to be evaluated more consistently. The programmes are also meant to indicate the extent to which – in line with recommendations by the European Council – they are geared to a qualitative improvement of fiscal policy and take account of the challenges posed by an ageing population. The objectives of the budgetary policy programmes, moreover, must be compatible with the broad economic-policy guidelines, which for their part are subject to the constraints of the Stability and Growth Pact.

(c) The prospects of EU enlargement

Further progress in meeting accession criteria and in accession negotiations

The prospects of EU accession have become considerably more realistic for most of the accession countries. In its most recent annual strategy report of November 2001, the Commission confirmed that all twelve countries with which negotiations on accession are being held[1] made major progress in meeting the Copenhagen accession criteria last year. On that basis, the negotiations on accession made good headway, too. The political terms have in the meantime been met by all accession countries. As regards the economic criteria, though, the picture continues to be mixed. However, the Commission feels that, in the near future, the Czech Republic, Cyprus, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, the Slovak Republic and Slovenia will be able to be rated not only as functioning market economies but will also be able to withstand competitive pressures and market forces in the EU. The third criterion required, the adoption of the *"acquis communautaire",* has likewise made rapid progress during the negotiations on accession. By the end of 2001, the aforementioned ten candidates had opened all negotiable chapters of the EU *acquis communautaire* and had provisionally closed one-third or more of them.[2]

1 Bulgaria, the Czech Republic, Cyprus, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Rumania, the Slovak Republic and Slovenia.
2 The Community's *acquis communautaire* was split up into 31 chapters, 29 of which are already negotiable. The chapters on "Institutions" and "Miscellaneous" will only be opened once accession negotiations have been closed.

The Eurosystem's Berlin Seminar with the central banks of the accession countries on issues relating to the catching-up process

In December 2001 the Eurosystem held its third top-level seminar with the central banks of the accession countries on issues relating to the catching-up process, with the goal of making it easier for countries seeking membership of the EU to join at a later date. The Eurosystem was represented by the deputy governors of the national central banks and the ECB Executive Board member responsible for international and European relations. The accession countries' central banks were represented by their governors. The Bundesbank and the ECB jointly organised the seminar and prepared the content of the meetings. With the first seminar in Helsinki in 1999 having focused on accession countries' exchange-rate policies and the 2000 seminar in Vienna on price dynamics in the accession countries, the Berlin seminar was dedicated mainly to the progress made by those countries' financial sectors. In addition, participants discussed the impact of capital-account liberalisation on the accession countries' exchange-rate policies and also the ingredients for a successful economic catching-up process.

Here are some important conclusions of the seminar.

– Since financial markets in the accession countries are still underdeveloped, the question of whether an Anglo-Saxon-style financial market model (where capital markets are predominant) or a Continental European model (in which financial intermediation by banks is more important) provides the better preconditions for the supply of credit and for economic growth is not a priority issue. There are success stories for both types of systems.

– In the debate as to whether financial market supervision is a central bank's task or should be entrusted to separate supervisory bodies, it was unanimously agreed that central banks needed to play a key role in banking supervision, and that other agencies having supreme responsibility for financial market supervision should likewise be independent of day-to-day political activity.

– Given the fact that the accession countries would need to undertake full liberalisation of the capital account as part of the *acquis communautaire* which the accession countries are required to accept, the effect of a rise in the accession countries' capital imports on their exchange-rate policies during the catching-up process was also debated as a complement to the discussion in Helsinki. It became clear that merely the varying size of the countries' economies puts each individual country in a very different situation, which means it appears impossible to issue any general recommendations.

– There was a broad consensus that a framework of rules which emphasises individual freedom as an element of regulatory policy is the most important ingredient in a successful catching-up process.

These annual high-level seminars are at the forefront of cooperation between the Eurosystem and the accession countries' central banks, and have proved their worth as an important contribution to preparations for joining the EU. A meeting in Belgium, jointly organised by the National Bank of Belgium and the ECB, is scheduled for 2002.

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Beginning of a dialogue on macroeconomic policy and financial stability

In parallel with the accession negotiations, cooperation with the accession countries in the area of economic and monetary policy has been stepped up. During the year under review, a high-level dialogue on macroeconomic policy and financial stability, which was approved at the end of 2000 by the Ecofin Council and confirmed by the European Council, was launched. Such cooperation is designed to make it easier for accession countries to integrate their economies into the EU and subsequently to participate in monetary union. The accession countries' budget reports and their pre-accession economic programmes are at the centre of the dialogue. Another issue under discussion is a report drawn up every year by the Commission on that country's macroeconomic and financial market stability. At the informal meeting of the EU finance ministers and central bank governors in Malmö in April 2001, the first such dialogue took place at ministerial level. In June and November 2001 conferences attended by high-ranking representatives from the finance ministries and central banks of the member states and their colleagues from the accession countries were held. A further minister-level meeting was held in December 2001. In addition, since 1999 the Eurosystem has been exchanging opinions with the accession countries' central banks concerning the catching-up process. High-level seminars form the backbone of this cooperation. The most recent such event was held in Berlin in December 2001.

First countries expected to join in 2004

At its summits in June and December 2001, the European Council reaffirmed the EU's intention of bringing negotiations with such countries as are ready for accession to a successful conclusion by the end of 2002. That means that the countries in question could already participate in the European Parliament elections in 2004. In addition, in December 2001 the European Council also endorsed the Commission's conclusion that the aforementioned ten countries could be allowed to accede together if they maintain the current pace of progress in reform and negotiations. EU accession will be accompanied by a further preparatory period leading up to participation in monetary union at a later date. The convergence criteria set out in the EC Treaty, in particular, must be met.

(d) Further political integration within the EU

Political integration lagging behind monetary integration

The Treaty of Nice on the institutional strengthening of the European Union was unable to eradicate major shortcomings in the functional ability of the European institutions, despite the forthcoming EU enlargement. The implementation of the desired common defence and security policy will also call for further difficult debate in the coming years. The same is true of the gradual establishment of an area of freedom, security and the rule of law by the formulation of a common visa, asylum and immigration policy; only when this has happened can internal borders in the Community be completely abolished. On the whole, political integration is thus lagging considerably behind monetary integration.

Convention convened to prepare a new intergovernmental conference

In December 2001 the European Council gave new impetus to the pace of integration. It reaffirmed its commitment to introducing a true common asylum and immigration policy and also noted that the Union is now in a position to participate in measures to deal with foreign crises. Above all, the European Council, in a declaration on the future of the Union, paved the way for a new intergovernmental conference aimed at implementing fundamental institutional reforms. In order to prepare this conference as broadly and transparently as possible the European Council decided to convene a convention of distinguished politicians and experts. This body, which has now been officially convened, comprises 105 members, including a representative of each of the heads of state or government of the member states, two representatives of each national parliament and two representatives of the EU Commission as well as 16 members of the European Parliament. The accession countries are likewise involved in the discussions. However, if a consensus is reached among member states on specific material issues, it cannot be blocked by the accession countries. Alongside the work of the convention, a public debate is being held in the context of a forum. The European Council specified, as the most important topics, the division of responsibilities within the EU, the improved gradation of the EU's legal instruments, the enhancement of democratic accountability and the improvement of the transparency and efficiency of Community institutions. Moreover, the structure of the Treaties is to be reviewed; this raises the question of whether the Union will need a constitution in future. The Convention is required to present the results of its consultations to the European Council within one year.

2 Strengthening the international monetary and financial system

(a) IMF reform

Enhanced transparency of IMF operations

In the past year the IMF has stepped up its efforts to improve the transparency of it's member countries' economic policies and the accountability for its own operations. For most countries, the Fund now publishes documents which describe and evaluate current economic developments and problems in detail. It is particularly the staff reports on the annual Article IV economic-policy consultations and the documents on applications for IMF loans and programme reviews that establish more transparency. The Executive Board uses these papers as a basis for its decisions. Standardised press releases or special statements by the Managing Director are ways of communicating the outcome of IMF discussions to the public. Moreover, the IMF is now publishing a growing number of policy papers produced by its staff as well as the results of debates in the Executive Board concerning those papers. In addition, the IMF has increased the transparency of its financial operations. IMF financial reporting has been brought into line with international accounting conventions, and up-to-date information on its financial assistance can now be accessed on the internet. Furthermore, the IMF is submitting its policies to ongoing review by a newly established and independent evaluation office. That office's work programme for its first business year, fiscal year 2002-2003 (which begins in May 2002), includes among its projects an evaluation of the Fund's role in some recent financial crises (Korea, Indonesia, Brazil). Finally, the IMF has intensified its dialogue with external agencies – with representatives of the financial and corporate sector and with diverse groups within society. As a result of this enhanced openness on the part of the IMF, Germany, in 2000, was one of the first members to agree to its Article IV consultation reports always being published.

Strengthening conditionality

The Executive Board also continued to study ways of enhancing the importance of conditionality in its lending practices. Its main goal is to simplify the IMF's economic conditionality while at the same time applying it more flexibly and also confining it strictly to those economic criteria which play a key role in the success of an adjustment programme. That would particularly enhance national "ownership" of and identification with the agreed adjustment programme. One of the key issues in the current debate is the streamlining of structural conditionality, including improving the distribution of effort between the IMF and the World Bank. The ongoing discussions will soon be rounded out by a revision of the 1979 Conditionality Guidelines.

No progress thus far in discussions on quotas

In the discussions on possible revisions of the quota formula which commenced earlier in 2000, progress thus far has been nil. The IMF quotas are key variables which determine each country's financial commitments, drawing rights and voting power. Proposals for reform range from enhancing the clarity and economic plausibility of the quota formula to gearing the method of calculation to politically desirable quota distributions (especially with the aim of increasing the developing countries' share). In the autumn of 2001, the IMF staff proposed a new quota formula comprising three components. The first component, GDP, would indicate a country's financial performance. The second component, namely the absolute sum of current receipts and payments, would reflect the country's integration into the world economy. Finally, the variability of foreign trade receipts and net capital inflows would reflect the country's vulnerability to crises. In the discussion among members on revising the quota formula, GDP and an openness variable have met with general acceptance because they would ensure transparency in calculation and the plausibility of voting power. On the other hand, the proposed variability component has met with reservations. The Bundesbank, too, sees problems in the use of a variability ratio, because it might give members false incentives; for instance, unsound economic policy, resulting in greater external variability, would be rewarded by a higher quota and an increase in voting power.

(b) Improving crisis prevention

Increased monitoring of crisis potential

Since the early 1990s, international capital account liberalization has made great headway in the emerging economies, too, thus contributing to the more efficient allocation of global resources. The flip side, though, is the capital-importing countries' increased vulnerability to crises. The considerable list of countries successively affected by international financial crises since 1995, however, reveals the urgency of implementing economic reforms with a view to gaining the lasting confidence of capital donors. Quite apart from sound macroeconomic policies, it is crucial in this context to make emerging economies' financial systems more immune to crises, so that, at times of economic turmoil, their dependency on foreign funds does not aggravate the situation. On the other hand, capital donors, too, have every reason to be more aware of risk and to improve their risk-control mechanisms. In 2001, the official international institutions not only continued to contribute to pushing through the requisite reforms but also worked on enhancing the efficacy of international early-warning mechanisms. Specifically, the IMF took steps to have the Executive Board regularly monitor the external vulnerability of emerging economies, in particular, using early-warning indicators. In addition, a leading role is being played by the G-10 central banks' Committee on the Global Financial System, which meets four times a year at Executive Board level under the auspices of the Bank for International Settlements. Its operations assist, not least, the activities of the Financial Stability Forum (FSF), which was set up in 1999. Since last year, that forum has engaged even more than before in a non-stop exchange of views on current risks of the eruption of financial market turmoil so that official agencies can react as quickly as possible.

FSF recommendations to promote standards and codes

The implementation of internationally accepted standards and codes in areas of importance for the satisfactory functioning of financial markets plays a vital role in the stabilisation of individual countries' financial systems. The FSF, which emphasised the highly important nature of twelve of these standards in 2000,[1] last year published a list of recommendations for promoting this process. The forum agreed that the implementation of standards and codes would make all the better progress, the more rating agencies and financial institutions allowed such progress to enter into their creditworthiness assessments. The IMF and the World Bank, which are working together towards the stabilisation of the global financial system and which are also providing the requisite technical assistance, therefore began in 2001 to enhance financial market players' awareness of the significance of standards and codes by hosting events for risk analysts and "multipliers" at major international financial centres. In February 2002 a further seminar of this type was held at the Bundesbank. The FSF has also studied the wisdom of using sanctions, where necessary, to put pressure on countries whose implementation progress has not been satisfactory. One such example might be denying those countries' financial institutions access to international markets or prohibiting home-country institutions from doing business with violators. In this respect, though, the Forum recommends extreme caution, since the essential objective is to instil a sense of ownership of the desired objectives. Also, sanctions would require broad international coordination in order to prevent the distortion of competition. However, publication by the Forum in May 2000 of a list of offshore financial centres (OFCs) grouped according to their propensity to cooperate proved helpful. Since then, some offshore centres have reacted by becoming increasingly cooperative. This development has recently been fostered by efforts coordinated at the global level to hamper the financing of terrorist activities.

Improving market transparency through implementation reports

Another way of promoting the greatest possible compliance with internationally accepted standards and codes consists in the Reports on the Observance of Standards and Codes, or ROSCs, which are co-produced by the IMF and World Bank for their members on a voluntary basis. The IMF and World Bank, together with external experts, jointly examine in summary assessments the extent to which individual standards are being effectively observed. Such ROSC "modules" contain a description of the country's current practices, a judgement thereof based on relevant international standards and the most important resultant recommendations. The findings of the ROSC modules are used to pro-

1 See Deutsche Bundesbank, "The role of the International Monetary Fund in a changing global economic environment", *Monthly Report,* September 2000, p 23.

mote dialogue with member countries on economic policy. However, with the consent of the country being examined, the reports are ultimately to be published with a view to improving market transparency. By the end of 2001, a total of around 200 ROSC modules had been compiled for numerous countries or areas and, for the most part, also published, with several industrialised countries leading the way by example. In this spirit, the Eurosystem's compliance with the Code of Good Practices on Transparency in Monetary and Financial Policies was reviewed in 2001. The study revealed that the Eurosystem was characterised by a high degree of transparency and far-reaching observance of the relevant standards and codes.

Further progress in the monitoring of financial systems

In addition, the IMF and the World Bank have made further progress in the systematic monitoring of individual financial systems. Based on ROSC modules, the voluntary Financial Sector Assessment Programmes (FSAPs) introduced for this purpose aim at a comprehensive assessment of the strengths and weaknesses of a country's financial system. They also form a basis for identifying the need for technical assistance. Up to 24 such studies a year are currently planned, with systemically important countries having priority. The medium-term objective is to review all IMF members. As a result of the publication of the above-mentioned FSF list of OFCs, most of those financial centres are likewise cooperating with the Bretton Woods institutions. Whereas offshore centres were initially only willing to submit self-assessments of their financial stability, major OFCs are now permitting external experts to conduct examinations.

(c) Private sector involvement in crisis resolution

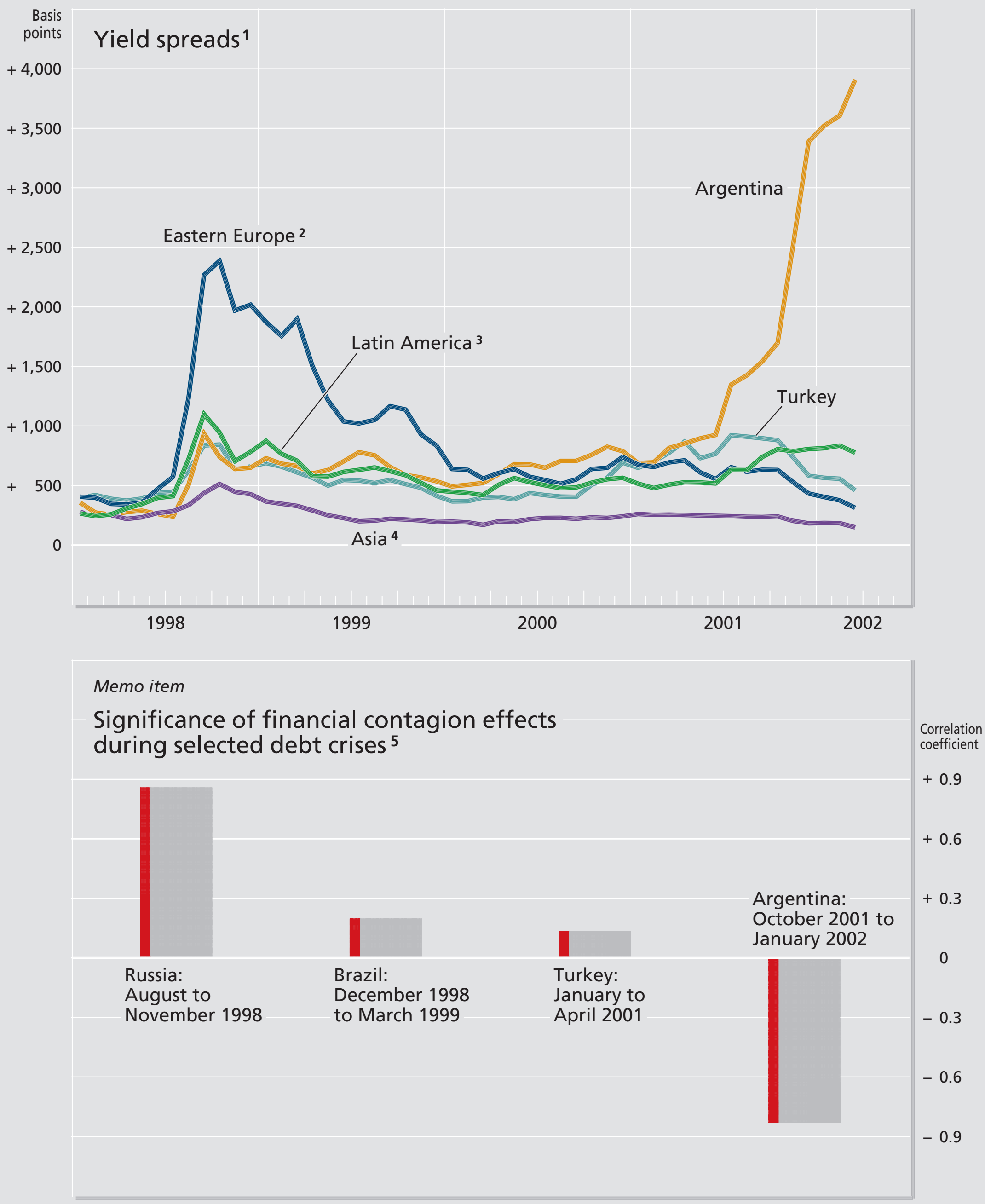
Increased efforts to further develop the Prague framework

Major international institutions and bodies are firmly convinced that the key to making lasting improvements in the ability of the international monetary and financial system to function lies in the timely and effective involvement of emerging economies' private sector creditors in the resolution of international debt crises. Under the framework agreed by the International Monetary and Financial Committee (IMFC) at the IMF meeting in Prague in September 2000, the IMF, in the event of a debt crisis, should make the scale of its financial aid, and therefore also the "if" and "how" of private sector involvement, conditional on the affected country's prospects of regaining access to markets. Countries with balance-of-payments difficulties that are rated as temporary could accordingly be given massive financial assistance if required. In this case, the private sector should at the most be encouraged to give voluntary crisis-resolution assistance. On the other hand, if the debtor country is expected to suffer a long-term crisis of confidence, then the IMF should seriously contemplate extreme financial restraint and commensurate debt-rescheduling agreements. This framework may look attractive at first sight. However, practice has shown that the required a priori distinction between liquidity crises and solvency crises leaves a lot of room for political manoeuvring which can easily be exploited to continue the strategy of giving large financial packages, thereby ultimately frustrating attempts to enhance private sector involvement. In typical fashion, the IMF met the financial crises which beset Turkey and Argentina in the autumn of 2000 quasi-automatically by granting massive financial assistance; the voluntary private sector involvement which was demanded at the same time actually fell well short of expectations. In addition, it soon became clear that Turkey did not have to contend merely with short-term problems. In December 2001 Argentina, despite receiving yet more financial assistance, largely had to discontinue payments on its foreign currency debt. It was not least this unsatisfactory experience of crisis management which led to a heated debate last year as to how the Prague framework, with its objective of timely and increased private sector involvement, can be improved.

Greater curbs on official financial assistance are urgently needed

The Prague framework itself contains the key elements of its necessary enhancement. The aforementioned IMFC communiqué emphasised that the IMF's financial resources are limited, that exceptionally large financial assistance packages should be granted only in extreme situations, and that the principle of debtors and creditors being entirely responsible for the risks of their actions should not be violated. It will therefore be particularly important during the course of the further debate to make access to exceptionally large IMF loans more difficult in order to convince market participants that international financial institutions will actually restrict their financial crisis assistance more in future than hitherto. What this implies is that, in future, severe balance-of-payments difficulties attributable to a loss of confidence could, in principle, no longer be resolved without private sector involvement. Although exceptionally large financial assistance must remain possible in rare cases, it would have to be ensured that public funds are not generally used to bail out private creditors. Credible reforms of IMF policies along those lines would give debtors and creditors alike an incentive to reach a quick and voluntary agreement on sustainable solutions in the event of crises, since otherwise payment defaults would ensue and the problems would be dragged out. In this connection, reference should be made to the benefits of equipping emerging market economies' new foreign currency bonds with collective-action clauses (which have been recommended for quite some time) as regards the coordination of creditors' interests. All the evidence suggests that, Risk premiums on emerging-market government bonds

Chart 25



Sources: Thomson Financial, BIS and Bundesbank calculations. — **1** The difference between the yield on US$-denominated bonds and the yield on long-term US government bonds; monthly averages of end-of-week levels. — **2** Eastern Europe: the Czech Republic, Hungary, Poland, Russia and Turkey. — **3** Latin America: Argentina, Brazil, Colombia, Mexico, Peru and Venezuela. — **4** Asia: China, India, Indonesia, Korea, Malaysia, the Philippines and Thailand. — **5** Correlation between the yield spread of the crisis country in one region (Asia, Latin America or Eastern Europe) and that of the other two regions during the period cited.

Deutsche Bundesbank

under those conditions, moratoriums on payments can largely be avoided. The necessary exceptional nature of a moratorium could also be assured by conditioning IMF "lending into arrears" on whether the debtor country, apart from being willing to cooperate (which is already required in the first place), observes a set of good practices, which need to be determined.

Proposed debt-rescheduling mechanism a step in the right direction

In the light of the increased debate on a reorientation of IMF lending policies, in November 2001 the IMF staff publicly proposed creating a formal international mechanism to facilitate the orderly rescheduling of an insolvent debtor country's debt. The IMF is worried that, because of the massive increase in the importance of securitised sovereign debt denominated in foreign currency since the early 1990s, and the correspondingly large number of creditors, sustainable and co-operative solutions will be much more difficult to reach in the event of a crisis. In fact, there is no denying that some creditors of an insolvent country might insist on going to court to enforce their claims, thereby undermining the required efforts to form a consensus and engage in an orderly debt-rescheduling process. The IMF described this risk as one of the reasons why it provided rather generous financial assistance in so many cases in the past. The IMF staff therefore proposes giving the Fund, or another international agency, the power to impose a temporary stay on such lawsuits unless the debtor leaves doubts that he is doing his utmost to reach a quick and fair solution at the negotiating table. The procedure would also allow for majority decisions that would be legally binding on all creditors. In principle, these proposals are not new. Comparable ideas have repeatedly been aired since the 1994-5 Mexican crisis. The fact that the IMF is now revisiting these proposals is partly a consequence of the lack of progress in implementing the recommended incorporation of collective-action clauses in new emerging-market sovereign bond issues. Generally speaking, the IMF's proposals, which are geared to the essentials of major countries' insolvency legislation, are a step in the right direction. Such procedures could, in particular, help lend added credibility to the reform of IMF lending policies, which is being aimed at anyway, thereby giving a further boost to voluntary agreements. But the proposed formal debt-restructuring mechanism raises a host of difficult legal and practical issues which require intense study. At their most recent meeting in February 2002, the G-7 finance ministers and central bank governors decided to investigate all aspects of the Prague framework quickly.

A major reason why the chances of making conceptual progress in involving the private sector in crisis resolution have recently improved is that now, unlike the situation in the past, the crises besetting emerging market economies, even

Reduction of contagion effects facilitates increased private sector involvement

those of significant size, no longer spark off chain reactions in other countries' financial markets. After the Russian crisis of August 1998 had triggered a world-wide rise in risk premia (exacerbated by the difficulties encountered by the Long-Term Capital Management hedge fund, which came to light in September 1998), such contagion effects have now waned distinctly. Even as the situation in Argentina was coming to a head, risk premia in other regions were actually on the decline. This welcome development had several causes. Institutional investors have improved their ability to assess risks, something the official community had been demanding for quite a while. In addition, the intensification of the Argentine crisis was foreseeable, enabling many investors to reduce or hedge their holdings. In addition, hedge funds have been reducing their borrowing for some time, with the result that a crisis in one country is less likely than in the past to compel liquidity-related sales of assets in other countries. The most important factor, though, is that emerging market economies have actively taken steps to protect themselves better against contagion, especially by introducing flexible exchange-rate systems and by accumulating official reserve assets or reducing their short-term foreign debt. On the whole, financial markets have become better at distinguishing between individual emerging market economies in terms of their credit risks, which suggests that further restraint by the IMF in its financial crisis management will not pose unduly strong obstacles to the flow of capital to those countries.

3 International financial assistance

Increasing IMF credit commitments

The amount of total IMF credit outstanding went up by SDR 10.7 billion (US$13.5 billion) in the 2001 calendar year to just under SDR 60 billion. Members took up a considerable volume of funds under stand-by arrangements (SBA), including the Supplemental Reserve Facility (SRF), whereas new borrowing under the longer-term Extended Fund Facility (EFF) continued to decline. Total purchases amounting to SDR 24.6 billion were accompanied by repurchases of SDR 14.1 billion, with repurchases by Korea (SDR 4.5 billion) and Russia (SDR 3 billion) having the greatest impact.

New lending focused on fewer countries

In 2001 IMF lending focused on Argentina, Brazil and Turkey. In the months of January and September 2001, a new combined SBA/SRF arrangement with Argentina, dating from March 2000, was increased by a total of SDR 11.6 billion to SDR 16.9 billion (800% of the quota); to date, SDR 9.7 billion has been drawn down. In September 2001 the IMF approved a stand-by arrangement with Brazil of SDR 12 billion (400% of the quota), replacing a stand-by arrangement of December 1998 originally amounting to SDR 13 billion (600% of the quota). Brazil's outstanding debt to the IMF from both credit arrangements totals SDR 6.6 billion. Turkey received even more generous financial assistance. In December 2000 and May 2001, a stand-by arrangement approved at the end of 1999 was increased to SDR 15 billion (1,560% of the quota); in February 2002, a three-year stand-by arrangement of SDR 12.8 billion (1,330% of the quota) replaced the previous credit arrangements, encouraging the prospect of further disbursements, which might raise the total volume of funds disbursed from all arrangements to over 1,800% of the quota by the end of 2003. At present, Turkey owes the IMF SDR 13.6 billion from the existing arrangements.

Less-than-satisfactory private sector involvement

In contravention of the IMF's policy (which it reaffirmed in 2001) of permitting access to IMF funds in excess of the cumulative borrowing limit of 300% of the quota only in exceptional cases, in the three instances mentioned above the financial assistance provided was considerably higher. The Argentine and Turkish cases, in particular, raise a host of questions, not only regarding the equal treatment of all IMF members and the necessary diversification of risk with respect to Fund assets (by 2003, around 30% of all outstanding IMF credit might be accounted for by Turkey alone). In fact, the IMF's response to the crises in Argentina and Turkey demonstrated how easily the aforementioned Prague framework of distinguishing between liquidity crises and solvency crises can lead to a generous interpretation of the Fund's role, even if the overall state of a country cannot but raise serious doubts as to the country's ability to meet its existing long-term debt-service obligations. What was particularly disillusioning, moreover, was the fact that the voluntary private sector involvement in crisis resolution expected by the IMF did not yield satisfactory results. The "mega swap" of around US$30 billion voluntarily agreed by the Argentine government in June 2001 and effected on market terms did not give rise to a sustainable balance-of-payments burden; rather, it dramatically increased the cash value of the debt. The subsequent restructuring of around US$60 billion worth of sovereign debt voluntarily agreed with domestic financial institutions in December 2001 likewise failed to bring any lasting relief, causing Argentina ultimately to lose the confidence of the markets and forcing it to declare a comprehensive moratorium on debt payments in December 2001. In the case of the IMF's financial package for Turkey, the intended voluntarily prolongation of foreign bank loans did not produce the desired effects, since the exceptionally massive recourse to IMF funds was accompanied by considerable outflows of capital. In December 2000 the Turkish authorities, at the IMF's request, agreed with the

Purchases, repurchases and total credit outstanding under IMF facilities

Table 11

SDR billion

Item	1997	1998	1999	2000	2001
Purchases					
Credit tranches 1	13.3	12.1	7.5	5.9	23.0
Extended Fund Facility (EFF) 1	2.7	6.3	1.8	1.3	0.7
Compensatory Financing Facility (CFF) 2	0.1	2.2	0.7	0.0	0.0
Poverty Reduction and Growth Facility (PRGF) 3	0.7	0.9	0.7	0.5	0.9
Total purchases	16.8	21.5	10.7	7.7	24.6
Repurchases	6.3	7.3	20.0	15.8	14.1
Net purchases	10.5	14.2	– 9.3	– 8.2	10.6
Total IMF credit outstanding 4	52.6	66.8	57.5	49.3	59.9
of which 5					
Europe	15.7	19.6	17.4	16.7	21.6
Asia	15.5	24.2	17.9	18.6	12.4
Latin America	13.8	15.6	14.9	6.8	19.0
Africa	7.1	6.8	6.6	6.5	6.2

Source: IMF. — **1** Including purchases under the Supplemental Reserve Facility (SRF). — **2** Formerly the Compensatory and Contingency Financing Facility (CCFF). — **3** The PRGF was formerly the Enhanced Structural Adjustment Facility (ESAF); this item also includes the former Structural Adjustment Facility (SAF). The SAF and PRGF are financed out of special assets administered by the Fund. — **4** Level as at the end of the year. — **5** Delineation of regions according to IMF definitions; Europe also includes the countries of the former Soviet Union.

Deutsche Bundesbank

foreign creditor banks to maintain the interbank loans at their level at that time. That rollover agreement was publicly reaffirmed in June 2001. In addition, compliance with those agreements was monitored by regular teleconferences between the G-10 central banks, coordinated by the Bundesbank (in which the Turkish central bank and the IMF took part). None of this was successful, though. For one thing, creditors were apparently not convinced that the Turkish economic programmes were being implemented smoothly. For another, Turkey, in view of the massive IMF assistance, had an interest in reducing the relatively expensive interbank loans, which ultimately served to finance its budget.

Development banks' adjustment loans pose efficiency risks

The new lending commitments made by the World Bank (IBRD and IDA) rose in the 2001 financial year (July 2000 to June 2001) to US$17.3 billion, against US$15.3 billion in the previous year. That was entirely due to a distinct rise in IDA concessional lending to the poorer developing countries (particularly in Africa). By contrast, the IBRD's lending, which is on market terms, went down a little in the 2001 financial year, to around US$10.5 billion. Nearly half of that amount went to Latin American countries, mostly in the form of adjustment loans designed to promote economic policy reforms and institution-building. Fast disbursing adjustment loans were also a key element in the lending of the

Inter-American Development Bank (IDB), which is primarily responsible for Latin America, last year. Roughly 40% of the US$7.8 billion worth of new lending commitments in the 2001 calendar year consisted of non-project loans. The multilateral development banks are unmistakably seeking to convert a larger percentage of their loans over the long term into fast disbursing, non-project loans. Newer forms of adjustment loans, which had already been introduced in the early 1980s, though, are sometimes reminiscent of the IMF's Contingent Credit Line (CCL). This affords developing countries an option for financing their budgets or balances of payments that is not without its problems. That poses the risk that adjustment loans may reduce, rather than reinforce, pressures towards implementing necessary reform processes. Hence care must be taken to ensure that no new scope is opened up for less productive expenditure.

Considerable debt relief through HIPC initiative

As 2001 came to a close, 24 of the 42 heavily indebted poor countries (HIPCs) qualifying for the enhanced debt initiative had reached the "decision point" in the qualifying process, at which the scale of debt relief intended to bring the debt burden down to sustainable levels is defined in a binding fashion. In addition, from this point in time onwards, the international community grants interim debt relief in order to underpin poverty reduction and other reform measures. Around US$36 billion in debt relief has already been granted to the 24 qualifying countries. According to information from the World Bank, such relief leads to a significant reduction in certain debt indicators, such as the debt-to-exports or debt-to-revenue ratios. Following the granting of debt relief, some indicators for these countries are markedly below the average values for developing countries not benefiting from the HIPC initiative. In response to a proposal by the IMF and World Bank, the debt initiative has been made flexible enough so that the scale of relief granted at the decision point can be increased if exogenous factors lead to a fundamental deterioration in economic conditions. From the Bundesbank's point of view, however, it is essential that such supplementary assistance not become the rule; instead, it should be examined carefully, on a case-by-case basis, whether each of the cited exogenous shocks is really long-term in its effect. Now it is especially important for the IMF and the World Bank to monitor precisely the new external borrowing of HIPC countries, in order to forestall the incurrence of new unsustainable debt burdens.

UN conference on "Financing for Development" addresses problematic proposals

Last year, the general debate on development policy was strongly influenced by preparations for the UN International Conference on Financing for Development, which took place in Monterrey, Mexico in March 2002. The basis for this conference was a report drafted by a panel chaired by former Mexican president

Ernesto Zedillo which ended by formulating twelve recommendations. Among other things, the report calls for the convening of a summit meeting to discuss the establishment of a "Global Council" to control globalisation, the creation of a global environmental agency, the use of SDRs for development finance and the establishment of an international tax organisation to levy a tax to support development assistance. Even though the Zedillo report does a good job in detailing developing countries' individual responsibility for success in the fight against poverty, it is quite possible that the quest for "innovative financing methods" will dominate future debate. In the Bundesbank's view, it would not be acceptable, for example, to create new SDRs for the sake of development finance. Under the IMF Articles of Agreement, the allocation of SDRs presupposes the existence of a long-term global need for artificial official reserve assets. However, in today's international monetary and financial system, such a global need to supplement global official reserve assets is unlikely to arise. The IMF also stated as much in its regular assessment of the macroeconomic situation in December 2001. Any creditworthy country can ultimately meet its reserve needs by borrowing in the highly developed financial markets. Some proponents of further allocations of SDRs actually contradict themselves. On the one hand, they claim that there is a shortage of reserves, and that this should be remedied free of charge; on the other, they expect developing countries to use such allocations immediately for additional imports. In the latter cases, official reserve assets (which may help overcome temporary balance-of-payments problems) would be misused for the permanent acquisition of real resources.

Operations of the Deutsche Bundesbank

I The Bank's involvement in the operations of the European System of Central Banks

The Bank as an integral part of the ESCB

With the advent of Stage Three of European economic and monetary union, national monetary policy powers were transferred to the European System of Central Banks (ESCB). The Bank is an integral part of the ESCB. As the central bank of the EU country with the largest population and the highest economic output, it has a particularly important role to play. Along with the other national central banks, the Bank is involved in the decisions taken by the ESCB, and plays an active part in the preparation of such decisions. Moreover, it is responsible – with just a few exceptions – for the implementation of the monetary and other operative transactions of the ESCB in Germany. After all, over 50% of the Eurosystem's refinancing operations are accounted for by German banks.[1]

Bundesbank President a member of the ECB Governing Council

A prominent role is played by the Bank's President, who is an *ad personam* member of the ECB Governing Council. That Council is the most important decision-making body of the ESCB. In particular, it formulates the single monetary policy for the euro area, issues guidelines and takes the decisions that are necessary to ensure the performance of the functions assigned to the ESCB.

Tendering advice to the President

Such participation in decisions by the ECB Governing Council calls for expert and effective advice. The Central Bank Council discusses the implications of domestic and external monetary policy – without prejudice to the President's independence of instructions in his capacity as a member of the Governing Council.[2] In addition, it is crucial that the close contacts with the ECB that are needed to give the President useful support are in place at the central office of the Bank. In this connection, particular importance attaches to the numerous committees and working groups of the ESCB, where representatives of the central office of the Bank work alongside staff members of the ECB and the other national central banks on the preparation of major decisions. Knowledge of the debates at the committee stage is essential to any expert counselling of the Bundesbank President.

ESCB committees and sub-groups

In 1998, the Governing Council set up twelve ESCB committees, which assist it in the performance of its functions. As a rule, the committees are composed of representatives of the national central banks of every country participating in economic and monetary union and the ECB. Representatives of the national

1 See the detailed notes in Section IV, page 148 ff.
2 From 1 May 2002 the Bundesbank will be governed by an Executive Board (see p 9, 42 f and p 45).

central banks of non-participating member states attend meetings of the committees if matters are being discussed that fall within the area of responsibility of the General Council.[1] The committee chairmen are appointed by the Governing Council; they are mostly chosen from among the ranks of the Directors-General and Directors of the ECB. At present, exceptions to this rule are the International Relations Committee, the Banking Supervision Committee and the Budget Committee, whose chairman is in each case selected from among the ranks of the national central bank staff members. In the case of the Banking Supervision Committee, the chairman is a member of the Directorate of the Bank. In turn, the committees are assisted in their work by about 60 working groups and project groups. That level of work likewise owes a great deal to the involvement of the national central banks.

In practice, the committees of the ESCB are of outstanding importance because they make a major contribution to the decision-making of the Governing Council. Their range of functions encompasses monetary policy issues and their implementation, international relations, the Governing Council's law-making for the euro area, banknote production and issuance, payment transactions, statistics and other matters, too, (see the notes on the various committees on the following pages). This is where the representatives of the national central banks can bring their expertise, their knowledge of national peculiarities and their multi-year experience of the respective central banks to bear. In this way, the committees help to ensure that the functions of the Eurosystem, and of the ESCB, are performed effectively, and with due consideration of any special conditions that may obtain.

After having addressed such topics in depth, the committees submit recommendations to the Governing Council, via the Executive Board of the ECB. These recommendations range from the elaboration of common policy positions to the treatment of quite technical issues. The latter include, in particular, recommendations on harmonisation strategies, intended to ensure the uniformity of the settlement of the operations of the ESCB, as well as their further development in technical and material terms.

Major tasks in 2001

For a number of the committees, the preparation of the introduction of euro currency has recently been the focus of their work. That applies particularly to

1 The General Council is composed of the President and Vice President of the ECB and the governors of all the national central banks in the ESCB. In addition to the members of the Eurosystem, that also includes the governors of the national central banks of Denmark, Sweden and the United Kingdom.

the Banknote Committee and the Coordinating Committee for the Transition to Euro Currency, set up by the Governing Council solely for the period from March 2001 to March 2002. The Coordinating Committee supervised preparatory work in the participating countries and established ESCB-wide communication structures for the period from 27 December 2001 to 28 February 2002. Other committees – such as the Legal Committee, the Information Technology Committee and the External Communications Committee – accompanied the introduction of euro currency in legal, technical and public-relations terms. Another major field of committee activity last year was the further development of the policy governing the distribution of monetary income in the ESCB. In this context, it was especially the Accounting and Monetary Income Committee, along with the Legal Committee, that performed wide-ranging preliminary work.

Besides the ESCB committees, there is a Budget Committee composed of representatives of the central banks of the Eurosystem. It serves the purpose of constantly advising the Governing Council on budgetary issues. Accordingly, it reports – unlike the other committees – direct to the Governing Council.

1 Accounting and Monetary Income Committee

Regulating the distribution of monetary income

The Accounting and Monetary Income Committee (AMICO) works in the fields of accounting that fall within the area of responsibility of the ESCB. Thus, the introduction of euro banknotes as legal tender from 1 January 2002 made it necessary to address a whole series of complex issues relating to the accounting of outstanding euro banknotes. Moreover, some technical questions concerning a follow-up arrangement for the transitional regulations for distributing monetary income, which expired at the end of 2001, had to be addressed. Last year, the Accounting and Monetary Income Committee duly carried out appropriate preparatory work, which was reflected in the published decisions of the Governing Council on the issuance of euro banknotes and the distribution of monetary income.

2 Banking Supervision Committee

The Banking Supervision Committee (BSC) is mainly concerned with questions relating to the stability of financial systems and financial institutions, and is also a forum for cooperation between the supervisors and central banks of the

15 EU member states. In view of the cross-border operations and ties of credit institutions in Europe, and of the overall growth of systemic risk in recent years, the importance of such tasks is increasing. Last year, too, the Committee's work centred on macroprudential analyses, such as regular studies of the stability of the European banking system, or of the earning and risk position of credit institutions. Cooperation in the Banking Supervision Committee again proved its worth in a critical situation immediately after the terrorist attacks of 11 September 2001, when an up-to-date evaluation of conditions in the money markets, of the functionality of payment and settlement systems and of conditions in European banking systems was immediately supplied. In the light of its composition, the Committee is also the appropriate body for combining the findings of the supervision of individual institutions more efficiently with those of an analysis of systemic stability, in the interests of "across-the-board" supervision.

Multilateral cooperation between banking supervisors and central banks

Acid test after 11 September 2001

3 Banknote Committee

The Banknote Committee (BANCO) is involved in the discharge of those functions of the ESCB that are associated with the note-issuing prerogative. The focal point of last year's activities was the preparation of the Governing Council's decisions in connection with the introduction of euro currency. The course of production of the initial supply of euro banknotes was monitored continuously in terms of both quantity and quality during the year; the joint quality-management system was devised and enhanced. Moreover, security standards in the various production facilities for primary products and banknotes were constantly monitored and improved. Progress was made in establishing a counterfeit-monitoring system, with the aid of a pan-European database. A network of analysis centres, with a counterfeit centre at the ECB at its head, has now been set up. Another important issue is the elaboration of uniform sorting standards for euro-banknote processing in the Eurosystem, in order to safeguard the uniform quality of the banknotes in circulation.

Preparing the introduction of euro currency

Establishing a pan-European counterfeit-monitoring system

4 External Communications Committee

As a member of the External Communications Committee (ECCO), the Bank is involved, through its representatives, in formulating and coordinating the ESCB's communications policy. Among the committee's functions are the drawing-up of common principles for information and communication and the planning of

Formulating and coordinating the communications policy of the ESCB joint information campaigns. A focal point of the committee's activities last year was the design and implementation of the "Euro 2002" information campaign on the introduction of euro currency.

5 Information Technology Committee

Developing systems and methods of application

The Information Technology Committee (ITC) ensures that the operational processes of the ESCB are buttressed by the requisite IT infrastructures, information and communication systems, and methods of application. On the basis of IT-strategic planning and IT-related control mechanisms, appropriate systems and methods of application are developed, or adjusted to the requirements of the specialist fields, and then put into operation in the ESCB (and even outside it, with other international institutions). Last year, the committee's work focused on the IT support of the introduction of euro currency, that is to say, on the development of information systems for managing currency in circulation and for monitoring the incidence of euro counterfeits. Another focal point was enhancing the performance and security of IT infrastructures in the ESCB.

6 Internal Auditors Committee

Auditing of ESCB-wide procedures, operations and systems

The Internal Auditors Committee (IAC) is responsible for auditing ESCB-wide procedures, operations and systems. The members of the committee exchange information on best practices in the case of internal audits and foster the exchange of expertise. Joint auditing projects and audit reports of national central banks and the ECB are coordinated by the Internal Auditors Committee. In line with the principle of decentralisation, the conduct of internal audits is the responsibility of the internal audit divisions of the national central banks.

7 International Relations Committee

Positioning in questions concerning international economic, monetary and financial market issues

The International Relations Committee (IRC) comprises the Deputy Governors, or other high-level representatives, of the national central banks and a member of the ECB Executive Board. It prepares common positions on monetary and exchange-rate issues, or drafts basic orientations for ESCB central banks, on topics extending beyond the Eurosystem's or the ESCB's area of responsibility proper. In addition, the committee regularly monitors the functioning of the international monetary system and the international financial markets, and comments on issues and suggestions for improvements that are currently under discussion in international fora. The committee also monitors the functioning of the exchange rate mechanism ERM II. Moreover, the committee assesses the progress made by the accession candidates on the way to EU membership and participation in monetary union. Among the other topics with which the International Relations Committee concerned itself intensively last year were developments in emerging markets (especially including the IMF's crisis management in the cases of Turkey and Argentina), the possible involvement of the private sector in the solution of financial crises, the international role of the euro and – in the context of the eastward enlargement of the EU – the present state of the accession process.

8 Legal Committee

Preparing legal acts

The Legal Committee (LEGCO) assists in the performance of the ESCB's legal functions. Its mandate encompasses, in particular, the preparation of the manifold legal acts which the Governing Council issues in the discharge of its duties under the EC Treaty and the ESCB Statute. For instance, the Legal Committee was involved in compiling the drafts of the more than 120 legal acts the ECB has issued since June 1998, and also tendered advice on institutional issues affecting the ESCB. It assists in monitoring of the implementation of the legal acts of the ECB and, in particular, fosters exchanges of views between the lawyers of the national central banks and the ECB and also with legal experts in the central banks of the accession candidates. Besides advising the other committees on legal questions, the Legal Committee addresses legal issues affecting the operations of the ESCB and monitors the development of Community law in that area. Important functions in 2001 were the legal accompaniment of the launch of euro currency and the further development of the policy governing the distribution of monetary income in the ESCB.

9 Market Operations Committee

Observing the financial markets

The Market Operations Committee (MOC) assists the Governing Council and the Executive Board especially in observing developments in the financial markets and financial instruments, in the conduct of the single monetary policy, in foreign exchange operations and in the management of ECB reserve assets.

That also includes the regular review and improvement of the functionality of the underlying framework of monetary policy operations, of liquidity management, of the management of ECB reserve assets, of the information systems employed and of the internal organisation. As part of its responsibilities, the committee also helps the central banks of those EU member states which have not yet introduced the euro to adjust their monetary policy instruments and their procedures, and participates in the preparatory work leading to the enlargement of the European Union or to monetary union. Last year, the Market Operations Committee elaborated, among other things, proposals with respect to the underbidding problems posed by refinancing operations, for restructuring the deposit facility, for further developing collateral policy to employ additional instruments in the management of the foreign reserve assets and for coping with the introduction of euro currency in liquidity policy terms.

Assistance in the accession preparations of the pre-ins

10 Monetary Policy Committee

Addressing strategic and technical monetary policy issues

The Monetary Policy Committee (MPC) is active in the field of monetary policy. It addresses both strategic and other long-term issues, as well as technical aspects in this field. The committee regularly compiles, among other things, a number of reports for the Governing Council and the General Council. Last year, these included semi-annual macroeconomic projections for the euro area (which were also published in the ECB's Monthly Bulletin) and the Annual Report on the state of public finances in the EU. In addition, the Monetary Policy Committee is engaged, for example, in monitoring the ban on government financing through central bank lending, in accordance with Articles 101 and 102 of the EU Treaty.

11 Payment and Settlement Systems Committee

Lead function for TARGET and CCBM

The Payment and Settlement Systems Committee (PSSC) is meant to help foster the smooth functioning of payment systems in Europe. Major functions in this connection are the operation of the TARGET system and of the Correspondent Central Banking Model (CCBM), policy decisions in the fields of payment systems and payment supervision ("oversight"), as well as securities settlement and their clearing systems. The focal points of operations last year included, among other things, the technical and organisational orientation of TARGET ("long-term TARGET strategy"), potential ways of improving cross-border retail

Long-term TARGET strategy

payments, preparations for an enlargement of the euro area and, in the securities sector, cooperation with securities supervisors with a view to implementing international standards.

12 Statistics Committee

Harmonising banking and balance-of-payments statistics within EMU

The principle function of the Statistics Committee (STC) is that of harmonising banking and balance-of-payments statistics within EMU. The objective is to draw up such statistics in accordance with a uniform approach, while achieving a maximum of efficiency in the collection and processing of data as well as in the presentation of the statistical findings. In addition, coordinating functions are to be performed at an international level in the fields of both monetary and financial statistics and general business statistics. Moreover, the Statistics Committee is devising suitable technical infrastructures for data communication and administration, and is fostering statistical preparatory work in those EU countries which have not yet joined EMU. Major focal points of work last year were, for instance, the further development of harmonised monetary and banking statistics and the launch of EMU-wide interest-rate statistics.

13 Budget Committee

Advising the Governing Council on budgetary matters

The Budget Committee (BUCOM) advises the Governing Council prior to decisions on the ECB budget, which is drafted by the Executive Board, and also in the event of supplementary budgets exceeding €1 million. In addition, the Budget Committee evaluates the annual budget report, which is drawn up by the Executive Board. In 2001 the Budget Committee was particularly concerned with the planned support of the European School in Frankfurt by the ECB, with the purchase of the wholesale market-hall site from the city of Frankfurt as a new location for the ECB, and with individual issues connected with measures of currency conversion.

II Processing cash payments and cashless payments

1 Cash payments

Banknotes and coins in circulation

Owing to the introduction of euro banknotes and coins on 1 January 2002, the value of banknotes in circulation at 31 December 2001, at DM149.8 billion, was DM112.3 billion, or 42.8%, lower than at the end of 2000. The value of coins in circulation fell by 22.4%. At the end of 2001, 92.3% of all currency in circulation consisted of banknotes, and 7.7% of coins.

At the end of the period under review, approximately 1.84 billion banknotes were in circulation. The significant year-on-year decline in circulation is mainly due to the reduction of hoarded cash (especially in the large denominations) at home and abroad in view of the introduction of euro banknotes and coins on 1 January 2002.

Currency in circulation and its pattern

Table 12

Trends over time

DM million

End of	Currency in circulation	Banknotes in circulation	Coins in circulation
1997	276,242	260,686	15,556
1998	270,981	255,335	15,646
1999	289,972	274,133	15,839
2000	278,143	262,089	16,054
2001	162,205	149,755	12,450

Pattern at the end of 2001

Banknotes in circulation			Coins in circulation		
Notes of DM	DM million	Percentage of total	Coins of DM	DM million	Percentage of total
1,000	43,747	29.2	10.00	2,582	20.7
500	13,576	9.0	5.00	4,098	32.9
200	3,770	2.5	2.00	1,789	14.4
100	62,074	41.5	1.00	1,780	14.3
50	14,922	10.0	0.50	897	7.2
20	7,095	4.7	0.10	807	6.5
10	4,332	2.9	0.05	253	2.0
5	239	0.2	0.02	112	0.9
			0.01	132	1.1
Total	149,755	100.0	Total	12,450	100.0

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Destruction of banknotes

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

	1997	1998	1999	2000	2001
Number (million)	1,466	1,475	795	782	1,781
Value (DM billion)	118.9	96.2	43.0	85.1	260.9

The sharp rise in the volume of the banknotes that were destroyed in 2001 was mainly due to the fact that some of the reserve holdings and banknotes flowing back from payments had already been shredded in view of the impending changeover to euro banknotes and coins.

Coins

The stock of German coins held by the Bundesbank at the end of 2001 amounted to DM4,854 million (end-2000: DM1,514 million); the stock thus amounted to 39.0% of the total coins in circulation. This high figure is essentially due to the strong return flow of coins shortly before the introduction of euro cash. In 2001, around DM112 million was credited to the Federal Government in respect of coins received from the mints and around DM377 million was debited to it in respect of coins. Between 1948 and 2001, the Bundesbank – acting for the account of the Federal Government – received coins amounting to DM20,275 million and redeemed coins which were no longer fit for circulation or which had been called in, equivalent to DM2,972 million. At the end of 2001, coins totalling DM12,450 million were in circulation, equivalent (given around 82 million inhabitants) to about DM152 per head of the population.

Counterfeits

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

Counterfeits detained in payments, as recorded by the Bundesbank — Table 13

	Banknotes		Coins	
Year	Number	DM thousand	Number	DM thousand
1997	33,873	3,933	14,983	67
1998	36,139	4,129	19,990	98
1999	22,532	2,316	26,813	132
2000	20,702	2,428	20,365	100
2001	29,464	4,760	27,263	135

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The largest number of counterfeit banknotes were of the DM20 note, followed by the DM100 note. The counterfeit coins were almost exclusively of the DM5 denomination.

2 Cashless payments

Slight decline in the number of payments made through the Bundesbank

The number of domestic and cross-border payments made through the Bundesbank in 2001 showed a slight decline on the year. Overall, 2.2 billion transfer and collection orders to the value of €107,696 billion were settled in the year

The cashless payments of the Deutsche Bundesbank — Table 14

Item	2000 Number (million)	2000 € billion	2001 Number (million)	2001 Change in %	2001 € billion	2001 Change in %
Retail payments						
Paperless settlement (RPS)						
Direct debits, cheques	1,416.4	1,466	1,363.7	– 3.7	1,377	– 6.1
of which Conversions	51.6	918	44.3	– 14.2	849	– 7.5
Prior 3 payments	810.2	779	833.8	2.9	825	6.0
of which Conversions	1.7	11	1.7	2.2	14	35.3
Total	2,226.6	2,245	2,197.5	– 1.3	2,202	– 1.9
MASSE 1 (cross-border)	4.9	2	4.4	– 10.4	2	– 1.2
Grand total	2,231.5	2,247	2,201.9	– 1.3	2,204	– 1.9
Large-value payments						
Gross settlement procedures						
ELS 2	17.8	24,001	15.9	– 10.9	21,145	– 11.9
$RTGS^{plus}$ 3			4.2		14,302	
TARGET 4 (cross-border)	3.7	28,294	3.7	1.2	33,282	17.6
AZV 5 (cross-border)	0.2	125	0.2	10.2	127	1.2
Other 6	0.2	790	0.7	271.3	1,612	104.0
Total	21.9	53,211	24.7	12.9	70,466	32.4
Net settlement procedures (Daily local clearing system)						
EAF 7	13.0	41,522	11.0	– 15.2	35,026	– 15.6
Total	13.0	41,522	11.0	– 15.2	35,026	– 15.6
Grand total	34.9	94,733	35.7	2.5	105,492	11.4
Cashless payments	2,266.4	96,979	2,237.7	– 1.3	107,696	11.1

1 Procedure for cross-border retail payments of public authorities. — **2** The real-time gross system of the Bundesbank up to 2 November 2001. — **3** The real-time gross system of the Bundesbank from 5 November 2001. — **4** Real-time system (of the EU central banks) for cross-border individual/large-value payments in EU countries. — **5** Procedure for cross-border individual/large-value payments in EU/EEA countries and non-EU/EEA countries. — **6** For example, special procedures for public authorities, payments within ELS following the introduction of $RTGS^{plus}$. — **7** Discontinued as of 2 November 2001.

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under review, signifying a slight fall of 1.3% in the number of items submitted. By contrast, the total value increased by 11.1% mainly owing to the introduction of the Bank's new real-time gross settlement system, $RTGS^{plus}$.

Increased number of items submitted by data telecommunication in retail payments

The Bundesbank has also been offering submission and delivery of retail payments by data telecommunication since spring 2000. Up to that time, only data media could be used for placing orders electronically. In order to make this form of data transmission more attractive, the Bundesbank – in consultation with the banking industry – selectively expanded its range of services for data telecommunication customers in the year under review. In addition to generally extended submission times (transfers up to 8pm and collection orders up to 9pm, instead of 6.30pm applying to submissions by data media), in autumn some banks were given the opportunity (in an initial productive pilot run) also to submit their payments in a German banking industry standard data record format for bilateral (data telecommunication) transfers. In December 2001, as much as 20% of all items in the Bank's retail payments were already being submitted by data telecommunication. From 19 April 2002, the Bundesbank is offering this extended submission facility to all banks.

New price and performance structure in retail payments

The additional measures that have already been introduced, or are currently still under discussion with the German banking industry, for an increased use of data telecommunication will be complemented from 1 July 2002 by a new price and performance structure in retail payments. For the new standard service of a submission by data telecommunication, the fee in future will be less than one-third of the earlier fee of €0.0051. A separate charge will be made in future for additional, labour-intensive services provided by the Bundesbank (such as the acceptance and delivery of vouchers and data media). However, the price charged will likewise cover the relevant cost.

Introduction of $RTGS^{plus}$ a great success

After a period of preparation and development lasting just under two years, the Bundesbank put the new liquidity-saving euro individual payment system $RTGS^{plus}$ into operation on 5 November 2001. This system uses and incorporates the advantages of the former large-value payment system ELS (gross real-time processing with access to the EU-wide TARGET system) and EAF (liquidity-saving settlement). The new system has its own intra-day account management (with liquidity transfers from and to the "home account"), employs the latest web communications technology for information and payment management and uses the S.W.I.F.T standards, which are customary in international payments, for domestic payments too. (The Society for Worldwide Interbank Financial Telecommunication (S.W.I.F.T.) operates an international data telecommunication network for a more efficient settlement of payments.) From the outset, RTGS^{plus} – not least from the point of view of computer technology – has proved to be an efficient and stable system. In December 2001, almost 120,000 domestic large-value payments were being routed through RTGS^{plus} on a daily average. In addition, the system also processed 16,000 TARGET payments to non-residents and 13,000 TARGET payments from abroad on a daily average.

ELS (Prior2) and EAF discontinued with the start of RTGS^{plus} operation

With the start of RTGS^{plus} operation, the large-value system Euro Access Frankfurt (EAF) and the Prior2 mode of payment in the Euro Link System (ELS) were discontinued. This means that only Prior1 payments can now be submitted in ELS. ELS thus serves, firstly, as a procedure for accessing RTGS^{plus}, the Bundesbank's new gross real-time system and, secondly, (for the time being) as a procedure for payments among the remaining ELS participants. There will be a three-year transitional period for ELS, after which the Bundesbank will make a new access procedure available to its other current account holders. The new access procedure will also be based on standard homebanking software.

3 Notable developments in domestic and cross-border payments

(a) TARGET – the real-time gross payment system for the euro

TARGET: euro large-value payment system with the highest turnover

In the year under review, the TARGET (Trans-European Automated Real-Time Gross Settlement Express Transfer) system, comprising the 15 national real-time gross settlement (RTGS) systems of the EU member states and the ECB Payment Mechanism, continued to build on its position as the euro large-value settlement system with the highest turnover. Around 45,000 cross-border payments amounting to somewhat more than €500 billion were processed on a daily average in 2001. An average of just under one-third of all orders (14,700 payments) and more than one-quarter of the total amount (€130 billion) were submitted by Germany for passing on to other countries. German banks accounted for somewhat more than one-quarter of all payments in terms of the number of items received. In total, German credit institutions were thus once again involved – either ordering or receiving – in two out of every three cross-border TARGET payments.

TARGET closing days

A long-term calendar for days on which the TARGET system will be closed for business was adopted by the Governing Council of the ECB on 14 December

2000. Until further notice, TARGET will not be in operation, in addition to Saturdays and Sundays, only on six TARGET closing days (New Year's Day, Good Friday, Easter Monday, 1 May, Christmas Day and 26 December). Furthermore, the ECB Governing Council instructed that the TARGET system as a whole be closed on the TARGET closing days, ie including all the national real-time gross settlement (RTGS) systems. The closure of TARGET as a whole was deemed desirable in order to prevent problems arising from differing national TARGET business days. This also conformed, in particular, with the requirements of the banking industry. In February 2002, Greece was granted a limited exceptional derogation from the long-term calendar for a three-year period, but only for retail payments settlement, in cases where the Catholic/Protestant Good Friday and Easter Monday do not coincide with the Orthodox calendar. The relevant press release also reiterated the fact that TARGET closing days are not settlement days for the euro money market or for foreign exchange transactions involving the euro.

Special arrangement for 31 December 2001

The exceptional closure of TARGET as a whole on 31 December 2001 was intended solely to safeguard the smooth conversion of retail payment systems and internal bank systems to the euro.

High availability of the TARGET system

In the year under review, the TARGET system again proved to be a fast, secure and reliable system for the settlement of cross-border large-value payments in euro. The availability of the system as a whole in the reporting year amounted to 99.72%. With the introduction of RTGS^{plus} on 5 November 2001, the availability of the German TARGET component rose from an earlier average of 99.19% to 100%.

CLS is not the only reason ...

The multi-currency Continuous Linked Settlement (CLS), designed by the "G-20 banking group", is scheduled to start operation in 2002. Given the operational procedures involved in this system, together with a time-critical provision of cover, the market players perceive a need for further improvement in availability and contingency planning on the part of all the central banks as well as the TARGET users themselves, since the highly time-critical provision of liquidity in euro for CLS is also performed via TARGET.

... why the credit institutions are calling for greater harmonisation and efficiency

In addition, the banking industry still regards it as desirable to harmonise the differing performance features of the national RTGS systems at as high a level as possible. In particular, uniform interfaces to the national RTGS systems, based on S.W.I.F.T. standards, and improved liquidity management procedures are expected.

Debate on future TARGET strategy

Two alternatives are occupying centre stage in the debate on making future improvements to TARGET's efficiency and range of services as part of a longer-term strategy for the system. One option is to maintain decentralised, albeit harmonised RTGS systems with a centralised information base using new S.W.I.F.T. services. This would mean that the present TARGET structure, which is relatively complex and input-intensive, would remain in place. In this debate, the question of linking future EU accession countries to TARGET is an important factor. The other option, which goes further, would be to provide a technically centralised platform for domestic and cross-border payments with a centralised information system. In the centralised model, the range of services and prices could be identical at all the national central banks.

RTGS^{plus} as a model for a centralised processing platform?

The Bundesbank advocates providing the market with highly efficient and low-priced solutions. This is likely to be feasible only through a centralised processing platform and by harmonising services at the highest level. The way to achieve that end will have to be the subject of further discussion. The Bundesbank has provided a model for this in the shape of RTGS^{plus} and is prepared, under appropriate underlying conditions for all parties involved, to introduce this into the Eurosystem.

(b) Standards in cross-border payments

Customer information

In the year under review, the central associations of the banking industry and the Bundesbank prepared a joint strategy and notices for informing their customers about the use of the International Bank Account Number (IBAN), the Bank Identifier Code (BIC) and the International Payment Instruction (IPI) in cross-border payments. The aim is to use international standards in order to achieve (fully automated) straight-though processing (STP) of cross-border payments – comparable to domestic payments – and thus a rapid and cost-effective settlement of payment orders.

Use of IBAN and BIC in cross-border payments

This objective is achieved by using the IBAN to address the beneficiary's bank/account number and the BIC for addressing the beneficiary's credit institution. The IBAN is a standardised international bank/account number for cross-border payments. It consists of an international component, ie a country code with two places, a check-digit with two places, and a nationally determined component containing, in the case of Germany, the bank code and the account number. The BIC (often also referred to as the S.W.I.F.T. code) is the internationally standardised bank code, which – along with the IBAN – is needed as a second identification feature for the transmission of cross-border payments. The BIC means that credit institutions can be identified unambiguously worldwide.

Use of the IPI in cross-border payments

In addition, the use of the IPI – a credit transfer form standardised by the European Committee on Banking Standards – represents a further significant step in promoting efficiency in cross-border payments. The IPI corresponds to the German credit transfer/cash inpayment form, which is pre-inscribed by the beneficiary. It thus contains all the data needed for the payment to be made simply and securely by the sender. The character-readable information additionally ensures that the data are transferred securely into payments processing, thus allowing the beneficiary to allocate the payment automatically. The IPI may be used for cross-border payments not subject to a reporting requirement, ie for amounts up to €12,500 or the equivalent value in another currency, to European countries.

Allocation of the IBAN to giro account holders (non-banks)

At the end of 2001, the Bundesbank informed its giro account holders (non-banks) of the new standards and the general conditions to be observed when dealing with cross-border payments to EU and EEA countries from 1 January 2002 and notified the giro account holders concerned of their IBAN and the BIC of the branch carrying their account.

Heightened efficiency through standardisation

The IBAN and IPI are without doubt major steps in raising the level of efficiency in cross-border payments. Standardisation has to be pushed even further, however. Above all, binding rules for the interbank settlement of payments have to be agreed. This requires the cooperation of the banking industry at the European level similar to that of the central associations of the banking industry joined together in the Central Credit Committee in Germany. Ultimately, the standards for foreign payments will have to be integrated into each country's domestic payments in order to create uniform clearing structures Europe-wide. A European clearing house has already been envisaged. Furthermore, working towards a fair distribution of fees among the banks is an urgent necessity, as is achieving a reduction of costs through the implementation of STP-capable standards vis-à-vis the banks' customers. Finally, the development of new payment instruments, such as the European direct debit, should be vigorously pursued.

(c) Electronic money

E-money still waiting in the wings

Up to now, electronic money has not been able to establish itself either nationally or internationally on a broad front. One of the reasons for this is the fact that the many different possibilities of using e-money (which makes it possible to pay the correct amount at all times) have not yet been sufficiently accepted by the majority of consumers. It has to be said, however, that the costs incurred in the conversion of shop tills and vending machines as well as the fee to be paid to the banks have stood in the way of e-money gaining acceptance in the retail trade.

Possible growth potential

E-money might come to be used more widely in connection with the projected growth in e-trading on the Internet. In contrast to the account-related electronic payment systems, this would involve electronic value units being transferred (using appropriate security procedures) direct via the Internet. Furthermore, additional applications on the bank customer card chip, such as the storage of digital signatures, electronic tickets or "marketplace applications" (such as bonus point systems) might promote acceptance of e-money. Finally, the planned realisation of electronic purse interoperability on the basis of the Common Electronic Purse Specifications (CEPS) standard would also permit the cross-border use of e-money.

(d) Activities at the G-10 level

Foreign exchange settlement risks

A global foreign exchange settlement system is to be created in the form of the Continuous Linked Settlement (CLS) project. The system will involve settlement on a payment-versus-payment (PVP) basis to accounts of the CLS Bank in New York, which has been established specifically for this purpose, in order to reduce the settlement risks in forex trading. Owing to the improved risk situation, the G-10 central bank governors have expressly welcomed this private sector initiative by internationally operating big banks. Following a few delays in the development of the system and associated rises in cost, some criticism has, nevertheless, also been voiced in the banking industry, not least concerning the expected efficiency of the system. CLS is scheduled to start in 2002, initially with seven currencies (Australian dollar, Canadian dollar, euro, pound sterling, Swiss franc, US dollar and yen). Primary responsibility for overseeing the payments of CLS will lie with the Federal Reserve Bank of New York. Additionally, a working group of the Committee on Payment and Settlement Systems of the Group of Ten Countries (CPSS) at the Bank for International Settlements (BIS) will exercise

Core Principles for important payment systems

G-10 Core Principles for systemically important payment systems

1. The system should have a well-founded legal basis
2. Participants should have a clear understanding of the system's impact on the financial risks they incur
3. Clearly defined procedures for the management of credit risks and liquidity risks
4. Prompt final settlement, at a minimum at the end of the day
5. Multilateral netting ensuring completion of settlement even in the event of an inability to settle by the participant with the largest single settlement obligation
6. Assets for settlement should preferably be a claim on the central bank (little or no liquidity risk)
7. High degree of security and operational reliability
8. Means of making payments which is practical and efficient
9. Objective and publicly disclosed criteria for participation, fair and open access
10. Effective, accountable and transparent governance arrangements.

Responsibilities of the central bank in applying the Core Principles

1. The central bank should define clearly its objectives and disclose publicly its role and major policies with respect to systemically important payment systems
2. The central bank should ensure that the systems it operates comply with the Core Principles
3. The central bank should oversee compliance with the Core Principles by systems it does not operate
4. The central bank should cooperate with other central banks and financial supervisory authorities

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a cooperative oversight of the settlement system on the basis of the principles laid down in the Lamfalussy Report of November 1990. Furthermore, in 2001 the Bundesbank took part in meetings of the Eurosystem with CLS shareholders from the euro area, in particular, in order to discuss the requirements of liquidity management by CLS as well as operational aspects, such as the settlement of CLS payments in euro via TARGET. In cooperation with the commercial banks, the ESCB set out recommendations for CLS payments in euro in order to ensure that the settlement of these time-critical payments in TARGET is as smooth as possible. The banks are thus to accord priority to CLS payments, for example, and make their inpayments to the CLS Bank in the morning as early as possible.

Core principles for systematically important payment systems

In January 2001, the Core Principles for Systemically Important Payment Systems (CPSIPS) were adopted by the G-10 central bank governors. These core principles are designed to promote the organisation and operation of secure and efficient payment systems and will now be used as a basis for assessing systemically important payment systems, including central banks' systems (such as RTGS^{plus}). They also form part of the international standards and codes which are relevant to the surveillance function of the IMF and are applied by the IMF and the World Bank worldwide in assessing the stability of financial systems.

III Securities clearing and settlement

Recommendations for securities settlement systems

On 12 November 2001, the CPSS and Technical Committee of the International Organization of Securities Commissions (IOSCO), an international association of securities supervisory authorities, published a joint report containing 19 recommendations setting out minimum standards for securities settlement systems. The recommendations on the organisation, mode of operation and oversight of such systems are designed to reduce the risks involved in securities settlement systems, enhance their efficiency, and ensure appropriate safeguards for investors worldwide. The national authorities responsible for the supervision and oversight of securities settlement systems are to assess whether the markets within their national jurisdiction have implemented the recommendations and, if necessary, drawn up plans of action for their implementation. For this purpose, the CPSS and IOSCO plan to develop a methodology of assessment in 2002. The IMF and the World Bank will be taking an active part in this next phase of the work.

IV The Bank's money-market and refinancing operations as part of the Eurosystem

Counterparties…

It is a condition for participating in the Eurosystem's monetary policy operations that a credit institution has the status of a counterparty. In principle, counterparties comprise all institutions which are subject to minimum reserve requirements pursuant to Article 19.1 of the ESCB Statute, and which are financially sound. In Germany, the number of such institutions diminished once again in the course of last year (as in the preceding year) on account of persistent mergers in the banking industry, namely from 2,742 to 2,526. Consequently, at the end of the year Germany accounted for about 35% of the just over 7,200 counterparties in the euro area.

... for regular open-market operations

In order to have access to monetary policy operations, counterparties must satisfy certain operational conditions. For instance, for participation in regular open-market operations, the Bank stipulates a pledge account, connection to the Automatic Bidding System (ABS) and generally a giro account at a Land Central Bank. The number of German institutions thus entitled to participate decreased last year, from 1,529 to 1,476 (in the Eurosystem as a whole, there were about 2,500 such institutions at the end of 2001). Specifically, an average of 274 bidders from the Bank's territory participated in the weekly main refinancing operations last year, and 166 in the monthly longer-term refinancing operations (Eurosystem: 404 and 225, respectively.) Hence participation in the standard tenders fell, both in Germany and in the Eurosystem as a whole last year (in the previous year in Germany it amounted to 518 bidders for the main refinancing operations and 186 bidders for the longer-term refinancing operations; in the Eurosystem as a whole, the respective figures were 721 and 270 bidders). The decline was presumably due both to the consolidation process in the banking industry and to the centralisation of Treasury operations. In the case of main refinancing operations, moreover, a great deal was no doubt owed to the transition to variable-rate tenders, which occurred in the summer of 2000 in a rather different overall interest-rate setting.

... for standing facilities

Access to the two standing facilities – deposit facility and marginal lending facility – is open only to institutions that comply with their minimum reserve requirements themselves, that is to say, that do not have recourse to an intermediary institution. Recourse to the marginal lending facility, moreover, calls for both a giro account at a Land Central Bank and a pledge account. In this case, the number of eligible institutions rose marginally (from 1,962 to 2,003) in the course of the year (in the Eurosystem as a whole, there were nearly 3,100 such institutions at the end of 2001). For access to the deposit facility, finally, only an account at a Land Central Bank (besides direct compliance with the minimum reserve requirements) is required. In this respect, the number of eligible institutions in Germany declined during 2001, namely from 2,485 banks to 2,324 banks (Eurosystem as a whole: just over 3,400 such institutions at the end of 2001).

... for fine-tuning operations

On account of the higher operational and technical requirements, only a small group of institutions can be considered for fine-tuning operations. A major selection criterion here is a credit institution's activity in the money market or the foreign exchange market. At present, the Bank could call, in case of need, on a maximum of 41 counterparties for money-market operations and 15 for foreign exchange market operations (Eurosystem as a whole: 176 and 87 institutions, respectively, at end-2001).

Main refinancing operations

The primary instrument of money-market management by the Eurosystem continues to be main refinancing operations (main tenders) with standard maturities of two weeks, which are offered at weekly intervals, and through which, on an annual average, around three-quarters of central bank money requirements are met. In all, 54 open-market operations were conducted in 2001 in the form of fixed-rate tenders, with minimum bid rates of between 4.75% and 3.25%. In view of the almost continuous expectations of falling interest rates, banks' bidding behaviour was marked by pronounced restraint, with the result that underbidding was recorded on four occasions in the course of the year, and led to liquidity dislocation and distortions of money-market rates. So as to remedy the divergence (owing to the underbidding) in the volumes of the two main refinancing operations, in both April and November one main tender was split into a two-week and a one-week operation. The amount outstanding in the Eurosystem averaged €158 billion during the year, roughly half of which (€78.3 billion) was accounted for by German banks. The large size of the German share was mainly due to the substantial amount of DM currency in circulation.

Longer-term refinancing operations

So as to steady the provision of liquidity, and as a contribution to facilitating the liquidity management of those banks that are less active in the money market, longer-term refinancing operations with maturities of three months were once again offered at monthly intervals. Altogether, twelve such "basis tenders" were conducted in 2001 in the form of variable-rate tenders of pre-announced size. The transactions were settled in the form of US-style variable-rate tenders. The amount outstanding averaged €57.2 billion during the year, ie one-quarter of aggregate refinancing needs. The German share averaged nearly two-thirds.

Fine-tuning operations

In the third year of EMU, too, there were only a few fine-tuning operations thanks to the stabilising function of the minimum reserves. To stabilise the financial markets after the terrorist attacks on the United States in September, two one-day quick tenders were effected in the form of fixed-rate tenders at the rate of 4.25%.

Marginal lending facility

The marginal lending facility is designed to provide overnight liquidity, which counterparties can obtain at any time on their own initiative, and in amounts limited only by the collateral available to them (a "standing facility"). As a daily average of last year, this facility in the Eurosystem was utilised to the extent of only €0.7 billion, the Bank's share of which was €0.4 billion. The heaviest recourse to the marginal lending facility was on 20 February 2001 as a consequence of prior underbidding in the main tender. In the Eurosystem as a whole, such recourse amounted to €33.5 billion, and at the Bank it totalled €17.1 billion.

Deposit facility

The deposit facility enables credit institutions to lodge excess liquidity with the central bank overnight at an interest rate below the main tender rate. As a daily average of last year, recourse by the Eurosystem amounted to €0.4 billion, and recourse by the Bank to €0.3 billion. Except for isolated cases, due to technical problems in settling payments or special features in cash management, recourse to the deposit facility was concentrated at the end of the reserve maintenance periods, which, naturally enough, is determined by the banks' final liquidity-management decisions. For the Eurosystem as a whole, the highest level of recourse, at €9.4 billion, was reached on 23 January 2001 (the Bank accounting for €4.7 billion thereof); for the Bank alone, on 18 June 2001, at €6.0 billion.

Range of assets eligible as collateral for refinancing operations

The range of assets that the Bank accepts as collateral for the monetary policy operations of the Eurosystem is broad. Two categories are distinguished: "tier-1 assets" comprise only marketable debt instruments that satisfy uniform, euro-area-wide eligibility criteria laid down by the ECB; "tier-2 assets" encompass other marketable collateral and non-marketable debt instruments whose eligibility criteria are defined by national central banks on the basis of minimum eligibility standards specified by the ECB. The Bank has put on its list of eligible tier-2 assets, in particular, non-marketable debt instruments in the shape of trade bills and bank loans. The residual maturity of such assets, when accepted by the Bank, must not be less than one month, and must not exceed six months in the case of bills of exchange, or two years in the case of bank loans. The debtors of the bills or loans must be business enterprises of the non-financial sector or self-employed persons, and their registered office must be in Germany. Their eligibility for central bank assistance is verified by the Bank primarily by reference to their annual accounts.

List of eligible assets

The list of assets eligible as collateral for refinancing operations is published by the ECB on the Internet. The list specifies each type of eligible asset – provided that it is marketable – in detail. At the end of December 2001, the outstanding volume of such marketable and eligible assets amounted to some €6,600 billion. Two-fifths of that sum was accounted for by assets held in Germany.

Volume of eligible assets pledged to the Bank

At the end of 2001, counterparties had lodged eligible assets totalling €422 billion in their collateral pools at the Bank to collateralise refinancing operations (and intra-day loans in the context of settling payments). That figure included

€85 billion of assets held in another member state, and made available across national borders for refinancing purposes at the Bank.

As in the previous year, more than half of the assets pledged to the Bank consisted of covered bank debt securities (mortgage bonds). One-fifth was accounted for by Government bonds and one-fifth by uncovered bank debt securities. Compared with the preceding year, that signifies a distinct shift in favour of uncovered bank debt securities. Less than one-tenth of the total was made up of other marketable assets and loans to enterprises (approximately 25,000 bills of exchange and 6,100 bank loans, amounting in all to €8.5 billion).

V The Bank's involvement in the issuance of Federal securities and in asset management

Restructuring of public debt management

Pursuant to Section 20 (2) of the Bundesbank Act, the Federal Government, Federal special funds and *Land* Governments should issue bonds and Treasury bills primarily through the Bank. Hence the Bank acts as the public sector's "fiscal agent". In the past, that function used to encompass, besides the issuance of securities and the conduct of market-management and price-regulation operations, counselling and coordination services in connection with public borrowing. After the Federal Ministry of Finance had decided, in February 2000, that Federal debt management should be contracted out to an entity of independent legal status, and the "Federal Republic of Germany – Financial Agency Ltd" had been set up for that purpose in September 2000, with its registered office in Frankfurt am Main, and had started operations in June 2001, a number of functions in the field of debt management hitherto performed by the Bank were successively transferred to that agency. Until further notice, however, the Bank is conducting, on behalf of the Financial Agency and for the account of the Federal Government, auctions of transferable Federal securities, and is involved in sales of Federal tap issues. The next step will be that sales of the amounts set aside for market-management operations through the electronic trading system of *Deutsche Börse AG* (Eurex Bonds) are taken over by the Financial Agency in the first half of 2002; on the other hand, price-regulation operations and sales of the amounts set aside for market-management operations through the eight German stock exchanges will continue to be conducted by the Bank.

Bund Issues Auction Group
List of members, ranked according to their shares in the weighted amounts allotted in 2001

Table 15

Ranking		Ranking	
1	Morgan Stanley Bank AG	24	Merrill Lynch Capital Markets Bank Limited Zweigniederlassung Frankfurt a.M.
2	Deutsche Bank AG	25	Landesbank Hessen-Thüringen Girozentrale
3	UBS Warburg AG	26	Lehman Brothers Bankhaus AG
4	Dresdner Bank AG	27	Landesbank Berlin Girozentrale
5	Bayerische Landesbank Girozentrale	28	Société Générale S.A. Zweigniederlassung Frankfurt am Main
6	Landesbank Baden-Württemberg	29	DGZ DekaBank Deutsche Kommunalbank
7	Bayerische Hypo- und Vereinsbank AG	30	Banca Monte dei Paschi di Siena S.p.A. Niederlassung Frankfurt a.M.
8	Salomon Brothers AG	31	SANPAOLO IMI S.p.A. Filiale Frankfurt am Main
9	BNP PARIBAS Niederlassung Frankfurt am Main	32	Landesbank Sachsen Girozentrale
10	DZ Bank AG Deutsche Zentral-Genossenschaftsbank [1]	33	Bremer Landesbank Kreditanstalt Oldenburg Girozentrale
11	Westdeutsche Landesbank Girozentrale	34	Baden-Württembergische Bank AG
12	BHF-Bank AG	35	Vereins- und Westbank AG
13	Goldman, Sachs & Co. oHG	36	Nomura Bank (Deutschland) GmbH
14	Credit Suisse First Boston (Europe) Ltd. Niederlassung Frankfurt	37	Hesse Newman & Co. (AG & Co.) Kommanditgesellschaft
15	Commerzbank AG	38	Banca Intesa Banca Commerciale Italiana Niederlassung Frankfurt a.M.
16	Norddeutsche Landesbank Girozentrale	39	WGZ-Bank Westdeutsche Genossenschafts-Zentralbank eG
17	Bankgesellschaft Berlin AG	40	Landesbank Schleswig-Holstein Girozentrale
18	ABN AMRO Bank (Deutschland) AG	41	Stadtsparkasse Köln
19	Hamburgische Landesbank Girozentrale	42	Reuschel & Co.
20	Barclays Bank PLC Frankfurt Branch		
21	HSBC Trinkaus und Burkhardt KGaA		
22	Deutsche Postbank AG		
23	J. P. Morgan Securities Limited Frankfurt Branch		

1 Since the merger of the Deutsche Genossenschaftsbank and GZ-Bank AG Frankfurt/Stuttgart, DZ Bank AG Deutsche Zentral-Genossenschaftsbank has taken its place as legal successor.

Deutsche Bundesbank

On account of its market knowledge, the Bank continues to be represented on the Committee for Public Sector Credit Issues, on which the bond-issuing requirements of the central, regional and local authorities are coordinated and questions concerning issuing techniques are discussed. In addition, it is still working in the Central Capital Market Committee and in a number of other national and international bodies in which capital-market and stock-market issues in the broader sense are addressed.

"Bund Issues Auction Group"

Since 1998, Federal bonds, five-year special Federal bonds (after the conclusion of sales of the various series to private investors as tap issues), Federal Treasury notes and Treasury discount paper have all been issued by auctions through the "Bund Issues Auction Group". Membership of that group is conditional on sufficient placing power. That condition is deemed to be met if at least 0.05% of the issue volume sold by auction in a calendar year, weighted by type of securities, is taken up. When determining an institution's placing power, the weighting factors are meant to reflect the differing capital commitments and interest exposures involved in the various maturities. The weighting factors remained unchanged in 2001, at 1 for Treasury discount paper, 4 for Federal Treasury notes, 8 for five-year special Federal bonds, 15 for 10-year Federal bonds and 25 for 30-year Federal bonds; the same factors will remain in force in 2002, too.

A ranking list of Auction Group members, classified by the size of their shares in the issue volume allotted (without specifying the actual percentages), on the basis of weighted allotments, is published annually. After taking account of the merging of two institutions and the retirement of three institutions at the end of the year owing to lack of placing power, the number of members of the Auction Group fell from 46 at the beginning of 2001 to 42 at the beginning of 2002. In 2001, Federal securities amounting to €106.1 billion were issued through the Auction Group in 17 auctions (in 2000: a total of €95.6 billion in 19 auctions). Besides the issuance of Federal securities through the Auction Group, the Bank continues to place amounts set aside for market-management operations through the stock exchanges.

Issuance of Federal bonds

In 2001 the Bank was involved in the launching of bond issues of the Federal Government *(Bunds)* amounting in all to €38.0 billion (in 2000: to €58.0 billion). By reopening issues, using the auction procedure, and by sales of amounts set aside for market-management purposes, aggregate issue volumes of up to €24 billion were reached.

Issues of Federal bonds in 2001

Table 16

Issue	Amount issued (€ billion) Total	of which: Amount allotted by auction	of which: Market-management amount	Terms: Nominal interest rate (% pa)	Maturity (years/months)	Weighted average price (%)	Average yield (% pa)	Date of issue
Federal Government (WKN 113 516)								
Increase	1 8.0	5.7	2.3	5.25	10/0	104.14	4.71	3 Jan
Federal Government (WKN 113 517)								
Increase	5.0	4.4	0.6	5.50	29/11	102.71	5.31	31 Jan
Increase	2 1.0	–	1.0	5.50	29/10	–	–	23 Feb
Federal Government (WKN 113 518)	8.0	6.1	1.9	5.00	10/1	98.88	5.14	23 May
Increase	8.0	6.0	2.0	5.00	10/0	99.11	5.11	4 July
Increase	3 8.0	6.3	1.7	5.00	9/10	101.31	4.82	19 Sep

1 Total amount issued: €23 billion. — **2** Total amount issued: €11 billion. — **3** Total amount issued: €24 billion.

Deutsche Bundesbank

Issues of five-year special Federal bonds in 2001

Table 17

Issue	Amount issued (€ billion) Total	of which: Sales in the open market	of which: Amount allotted by auction	of which: Market-management amount	Terms: Sales in the open market: Issue prices (%)	Sales in the open market: Yields (% pa)	Auction procedure: Weighted average price (%)	Auction procedure: Average yield (% pa)	Start of sales in the open market/Date of stock exchange listing
5 % series 137 of 2000 (2006)	6.3	0.3	5.5	0.5	102.60 – 103.30	4.25 – 4.40	102.00	4.52	2 Jan/ 14 Feb
Increase	7.0	–	4.7	2.3	–	–	–	–	–/16 May
	1 13.3								
4.50 % series 138 of 2001 (2006)	7.0	1.0	5.1	0.9	99.50 – 101.70	4.10 – 4.59	100.88	4.28	13 Feb/ 22 Aug
Increase	7.0	–	6.3	0.7	–	–	102.94	3.79	–/14 Nov
	14.0								
4 % series 139 of 2001 (2007)	0.2	0.2	...	...	99.00 – 102.55	3.45 – 4.20	...	...	21 Aug /...

1 Sales of series 137 began on 15 August 2000. Total amount of the series issued: €14 billion.

Deutsche Bundesbank

"Stripping"

The volume of bonds whose principal and interest payments may be separated ("stripped") amounted to €267.4 billion at the end of the year; approximately €2.9 billion of those bonds were held in stripped form.

Five-year special Federal bonds

Since August 2000, only two series of five-year special Federal bonds *(Bobls)* have been issued per annum, with maturities of initially five years and six months. During 2001, the volume issued amounted to €27.5 billion (in 2000: €28.5 billion); €26.0 billion of that sum was accounted for by allotments under the auction procedure and amounts set aside for market-management operations and €1.5 billion by sales in the open market (as tap issues).

Federal Treasury notes

Of the two-year Federal Treasury notes *(Schätze)* that have been on offer since September 1996, a total of €40.0 billion (in 2000: €24.0 billion) was issued at quarterly intervals (March, June, September, December) in 2001. Thus the Federal Government stepped up its recourse to funds with two-year maturities.

Treasury discount paper

The Treasury discount paper issued at quarterly intervals (January, April, July, October) by the Federal Government with maturities of six months *(Bubills)* since July 1996 yielded an issue volume (gross value) of €31.5 billion in 2001 (amount outstanding on 31 December 2001: €19.6 billion). The maximum volume outstanding in 2002 was set at €30 billion; issues are to be launched at monthly intervals from April 2002.

Market-management operations

Of the listed Federal securities issued in 2001, significant amounts were again set aside for injecting into the market; specifically, €9.5 billion in the case of Federal bonds, €4.4 billion in the case of five-year special Federal bonds and €7.2 billion in the case of Federal Treasury notes. Of the amounts set aside for market-management purposes, a total of €22.8 billion was sold (in 2000: €27.8 billion) through the stock exchanges.

Price-regulation operations

As in earlier years, the Bank conducted (for the account of the issuers) price-regulation operations on the German stock exchanges for officially listed securities issued by the Federal Government, its special funds, the former *Treuhand* agency, the former *Deutsche Bundespost* and for securities issued prior to 1997 by *Kreditanstalt für Wiederaufbau* and *Deutsche Ausgleichsbank.* The Bank likewise conducted price-regulation operations for bonds issued by the Land of Lower Saxony and listed on the stock exchanges of Frankfurt am Main and Hanover.

Issues of Federal Treasury notes *(Bundesschatzanweisungen (BSA))* in 2001

Table 18

Issue	Amount issued (€ billion)			Terms				
	Total	*of which* Amount allotted by auction	*of which* Market-management amount	Nominal interest rate (% pa)	Maturity (years/ months)	Weighted average price (%)	Average yield (% pa)	Date of issue
BSA (WKN 113 693)	10.0	7.7	2.3	4.25	2/0	99.83	4.34	14 Mar
BSA (WKN 113 694)	10.0	8.3	1.7	4.25	2/0	99.86	4.32	13 June
BSA (WKN 113 695)	10.0	7.4	2.6	3.75	2/0	100.18	3.65	12 Sep
BSA (WKN 113 696)	10.0	9.4	0.6	3.50	2/0	99.99	3.51	12 Dec

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Issues of Federal Treasury discount paper in 2001

Table 19

Issue	Amount issued (€ billion)	Date of issue	Terms		
			Maturity (months)	Weighted average price (%)	Average yield (% pa)
January 2001 (WKN 111 437)	5.0	10 Jan	6	97.772	4.51
April 2001 (WKN 111 438)	6.8	18 Apr	6	97.722	4.61
July 2001 (WKN 111 439)	9.4	11 July	6	97.790	4.30
October 2001 (WKN 111 440)	10.2	17 Oct	6	98.311	3.40

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Issues of Federal savings bonds in 2001

Table 20

Issue	Sales period 2001	Sales (DM million)			Nominal interest rate (% pa)	Final yields (% pa)	
		Total	Federal savings bonds, Type A	Federal savings bonds, Type B		Type A	Type B
2000/11+12	1 2 Jan – 8 Jan	171	130	41	4.00 – 5.50	4.59	4.75
2001/ 1+ 2	8 Jan – 2 Apr	729	614	115	3.50 – 5.00	4.10	4.25
2001/ 3+ 4	2 Apr – 2 May	204	167	37	3.25 – 4.75	3.97	4.11
2001/ 5+ 6	2 May – 3 Aug	1,002	837	165	3.50 – 5.25	4.38	4.53
2001/ 7+ 8	3 Aug – 1 Oct	846	731	115	3.00 – 5.00	4.13	4.28
2001/ 9+10	1 Oct – 2 Nov	498	406	92	2.75 – 5.00	3.71	3.93
2001/11+12	2 Nov – 28 Dec	320	255	65	2.50 – 4.50	3.38	3.57

1 Sales began on 6 December 2000; total sales, issue 2000/11: DM238 million; issue 2000/12: DM71 million.

Deutsche Bundesbank

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 sales (through credit institutions and its own branch offices) of Federal savings bonds and Treasury financing paper issued on tap. Federal savings bonds with maturities of six and seven years and annually rising yields, which are sold only to natural persons and non-profit-making institutions, were sold in 2001 to the value of DM3.8 billion (in 2000: DM6.1 billion). Treasury financing paper, which is issued in the form of discount paper, with maturities of one year and two years, was launched in the amount of DM2.6 billion (in 2000: DM3.1 billion).

Pension reserves of the Federal and Land Governments

In order to safeguard pension payments to civil servants, which are going to rise sharply in future, against the backdrop of the looming demographic changes, Parliament, by adopting the 1998 Pension Reform Act, decided to accumulate pension reserves for the Federal and *Land* Governments in the form of special funds based on contributions from the recipients of civil service pay and pensions. The "Act on a Pension Reserve of the Federal Government" *(Gesetz über eine Versorungsrücklage des Bundes)* came into force at the beginning of 1999; under it, a special fund called the "Pension Reserve of the Federal Government" *(Versorgungsrücklage des Bundes),* and managed by the Federal Ministry of the Interior, was set up to safeguard expenditure on pensions. After taking due account of the 2001 Pension Amendment Act *(Versorgungsänderungsgesetz 2001),* which came into effect on 1 January 2002, it is planned to use these resources from 2017 onwards, over a period of 15 years, to progressively ease the burden imposed by pension payments. The management of the resources of this special fund was entrusted, under the Pension Reserve Act, to the Bank.

Transfers of resources to the special fund "Pension Reserve of the Federal Government" totalled DM230 million in 2001. In accordance with the investment guidelines laid down by the Federal Ministry of the Interior and the Federal Ministry of Finance, in association with the Federal Ministry of Labour and Social Affairs, the Bank invested those resources in marketable Federal debt securities. At the end of 2001, the market value of the special fund amounted to approximately DM446 million.

The *Land* Governments are likewise required to accumulate pension reserves in the form of special funds. Particular Land Central Banks have been entrusted with the management of the resources of such pension reserves under a number of different regulations.

"Money and Currency" Foundation

On the basis of the Act concerning the Minting of a DM1 Gold Coin and the Establishment of the "Money and Currency" Foundation dated 27 December 2000, the Bank issued gold coins with a face value of DM1 in 2001. Of the net receipts from sales of those gold coins, totalling €94.3 million, €51.1 million was transferred to the "Money and Currency" Foundation set up on 1 January 2002. The remainder is accruing to the "Prussian Cultural Heritage" Foundation and is earmarked for use in refurbishing the Museum Island in Berlin. The "Money and Currency" Foundation is designed to support economic and juridical research, especially in the fields of monetary policy and currency affairs, in order to maintain and enhance public awareness of the significance of monetary stability.

The assets of the foundation are managed by the Bank. The aim of such asset management is to generate the highest and most regular receipts possible for financing the objects of the foundation, while at the same time maintaining the real substance of the foundation's assets. In line with these principles, the assets are invested in blue-chip euro-denominated fixed interest securities and equities.

VI The Bank's participation in banking supervision and changes in banking supervision legislation

1 International harmonisation of banking supervision

In the year under review the Bundesbank again contributed, through its involvement in various international bodies and committees, to further developing and improving the rules and procedures for supervising credit institutions and financial service institutions.

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

Basel II: revision of the 1988 Capital Accord

In 2001 the Basel Committee continued its work on revising the Basel Capital Accord (Basel II). In this connection the Committee presented a second consultative paper in January 2001 which elicited numerous comments and views from the financial sector and other interested institutions.

Implications of Basel II for SMEs

A key issue in shaping Basel II are the implications of the new capital rules concerning the access to and terms of bank credit for small and medium-sized enterprises (SMEs). Given the important role played by the SME sector in generating innovations, macroeconomic growth and jobs, the chief concern of the German delegation in the negotiations was that, in drawing up Basel II, due account is taken of the special features and needs of the SME sector as compared with large enterprises so as to ensure as far as possible that small and mid-size firms are not put at a disadvantage. The negotiations on this issue have not yet been concluded.

Maturity adjustments under the Internal Ratings-Based Approach

Another major topic of discussion for Germany are the additional capital charges for longer-dated credit envisaged under the Internal Ratings-Based Approach of Basel II. Even though, from a purely microprudential angle, long-term lending poses a greater risk to the lender than does short-term credit, the long-term lending culture that exists in Germany has proved to be a major stabilising factor for the financial system as a whole; in particular, it has facilitated investment financing. The traditional long-termism of financial relationships in Germany must not be called into question by Basel II.

Modified timetable

To ensure that the new capital rules are of a high quality and also meet with wide acceptance, the Basel Committee decided in December 2001 to modify the originally envisaged timetable for finalising the new Accord. Further studies of the quantitative impact of the new capital rules on credit institutions' capital requirements are now to be carried out in the course of 2002. The findings of this study will be incorporated into the third consultative paper, which is scheduled to be submitted to banks and the general public for comment in the first half of 2003.

Accounting standards

In the year under review the Basel Committee submitted an opinion to the International Accounting Standards Board (IASB) on the discussion paper "Draft Standard and Basis for Conclusions: Financial Instruments and Similar Items" drawn up by the Joint Working Group of Standard Setters (JWG) on the subject of accounting for financial instruments. Accounting standards for financial instruments are particularly important for the banking sector as financial instruments constitute the major part of banks' balance sheets. In the discussion paper the JWG proposes that all financial instruments should be shown at their current or market value (full fair value accounting).

Criticism of full fair value accounting

The Basel Committee expressed misgivings about the concept of full fair value accounting and argued in its statement of opinion that major conceptual and practical hurdles stand in the way of implementing the JWG's proposals, especially concerning the reliability and objectivity of the information given in financial statements. One major problem, the Basel Committee pointed out, is determining the fair values of loans as these are typically not traded on liquid markets, hence there is no basis for objectively determining the fair value. Applied to liabilities, the fair value accounting approach would prompt the accounting entity to recognise income gains or losses associated with changes in its credit rating. Ultimately, this could lead to a balance sheet presentation that does not accord with the enterprise's actual and legal financial situation. The Basel Committee voiced its concern that applying the proposed valuation rules might cause artificial volatility in reported earnings and capital that does not reflect a bank's underlying risk profile. In submitting an opinion of its own to the IASB, the Bundesbank likewise expressed misgivings about introducing full fair value accounting for financial instruments.

Internal auditing principles

In August 2001 the Basel Committee published the document "Internal audit in banks and the supervisor's relationship with auditors". The paper contains principles regarding the tasks and functions of internal auditing at banks and also addresses current issues such as the outsourcing of internal auditing tasks.

Guidelines for the relationship between banking supervisors and external auditors

In the year under review the Basel Committee and the International Auditing Practices Committee of the International Federation of Accountants drew up joint guidelines aimed at promoting collaboration between banking supervisory authorities and external auditors. These guidelines were published in January 2002 under the title "The relationship between banking supervisors and banks' external auditors".

Transparency – third pillar of the new Basel capital accord

As part of the the Basel Committee's work on what is known as Pillar 3 of the new Basel capital accord (Basel II), disclosure standards are envisaged for banks in respect of their essential risks. These standards are intended to give market participants a better picture of the risk profile of institutions. This is envisaged as a measure for supporting effective market discipline. In the year under review the disclosure standards contained in the second consultative paper of January were revised, mainly in the light of the comments received from the banking industry. The disclosure requirements were significantly streamlined and shortened as a result of the revision. The outcome was published in September 2001 in the form of a "Working Paper on Pillar 3 – Market Discipline" which now forms the basis for further consultations with the banking industry. One major aspect of these consultations is the coordination of the separate activities of the Basel Committee and the Financial Activities Advisory Group, which is engaged in revising the IAS 30 accounting standard (Disclosures in the financial statements of banks and similar financial institutions). A revised IAS 30 that is harmonised with the substance and aim of Pillar 3 would undoubtedly enhance the general acceptability of the Basel Committee's disclosure standards.

Overview of the disclosure practice of big banks

In April 2001 the Basel Committee reported the results of the regular survey of credit institutions' disclosure practice ("Public disclosures by banks: results of the 1999 disclosure survey"). Some major German banks also took part in the survey.

(b) Harmonisation in the European Union

Revision of the European capital requirements

In the past year, as in 2000, the task of revising the capital requirements for credit institutions and securities trading firms was a focal point of the harmonisation efforts undertaken by the European Commission. In close harmony with the work of the Basel Committee, the European Commission is likewise pursuing a concept based on minimum capital requirements, a supervisory review process and increased market discipline. One major difference of the work at EU level, however, is that all credit institutions and securities trading firms in the EU will be subject to the new European regime of prudential supervision. For this reason the European discussion is focused on the necessary flexibility and the quantitative impact of the new capital requirements on a broader group of institutions.

Coordinated timetables

In view of the Basel Committee's decision to postpone the third round of consultations, the European Commission now likewise intends to publish its planned third consultation paper (originally scheduled for early 2002) at a later date, ie immediately after the third consultative paper of the Basel Committee has appeared. This will ensure coherence between the European Commission's consultation paper and the revised Basel proposals for the future international framework.

Supervision of financial conglomerates

In April 2001 the European Commission submitted a proposal to the European Parliament and the Council of the European Union for a Directive on the supplementary supervision of credit institutions, insurance undertakings and investment firms in a financial conglomerate (doc. COM[2001] 213 final). Following the decision of the European Council of Lisbon, the Directive is to be adopted by 2005 at the latest. In the context of the capital adequacy rules, the proposed

Directive allows the methods for avoiding double gearing (consolidation method, deduction and aggregation method and requirement deduction method) elaborated by the Joint Forum to be applied equally in assessing the capital adequacy of financial conglomerates. Further details were given in the Bundesbank Annual Report 2000.

2 Amendments of national banking supervision legislation

Act concerning the integrated supervision of financial services

On 15 August 2001 the Federal Government approved the bill for an Act concerning the integrated supervision of financial services and submitted it to the German parliament. The Federal Banking Supervisory Office, the Federal Supervisory Office for Insurance Enterprises and the Federal Supervisory Office for Securities Trading, together with all their existing duties and staff, are to be combined under the aegis of a new cross-sector supervisory authority – the Federal Agency for Financial Services Supervision – with the status of a Federal public-law institution with legal capacity. The statutory basis for the collaboration between the Federal Agency and the Bundesbank in supervising all credit institutions and financial services institutions is to be concurrently redefined. Pursuant to section 7 (1) of the Banking Act (new version), responsibility for the ongoing supervision of credit institutions and financial services institutions will be transferred to the Bundesbank. This encompasses evaluating the returns submitted by the institutions, together with their annual financial statements and the related audit reports, and performing and evaluating audits of banking business with a view to assessing the adequacy of institutions' capital and risk management procedures. The Federal Agency, by contrast, will have sole responsibility for taking prudential measures. As a rule, it will base such measures on the Bundesbank's audit findings and evaluations.

Fourth Financial Market Promotion Act

On 14 November 2001 the Federal Government submitted the bill for the Fourth Financial Market Promotion Act to the German parliament. It is likely that the enacted bill will enter into force in May 2002. Numerous existing laws pertaining to prudential supervision will be amended by the Fourth Financial Market Promotion Act.

Changes to the Banking Act

The primary aim of the latest amendment of the Banking Act is to bring it into line with the Core Principles for Effective Banking Supervision published by the Basel Committee on Banking Supervision in 1997; compliance with the Core Principles is monitored by the International Monetary Fund (IMF) as part of its

Financial Sector Assessment Program. In the foreseeable future the IMF will monitor compliance with this and other international standards in Germany. In particular, the changes to the Banking Act relate to the provisions concerning loans to managers (section 15), particular organisational duties of institutions (section 25a (1)) and grounds for refusing to grant a licence (section 33). The provisions concerning loans to managers etc are to be made more stringent in that, except in the context of staff programmes, such loans may be granted in future solely on market terms and that the Federal Banking Supervisory Office may stipulate maximum amounts for loans to managers and may order such loans to be deducted from the liable capital. The new provisions concerning the particular organisational duties of institutions require, firstly, that institutions must put in place adequate internal safeguards against money laundering and against fraudulent activities and, secondly, that the superordinated institution of a group of institutions must ensure that the organisational duties listed in section 25a (1) of the Banking Act are also satisfied by the group of subordinated enterprises as a whole. An additional ground for refusing a licence is being added to section 33 (1) of the Banking Act, namely the home-country supervisory authority's non-approval of the establishment of a subsidiary or branch office in Germany. Furthermore, the Federal Banking Supervisory Office's powers of intervention under section 6 (3) of the Banking Act are to be extended. Thus the Office is to be additionally authorised to issue regulations prohibiting infringements of general statutory provisions, whereas at the moment it has such competence to issue regulations only in respect of infringements of the Banking Act.

E-money directive

A second focal point of legislative activity, besides bringing the Banking Act into line with the Basel Core Principles, is the national implementation of the E-money Directive (2000/46/EC). The existing e-money categories "prepaid card business" and "network money business" are being combined in line with the E-money Directive to form the new category of "e-money business". A new category of credit institutions – "e-money institutions" – is being added to the Banking Act. Prudential requirements are being drawn up for these institutions that are tailored to the special field of business of such institutions. The minimum initial capital requirement for an "e-money institution" of €1 million is to be increased by a supplementary capital requirement. This will amount to 2% of the current amount, or of the average total amount over the previous six months, of its liabilities arising from electronic funds not yet drawn down. The right to reconvert electronic money will also be regulated in section 22a of the Banking Act.

Cooperation between European central credit registers

The third main area of legal activity is the creation of a legal basis for cooperation between the Bundesbank's central credit register for loans of €1.5 million or more and similar registers in other member states of the Community. This activity is focused on the collaboration, fostered by the European Central Bank, between the credit registers in Austria, Belgium, France, Italy, Portugal and Spain. One of the aims of this collaboration is to establish the legal and organisational prerequisites for giving credit institutions in the countries concerned access to the information on their borrowers' indebtedness stored by the other European credit registers.

Harmonisation of owner vetting under the Banking Act and the Act on the Supervision of Insurance Enterprises

In accordance with an instruction from the Forum for Financial Market Supervision, the respective provisions in the Banking Act and the Act on the Supervision of Insurance Enterprises relating to the vetting of the owners of institutions are being harmonised. Thus in the Banking Act an authorisation to issue regulations is being added to enable the supervisory authorities to issue a regulation detailing the documentation to be submitted for assessing the trustworthiness of persons applying for a banking licence. Furthermore, the supervisory authorities are explicitly to be given the right to have the documentation examined by an external auditor at the applicant's expense (section 44b of the Banking Act). Finally, the Federal Banking Supervisory Office will also be authorised to obtain information about tax evasion proceedings concerning holders of qualified participating interests (section 8 (2) of the Banking Act). With a view to combating international money laundering, the supervisory authorities are concurrently being authorised to prohibit a potential acquirer of a participating interest from acquiring it if he cannot prove that he came into possession of the purchase sum by lawful means. The clauses listing possible grounds for refusing a licence will be supplemented accordingly.

Modification of the legal status of the Own Funds and Liquidity Principles

Another important development is that in future the Principles Concerning the Own Funds and Liquidity of Institutions will be issued with the legal status of regulations. Other changes concern the legislative definition of credit card business as a financial services activity requiring a licence, the inclusion of the Public Debt Administration Agency under the exceptions listed in section 2 of the Banking Act, automated access to account data by the Federal Banking Supervisory Office in the new section 24c of the Banking Act and an extension of the powers of the supervisory authorities vis-à-vis the managers and supervisory board members of institutions. With a view to improving the ability to combat the grey capital market, the competencies of the supervisory authority are being extended, in particular, by widening the range of entities required to provide information and submit documents.

Minimum requirements for credit business

In 2001 a draft set of Minimum requirements for the credit business of credit institutions was drawn up jointly by the Federal Banking Supervisory Office and the Bundesbank. The representatives of credit institutions from all the various categories of banks were involved in the discussions from an early stage. The aim of the Minimum requirements is to implement general minimum standards (best practices) in credit business, especially regarding the organisation and processes of credit management, at all credit institutions. The decision on the credit application plays a key role in the lending process; for this reason, one of the main Minimum requirements is a demand for two votes from organisationally segregated business units. In addition, the Minimum requirements set standards for credit processing so as to ensure increased transparency of the credit procedure. Following the Minimum requirements for the trading activities of credit institutions and the Minimum requirements for the internal audit function of credit institutions, which were already in force, the Minimum requirements for the credit business of credit institutions represent a further important step towards a more qualitative type of prudential supervision. The draft version of the new Minimum requirements was forwarded to the national federations representing the credit institutions for consultation on 20 February 2002. The Minimum requirements are scheduled to be published in the course of the current year.

3 Ongoing banking supervision operations

Continuing process of concentration in the banking sector

At the end of last year 2,742 credit institutions were subject to banking supervision in Germany, which was 213 fewer institutions than at the end of 2000. Hence the trend towards consolidation in the banking sector continued during the year under review, albeit at a less dynamic pace than in 2000 (net decrease of 113 institutions in 1997, 167 in 1998, 226 in 1999 and 257 in 2000). The overall number of credit institutions declined by 233 – mostly owing to mergers. This figure includes 176 credit cooperatives and 24 savings banks. The newly registered institutions last year comprised seven regional banks, five branch offices of deposit-taking credit institutions or securities trading firms domiciled in another EEA country, four investment companies – whose number thereby increased to 83 – one savings bank, one housing enterprise with savings facilities, one credit institution with special functions and one public building and loan as-

Ongoing banking supervision operations

Table 21

Number of operations conducted

Item	1998	1999	2000	2001
Individual reports pursuant to sections 13 to 14 of the Banking Act	241,960	251,735	241,128	207,633
Single borrowers included in the summary reports submitted pursuant to sections 13 to 14 of the Banking Act	1,751,499	2,002,459	2,276,548	2,274,007
Reports pursuant to sections 24 and 24a of the Banking Act	39,868	43,091	46,847	40,597
Monthly returns pursuant to section 25 of the Banking Act	46,319	46,301	45,164	43,931
Reports on the volume of foreign lending (country risk) pursuant to section 25 (3) of the Banking Act	296	271	264	265
Auditors' reports on annual accounts	2,798	2,690	3,718	3,490
Reports on the auditing of safe custody accounts	449	511	731	700
Routine, special and deposit guarantee fund auditors' reports	1,333	1,510	1,538	1,894
Audits pursuant to sections 44 and 44c of the Banking Act	54	92	74	74
Auditors' reports on the special funds of investment companies	578	828	1 175	970
Reports from investment companies on their activities	4,347	4,897	6,110	6,655
Reports under Principle I	–	39,733	38,128	34,579
Reports under Principle II	–	63,342	42,629	33,118
Audits of internal risk models	–	19	11	10
Reports under the Capital Accord of the Basel Committee on Banking Supervision	23	92	84	84

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sociation. In addition, at the end of last year a total of 1,043 financial services institutions held licences to provide services pursuant to section 1 (1a) of the Banking Act.

Main banking supervisory activities

Five credit institutions with important nationwide functions are supervised directly by the Bundesbank's Central Office pursuant to section 7 (1) sentence 3 (2) of the Bundesbank Act. In the case of all other institutions it is the respective Land Central Bank that is responsible for the task of day-to-day supervision. Table 21 above shows the volume of work for selected prudential activities performed in the past four years.

Credit register of loans of €1.5 million or more

The number of loans of €1.5 million or more to be reported quarterly pursuant to section 14 of the Banking Act increased in the 12 months from 30 September 2000 to 30 September 2001 by nearly 3% to around 525,000 reports (see Table 22). The total volume of reported loans of €1.5 million or more went up during this period from €6.5 trillion to almost €7.1 trillion on the reporting date 30 September 2001. As at that reporting date, 2,946 institutions, 644 insurance enterprises and 955 financial enterprises had submitted reports on loans of €1.5 million or more.

Credit register of loans of €1.5 million or more — Table 22

Third quarter	Volume of loans of €1.5 million or more		Number of loans of €1.5 million or more reported		Number of reporting		
	€ billion	Change (%)	Number	Change (%)	institutions 1	financial enterprises	insurance enterprises
1996 2	3,423	+ 139.9	405,983	+ 32.0	3,667	874	551
1997	4,119	+ 20.3	446,146	+ 9.9	3,635	893	584
1998	4,790	+ 16.3	464,507	+ 4.1	3,496	963	607
1999	5,662	+ 18.2	484,443	+ 4.2	3,355	900	626
2000	6,487	+ 14.6	509,567	+ 5.2	3,129	993	645
2001	7,087	+ 9.2	525,020	+ 2.9	2,946	995	644

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

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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 30 September 2001 amounted to 386,273. Just under two-thirds of the borrowers were amalgamated into 78,010 single borrower units pursuant to section 19 (2) of the Banking Act. At the end of September 2001, 145 borrowers/single borrower units had debts exceeding €1.5 billion; the aggregate indebtedness of those borrowers amounted to over €512 billion, which represents 7.2% of reported total borrowings. Just under 59% of the reported total borrowings (almost €4.2 trillion) was taken up by domestic borrowers.

Insolvencies

In 2001 the credit register recorded a total of 2,053 insolvencies of enterprises and individuals which or who had loans of €1.5 million or more outstanding. This was 504 cases more than in 2000 (+32.5%). The volume of loans of €1.5 million or more reported for insolvent borrowers at the date when the insolvency became known amounted to nearly €10.9 billion, which was roughly €3.1 billion more than in 2000 (+40.4%).

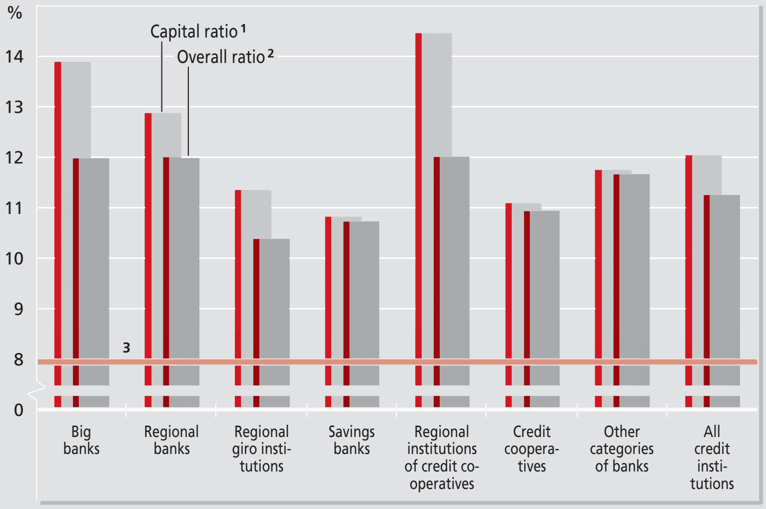
Working Group on Credit Registers

In accordance with the mandate of the Working Group on Credit Registers, which reports to the Banking Supervision Committee of the European System of Central Banks, a draft Memorandum of Understanding was drawn up which is to serve as the basis for the aforementioned cross-border data exchange between national credit registers. In addition, technical and organisational solutions have already been developed for implementing this data exchange once the legal preconditions have been met.

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

Chart 26

End-of-year 2001 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 = (eligible 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%.

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Principle 1

Principle I, which lays down capital requirements for credit risk and market risk, stipulates that the available own funds (liable capital plus eligible tier 3 funds) – both at the level of individual institutions and of groups of institutions/financial holding groups – must amount to at least 8 % of the total risk assets weighted according to creditworthiness plus the capital charges for market price risk. Credit risks may be backed by core capital and additional capital (liable capital), while market price risks can also be backed by tier 3 funds. As at 31 December 2001 German solo institutions had a capital ratio – the ratio of weighted risk assets to liable capital – of 12% on average (2000: 11.7%). Groups of institutions reporting to Principle I on a consolidated basis had an average ratio at the reporting date of 11.5% (2000: 10.9%). The overall ratio, which is a measure of all risk positions that have to be backed by capital as a percentage of the eligible own funds, of institutions reporting on a solo basis averaged 11.3% as at 31 December 2001 (2000: 10.9%). The German groups of institutions recorded a consolidated overall ratio of 10.5% on average (2000: 10.2%). Credit risks predominated among the sum total of positions subject to capital charges, accounting for a share of 92%. The average capital ratios and overall ratios of the various categories of institutions in Germany are shown in Chart 26 above.

Principle II

In 2001 the amended Liquidity Principle was applicable for the first time to all banks and certain financial services institutions for the whole year. The underlying concept of Principle II is to match incoming payment flows with payment liabilities according to their timing by grouping them in four different residual maturity bands. An institution satisfies the prudential liquidity requirements if its liquidity ratio, as calculated each month, is equal to or greater than 1. The liquidity ratio is the ratio of the institution's available means of payment to its possible liquidity outflows during the next 30 days. As at 31 December 2001, the average liquidity ratio of all credit institutions in Germany was 1.39% (2000: 1.37%).

Audits of banks' internal risk models

In the years 1998 to 2000, many institutions had been authorised to use their own internal risk management models for calculating the amount of own funds required to cover their market price risks. Last year the Federal Banking Supervisory Office approved additional models and carried out audits of their effectiveness jointly with the Bundesbank. Three institutions were authorised for the first time to calculate the capital charges for market price risk using their internal model. In the case of a fourth institution modifications to the model as well as its extension to cover the specific interest rate risk necessitated a renewed confirmation of the model's suitability pursuant to section 32 (3) sentence 3 of Principle I.

VII UN/EU financial sanctions: new developments

Regulatory structure

Both financial sanctions against third countries based on United Nations requirements and EU sanctions are currently in force in Germany. The legal acts relating to these sanctions do not follow a common regulatory format; some of them form part of Community law while others are national legislation. This is essentially due to the fact that the Maastricht Treaty established an equivalent European Union or European Community competence.

Legal basis and key contents

Pursuant to Article 60(1) of the Treaty establishing the European Community, the Council, acting by a qualified majority on a proposal from the Commission, may take measures against third countries. This is conditional on the European Union adopting joint actions (Article 14 of the Treaty on European Union) or common positions (Article 15 of the Treaty on European Union) with a view to suspending, limiting or terminating economic relations with one or more third countries.

Even if the financial sanctions under Community law differ in detail, they usually provide for the financial resources of certain named natural and legal persons to be frozen. They also prohibit making funds available to these persons directly or indirectly.

This is the background against which financial sanctions were imposed on the Taliban of Afghanistan, Angola (UNITA), the Federal Republic of Yugoslavia and Burma/Myanmar and as means of combating terrorism. Financial sanctions against Iraq and Libya, however, were introduced before the Maastricht Treaty entered into force and are therefore governed by national law.

UN Sanctions against the Taliban of Afghanistan

By means of Resolution No 1333 (2000) of 19 December 2000, the United Nations Security Council decided to intensify the existing financial and other sanctions imposed on the Taliban of Afghanistan and to add further measures. This Resolution was implemented by means of Council Regulation (EC) No 467/2001,[1] which replaced the financial sanctions existing at the beginning of the year.[2] In accordance with this Regulation, the financial resources of the persons named in Annex I to the Regulation are frozen and no funds may be made available to them.

Exemptions may be authorised only by the United Nations Taliban Sanctions Committee. Applications have to be made to the UN Sanctions Committee through the locally responsible Main Office (Land Central Bank) of the Deutsche Bundesbank.

By means of Commission Regulation (EC) No 1354/2001,[3] a new Annex I has replaced Annex I of Council Regulation (EC) No 467/2001. In the wake of the attacks of 11 September 2001 this Annex I has been changed by eight further Regulations to date.[4]

In anticipation of these Regulations, the Federal Ministry of Economics and Technology, in consultation with the Deutsche Bundesbank and other bodies, had issued restrictive measures which were based on the Foreign Trade and Payments Act and took the form of general administrative acts, the most recent

1 Of 6 March 2001, OJ L 67 p 1.
2 Council Regulation (EC) No 337/2000 of 14 February 2000, OJ L 43 p 1 and Commission Regulation (EC) No 1272/2000 of 16 June 2000, OJ L 144 p 16.
3 Of 4 July 2001, OJ L 182 p 15.
4 Most recently, Commission Regulation (EC) No 362/2002 of 27 February 2002, OJ L 58 p 6.

of which date from 27 December 2001.[1] Access to the financial assets of named persons and organisations and payments by residents to these persons and organisations were made subject to approval by the Bundesbank. These restrictive measures were issued as urgent and were repealed when the persons concerned were included in the Annex to the aforementioned EC Regulation. Within the framework of fundamental Community powers, national sanctions may also be imposed pursuant to Article 60(2) of the Treaty establishing the European Community. In accordance with these provisions, member states may impose sanctions, provided that the Community has not taken any measures of its own.

On the basis of these EC Regulations and the Foreign Trade and Payments Act, the Bundesbank called upon German credit institutions to provide information about the funds and assets affected by the sanctions legislation. The credit institutions initially reported that as of October 2001 more than 200 accounts with total deposits of more than €4 million had been frozen. Once any random similarities between names had been cleared up, these figures tended to decline.

UN sanctions against terrorism

Resolution 1373 of the United Nations Security Council of 28 September 2001 was implemented in the Community by means of Council Regulation (EC) No 2580/2001 of 27 December 2001 on specific restrictive measures directed against certain persons and entities with a view to combating terrorism.[2] This Regulation freezes all funds, other financial assets and economic resources owned by a natural or legal person, group or entity included in lists drawn up separately by the Council; no funds, other financial assets or economic resources may be made available to them either directly or indirectly. An initial list of ten natural persons and groups was prepared by the Council in its Decision of 27 December 2001.[3]

The competent authorities in the member states may authorise specific exemptions. In Germany the authority empowered to freeze funds is the Deutsche Bundesbank. Applications have to be made to the locally responsible Main Office (Land Central Bank) of the Bundesbank.

1 Federal Gazette No 242, p 25 512.
2 OJ L 344 p 70.
3 Council Decision 2001/927/EC, OJ L 344 p 83.

Preparations are now being made to implement UN Security Council Resolution 1390 of 16 January 2002 in the Community with the aim of adapting the sanctions imposed on the Taliban and al-Qaeda.

UN sanctions against Angola (UNITA)

The UN financial sanctions against Angola (UNITA) implemented initially by means of Council Regulation (EC) No 1705/98[1] and Commission Regulation (EC) No 753/1999[2] have been supplemented by Commission Regulation (EC) Nos 2231/2001,[3] 2536/2001[4] and 271/2002.[5]

UN sanctions against Iraq

The UN financial sanctions against Iraq continue to apply unchanged. Section 69e of the Foreign Trade and Payments Regulation accordingly makes certain payments or transfers of assets subject to approval, as does section 52 of that Regulation in the case of access to bank accounts, safe custody deposits or other assets that are held in safe custody or managed and belong to Iraq, official bodies in Iraq or their authorised representatives. Pursuant to section 28(2) No 1 of the Foreign Trade and Payments Regulation, the authorising body in all cases relating to capital movements and payment transactions is the Deutsche Bundesbank. Applications for authorisation have to be addressed to the locally responsible Main Office (Land Central Bank) of the Bundesbank.

UN sanctions against Libya

No decision has yet been taken on lifting the UN financial sanctions against Libya (section 69n of the Foreign Trade and Payments Regulation). These were suspended with effect from 5 April 1999.

EU sanctions against Yugoslavia

Financial sanctions against the Federal Republic of Yugoslavia had already been limited in November 2000 to freezing the funds of Slobodan Milosevic and some 650 of his close associates and to prohibiting payments in favour of these persons.[6] With effect from 21 June 2001 this was restricted to Slobodan Milosevic and 12 of his associates.[7] The European Commission alone may grant exemptions for humanitarian purposes. Applications have to be made to the Commission through the locally responsible Main Office (Land Central Bank) of the Deutsche Bundesbank.

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1 Of 28 July 1998, OJ L 215 p 1.
2 Of 12 April 1999, OJ L 98 p 3.
3 Of 16 November 2001, OJ L 301 p 17.
4 Of 21 December 2001, OJ L 341 p 70.
5 Of 14 February 2002, OJ L 45 p 16.
6 Council Regulation (EC) No 2488/2000 of 10 November 2000, OJ L 287 p 19.
7 Commission Regulation (EC) No 1205/2001 of 19 June 2001, OJ L 163 p 14.

EU sanctions against Burma/ Myanmar

The EU sanctions imposed on Burma/Myanmar in 2000 continue to apply unchanged.[1]

VIII The Economic Research Centre

Research Centre steps up its workload

As the Economic Research Centre, founded in 2000, continued its operations in the period under review, there was also a distinct intensification of some of its activities. Staff at the Research Centre explore new academic ground and debate their findings in specialist groups. At the same time new theoretical developments are taken up with a view to applying them meaningfully to the work of the central bank. These tasks involve an in-depth exchange of views with economists from universities and other research institutions.

More discussion papers published

One of the Centre's main tasks is to carry out its own research projects and to publish the results. The Research Centre published 20 discussion papers in 2001. In line with the remit of the Bundesbank, the main focus of the projects in which the staff were engaged was monetary matters. One series of papers dealt with the monetary policy transmission process in Europe in general and in Germany in particular. After the transition to monetary union it is particularly interesting to see the extent of the remaining differences in monetary policy transmission between the member states and the speed at which discrepancies can be expected to recede. This is vital for assessing the effects of monetary policy in monetary union. Some of these projects are conducted in conjunction with economists from the European Central Bank and other central banks in Europe. For instance, an investigation was carried out to ascertain whether banks both in Germany and in Europe as a whole react to monetary policy measures by adjusting their credit supply (or whether monetary policy only takes effect through credit demand). This thesis is the subject of intense discussion, particularly in the United States. One of the findings of the project was that conditions in the USA are not automatically transferred to Europe. For instance, small banks in Germany react only slightly more strongly to changes in the central bank rate than large credit institutions. Pursuing the subject somewhat further, other projects examined the impact of interest rate changes on corporate investment behaviour and attempted to determine what affects these correl-

1 Council Regulation (EC) No 1081/2000 of 22 May 2000, OJ L 122 p 29.

ations. Studies which found global evidence of the relationship between monetary growth and price movements or which examined the question of how inflation expectations develop and how these then influence prices can also be included under this heading. A further key area in the research programme looks at the way the financial markets operate. One example of the work carried out in this field was an investigation into the behaviour of managers of German share-based funds. The information derived from analyses such as these may, for instance, help to identify weaknesses in the stability of the financial system. Moreover, several discussion papers treated issues relating to fiscal policy, such as appropriate methods of assessing government deficits or the long-term effect of fiscal policy on the labour market.

A more intensive exchange of views with external academics

Successful research depends on a continual exchange of ideas with colleagues specialising in a given field. The Research Centre therefore organises conferences and workshops with internationally renowned academics, it networks with other central banks and universities, and invites external academics to carry out research at the Bundesbank, to give seminar presentations and to take part in further training events. In 2001, for instance, the Research Centre held two conferences. In the spring the subject was "Ageing, financial markets and monetary policy". Population ageing, which will typify many industrial countries in the decades to come, will give rise to a number of difficulties. Saving for retirement will become more important, a development which will probably not leave the financial markets unaffected. Central banks need to ask themselves what effect this change will have on their policies. The Bundesbank published the conference proceedings as well as those of two other conferences in 2001. The subject discussed at the autumn conference was how, from the perspective of monetary policy (and fiscal policy), eastward enlargement of the EU can best be handled. There was lively discussion, for example, of the advantages and disadvantages of various exchange rate regimes in the run-up to enlargement. The Research Centre also ran another workshop with the Research Department of the Oesterreichische Nationalbank. The exchange of views during this workshop was the springboard for various joint research proposals.

One spin-off of the Bundesbank's research activities is that its staff are being increasingly invited to take part in conferences and to give academic presentations as well as to have their work published in academic periodicals.

IX Technical central bank cooperation

Introduction of euro cash leads to a decrease in technical central bank cooperation activities

In 2001 the Technical Central Bank Cooperation Division organised 160 training initiatives, involving a total of more than 1,800 foreign central bank staff. This means that for the first time since 1992 there was a fall in the number of activities from the previous year; in 2000 some 2,000 foreign central bank staff members had taken part in 189 training activities in Germany and abroad. This reflects the additional internal pressure caused by the introduction of the euro banknotes and coins. In 2001 the sustained high international demand for the Bundesbank's technical central bank cooperation services could therefore not be met in full. The euro banknotes and coins have now been successfully introduced and an increase in technical central bank cooperation activities can therefore be expected during 2002.

Technical central bank cooperation involves the entire Bundesbank

The Technical Central Bank Cooperation Division at the Bundesbank's Central Office is responsible for coordinating technical central bank cooperation activities throughout the Bank as a whole. These activities are conducted by specialists from the various units at the Bank, including the Land Central Banks. The Bundesbank Training College also makes a helpful contribution to technical central bank cooperation and joint projects are occasionally conducted with other European central banks.

Multiple training activities

The Bundesbank uses a variety of different approaches to provide training and advisory services for executive and other staff members of foreign central banks. For instance, seminars on specific topics are offered in Germany and abroad; these usually last one week. Foreign central bank staff members are invited to take part in fact-finding visits to Germany and experts from the Bundesbank undertake advisory work abroad. In addition, international central banking seminars are held each month in Frankfurt am Main, with staff from up to 30 different central banks taking part on each occasion. As well as providing an opportunity to discuss matters with specialists from the Bundesbank, these seminars are also a platform for an exchange of views among the participants themselves.

More than 13,000 participants since 1992

Since 1992 more than 13,000 specialists have taken part in almost 1,400 training events organised by the Bundesbank. The Bank's main goal has always been to foster the development of modern, efficient central banking systems and thus to promote economic stability as a precondition for economic prosperity and growth in our partner countries. The Bundesbank offers technical central bank cooperation on a partnership basis, making no charge for its services. The issues addressed cover the full range of economic, operational and legal instruments used in modern central bank management.

Almost 50 advisory activities abroad

In 2001 15 foreign central banks took advantage, on 50 occasions, of short-term advisory services provided by Bundesbank experts at the bank concerned. Advisers from the Bundesbank also participated in international groups of experts. These advisory initiatives rarely lasted longer than one week. Long-term advisory services by Bundesbank staff abroad still tended to be the exception rather than the rule. Only two members of the Bundesbank staff, for instance, were involved in long-term activities in southern Europe and South Asia in 2001.

Geographical focus: CIS, central and eastern Europe and East Asia

Some two-thirds of the Bundesbank's training activities in 2001 were concentrated on nine countries: Russia, Ukraine, China, Lithuania, Tajikistan, Yugoslavia, Vietnam, Poland and Azerbaijan. The remaining third covered a further 40 partner countries. Since 1992, when technical central bank cooperation began, the overall picture that has developed is one in which just over 80% of all of the Bundesbank's activities are focused on some 30 central banks in the CIS, central and eastern Europe and East Asia. Just under 20% of the Bank's technical central bank cooperation activities span the remainder of the globe.

X Organisation and staff

Staff increase due to the introduction of the euro banknotes and coins

Despite the closure of further branch offices (taking the current total of those in operation to 126) and the generally cautious recruitment policy, the number of core staff rose by 417 to 15,651 because of the logistical preparations associated with the introduction of the euro banknotes and coins. Owing to the additional temporary workload resulting from this, 328 of these new members of staff were employed at the branch offices on short-term contracts, most of which were for less than 24 months. There was a slight increase in the number of staff employed in the Bank's other organisational units (Central Office: +0.8%; Main Offices: +0.3%).

Number of training places remains more or less steady

In 2001 the number of trainees, at 279, was almost the same as in the previous year (–16). There was also little change, at 390, in the number of trainee civil servants and officials changing to a higher civil service career path (–29).

Bundesbank staff at the ECB

At the end of the year under review 75 members of the Bank's staff were on secondment to the European Central Bank (ECB). Some of these secondments date back to the time of the European Monetary Institute (EMI), the ECB's predecessor. Most of the seconded members of staff at the ECB are employed at professional and managerial levels.

Part-time ratio

The Bank endeavours to comply as far as possible with the wishes of its employees regarding part-time work. Even so, at 12.3%, the ratio of part-time employees was slightly down on the previous year (12.9%). Compared with full-time employees, part-time employees work an average of 57.1% (previous year: 57.9%). If part-time and full-time employees are taken together on the basis of their contractual working hours, the Bank had the equivalent of around 14,817 full-time employees (start of the year: 14,404).

Age-induced part-time work

The regulations governing age-induced part-time work agreed in the wage settlement for public sector employees in 1998 are also applied at the Bundesbank. On 31 December 2001 774 members of staff were engaged in age-induced part-time work; 758 of these (98%) have contracts based on a "phase model", which means that a phase of full-time employment with reduced remuneration is followed by a phase in which the employee does not work but receives the same (reduced) remuneration as in the previous phase. Of the 758 employees indicated above, 225 have now entered the final pre-retirement phase.

Change in training regulations

New regulations affecting studies at the Bundesbank's Training College came into force during the year under review. At the heart of the new structure is the introduction of a degree-level dissertation as part of the career development examination for admission to the Bank's Upper Intermediate Service. In further developing the study programme and introducing a dissertation, the Bank is responding to the greater demands being made on its employees since its integration into the European System of Central Banks.

Introduction of euro cash has impact on training

The euro campaign and the preparations for issuing euro banknotes and coins meant that staff training in these areas was stepped up, whereas training in other areas had to be cut back – especially in the fourth quarter of the year –

Staff numbers at the Bundesbank on 31 December 2001* — Table 23

Item	Staff numbers [1] Total	Land Central Banks	Branch offices	Central Office [4]	Changes from the start of 2001 [3] Total	Land Central Banks	Branch offices	Central Office [4]
Civil servants	6,578	2,373	3,173	1,032	– 49	– 23	– 27	+ 1
Other salaried staff	8,912	2,307	5,131	1,474	+ 444	+ 31	+ 392	+ 21
Wage earners	793	252	389	152	– 23	– 3	– 17	– 3
Total	16,283	4,932	8,693	2,658	+ 372	+ 5	+ 348	+ 19
of which Trainee civil servants/other trainees [2]	632	199	303	130	– 45	– 9	– 34	– 2
Core staff	15,651	4,733	8,390	2,528	+ 417	+ 14	+ 382	+ 21
of which Staff with permanent contracts	14,718	4,676	7,544	2,498	+ 106	+ 18	+ 54	+ 34
Staff with short-term contracts	933	57	846	30	+ 311	– 4	+ 328	– 13
Memo item Core staff pro rata (full-time equivalent)	14,817.4	4,533.7	7,871.6	2,412.1	+ 410.9	+ 3.8	+ 396.1	+ 11.0

	Start of 2001	End of 2001
* Not included:		
Members of staff on secondment for 12 months or more	108	114
Members of staff on unpaid leave	734	706
Members of staff in the second phase of the age-induced part-time employment scheme	140	225
1 *Of which*, part-time employees	1,964	1,942
2 Other members of staff undergoing training: civil servants changing their career path	40	37

3 Reporting date for staffing statistics changed from 1 January to 31 December

4 Including the Bundesbank Training College.

Deutsche Bundesbank

because of the increased workload relating to the introduction of the euro. Consequently, the number of staff participating in internal and external training events fell by approximately 7%.

Euro bursaries advertised

At the end of the year under review, the Bundesbank advertised 11 bursaries for students of law and economics from the 11 other euro-area countries. The intention was to mark the occasion of the introduction of euro banknotes and coins. These bursaries enable students to spend two semesters (from 1 October 2002 to 31 July 2003) studying in the banking centre of Frankfurt am Main.

In the year under review the Bundesbank held its first two-week summer workshop for students specialising in economics. Together with ten candidates for

First summer workshop for students

the Bank's Higher Service, 29 students from different German and European universities had the opportunity to broaden their knowledge by taking a look behind the scenes of a large central bank in the euro area. The specific aim of the Bundesbank in setting up this workshop was to help to deepen understanding of European central banking among students in higher education. The summer workshop is also part of the Bank's university marketing programme, which aims to make the Bank known as a prospective employer to a wider group of potential recruits.

Annual accounts
of the Deutsche Bundesbank
for 2001

I Balance sheet of the Deutsche Bundesbank as at 31 December 2001

Assets

				31.12.2000
			€ million	€ million
1	Gold and gold receivables		35,005	32,676
2	Claims on non-euro-area residents denominated in foreign currency			
2.1	Receivables from the IMF	8,721		(7,762)
2.2	Balances with banks, portfolio investment, external loans and other external assets	49,598		(53,377)
			58,320	61,139
3	Claims on euro-area residents denominated in foreign currency		—	—
4	Claims on non-euro-area residents denominated in euro		300	300
5	Lending to euro-area credit institutions related to monetary policy operations denominated in euro			
5.1	Main refinancing operations	80,502		(110,714)
5.2	Longer-term refinancing operations	41,134		(27,909)
5.3	Fine-tuning reverse operations	—		(—)
5.4	Structural reverse operations	—		(—)
5.5	Marginal lending facility	1,413		(606)
			123,049	139,230
6	Other claims on euro-area credit institutions denominated in euro		2	10
7	Securities of euro-area residents denominated in euro		—	—
8	Claims on the Federal Government		4,440	4,440
9	Intra-Eurosystem claims			
9.1	Participating interest in the ECB	1,225		(1,225)
9.2	Claims arising from the transfer of foreign reserves to the ECB	12,247		(12,247)
9.3	Other claims within the Eurosystem (net)	—		(—)
			13,471	13,471
10	Items in course of settlement		42	6
11	Other assets			
11.1	Coins	834		(774)
11.2	Tangible and intangible fixed assets	2,149		(2,174)
11.3	Other financial assets	51		(51)
11.4	Off-balance sheet instrument revaluation differences	—		(—)
11.5	Accruals and deferred expenditure	1,305		(1,617)
11.6	Sundry items	1,028		(1,027)
			5,367	5,643
			239,997	256,916

Liabilities

				31.12.2000
			€ million	€ million
1	Banknotes in circulation		76,470	133,944
2	Liabilities to euro-area credit institutions related to monetary policy operations denominated in euro			
	2.1 Current accounts	57,399		(46,924)
	2.2 Deposit facility	97		(91)
	2.3 Fixed-term deposits	—		(—)
	2.4 Fine-tuning reverse operations	—		(—)
			57,496	47,015
3	Other liabilities to euro-area credit institutions denominated in euro		—	—
4	Liabilities to other euro-area residents denominated in euro			
	4.1 General government deposits	88		(59)
	4.2 Other liabilities	949		(400)
			1,037	460
5	Liabilities to non-euro-area residents denominated in euro		7,286	6,583
6	Liabilities to euro-area residents denominated in foreign currency		8	12
7	Liabilities to non-euro-area residents denominated in foreign currency		1,419	0
8	Counterpart of special drawing rights allocated by the IMF		1,725	1,695
9	Intra-Eurosystem liabilities			
	9.1 Liabilities to the ECB arising from promissory notes	—		(—)
	9.2 Other liabilities within the Eurosystem (net)	30,862		(6,855)
			30,862	6,855
10	Items in course of settlement		7	20
11	Other liabilities			
	11.1 Off-balance-sheet instruments revaluation differences	—		(—)
	11.2 Accruals and deferred income	100		(120)
	11.3 Sundry items	191		(76)
			291	196
12	Provisions		5,360	7,486
13	Revaluation accounts		41,685	39,184
14	Capital and reserves			
	14.1 Capital	2,556		(2,556)
	14.2 Statutory reserves	2,556		(2,556)
			5,113	5,113
15	Profit for the year		11,238	8,353
			239,997	256,916

II Profit and loss account of the Deutsche Bundesbank for the year 2001

				2000
			€ million	€ million
	– Interest income	8,793		(9,351)
	– Interest expense	– 2,196		(– 2,170)
1	Net interest income		6,598	7,181
	– Realised gains/losses arising from financial operations	3,666		(2,474)
	– Write-downs on financial assets and positions	– 77		(– 16)
	– Transfer to/from provisions for general risks, foreign exchange risks and price risks	2,332		(– 247)
2	Net result of financial operations, write-downs and risk provisions		5,921	2,705
	– Income from fees and commissions	50		(55)
	– Expense relating to fees and commissions	– 41		(– 8)
3	Net income from fees and commissions		9	47
4	Income from participating interests		525	12
5	Net result arising from allocation of monetary income		– 5	– 4
6	Other income		126	73
7	**Total net income**		13,173	10,014
8	Staff costs		1,017	980
9	Other administrative expenses		346	299
10	Depreciation on tangible and intangible fixed assets		206	195
11	Banknote printing		228	163
12	Other expenses		138	24
13	**Profit for the year**		11,238	8,353

Frankfurt am Main, 26 February 2002

DEUTSCHE BUNDESBANK
The Directorate

Ernst Welteke   Dr Jürgen Stark

Dr Hans Georg Fabritius   Dieter Haferkamp   Edgar Meister   Professor Hermann Remsperger

III External auditors' report

We have audited the annual accounts, including the bookkeeping, of the Deutsche Bundesbank for the financial year from 1 January 2001 to 31 December 2001. The bookkeeping and the presentation of the annual accounts in accordance with generally accepted accounting principles and the principles for the accounting of the Bundesbank approved by the Central Bank Council pursuant to section 26 (2) of the Bundesbank Act are the responsibility of the Directorate of the Deutsche Bundesbank. Our task has been to submit an evaluation of the annual accounts, including the associated bookkeeping, on the basis of the audit we have undertaken.

We have carried out our audit of the annual accounts in accordance with section 317 of the Commercial Code *(Handelsgesetzbuch)* and in conformity with the German principles laid down by the Institute of Auditors *(IDW)* for auditing annual accounts. According to these principles, the audit has to be planned and implemented in such a way that errors and malpractices which materially affect the picture of the Bank's assets and liabilities, financial position and profitability given in the annual accounts in line with generally accepted accounting principles are identified with sufficient certainty. When the audit is being arranged, account is taken of the auditors' knowledge of the Bank's operations and of its economic and legal environment and the likelihood of possible errors. In the course of the audit the effectiveness of the internal control system relating to accounting and documentary evidence for the figures in the accounts and the annual accounts are assessed largely on the basis of samples. The audit comprises the evaluation of the accounting principles applied and of the major estimates made by the Directorate as well as the assessment of the overall presentation of the annual accounts. We are of the opinion that our audit provides a sufficiently sound basis for our judgement.

Our audit has not revealed any discrepancies.

We are convinced that the annual accounts conform to generally accepted accounting principles and to the principles for the accounting of the Bundesbank 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, 20 March 2002

Ernst & Young
Deutsche Allgemeine Treuhand AG
Wirtschaftsprüfungsgesellschaft

KPMG Deutsche Treuhand-Gesellschaft
Aktiengesellschaft
Wirtschaftsprüfungsgesellschaft

Graf von Treuberg	Havas	Zehnder	Rönnberg
Wirtschaftsprüfer	Wirtschaftsprüfer	Wirtschaftsprüfer	Wirtschaftsprüfer
(chartered accountant)	(chartered accountant)	(chartered accountant)	(chartered accountant)

Overview of the principles for the accounting of the Deutsche Bundesbank

General accounting principles
Record of economic reality, thus reflecting the Bank's assets and liabilities, financial position and profitability; prudence; account to be taken of post-balance-sheet events that affect the balance sheet; materiality; going-concern principle; accruals principle (income and expenditure to be recognised in the accounting period in which they are earned or incurred); consistency and comparability.

Cash/settlement approach
Recording of spot transactions in gold, foreign currency instruments and securities in the Bank's accounts shall be based on the date of payment (settlement date).

Balance sheet valuation rules
Gold, foreign currency instruments, securities and financial instruments shall be valued at mid-market rates and prices on the balance sheet date.
No distinction shall be made between price and currency revaluation differences for gold, but a single gold revaluation difference shall be accounted for on the basis of the euro price per defined unit of weight of gold derived from the euro-US dollar exchange rate on the balance sheet date.
Revaluation shall take place on a currency-by-currency basis for foreign exchange (including off-balance-sheet transactions).
In the case of securities revaluation shall be on a code-by-code basis (same ISIN number/type).

Repurchase agreements
A repurchase agreement (repo) shall be recorded as a collateralised inward deposit on the liabilities side of the balance sheet while the item that has been given as collateral remains on the assets side of the balance sheet. A reverse repurchase agreement (reverse repo) shall be recorded as a collateralised outward loan on the assets side of the balance sheet for the amount of the loan. In the case of security lending transactions the assets shall remain in the balance sheet of the transferor.

Income recognition
Realised gains and realised losses shall be taken into the profit and loss account. Unrealised gains shall not be recognised as income but shall be transferred direct to a revaluation account. Unrealised losses shall be taken into the profit and loss account if they exceed previous revaluation gains registered in the corresponding revaluation account. Unrealised losses recorded in the profit and loss account in previous years shall not be reversed in subsequent years in the event of new unrealised gains. There shall be no netting of unrealised losses in any one security, in any currency or in gold holdings against unrealised gains in other securities, currencies or gold.

Premiums or discounts arising on purchased securities shall be treated as part of interest income and shall be amortised using either the straight line method or the implicit rate of return method. The implicit rate of return method shall be used in the case of zero-coupon bonds with a residual maturity of more than one year at the time of acquisition.
Accrual and deferral items covering foreign currency holdings must be converted at the mid-market rate at the end of the year and reversed at the same rate.
Realised gains and losses can arise only in the case of transaction which result in a change in a foreign currency position.
The average cost method shall be used on a daily basis for calculating the acquisition cost in the case of assets that are subject to exchange rate and/or price movements. The average cost price or rate of the assets shall be reduced by unrealised losses taken into the profit and loss account at the end of the year.

Accounting rules for off-balance-sheet instruments

Foreign exchange forward transactions, the forward legs of foreign exchange swaps and other currency instruments involving an exchange of one currency for another at a future date shall be included in the foreign currency position.
Interest rate swaps, futures, forward rate agreements and other interest rate instruments shall be accounted for and revalued on an item-by-item basis.
Gains and losses arising from off-balance-sheet instruments shall be recognised and treated in a similar manner to on-balance-sheet instruments.

Provisions

The regulations set out in the Commercial Code continue to apply to the reporting of provisions in the balance sheet. Pursuant to section 26 (2) of the Bundesbank Act, the creation of liability items for general risks associated with domestic and foreign business remains unaffected.

Transitory rules

The assets and liabilities shown in the closing Deutsche Mark balance sheet of 31 December 1998 shall be revalued on 1 January 1999. Unrealised gains arising on or before 1 January 1999 are to be recorded separately from the unrealised gains which arise after 1 January 1999. The market rates/prices applied by the Bank in the euro-denominated opening balance sheet of 1 January 1999 shall be deemed to be the average acquisition rates/prices as at 1 January 1999. The revaluation items for unrealised gains accruing on or before 1 January 1999 shall be dissolved only in connection with decreases in value and in the event of disposals after 1 January 1999.

IV General information on annual accounts

Legal basis

In connection with the introduction of the euro the provisions governing the Bank's accounting, as laid down in section 26 (2) sentences 2 and 3 of the Bundesbank Act, were amended with effect from 1 January 1999 by means of the Sixth Act Amending the Bundesbank Act of 22 December 1997 (Federal Law Gazette I, page 3274).

Accounting principles of the Bundesbank

This amendment has enabled the Bank to adopt the accounting principles governing the annual accounts of the ECB, which the Governing Council of the ECB had adopted in accordance with Article 26.2 of the ESCB Statute. The Central Bank Council of the Deutsche Bundesbank decided to adopt those principles as the "accounting principles of the Deutsche Bundesbank"[1] (decision of 3 December 1998, amended by the decisions of 9 March 2000 and 28 December 2000). An overview of the principles for the accounting of the Deutsche Bundesbank is given above.

Audit and approval of the annual accounts

The annual accounts of the Bank for the financial year 2001 were audited by Ernst & Young Deutsche Allgemeine Treuhand AG Wirtschaftsprüfungsgesellschaft, Frankfurt am Main, and KPMG Deutsche Treuhand-Gesellschaft Aktiengesellschaft Wirtschaftsprüfungsgesellschaft, Berlin and Frankfurt am Main, which the Central Bank Council had appointed to be auditors in accordance with section 26 (3) of the Bundesbank Act. The auditors confirmed without qualification that the Bank's annual accounts for 2001 and its 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 of the Bank approved the annual accounts for 2001 on 11 April 2002.

1 Published as a revised edition in Bundesbank Notice No 10001/2001 of 25 January 2001.

V Notes on the individual balance sheet items

1 Assets

Gold and gold receivables

At the end of 2001 the Bank's holdings of fine gold (ozf) amounted to 111 million ounces. The gold was valued at market prices at the end of the year (1 ozf = €314.990). In the year under review the gold holdings declined by 0.4 million ounces. This was due to the gold used for issuing 1 million DM1 gold coins pursuant to the Act on the minting of a DM1 gold coin and the establishment of the foundation *Stiftung "Geld und Währung"* of 27 December 2000. Each of the coins was sold for DM250. The net earnings from the sale amounted to €94 million. In accordance with the statutory regulations governing the use of net earnings, €51 million (DM100 million) was transferred to the newly established *Stiftung "Geld und Währung"* on 2 January 2002 and €43 million to the foundation *Stiftung "Preußischer Kulturbesitz".*

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

The claims on the International Monetary Fund (IMF) as well as balances with banks, portfolio investment, loans and other foreign currency claims on non-euro-area residents are shown in this item.

Receivables from the IMF

This sub-item contains the claims on the IMF which are financed and held by the Bank and which arise from the Federal Republic of Germany's membership of the IMF. The claims, which total €8,721 million (SDR 6,122 million), consist of drawing rights within the reserve tranche and special drawing rights.

The drawing rights within the reserve tranche correspond to the amounts actually paid to the IMF in gold, special drawing rights (SDRs), foreign exchange and national currency under the German quota. At the end of 2001 drawing rights held amounted to €6,689 million (SDR 4,696 million) compared with €5,868 million (SDR 4,191 million) on 31 December 2000. They represent the difference between the unchanged German quota of SDR 13,008 million (€18,530 million) and the euro balances amounting to €11,841 million (SDR 8,312 million) at the disposal of the IMF at the end of the year. In 2001 there was a net increase of SDR 505 million in the holdings of drawing rights on the IMF, mainly as a result of the euro withdrawals and repayments of other member countries.

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. A corresponding counterpart is shown as liability item 8. The level of special drawing rights held at the end of 2001 amounted to €2,032 million (SDR 1,426 million) compared with €1,894 million (SDR 1,353 million) on 31 December 2000. Increases totalling SDR 144 million, mainly as a result of interest credited, were accompanied by decreases amounting to SDR 70 million arising from voluntary sales.

No loans were granted to the IMF as a result of special credit arrangements under both the General Arrangements to Borrow and the New Arrangements to Borrow in 2001.

SDR-denominated drawing rights in the reserve tranche, special drawing rights and the counterpart of special drawing rights allocated are shown in the balance sheet on the basis of the market rate calculated by the ECB at the end of the year for all central banks participating in the Eurosystem (SDR 1 = €1.424510).

Balances with banks, portfolio investment, external loans and other external assets

The balances with banks, portfolio investment, loans and other foreign currency claims amounted to €49,598 million at the end of 2001 compared with €53,377 million on 31 December 2000. These are almost exclusively in US dollars (US$43,091 million = €48,894 million), with some in yen (¥80,442 million = €697 million) and a very small amount in other currencies; the holdings are interest-bearing. If all US dollar items on the assets side and the liabilities side of the balance sheet are taken into account, the net US dollar position amounted to US$41,839 million. Last year the Bank reduced its net US dollar position by US$7,426 million. The US dollar items were valued at the end-of-year market rate of €1 = US$0.8813 compared with €1 = US$0.9305 on 31 December 2000. There was a change in the structure of contrary repurchase agreements (reverse repos/ repos) in the year under review. Consequently, these transactions, which used to cancel out, are now shown gross. The gross disclosure of reverse repos as assets in this item (31 December 2001: US$1,248 million) and of repos as liabilities in liability item 7 “Liabilities to non-euro-area residents denominated in foreign currency” (31 December 2001: US$1,247 million) resulted in an extension of the balance sheet.

Claims on non-euro-area residents denominated in euro

A long-term interest-free loan amounting to €300 million which the Bank made available to the IMF in agreement with the Federal Government in 2000 is shown in this item. The loan is in connection with the financing of debt relief which the IMF grants to the heavily indebted poor developing countries (Heavily

Indebted Poor Countries Initiative or HIPC initiative). The interest income from the investment of this money is at the disposal of a trust fund which is administered by the IMF and from which the debt relief granted by the IMF is financed. The loan has a maturity of ten years.

Lending to euro-area credit institutions related to monetary policy operations denominated in euro

This item reflects the volume and pattern of the Bank's refinancing of the credit institutions in the euro area. At the end of the year under review the amount of funds loaned for refinancing purposes was €16,181 million lower than on 31 December 2000. This fall in the need for central bank money was due to the reduced amount of cash in circulation in the run-up to the introduction of euro banknotes and coins.

Most of this item is composed of the main refinancing operations used as part of money market management. These operations are regular weekly transactions with a normal two-week maturity, the purpose of which is to provide liquidity. In the year under review the main refinancing operations were conducted as variable rate tenders with a minimum bidding rate. At the end of the year the main refinancing operations amounted to €80,502 million, which was €30,212 million less than the level on 31 December 2000 (€110,714 million).

The longer-term, and in terms of value smaller, refinancing operations are used to provide additional longer-term liquidity at monthly intervals and with a maturity of three months. In the year under review they were held as variable rate tenders. At €13,225 million, the volume of longer-term refinancing operations at the end of 2001 was above that of the previous year.

The marginal lending facility (overnight liquidity) is permanently available at a predetermined interest rate (standing facility). The extent to which recourse to the marginal lending facility was being taken on 31 December 2001 had risen by €807 million to €1,413 million compared with 2000.

Other claims on euro-area credit institutions denominated in euro

This item contains claims which have no connection with monetary policy operations. These claims are balances which are held at commercial banks in other euro-area countries and which are used for settling payments.

Claims on the Federal Government

This item shows the equalisation claims on the Federal Government and the non-interest-bearing debt register claims 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 and the debt register claims are to be redeemed in ten annual instalments, starting in the year 2024.

Intra-Eurosystem claims

The Bank's claims within the Eurosystem, both on the ECB and on the other central banks participating in the Eurosystem, are combined in this item.

Participating interest in the ECB

Sub-item 9.1 is the Bank's participating interest in the ECB. Pursuant to Article 28 of the ESCB Statute, the national central banks are the sole subscribers to the capital of the ECB. Subscriptions depend on capital shares, which are fixed in accordance with Article 29 of the statute and revised, and if necessary adjusted, every five years. The Bundesbank currently has a 24.5 % share (€1,225 million) of the ECB's capital of €5 billion. Following the accession of Greece to the Eurosystem on 1 January 2001, this is equivalent to a 30.2% share of the total capital paid in by the 12 national central banks in the Eurosystem.

Claims arising from the transfer of foreign reserves to the ECB

Sub-item 9.2 contains the Bank's euro-denominated claims arising from the transfer of foreign reserves to the ECB. In accordance with Article 30 of the ESCB Statute, the central banks participating in the Eurosystem transferred foreign reserves (15% in gold and 85% in foreign exchange) to the ECB at the beginning of 1999. The Bundesbank's share of the foreign reserves transferred is unchanged at €12,247 million. As the transferred gold does not earn interest, the claim is remunerated at 85% of the present main refinancing rate.

Other claims within the Eurosystem (net)

A daily netting-by-novation procedure produces either a net assets balance or a net liabilities balance vis-à-vis the ECB from the TARGET settlement balances between the central banks of the ESCB. Sub-item 9.3 would contain a net assets balance together with the very small settlement balances arising from the traditional correspondent banking operations within the Eurosystem. At the end of the year a net liabilities position is obtained for the Bank from its assets and liabilities, and this is shown in sub-item 9.2 "Other liabilities within the Eurosystem (net)" on the liabilities side.

Items in course of settlement

This item contains the asset items arising from payments still being processed within the Bank (notably the float stemming from collections).

Other assets

The value of Deutsche Mark and pfennig coins shown in sub-item 11.1 "Coins" rose, at €834 million, by 7.7% compared with the value at the beginning of the year; that is 13.1% of the total value of coins in circulation (€6,365 million). The substantial holdings of coins at the end of the year were due to the rapid reflux of cash in the run-up to the introduction of euro banknotes and coins. As Deutsche Mark and pfennig coins ceased to be legal tender on 1 January 2002, the stock of coins shown as at 31 December 2001 was debited to the Federal Government on 2 January 2002. In preparation for the introduction of euro banknotes and coins the Bundesbank, acting on behalf of the Federal Government, drew euro coins with a total face value of €5,386 million from the state mints. Of these coins, a volume worth €4,331 million was distributed in advance to the banks under the frontloading scheme. These coins included those that were issued to the general public from 17 December 2001 in the form of "starter kits". The remaining coins, worth €1,055 million, were held by the Bank on 31 December 2001. The stock of euro coins were carried as assets in special custody until the end of 2001 as euro coins were not yet legal tender.

Sub-item 11.2 "Tangible and intangible fixed assets" amounted to €2,149 million compared with €2,174 million in 2000; it comprises the Bank's land and buildings, furniture and equipment and computer software. The balance sheet value of the land, offices and residential buildings showed a slight decline from 31 December 2000 of €53 million to €1,879 million. Net additions of €53 million were accompanied by depreciation amounting to €105 million. In the year under review the value of the Bank's furniture and equipment rose slightly to €249 million after net additions of €116 million and depreciation totalling €86 million. In the case of computer software there was an almost unchanged balance sheet value at the end of 2001 of €21 million after taking account of depreciation amounting to €15 million and net additions of €13 million.

Sub-item 11.3 "Other financial assets" contains the Bank's participating interests in the Liquiditäts-Konsortialbank GmbH, Frankfurt am Main, the Bank for International Settlements, Basle, and the cooperative society SWIFT, La Hulpe (Belgium). The 30 % interest in Liquiditäts-Konsortialbank entails for the Bank a maximum additional commitment of €300 million.

Sub-item 11.5 "Accruals and deferred expenditure" contains the accrued and prepaid expenditure identified at 31 December 2001. These chiefly consist of interest income which is due in the new financial year from securities denominated in US dollars, loans and other assets which were acquired or transacted in the financial year just ended.

Among the "Sundry items" (sub-item 11.6) are the Bank's holdings of banknotes issued by other central banks in the Eurosystem, whose equivalent values have not yet been settled.

2 Liabilities

Banknotes in circulation

In the year under review the volume of Deutsche Mark banknotes in circulation declined markedly by €57,474 million (-42.9%) to €76,470 million. This sharp fall was due to the reduction in banknotes in circulation in the run-up to the introduction of euro banknotes. As part of the preparations for introducing the euro banknotes, €60,146 million had been distributed to the banking industry in advance and euro banknotes worth €4 million had been sold to automatic machine operators by 31 December 2001. The euro banknotes distributed in this way were recorded off-balance-sheet on memorandum accounts. The value of euro banknotes issued amounted to €60,150 million and was equivalent to the volume of the euro banknotes which the Bundesbank had in circulation on 1 January 2002.

Liabilities to euro-area credit institutions related to monetary policy operations denominated in euro

Sub-item 2.1 "Current accounts" contains the deposits of the credit institutions amounting to €57,399 million (31 December 2000: €46,924 million), which are used to meet the minimum reserve requirement and settle payments. The main criterion for including these deposits in this sub-item is that the respective business partners appear in the list of institutions which are subject to the minimum reserve regulations in the Eurosystem.

Sub-item 2.2 "Deposit facility" (€97million) contains overnight deposits at a predetermined interest rate (standing facility).

Liabilities to other euro-area residents denominated in euro

Sub-item 4.1 "General government deposits" encompasses the balances of the Federal Government, its special funds, the Land 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 31 December 2001 general government deposits amounted to €88 million in all (31 December 2000: €59 million).

The deposits of enterprises, individuals and other depositors are the main items shown in sub-item 4.2 "Other liabilities". At the end of 2001 these deposits amounted to €949 million compared with €400 million on 31 December 2000.

Liabilities to non-euro-area residents denominated in euro

This balance sheet item, amounting to €7,286 million (31 December 2000: €6,583 million) contains primarily the fixed-term deposits of central banks and the working balances of monetary authorities, of commercial banks and of international or supranational organisations.

Liabilities to euro-area residents denominated in foreign currency

This item contains mostly the US dollar deposits of banks and of branches that are domiciled in the euro area and owned by banks domiciled outside the euro area.

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

The liabilities towards banks outside the euro area are recorded in this item. These are essentially liabilities in US dollars, amounting to US$1,247 million (€1,415 million), which have arisen from securities repurchase agreements (repos) and which are being shown in this item starting from the year under review (see asset sub-item 2.2 "Balances with banks, security investment, external loans and other external assets").

Counterpart of special drawing rights allocated by the IMF

The counterpart of the special drawing rights allocated by the IMF free of charge and shown as sub-item 2.1 "Receivables from the IMF" 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.

Intra-Eurosystem liabilities

The Bank's liabilities within the Eurosystem, both to the ECB and to the other central banks participating in the Eurosystem, are combined in this item.

The "Liabilities to the ECB arising from promissory notes" shown as sub-item 9.1 arise in connection with the issue of ECB debt certificates. There were no such issues during the year under review.

A netting-by-novation procedure produces either a net assets balance or a net liabilities balance vis-à-vis the ECB from the TARGET settlement balances between the central banks of the ESCB. The net liabilities balance together with the very small settlement balances arising from the traditional correspondent banking operations within the Eurosystem are shown in sub-item 9.2 "Other liabilities within the Eurosystem (net)". At the end of the year the Bank incurred net liabilities of €30,857 million arising from these assets and liabilities. Furthermore, the liability of €5 million arising from the allocation of monetary income is shown in this sub-item (see profit-and-loss item 5 "Net result arising from allocation of monetary income").

Items in course of settlement

This item contains the liabilities items arising from the settlement transactions circulating within the Bank (notably the equivalent values arising from the collection of bills).

Other liabilities

Sub-item 11.2 "Accruals and deferred income" contains the accrued and deferred income identified at 31 December 2001. These consist almost exclusively of interest expenditure and payments which are due in the new financial year and which arose in the financial year just ended.

Sub-item 11.3 "Sundry items" contains the net proceeds from the issue of the DM1 gold coin, which amount to €94 million and which have not yet been transferred to the Federal Government (see asset item 1 "Gold and gold receivables").

Provisions

The Bank's provisions are as follows:

	31.12.2001	31.12.2000
	€ million	€ million
Provision for		
– general risk	2,832	3,148
– pension commitments	2,394	2,204
– any waiver of claims on the ECB	–	2,016
– other	134	117
	5,360	7,486

The provisions for general risks, pursuant to the regulations governing the Bank's annual accounts contained in section 26 (2) of the Bundesbank Act, are created in view of the unchanged foreign currency risks, especially in the case of the Bank's US dollar and SDR positions. The decline is due to the substantial disposals of US dollars during the year under review (see asset sub-item 2.2 "Balances with banks, security investment, external loans and other external assets").

Following an increase of €92 million, the Bank's provisions for pensions amount to €2,127 million; they are based on an actuarial expert opinion. According to calculations by appropriately qualified experts, indirect pension liabilities arising from the Bank's obligation to act as guarantor for pension payments out of the supplementary pension funds for public sector employees amounted to €342 million at 31 December 2001. €267 million of this sum is recorded in the pensions provisions at 31 December 2001. It is planned to set the remaining €75 million aside in the annual accounts for 2002.

The provision for any waiver of claims on the ECB exists in connection with the transfer of foreign reserves to the ECB. In view of the large valuation losses that may arise at the ECB as a result of foreign exchange risks in the event of a falling gold price or of a strong euro, the ECB Governing Council approved a contingency regulation. Accordingly, the annual accounts for 1999 contained a provision amounting to €2,016 million, which was equivalent to the profit realised at the time the foreign reserves were transferred to the ECB. The assumption of the exposure risk is restricted to the period from 1999 to 2001. In view of the fact that this regulation expired at the end of 2001, the provision was retransferred, with a resultant positive effect on the profit, because the ECB did not have to implement the contingency regulation in 2001.

The other provisions created primarily for anticipated losses and doubtful liabilities increased by €17 million net to €134 million at 31 December 2001.

Revaluation accounts

This item contains the disclosed hidden reserves from the initial valuation at the time of the changeover to market valuation on 1 January 1999 (revaluation items "old") and the resultant unrealised profits arising from market valuation on 31 December 2001 (revaluation items "new"). The "Revaluation accounts" item was made up as follows at the end of the year.

	Revaluation items "old"	Revaluation items "new"	Revaluation accounts, total
	€ million	€ million	€ million
Gold	19,208	7,626	26,834
Foreign exchange	2,467	10,555	13,023
of which			
SDRs	(160)	(545)	(705)
US dollars	(2,307)	(10,010)	(12,317)
Securities	–	1,829	1,829
	21,676	20,010	41,685

Revaluation items "old"

Revaluation items were created, especially for gold, SDRs and US dollars, during the changeover to market-valuation on 1 January 1999. Although the valuation gains arising from the initial valuation are not eligible for distribution, they are available for offsetting valuation losses. Valuation losses did not arise from the valuation on 31 December 2001 in any balance sheet item for which there was a revaluation item at the end of the year as a result of the initial valuation; to that extent there was no dissolution.

Besides a dissolution in the case of valuation losses, a dissolution takes place only in the case of reductions in the corresponding assets. In the course of an annual revision all disposals in the year under review are first offset against the acquisitions in that year. A proportionate dissolution of the revaluation items "old" concerned is undertaken only if the end-of-year holdings are below their lowest end-of-year level since the beginning of 1999. In the year under review there were reduced holdings of gold and US dollars on 31 December 2001, resulting in a dissolution of €67 million in the case of gold and €438 million in the case of US dollars. The revaluation items "old" were reduced by a total of €505 million to €21,676 million. The dissolution amount is included in profit-and-loss item 2/sub-item "Realised gains/losses arising from financial operations" .

Revaluation items "new"

In the case of gold holdings, the net positions in each foreign currency and the securities portfolio the positive difference between their market value and their value in terms of the average acquisition costs carried forward from 1 January 1999 is shown in the revaluation items "new" at the end of the year.

Owing to the strength of the dollar, the market values of the gold, SDR and US dollar positions at the end of the year were above the respective acquisition values, with the result that revaluation items amounting to €18,181 million were created. There were only slight valuation gains in the case of the other foreign currencies.

Valuation gains of €1,829 million arose from the valuation of securities, especially as a result of the lower interest rate level in the United States.

Capital and reserves

The Sixth Act amending the Bundesbank Act of 22 December 1997 increased the liable capital to DM5 billion (€2,556 million) with effect from 31 December 1998 and laid down the sum of DM5 billion (€2,556 million) as the upper limit for the statutory reserves.

Profit for the year

The profit and loss account for the year 2001 closed with an annual surplus of €11,238 million. Pursuant to section 27 of the Bundesbank Act, it will be transferred in full to the Federal Government as the statutory reserves are at their maximum level of €2,556 million.

VI Notes on the profit and loss account

Net interest income

This item shows interest income less interest expenditure. Net interest income was lower than in the previous year, falling by €583 million to €6,598 million. Of this total amount, €3,065 million were in foreign currency (primarily foreign reserves) while the euro holdings amounted to €3,533 million (primarily from bank refinancing and minimum reserves).

Interest income

Interest income declined by €558 million from the previous year to €8,793 million, with interest income in foreign currency falling from €3,691 million in 2000 to €3,080 million. This was due primarily to the reduced US dollar holdings and the lower rate of interest on US dollar assets compared with the previous year. Interest income from euro assets increased slightly from €5,660 million in 2000 to €5,713 million. There was a particularly sharp rise (of €621 million to €5,184 million) in income from the refinancing of credit institutions owing to the fact that, on an annual average, interest rates and holdings were greater than in

2000; by contrast, income from TARGET settlement balances fell by €597 million to €14 million.

Interest expenses

Total interest expenditure rose only slightly (by €25 million to €2,196 million) compared with 2000. On the one hand, expenditure on remunerating minimum reserve balances increased by €206 million to €1,614 million and interest paid on euro time deposits by €30 million to €264 million; on the other hand, expenditure arising from TARGET settlement balances declined by €229 million to €277 million.

Net result of financial operations, write-downs and risk provisions

The sub-item "Realised gains/losses arising from financial operations" amounted to €3,666 million compared with €2,474 million in 2000. In the year under review there were realised gains arising from the disposal of gold (€99 million), US dollars (€2,594 million), SDRs (€188 million) and securities (€785 million) and a very slight loss of €1 million in the yen item. The disposals of gold and US dollars resulted in a dissolution of part (€505 million) of the revaluation items "old" for gold and US dollars created on 1 January 1999 (see liability item 13 "Revaluation accounts"). These are included in the realised gains shown in the account for gold and US dollars.

Most of the valuation losses of €77 million recorded in the sub-item "Write-downs on financial assets and positions" occurred in the yen position (€48 million) and in various US dollar securities (€29 million).

The sub-item "Transfers to/from provisions for general risks, foreign exchange risks and price risks" shows the partial liquidation of the provision for general risks (€316 million) and the full liquidation of the provision for any waiver of claims vis-à-vis the ECB arising from the transferred foreign reserves (€2,016 million) (see liability item 12 "Provisions").

Net income from fees and commissions

Net income from fees and commissions declined by a total of €38 million to €9 million compared with the previous year. The decline was due mainly to the expenditure of €32 million on the advance distribution of euro banknotes and coins. At a total of €41 million, net income arising from the handling of payments and from securities trading and safe custody account business declined slightly from the previous year (€44 million).

This item contains the Bank's profit from its participating interests in the Liquiditäts-Konsortialbank GmbH, the Bank for International Settlements and the Euro-

Income from participating interests

pean Central Bank. The substantial rise of €513 million in income to €525 million is due almost exclusively to the distribution of profits by the ECB for 2000 (€494 million); in the business year of 1999 the ECB had run a loss.

Net result arising from allocation of monetary income

The Bundesbank's share outcome of the allocation of monetary income in accordance with Article 32 of the ESCB Statute is shown in this item. In accordance with Article 32.5 of the ESCB Statute, the sum of the national euro-area central banks' monetary income is allocated to the central banks participating in the Eurosystem in proportion to their paid-up shares in the capital of the ECB.[1] The allocation of monetary income resulted in a net liability of €5 million for the Bank (2000: €4 million). This was due to a transfer of €15 million from monetary income to the common pool and to a claim by the Bank on the common pool of €10 million.

Other income

The remaining income rose by €53 million from the previous year to €126 million. The increase was mainly the result of gains from the sales of land and buildings (€76 million compared with €7 million the year before).

Staff costs

Expenditure on staff increased by a total of €36 million (3.7%) to €1,017 million in 2001. If the transfer to the provisions affecting this item is excluded, the increase over the previous year amounted to 4.5%. This increase was due mainly to rises in the pay of wage and salaried staff and of civil servants in 2001 and to the larger numbers of staff employed at the branch offices, mostly on temporary contracts, as a result of the introduction of euro banknotes and coins.

Retirement pensions accounted for €313 million of aggregated expenditure on staff (2000: €301 million). This sum includes the transfers to provisions for pensions and to the reserve for indirect pension commitments (see liability item 12 "Provisions") as well as payments made to staff 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.

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1 The ECB Governing Council decided that in the years 1999 to 2001 the monetary income to be transferred by the national central banks would be calculated by paying interest on the monetary base (defined as the liabilities items "Liabilities to euro-area credit institutions related to monetary policy operations denominated in euro: current accounts, deposit facility, fixed-term deposits, fine-tuning operations" and "Liabilities to the ECB arising from promissory notes") at a reference interest rate (defined as the respective current main refinancing rate). All interest expenditure which a national central bank has had to pay on the liabilities items mentioned is deducted from the amount calculated in this way.

Payments to serving members of the Bank's Directorate and of the Executive Boards of Land Central Banks amounted to €4,828,602.83 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 €8,904,450.37.

Other administrative expenses

The other (non-staff) operating expenditure increased by €47 million (15.7%) to €346 million compared with 2000. This item shows not only operating expenditure but also expenditure on buildings and computer hardware and software. Most of the increase in other administrative expenses was due to the additional work involved introducing euro banknotes and coins.

Depreciation on tangible and intangible fixed assets

The depreciation of land and buildings, of furniture and equipment and of computer software is shown in the balance sheet under asset sub-item 11.2 "Tangible and intangible fixed assets".

Banknote printing

In the year under review expenditure on banknote printing increased by €66 million (40.4%) from the previous year to €228 million. The increased expenditure was due to the substantially greater volume of (euro) banknotes supplied in the year under review.

Other expenses

The rise of €114 million in other expenses was due mainly to the entry on the liabilities side of the balance sheet of the net proceeds arising from the issue of the DM1 gold coin and transferred on 2 January 2002 (see asset item 1 "Gold and gold receivables"). The remainder of the other expenses is principally expenditure on residential buildings.

Branch Offices of the Deutsche Bundesbank

on 1 April 2002

Locality number	Bank location	Land Central Bank[1]
390	Aachen	NRW
614	Aalen	BW
653	Albstadt	BW
765	Ansbach	BY
464	Arnsberg	NRW
795	Aschaffenburg	BY
720	Augsburg	BY
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
430	Bochum	NRW
380	Bonn	NRW
290	Bremen	BNS
292	Bremerhaven	BNS
270	Brunswick	BNS
257	Celle	BNS
870	Chemnitz	STH
570	Coblenz	RS
370	Cologne	NRW
180	Cottbus	BBB
508	Darmstadt	H
741	Deggendorf	BY
805	Dessau	BNS
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
478	Gütersloh	NRW
450	Hagen	NRW
268	Halberstadt	BNS
800	Halle	BNS
200	Hamburg	HMS
254	Hamelin	BNS
410	Hamm	NRW
506	Hanau	H
250	Hanover	BNS
620	Heilbronn	BW
259	Hildesheim	BNS
780	Hof	BY
217	Husum	HMS
721	Ingolstadt	BY
222	Itzehoe	HMS
540	Kaiserslautern	RS
660	Karlsruhe	BW
520	Kassel	H
733	Kempten	BY
210	Kiel	HMS
324	Kleve	NRW
690	Konstanz	BW
320	Krefeld	NRW
743	Landshut	BY
285	Leer	BNS
860	Leipzig	STH
266	Lingen	BNS
683	Lörrach	BW
604	Ludwigsburg	BW
545	Ludwigshafen	RS
230	Lübeck	HMS
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	Munich	BY
400	Münster	NRW
150	Neubranden-burg	HMS
574	Neuwied	RS
760	Nuremberg	BY
365	Oberhausen	NRW
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
590	Saarbrücken	RS
593	Saarlouis	RS

Locality number	Bank location	Land Central Bank[1]
793	Schweinfurt	BY
140	Schwerin	HMS
386	Siegburg	NRW
460	Siegen	NRW
603	Sindelfingen	BW
600	Stuttgart	BW
585	Trier	RS
258	Uelzen	BNS
630	Ulm	BW
694	Villingen-Schwenningen	BW
602	Waiblingen	BW
753	Weiden	BY
356	Wesel	NRW
510	Wiesbaden	H

Locality number	Bank location	Land Central Bank[1]
282	Wilhelmshaven	BNS
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 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, Mecklenburg-West 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)