



EUROPEAN CENTRAL BANK

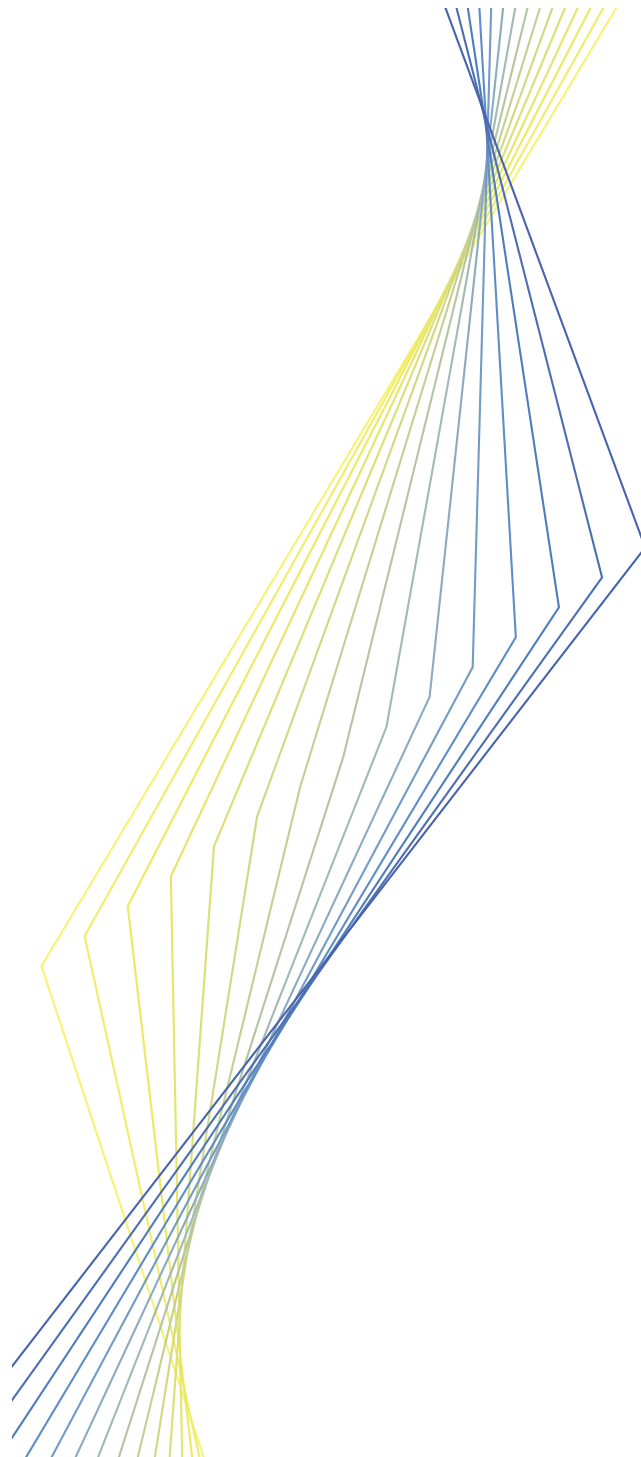
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ANNUAL REPORT

2000



EUROPEAN CENTRAL BANK



**ANNUAL
REPORT**

2000

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Abbreviations

Countries

BE	Belgium
DK	Denmark
DE	Germany
GR	Greece
ES	Spain
FR	France
IE	Ireland
IT	Italy
LU	Luxembourg
NL	Netherlands
AT	Austria
PT	Portugal
FI	Finland
SE	Sweden
UK	United Kingdom
JP	Japan
US	United States

Others

BIS	Bank for International Settlements
BPM4	IMF Balance of Payments Manual (4th edition)
BPM5	IMF Balance of Payments Manual (5th edition)
CDs	certificates of deposit
c.i.f.	cost, insurance and freight at the importer's border
CPI	Consumer Price Index
ECB	European Central Bank
ECU	European Currency Unit
EMI	European Monetary Institute
ESA 95	European System of Accounts 1995
ESCB	European System of Central Banks
EU	European Union
EUR	euro
f.o.b.	free on board at the exporter's border
GDP	gross domestic product
HICP	Harmonised Index of Consumer Prices
ILO	International Labour Organization
IMF	International Monetary Fund
MFI	Monetary Financial Institutions
NCBs	national central banks
repos	repurchase agreements
SITC Rev. 3	Standard International Trade Classification (revision 3)

In accordance with Community practice, the EU countries are listed in this Report using the alphabetical order of the country names in the national languages.

On the 14 dividing pages between the chapters of this Annual Report you will find pictures of colourful euro coins. They were painted under the patronage of the President of the ECB in the framework of a project entitled “Euro-World: European painting for young cancer patients”. Children and teenagers throughout the European Union together with artists devoted their efforts and imagination to painting about 1,000 huge euro coins which decorated the streets of Frankfurt for many months of 2000. Some of the coins will be on display in other European cities in the course of this year. The ECB purchased a total of 14 of the euro coins. Two pieces will remain at the ECB, but the remaining 12 – which were painted by young cancer patients from the 12 euro area countries – will be returned as a donation from the ECB to the hospitals of the children involved in the paintings. The ECB is happy to have contributed in this manner to the charitable aims of the Euro-World project.

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Vesaliusinstituut KTA Oostende, Belgium

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Foreword



The euro has been in existence for two years. In 1999 price increases were very low in the euro area. Last year, inflation slightly exceeded the ceiling of 2% considered by the European Central Bank (ECB) to be compatible with price stability in the medium term.

The increase in inflation last year was mainly due to external influences. Oil prices rose rapidly, while the euro depreciated against major currencies. As these developments took place in a climate of strong economic growth, they could have had implications for price stability in the medium term. As a consequence, there were upward risks to price stability for the greater part of 2000. These were also indicated by monetary developments. Money growth remained well above the reference value of 4½% throughout most of 2000.

In order to maintain the prospects for stable prices in the medium term, the Governing Council of the ECB decided to raise the key interest rates six times in the course of last year. Towards the end of the year, the risks to price stability became more balanced. Money growth gradually declined and approached the reference value. Oil prices fell. The exchange rate of the euro recovered

from the lows it had registered in October. Signs that the economy of the United States was slowing down became clearer. Economic growth in the euro area remained robust, but declined somewhat from the high levels seen in the earlier part of the year. However, in late 2000 and early 2001 there were still some elements of upward risks to price stability. These were related to wage prospects, fiscal policy and the lagged pass-through of both past increases in oil prices and the past depreciation of the euro.

Looking back at the first two years of the euro, there is reason to repeat the favourable conclusions I drew in last year's Annual Report. Inflation has remained relatively low, particularly considering the strong increase in oil prices. Financial markets have shown confidence in the determination and ability of the ECB to maintain price stability, its primary objective, in the medium and longer term. This is clear from the level of long-term interest rates, which shows that markets expect price stability to be maintained in the euro area. The ECB has already built up considerable credibility.

The introduction of the euro has added impetus to the process of change in the financial sector and the euro area economy as a whole. Indeed, the euro area as a single economic entity has started to become a more familiar notion. This is crucial to an understanding of the ECB's monetary policy, which always has to be directed at maintaining price stability in the whole of the euro area. Financial markets in the euro area have continued to integrate, and the consolidation of the financial sector has been boosted by the introduction of the euro. The two processes are related and are not yet complete. This is also clear from the European Commission's Financial Services Action Plan and the report prepared by the Committee of Wise Men on the regulation of European securities markets.

The euro was introduced in a favourable economic climate, and contributed to it. Last year, economic growth in the euro area

(3.4%) was the strongest for a decade. It had already increased in 1999, after only a slight slowdown following the Asian and Russian crises. Many new jobs were created and unemployment declined almost continuously. Nonetheless, unemployment remained unacceptably high both on average in the euro area and in some countries in particular.

It is widely acknowledged that unemployment in the euro area is highly structural in nature. It is, therefore, gratifying to note that over the past two years structural reforms to make product and labour markets operate more flexibly have been put firmly on the agenda. What is even more important is that far-reaching measures are taken and are being implemented in a consistent fashion.

The fiscal position of countries in the euro area is far healthier than just a few years ago. It is fair to say, however, that the recent decline in fiscal deficits has been more the result of low interest rates and stronger than expected growth than of measures to improve fiscal balances. It is important that countries make further progress along the path of consolidation to meet the requirements of the Stability and Growth Pact. The favourable economic developments in the euro area were facilitated by the fiscal consolidation already achieved, as well as by moderate wage developments, structural reforms and stable prices. These achievements, if sustained, should enhance Europe's growth potential and foster a reduction in unemployment in the years to come. The first two years of the euro have also shown that the policy-making framework at the European level is satisfactory. No major flaws emerged, as had been feared by some. It is crucial that this framework be adhered to as agreed. This is not to deny that it will be possible for further improvements to be made on the basis of experience, if and when appropriate.

A great deal remains to be done, but much has already been achieved. One fact to be highlighted, however, is that the general public has not always perceived the positive

overall balance of the euro's first two years. This is not the place to analyse this gap between perception and reality in detail. It may even be impossible to find a full explanation for this phenomenon. However, the fact that the euro is new and, due to the absence of euro banknotes and coins, not yet very "visible" or "concrete" has probably played an important role.

In any event, too much attention – particularly among the general public – was drawn to the depreciation of the euro. Although the euro area is a relatively closed economy, this depreciation added to the upward risks to price stability (as mentioned above), as a result of its persistence and its magnitude. The exchange rate was clearly no longer in line with the strong fundamentals of the euro area. This situation and the attention the exchange rate received in the media also tended to affect the confidence of the general public in the euro.

The concern about the potential implications of developments in the euro exchange rate for the world economy, as shared by our partners in the G7, ultimately prompted interventions in the foreign exchange markets, together with its G7 partners on the initiative of the ECB in September and then unilaterally by the Eurosystem in November. At the end of last year the euro started to recover.

The perception of the euro and the discussion about the exchange rate in 1999 and 2000 are practical and concrete examples of something which we have always known in the abstract: anchoring confidence in the euro, in particular for the general public, is a time-consuming process. The best way in which to do it is to build up a track record of low inflation and to demonstrate the determination with which the ECB pursues its objective of maintaining price stability. A good start has been made in establishing this track record, but this, by definition, takes time. Since price stability can never be taken for granted, this will be the main challenge for the Eurosystem in the years to come.

As I have said, a major handicap in making European citizens aware of their new currency is the fact that euro banknotes and coins will not be introduced until next year. This shows how significant the event will be. This year, the preparations for the launch of the euro banknotes and coins will be completed. Their introduction will coincide with the changeover of all accounting systems to the euro. This highlights the fact that everybody has to be seriously prepared for the final stage of the changeover to the euro.

This Annual Report summarises the activities of the European System of Central Banks (ESCB) and the Eurosystem in 2000. It also reports on monetary policy last year and this year. The report highlights the many issues, sometimes of a technical nature, that have been resolved and are being resolved in establishing the Eurosystem as the central bank of the euro area. Although many are directly or indirectly related to monetary policy, the report also deals with the other activities of the Eurosystem. Here I can only touch on a selection. A full account can be found in the 13 chapters of the report.

Monetary policy decisions of the Governing Council of the ECB continued to be focused on the overriding objective of preserving price stability in the medium term (see Chapter I). The ECB's monetary policy was based, as in the past, on its two-pillar strategy. With regard to the second pillar, last year the ECB started to publish Eurosystem staff economic projections. This should be seen in the context of the ECB's policy of being as open and transparent as possible; it did not imply any change in the monetary policy strategy of the ECB. In the context of the first pillar of the strategy, the Governing Council reconfirmed the 4½% reference value for the annual growth of the money supply, arguing that the underlying determinants of this reference value had not changed. However, it concluded that the uncertainty regarding potential economic growth in the euro area in the medium term was skewed to the upside. Although there are no clear signs as yet of an increase in potential growth in

the euro area due to the emergence of the "New Economy", there are some indications at the micro level that this may change in the future.

The Eurosystem's operational framework continued to function smoothly (see Chapter II). The only exception was the gradual development of a problem of severe overbidding by credit institutions in the main refinancing operations. This prompted the Eurosystem to switch from a fixed rate tender to a variable rate tender procedure with a minimum bid rate. It was explained that in the new procedure the minimum bid rate signalled the monetary policy stance, as the fixed rate had done previously. No change in the monetary policy stance was intended with the move to the new allotment procedure. Experience with the new tender procedure has been very good.

This year, Greece was welcomed as the twelfth country of the euro area (see Chapter III). This was decided on the basis of the convergence it had achieved with the euro area. As required, the ECB published a convergence report in 2000, and a number of technical preparations for Greece's entry had to be made in the course of the year. It should also be mentioned that, after a referendum, Denmark decided not to apply for adoption of the euro. This did not imply any change in the relationship between the ECB and Denmark's Nationalbank. Denmark continued to be a member of ERM II, maintaining a narrow fluctuation band for the Danish krone against the euro (see Chapter IV).

Last year the Eurosystem continued to build up its role in international co-operation (see Chapter V). This had many dimensions. First, the ECB continued to maintain and develop relations with the institutions and bodies of the European Community. Second, the Eurosystem again engaged in international co-operation on monetary, economic and financial matters. It took a particular interest in the work on international financial market developments conducted in international organisations and fora. Third, the ECB continued to deepen its working relations

with many central banks outside the European Union (EU). The Eurosystem intensified its dialogue with the central banks of the accession countries. The ECB also developed relations with the central banks of European countries not in the accession process, of key emerging market economies and of certain other industrial countries.

In June 2000 the ECB published a statement in which it clarified the role of the Eurosystem in the field of payment systems oversight (see Chapter VI). Promoting the smooth functioning of payment systems is a core function of a central bank, one which is directly linked to its responsibility for monetary policy and financial stability.

In 1999 the Eurosystem formulated a number of objectives to improve the speed and lower the costs of cross-border retail payment services in the euro area (see Chapter VI). Last year, the Eurosystem assessed the progress made against these objectives and identified the outstanding issues. It was concluded that the banking and payment systems industry has committed itself to the fulfilment of the objectives. Progress has been made in preparing the ground for a more efficient handling of cross-border retail credit transfers. Nevertheless, the Eurosystem has also identified some unresolved issues and suggested solutions. It will continue to monitor closely the activities of the banking sector and the progress made along the road towards fulfilling the objectives, in order to ensure that the preparations ultimately translate into satisfactory services for European citizens.

The Eurosystem is continuing to follow developments in electronic money and their implications for central banks (see Chapter VI). In 2000 it actively co-operated with the European authorities on a new regulatory framework for electronic money institutions. This framework was adopted and largely addresses the ECB's concerns as regards monetary policy, prudential supervision and payment systems.

Close co-operation between payment systems overseers and banking supervisors helps to form an overall strategy of risk reduction in the financial system, and is thus essential (see Chapters VI and VII). The ECB and the national central banks (NCBs) of the ESCB, in their capacity as overseers of payment systems, and the banking supervisory authorities of the EU countries have agreed on a "Memorandum of Understanding". It focuses on an exchange of information between payment systems overseers and banking supervisors in relation to large-value interbank funds transfer systems, in order to ensure the soundness and stability of such systems and their participants.

The increasing integration of banking and financial activities in the euro area and the EU led the EU authorities in the course of 2000 to review the institutional arrangements and the regulatory framework designed to safeguard financial stability (see Chapter VII). The "Report on financial stability" concluded that the existing institutional arrangements provide a coherent and flexible basis for safeguarding financial stability, but that their operational functioning needs some enhancement. The ECB supports the stance taken in the report. The Eurosystem has a general interest in the move towards integrated securities markets. However, the tasks of the Eurosystem with regard to payment systems, prudential supervision and financial stability give it an even stronger incentive to monitor and assess relevant developments in the securities market infrastructure and regulatory framework. Consequently, the ECB actively participated in the consultation process initiated by the Committee of Wise Men on the regulation of European securities markets. The proposals put forward by the Committee for achieving a more flexible and effective regulatory process at the EU level are broadly supported by the ECB.

With the assistance of the Banking Supervision Committee, the tools for the analysis of the banking sector have been sharpened in order to provide a

comprehensive framework for monitoring systemic risk at the EU/euro area level. In addition, the analysis of major structural developments in the banking and financial sector has been enhanced (see Chapter VII).

As part of the preparations for the introduction of the euro banknotes and coins, the ECB and the 12 NCBs of the Eurosystem are conducting the Euro 2002 Information Campaign (see Chapter VIII). Its slogan is "the EURO. OUR money". The campaign is being implemented at the international level by the ECB and at the national level by the 12 NCBs of the Eurosystem. The campaign is being co-ordinated with similar campaigns prepared by national authorities. It focuses on four main messages:

- the appearance of the banknotes and coins,
- the authentication features,
- the denominations and
- how the changeover will take place.

Three principal channels are being used to deliver these messages: a mass media campaign, information material for the public and the press, and co-operation with other groups active in this area (the Partnership Programme).

The Governing Council has agreed on the general principles of the framework for the 2002 cash changeover (see Chapter VIII). In deriving these principles, due account was taken of the major role credit institutions will play in making the cash changeover a successful operation. The decisions taken relate to the following matters: the frontloading and sub-frontloading of banknotes, the debiting model and the coverage of risks.

In 2000 the statistical work of the ECB focused on ensuring that the information needed to support the functions of the Eurosystem continued to be received, processed, disseminated and published in a

timely manner, to a high standard of quality and with good supporting documentation (see Chapter IX). This work was carried out in close co-operation with the NCBs, which collect data from reporting agents and compile the national statistics necessary to construct euro area aggregates. Although there is no reason to doubt that sufficient information is available for sound monetary policy decisions, it is also true that there is room for improvement. This applies first and foremost to economic statistics. It is particularly important for statistics to be available for all euro area countries and for the national data to be adequately harmonised. Responsibility for these statistics at the EU level lies mainly with the European Commission (Eurostat). The ECB and the Commission have collaborated closely to establish an Action Plan identifying the fields where urgent progress is needed for each Member State and for each statistical area. The areas mentioned as most needing improvement include quarterly national accounts, quarterly public finance statistics, labour market statistics, a range of short-term business indicators and external trade statistics.

The ECB must be consulted by the relevant Community institution and the responsible national authorities, as appropriate, on any proposed Community or national legislation which falls within the ECB's field of competence (see Chapter X). A total of 32 consultations were initiated in 2000. Three were related to the adoption of the euro by Greece. Four involved the introduction of the euro banknotes and coins in 2002 and seven involved Community legal acts. The remaining consultations related to national legislative proposals.

During 2000 the members of the Executive Board of the ECB, and the President in particular, continued their appearances before the European Parliament to report on monetary policy and other activities of the ESCB (see Chapter XI). In line with agreed practice, I appeared before the Committee on Economic and Monetary Affairs of the European Parliament

each quarter. The focus of these testimonies was on monetary policy and economic developments, in particular the factors potentially affecting price stability. I reported on the decisions taken by the Governing Council in the area of monetary policy as well as in other fields of ESCB competence, and explained the analysis underpinning these decisions in detail. In addition, other members of the Executive Board appeared before this Committee on a number of other occasions. Our regular appearances before the European Parliament are an essential tool to provide the European public and their directly elected representatives with comprehensive explanations of the way the ECB and the Eurosystem fulfil their mandate.

In addition to the decision-making bodies of the ECB (the Executive Board, the Governing Council and the General Council), the corporate governance of the ESCB also encompasses external layers of checks and balances (see Chapter XII). The Statute of the ESCB provides for two layers, namely the external auditors and the European Court of Auditors. More recently, an independent Anti-Fraud Committee was established as an additional check. It should be noted that an internal monitoring structure also exists, involving – among other things – internal auditing on a continuous basis under a mandate from the Executive Board. In October last year the Executive Board approved the Code of Conduct of the European Central Bank. The Code of Conduct gives guidance to, and sets benchmarks for, the staff of the ECB and the members of the Executive Board. They are encouraged to maintain high standards of professional ethics in the performance of their duties at the ECB as well as in their relations with NCBs, public authorities, market participants, media representatives and the public in general. The Executive

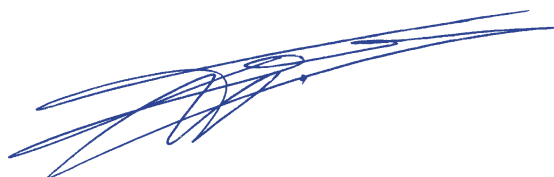
Board also adopted detailed rules preventing the abuse of sensitive financial market information (“insider trading rules” and “Chinese walls”).

At the end of 2000 the number of staff employed by the ECB from all 15 Member States stood at 941 (see Chapter XII). This compares with 732 staff at the end of 1999. The ECB’s budget for 2001 envisages increasing the number to slightly over 1,100 in the course of the year.

Last year, the ECB made an operating profit of €4.6 billion, before the deduction of special provisions of €2.6 billion to cover exchange and interest rate risks (see Chapter XIII). The profit made in the context of the ECB’s interventions in the foreign exchange markets was a significant element of this result.

One of the advantages of the single currency is that the euro area is probably less vulnerable than in the past to economic disturbances elsewhere. There is good reason for realistic optimism regarding the prospects of the euro area economy. This will not only benefit the euro area itself: that the euro area is showing a healthy economic development, solving its unemployment problem step by step, further improving the structure of its economy and maintaining an internally stable currency is also a source of stability for the world economy.

Frankfurt am Main, March 2001



Willem F. Duisenberg



Universitätsklinik Frankfurt am Main, Germany

Designed by Ferry Ahrlé. Title: Europe follow me

Chapter I

Economic developments and monetary policy

I Overview: monetary policy decisions in 2000

The primary objective of the single monetary policy is to maintain price stability in the euro area. In late 1998 the Governing Council of the ECB defined price stability as “year-on-year increases in the HICP for the euro area of below 2%”. Furthermore, it was made clear from the outset that “price stability is to be maintained in the medium term”. In taking monetary policy decisions, the Governing Council continued in 2000 to organise its analysis of information on the economic situation and threats to price stability in accordance with the two “pillars” of its monetary policy strategy.

The first pillar of the strategy assigns a prominent role to money, reflecting the fundamentally monetary origins of inflation over the medium to longer term. Within the first pillar, M3 developments are assessed in relation to a reference value. This reference value is the annual growth rate of M3 which is consistent with, and best serves, the maintenance of price stability in the euro area in the medium term. The reference value was set at 4½% in December 1998 and it was confirmed by the Governing Council in December 1999.

The second pillar of the strategy encompasses a wide range of other economic and financial variables in order to come to a broadly based assessment of the outlook for price developments and the risks to price stability in the euro area. Within this pillar, internal macroeconomic projections based both on conventional models and on economic experts’ knowledge, as well as forecasts produced outside the Eurosystem, play a role as tools for summarising existing information relevant for assessing possible future developments. In November 2000, the Governing Council decided to publish, as from December 2000 with biannual frequency, the Eurosystem staff economic projections for the euro area (see Box I for a description of the publication of projections and their role in the monetary policy strategy of the ECB).

2000 was a year of sound economic growth in the euro area which reached, at 3.4%, its highest level for more than a decade. At the same time, mainly as a result of adverse influences from oil prices and the exchange rate of the euro, short-term price pressures rose in 2000, driving the average inflation rate in the year to 2.4%. The intensity of these short-term price pressures posed risks to price stability in the medium term, through possible indirect and second round effects on consumer price inflation, especially in a context of strong economic growth and a high degree of capacity utilisation. The growth rate of M3 remained above the reference value throughout the year. The Governing Council of the ECB reacted to these medium-term price pressures by raising interest rates six times (see Chart I), thus contributing to maintaining a favourable outlook for price stability over the medium term.

At the outset of 2000, the interest rates on the three main monetary policy instruments were those prevailing since 4 November 1999, when the Governing Council had decided to increase the key ECB interest rates by 50 basis points. On that occasion, the rate on the main refinancing operations of the Eurosystem was raised to 3%, while the rates on the marginal lending and deposit facilities were increased to 4% and 2% respectively. In November 1999, the reasons underlying the precautionary interest rate reduction of April 1999 no longer prevailed. The information coming from the evolution of monetary aggregates, financial markets and other economic indicators was indicating that downward risks to price stability had receded and that risks to price stability were shifting to the upside.

In the first half of 2000, the information stemming from the first pillar of the strategy continued to point towards upward risks to price stability. The three-month average of annual M3 growth remained at around 6%, significantly above the reference value of 4½%, almost continuously throughout the

Box I

The publication of Eurosystem staff economic projections by the ECB

Economic projections offer a convenient analytical tool for organising and summarising a large amount of information and help to create a consistent picture of possible future developments. For this reason, projections are a useful guidepost for starting discussions on future economic developments.

From the start of Stage Three, economic projections have been prepared by Eurosystem staff as one of a number of inputs into the deliberations of the Governing Council. In the December 2000 issue of the ECB Monthly Bulletin, the ECB published these staff projections for the first time. These projections, which are produced within the Eurosystem on a biannual basis, will henceforth be published in the June and December issues of the ECB Monthly Bulletin. Projected figures are published for HICP inflation and the growth rate of real GDP and its components and they are accompanied by a text describing their main features. These projections have a two-year horizon. In order to reflect the degree of uncertainty attached to such projection exercises, the projections are published in the form of ranges.

The decision to publish the staff projections reflects the Governing Council's conviction that the information and analysis underlying its monetary policy decisions should be shared with the public, to the extent possible and efficient. However, in order to assess appropriately the role of the staff projections in the monetary policy decision-making process, the nature and the limitations of projections need to be well understood.

In this respect, the Eurosystem uses the term "projection" (rather than "forecast") in order to signal that the published figures are the results of a scenario based on a set of underlying technical assumptions, including, in particular, the assumption of "unchanged monetary policy", which implies a constant level of short-term interest rates over the forecasting horizon. This means that possible future monetary policy responses to emerging threats to price stability are not incorporated. Because of these underlying assumptions, the staff economic projections are not, in general, the best predictors of future outcomes, especially at longer horizons.

The Eurosystem staff economic projections are based on econometric models and on economic experts' knowledge. They form part of the second pillar, as such projections (as well as the forecasts made by most other institutions) are produced using analytical frameworks which do not accord a prominent role to money, but focus on the interplay between demand and supply and/or cost pressures. In addition, it is important to see that the projections do not, by their nature, incorporate all the analyses conducted under the second pillar. In particular, the econometric models underlying projections, like any model of the economy, are subject to uncertainty and cannot provide a complete description of the economy. Furthermore, the process of preparing projections is time-consuming, implying that certain assumptions underlying the projections can become quickly outdated. Finally, in assessing the potential risk to price stability, it is often necessary to look beyond the time horizon for which reliable projections can typically be formulated, i.e. one to two years. For all these reasons, the Governing Council does not only rely on projections in its monetary policy considerations. It also analyses monetary developments under the first pillar of its strategy and looks at information other than projections under the second pillar (such as recent data not taken into account in the projections, forecasts produced outside the Eurosystem, financial market indicators providing forward-looking information, etc.). A thorough assessment and cross-checking of the information coming from various indicators and different analytical frameworks are essential features of the ECB's two pillar strategy. This also helps the Governing Council in assessing the importance of the various indicators and in identifying the nature of economic disturbances affecting the euro area economy which have implications for price developments.

The above arguments explain why the staff projections have an important but limited role in the discussions of the Governing Council. The Governing Council only uses the projections as an input into its deliberations and does not assume responsibility for the projections. Since the assessment of the Governing Council draws on a

broader range of analyses than the staff projections alone, one should not expect monetary policy decisions to respond mechanically to developments in the economic projections published by the ECB.

Given its overriding commitment to maintain price stability, the Governing Council's own best prediction for price developments over the medium term must always be consistent with its quantitative definition of price stability. This definition should anchor inflation expectations. Against this background, the published macroeconomic projections for inflation should not, under any circumstances, be seen as questioning the commitment of the Governing Council to maintain price stability over the medium term. Furthermore, projections have been produced by staff and presented to the Governing Council since the beginning of Stage Three. Neither the ECB's strategy in general, nor the role of the staff projections within it in particular, has been changed by the publication of projections.

first half of 2000, with a peak of 6.4% in April 2000 (see Section 2.1 in this chapter). The protracted upward deviation of M3 growth from the reference value of 4½% in 2000, which followed a period in which M3 growth had been close to 6% for several months in 1999, implied that abundant liquidity had been progressively accumulated in 1999 and the first half of 2000. Furthermore, the high growth of M3 in 1999 and in the first half of 2000 continued to be associated with rates of growth in M1 of around 10%. In addition, credit to the private sector continued to expand at rates of around 10%.

The information stemming from the second pillar in the first half of 2000 also increasingly pointed towards risks to price stability. Oil prices continued to rise, as different events led to gradual upward pressures, especially in the second quarter of 2000, and the exchange rate of the euro depreciated further until the beginning of May. Inflation, as measured by the increase in the Harmonised Index of Consumer Prices (HICP), rose and remained close to 2% throughout much of the first half of 2000. In addition, the rise in import prices increased production costs, with possible indirect effects that would be likely to materialise in the rate of increase in the HICP with a lag. Furthermore, in a more medium-term perspective, these prolonged upward pressures from energy prices also led to risks of second-round effects via wage increases. This risk was especially pronounced in an environment of robust economic growth and tight labour market conditions in some sectors. In fact, data on the growth of real gross domestic product (GDP)

and other indicators, including industrial production figures and surveys on industrial and consumer confidence, indicated that economic activity had expanded very rapidly in early 2000 and was set to continue along that path. The external environment was also growth-supportive. Recovery continued in East Asia and Latin America, while growth in the United States was very strong. Forecasts for economic activity in the euro area were repeatedly revised upwards, supported by data and surveys on developments in economic activity and by the continuous brightening of the international environment.

Overall, high monetary and credit growth, a prolonged phase of depreciation of the exchange rate and the strong oil price increases added, in a period of strong economic growth, to inflationary pressures over the medium term. With both pillars of the monetary policy strategy pointing to upside risks to price stability, the Governing Council of the ECB decided to raise the key ECB interest rates on four occasions during the first half of 2000 (by 25 basis points on 3 February, 16 March and 27 April 2000 and by 50 basis points on 8 June). The interest rate of the main refinancing operations of the Eurosystem was thereby raised to 4.25% and the interest rates applicable to the deposit and marginal lending facilities were raised to 3.25% and 5.25% respectively.

On 8 June 2000 the Governing Council of the ECB also decided that, starting with the operation settled on 28 June 2000, the main refinancing operations were to be conducted

as variable rate tenders with the announcement of a minimum bid rate. The minimum bid rate was initially set at the same level as the preceding interest rate in fixed rate tenders (4.25%). This switch to variable rate tenders with a minimum bid rate in the main refinancing operations was a response to the severe overbidding which had developed in the context of the fixed rate tender procedure used until then and was not intended as a change in the monetary policy stance (see Section I in Chapter II). It was also announced that the minimum bid rate would henceforth play the role previously performed by the rate in fixed rate tenders to signal the monetary policy stance.

In the course of summer 2000, information from the first pillar pointed towards a gradual slowdown in the growth of monetary aggregates, especially the most liquid components of M3, probably reflecting the gradual increases in ECB interest rates. Total credit growth in the euro area also slowed down, although mainly because of the downward path of general government credit growth. However, the rate of M3 growth remained above the reference value, staying at around 5.5% at the end of summer.

From the point of view of the second pillar, it became increasingly evident during the summer of 2000 that consumer price inflation would, as a result of the continuous rise in oil prices in US dollar terms, remain above 2% for a period longer than previously anticipated. This increased the risk of the emergence of second-round effects further. These concerns were compounded by the developments of the exchange rate of the euro, which depreciated significantly further as from mid-June 2000. In addition, data for economic activity continued to point towards strong economic growth, supported by a continuing favourable international environment. In this context, most inflation forecasts for 2001 were also revised upwards in the third quarter of 2000.

As upside risks to price stability remained significant, the Governing Council decided to

raise the key ECB interest rates by 25 basis points each on both 31 August and 5 October 2000. After these decisions, the minimum bid rate on the main refinancing operations reached 4.75% and the rates on the deposit facility and the marginal lending facility stood at 3.75% and 5.75% respectively.

Over the summer of 2000, the level of the exchange rate of the euro had moved further out of line with the sound fundamentals of the euro area, thereby also raising concerns about potential implications for the world economy. The depreciation of the euro was addressed at the level of the G7 on 22 September 2000, on the initiative of the ECB, in the form of a concerted intervention in the foreign exchange market together with the monetary authorities of the United States, Japan, the United Kingdom and Canada. The ECB, consistent with its concerns about the risks for price stability in the euro area stemming from the depreciation of the exchange rate of the euro, decided to intervene again in foreign exchange markets in early November.

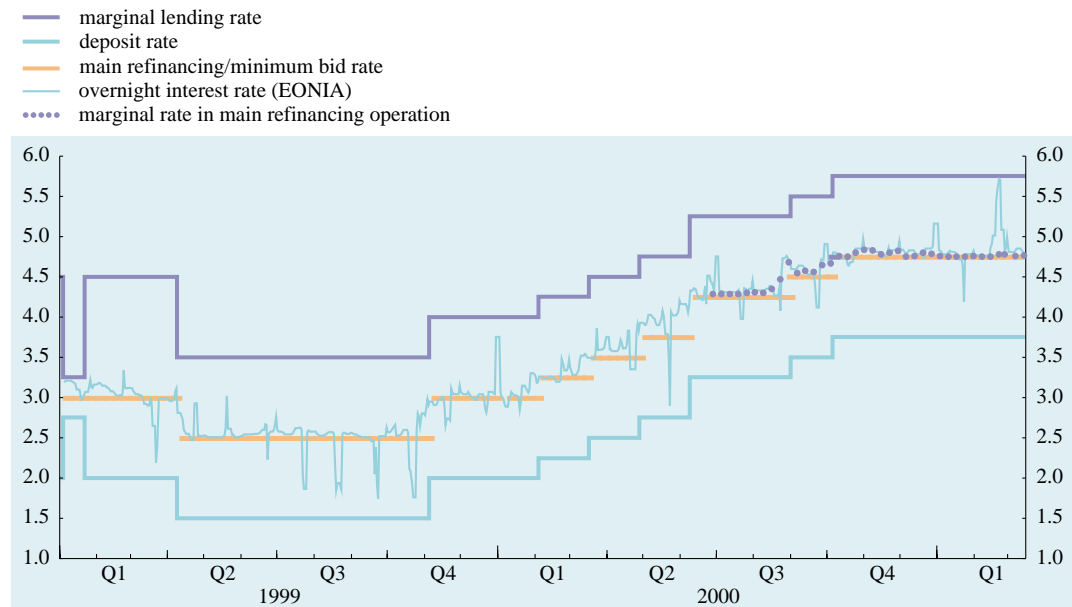
In late 2000, the signs of moderation in M3 growth became stronger as the increases in ECB interest rates as from November 1999 appeared to have significantly curbed the demand of the most liquid components of M3, which was only partially offset by the strong increase in marketable instruments. The annual growth of credit to the private sector remained relatively high, as it was connected with the financing by telecommunications companies of the payments of the UMTS licences to the government sector. The growth in total credit to euro area residents declined by approximately 2 percentage points between April and October 2000, with the growth of credit to the private sector declining by 0.5 percentage point in the same period. Overall, the picture of the risks to price stability stemming from the first pillar thus became more balanced in the autumn of 2000.

In late 2000 there were first indications that the impact of the rise in oil prices might have

Chart I

ECB interest rates and money market rates

(percentages per annum; daily data)



Sources: ECB and Reuters.

Note: The rate for main refinancing operations is the rate applicable to fixed rate tenders for operations settled before 28 June 2000. Thereafter, the rate reflects the minimum bid rate applicable to variable rate tenders.

contributed to a slowdown in economic activity in the euro area. In addition, uncertainty surfaced with regard to the economic performance of the United States and Japan. Data on industrial production and confidence indicators broadly indicated that euro area production growth seemed to have reached a peak in the second quarter of the year and moderated thereafter. At the same time, positive developments in the labour market continued throughout the year and probably contributed to the stabilisation of consumer confidence at high levels. In the first months of 2001, the outlook for sustained economic growth in the euro area remained positive.

Developments in the financial markets around the turn of the year reflected this general outlook for sustained growth in the euro area in a global environment of heightened uncertainty. The exchange rate of the euro appreciated significantly against all major currencies as from late November 2000. Furthermore, bond yields suggested that markets expected economic growth in the

euro area to remain strong, and inflation to develop in line with the Governing Council's definition of price stability over the medium term.

The significant fall in US dollar oil prices following their November peak, and the appreciation of the exchange rate of the euro contributed to a downward movement in annual consumer price inflation. However, in late 2000 and early 2001 there were still some elements of upward risk to price stability. HICP inflation remained significantly above 2% and HICP inflation excluding energy, although remaining relatively subdued, started to reflect, as from the autumn of 2000, the indirect effects on inflation of past increases in oil prices and the past depreciation of the exchange rate of the euro, i.e. the pass-through from higher producer price increases at earlier stages in the production process. Another risk was related to wage prospects, especially in light of the relatively high level of HICP inflation in the second half of 2000, in an environment of strong economic growth. In addition, signs of a loosening of

fiscal policy in several euro area countries began to materialise and deserved to be taken into consideration. The indications provided by the Eurosystem staff economic projections published in December 2000 broadly confirmed the outlook of upside risks to price stability remaining.

At its meeting on 14 December 2000, the Governing Council of the ECB conducted its regular review of the reference value for M3 growth and confirmed the value of 4½% for the broad aggregate M3. This decision was based on the annual review of the assumptions underlying the derivation of the reference value, namely those with regard to the trend decline in M3 income velocity (maintained in the range of ½% to 1%) and trend potential output growth (maintained in

the range from 2 to 2½%). The Governing Council noted that there was still no decisive evidence of measurable and lasting increases in productivity growth in the euro area that would warrant a significant upward revision in the assumption for trend potential GDP growth, although it was felt that the uncertainties surrounding estimates of the medium-term development of potential output growth in the euro area had become skewed to the upside. The Governing Council announced that it would carefully monitor evidence on the possible acceleration of productivity growth in the euro area. It was also emphasised that potential output growth could be strengthened by further structural reforms in the labour and goods markets. Naturally, monetary policy would take such changes appropriately into account.

2 Monetary and financial developments

2.1 Monetary developments

M3 growth slowed down in the course of 2000

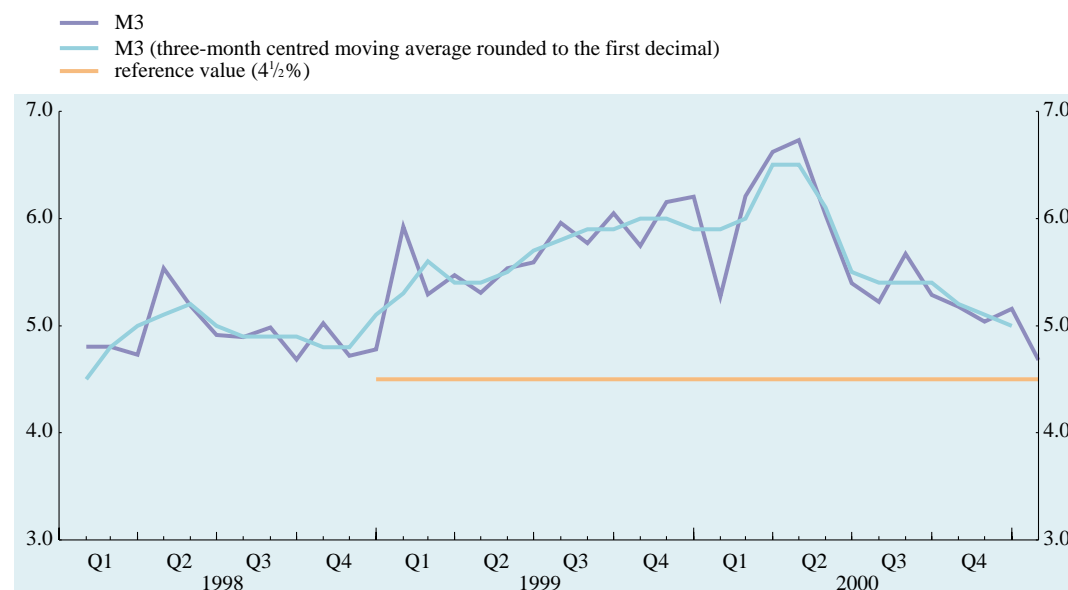
The annual growth rate of the broad aggregate M3 averaged 5.7% in 2000,

unchanged from 1999. However, the stability of the average growth rate masked a changing trend in monetary developments throughout the year (see Chart 2). The annual rate of growth in M3 continued to increase in the first four months of 2000, reaching a peak of

Chart 2

M3 growth and the reference value

(annual percentage changes)



Source: ECB.

6.7% in April, but fell significantly during the remainder of the year. As a result, the gap between M3 growth and its reference value of 4½% progressively narrowed. The three-month moving average of annual M3 growth was 5.1% in the last quarter of 2000.

During 2000, sustained economic growth in both real and nominal terms fostered the demand for money for transaction purposes. The particularly strong dynamics in M3 growth recorded in the first quarter of 2000 may moreover also have been driven by precautionary moves on the part of investors faced with high uncertainty in the stock exchange markets over the same period, as indicated by the pronounced growth in M1 in early 2000. The moderation in M3 growth experienced as from the second quarter of 2000 probably reflected the successive increases in ECB interest rates as from November 1999 and, via the associated rise in short-term money market rates, the increased opportunity costs of holding the most liquid components of M3. This had a dampening impact on demand for those

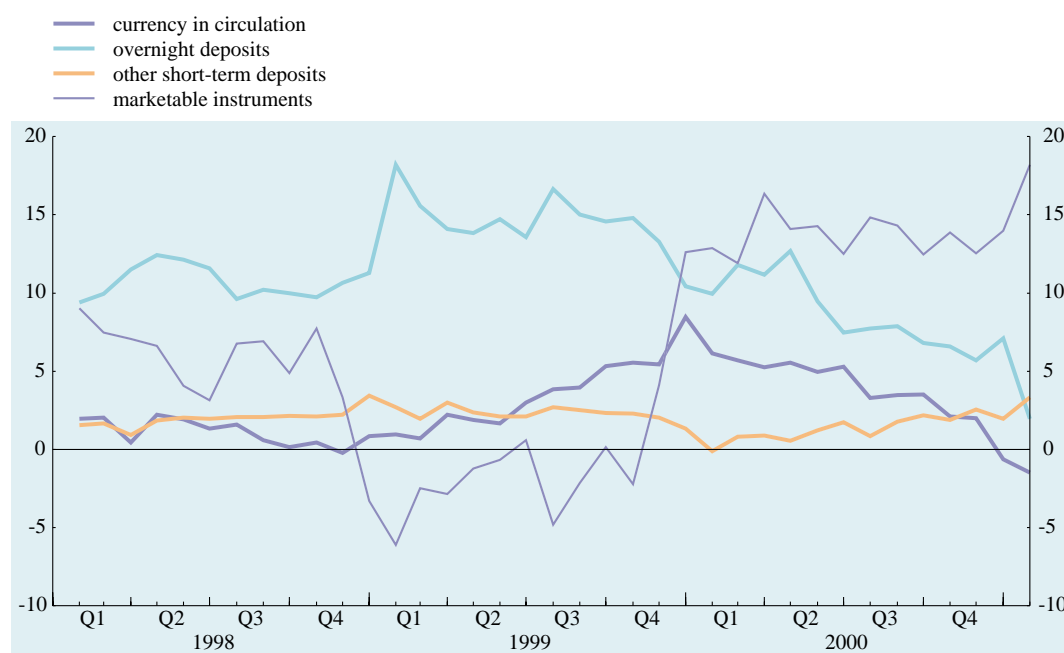
components which bear no interest or which respond less, in terms of their rate of return, to changes in market rates, such as currency in circulation and overnight deposits (i.e. M1), as well as deposits redeemable at a period of notice of up to three months. This effect more than offset that of the increase in demand for short-term time deposits and marketable instruments in M3 (see Chart 3).

Turning to a more detailed analysis of M3 components, the annual growth in currency in circulation, which had recovered strongly in 1999, not least as a result of the temporary rise in the precautionary demand for currency due to the century date change, followed a downward trend throughout the year 2000. The slowdown became more pronounced in the second half of the year, presumably as a result of the rising opportunity costs of holding currency. As a result, in the fourth quarter of 2000 the annual rate of increase in currency in circulation declined to 1.8%, compared with 6.0% in the corresponding quarter of 1999.

Chart 3

Components of M3

(annual percentage changes)



Source: ECB.

As for overnight deposits, having stood at 12.7% in April 2000, the annual growth rate of this category of deposits followed a sharp downward trend from spring onwards, presumably because of rising opportunity costs. In the last quarter of 2000, the average annual rate of increase declined to 6.4%, representing a significant decrease from the values recorded in the fourth quarter of 1999 (13.5%).

Short-term deposits other than overnight deposits continued, on average, to expand very moderately during 2000. In the last quarter of the year they grew by 2.2% in annual terms compared with 2.0% in the corresponding quarter of 1999. However, the subdued pace of growth in this category of deposits in 2000 concealed the rather contrasting dynamics of its two sub-components.

While the demand for deposits with an agreed maturity of up to two years grew strongly in 2000 (5.6%), that for deposits redeemable at a period of notice of up to three months declined over the same period (-1.6%). The diverging development of the two sub-components of short-term deposits other than overnight deposits can largely be attributed to the behaviour of the retail interest rates paid on them (see Chart 9).

In 2000 the expansion of marketable instruments included in M3, namely negotiable instruments and repurchase agreements, remained very strong. In the last quarter of 2000 the annual growth rate stood at 13.2%, representing a significant increase from the moderate annual growth rates recorded in the fourth quarter of 1999 (2.5%). As mentioned above, the strong demand for these instruments may, at least to some extent, have reflected the flattening of the yield curve in 2000. The behaviour of marketable instruments issued by euro area Monetary Financial Institutions (MFIs) should, however, be interpreted with caution as it is not possible, within the current statistical framework of the Eurosystem, to estimate with precision the part which is held by non-euro area residents. Such purchases by non-

euro area residents are likely to have distorted M3 growth upwards in 2000.

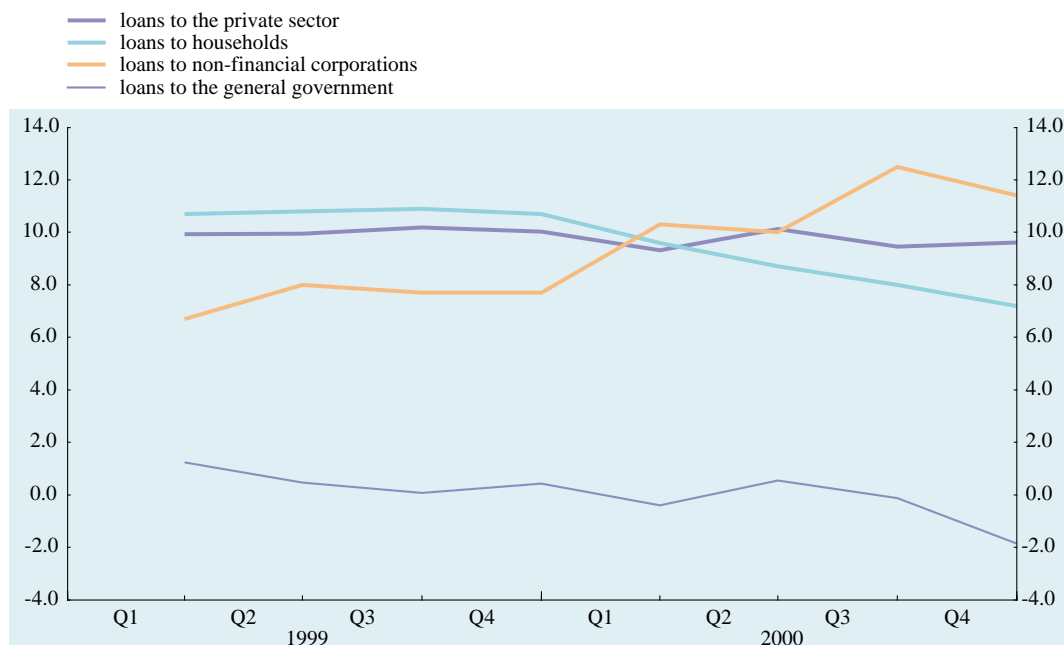
In January 2001 the annual rate of M3 growth decreased to 4.7% from 5.2% in December 2000, continuing the declining trend from the second quarter of last year. The three-month average of the annual growth rates of M3 also declined to 5.0% in the period from November 2000 to January 2001, from 5.1% in the period from October to December 2000.

Total credit slowed down somewhat in 2000

Turning to the counterparts of M3, credit to euro area residents slowed down in 2000. The annual average growth in this item was 7.4%, compared with 8.4% in the year before. This moderation was mainly attributable to a reduction in credit extended to general government (the average annual rate of change was -1.3% in 2000, compared with 2.9% in 1999), while the growth of credit to the private sector remained strong (it averaged 10.5% in 2000, unchanged from 1999).

With respect to credit to the private sector, the annual increase in loans fluctuated between 8.8% and 10.5%. Towards the end of the year, however, the short-run dynamics of loans to the private sector seemed to show incipient signs of a slowdown. The increase in loans to the private sector in 2000 was driven primarily by a significant increase in loans to non-financial corporations. The pace of expansion in loans to households, by contrast, declined somewhat, mainly reflecting a moderation in the demand for house financing (see Chart 4).

The robust growth of economic activity in the euro area and the high level of business and consumer confidence fostered the expansion of loans to households and corporations in the course of 2000. A front-loading of borrowing due to expectations of rising interest rates may also have played some role, especially in the first half of the

Chart 4**Sectoral breakdown of loans by MFIs***(annual percentage changes; end-of-quarter data)*

Source: ECB.

year. Merger and acquisition transactions inside the euro area as well as foreign direct investment abroad may have been additional factors. Finally, the interplay between mortgage loans and buoyant real estate prices in some euro area countries spurred the demand for loans, in particular, in the first half of 2000, whereas signs of a moderation in the increase in house prices were visible in the last few months of the year. At the same time, the continued increase in lending rates, which followed that in market interest rates at corresponding maturities with some lag, contributed to dampening credit in the euro area. A slowdown in credit growth was in fact visible during the second quarter of the year (the annual growth rate of loans to the private sector peaked at 10.5% in April and subsequently slowed down to 9.1% in July). Thereafter, the demand for loans was very much affected by the need of some telecommunications companies to finance the purchase of third-generation mobile telephone (UMTS) licences, especially in Germany. As a result, the annual growth rate of loans to the private sector was again close

to 10% in the autumn months. Subsequently, the annual rate of growth of loans to the private sector declined again, reaching 9.5% in December 2000 and 9.1% in January 2001. The lagged effect of the rise in lending rates as well as the slight weakening of euro area economic growth associated with the rise in oil prices in the autumn may have contributed to this development.

In sharp contrast to the strong growth in credit to the private sector, the change in credit to general government was negative in the course of 2000 (the annual rate of decline in MFI loans was 1.9% in the fourth quarter of 2000; that of securities was 8.9%). On the whole, this development was consistent with the reduced borrowing requirements in a phase of strong economic activity and reflected the high proceeds derived in some countries from the sale of UMTS licenses in the course of 2000. As to the other counterparts of M3, the longer-term liabilities of the MFI sector increased at a relatively moderate pace in 2000 (the average annual growth rate was 6.2% in the last quarter of 2000; 7.2% in the corresponding quarter of

1999). The slowdown in the pace of growth of these instruments probably reflected to some extent the flattening of the yield curve in the course of 2000.

Finally, during 2000 the net external asset position of the MFI sector fell significantly, by €98 billion in the 12 months up to December. The fall was however smaller than in 1999, when it amounted to €177 billion. As in 1999, the decline in net external assets probably reflected net direct and portfolio investment outflows from non-MFI residents. A slowdown in the pace of the decline in net external assets was visible in the second part of the year, in tandem with a recovery of net inflows from some financial transactions between non-MFI residents and the rest-of-the-world sector.

2.2 Financial markets

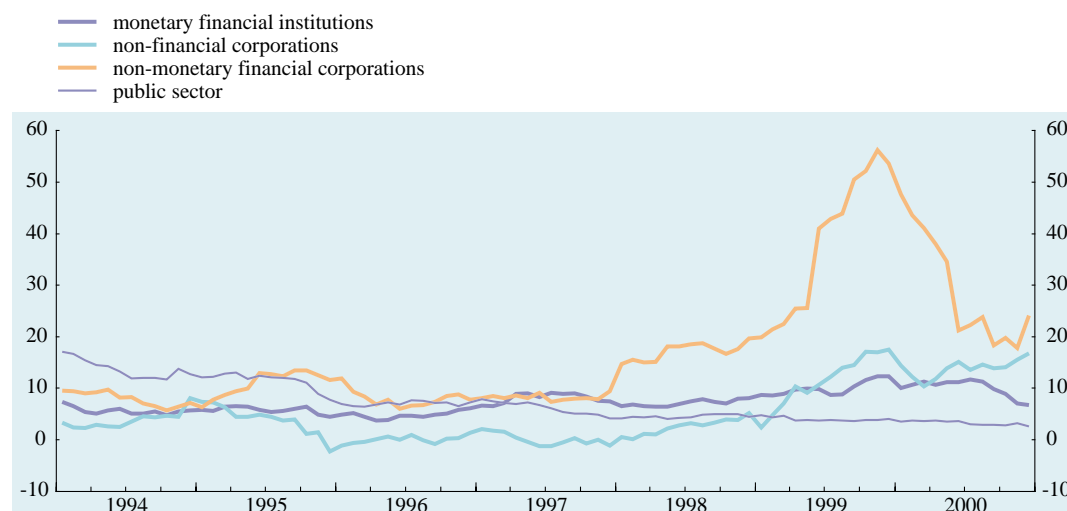
Continuing growth in the issuance of debt securities

The market for debt securities issued by euro area residents continued to grow strongly in 2000, with the amount of debt securities

outstanding increasing by about 7% between end-1999 and end-2000. Underlying this was a 4% increase in the amount of short-term debt securities outstanding and a 7% increase in the amount of long-term debt securities outstanding. The total amount outstanding remained dominated by long-term debt securities, which accounted for more than 90% of the total amount outstanding at the end of 2000.

Central government and the MFI sector still dominate the euro area debt securities market in absolute terms of both amounts outstanding and issuance. The growth rates of amounts outstanding of debt securities issued by these sectors was low in 2000 by comparison with the issuance activity of the non-monetary financial and non-financial sectors (see Chart 5), for which the amounts outstanding of euro-denominated debt securities grew by approximately 24% and 17% respectively in 2000. Apart from the robust economic growth of the euro area, the continued high issuance activity of these sectors is to a large extent due to ongoing restructuring in the European corporate sector. Furthermore, the need of the telecommunications sector to finance its

Chart 5
Amounts outstanding of euro-denominated debt securities issued by euro area residents
(annual percentage changes)



Source: ECB.

acquisitions of UMTS licences was an important element in the second half of the year. At the same time, there are strong signs that the single currency has contributed to the improvement of conditions for private issuers to tap the European capital markets. Moreover, as discussed in the article entitled "Characteristics of corporate finance in the euro area" in the February 2001 issue of the ECB Monthly Bulletin, there are indications that the euro area corporate sector has extended its market financing sources to increasingly include direct financing through the issuance of debt securities.

As a consequence of very different growth rates in amounts outstanding between the different sectors, non-monetary financial institutions and non-financial corporations increased their combined share of the stock of euro-denominated debt securities from 8.5% in 1999 to 9.7% in 2000. The MFI sector's share of the stock of euro-denominated debt securities rose from 37.0% at the end of 1999 to 37.4% in 2000, largely reflecting the financing of increased loans to the private sector. Mirroring these increasing shares, the general government's share of the stock of euro-denominated securities dropped from 54.5% at the end of 1999 to 53.0% at the end of 2000. The continued reduction in the relative importance of the public sector in the euro area debt securities markets reflects the reduced borrowing requirements of the public sector in 2000 compared with previous years.

The share of gross issuance of euro-denominated debt securities issued by euro area residents in total issuance in all currencies remained high in 2000, but declined by comparison with 1999. Compared with an average share of 94.6% in 1999, gross issuance in euro represented 92.6% of total gross issuance by euro area residents in 2000. The euro remained an attractive currency also for international investors, even if growth rates in 2000 did not reach the extraordinary levels of 1999. The amount outstanding of euro-denominated debt securities issued by non-residents of the euro area grew by 26.3% in 2000 (compared with 42.4% in 1999).

Money market interest rates increased in line with ECB interest rates in 2000

In the course of 2000, money market interest rates rose substantially. This mirrored the gradual increase in ECB rates which took place in six steps by a total of 175 basis points during 2000. The rise in money market interest rates in the course of the year was broadly anticipated by the financial markets. This can be seen by the fact that at the beginning of 2000 the 12-month EURIBOR, at around 3.9%, was significantly above the then prevailing one-month EURIBOR of 3.1% (see Chart 6) which indicated that the financial markets expected a sizeable increase in money market rates during 2000.

Ahead of the announcement of the decisions to increase ECB interest rates, the overnight interest rate, as measured by the EONIA, typically tended to stand above the rates which signalled the stance of monetary policy (this was the rate applicable to fixed rate tenders until the main refinancing operation settled on 21 June 2000 and the minimum bid rate applicable to variable rate tenders thereafter). As was also the case in 1999, the volatility of the EONIA was low and confined to the end of the reserve maintenance periods when the minimum reserve constraint on the banking system becomes binding. In addition, the EONIA tended to increase somewhat on the last trading day of each month, reflecting financial institutions' desire to adjust their balance sheets at these times. This occurred most markedly at the turn of the year.

In the first half of 2000, money market interest rates moved very much in parallel with the gradual upward adjustment of the path of ECB interest rates. Of the four increases in ECB interest rates in the first half of 2000, the first three had been almost fully anticipated by financial markets by the time they were announced and resulted in only very small adjustments in short-term money market interest rates. Only on the occasion of the 50 basis point increase in ECB interest rates on 8 June 2000 was the

reaction of short-term money market rates somewhat more pronounced, suggesting that the size of this move was not fully anticipated by market participants.

The increase in ECB interest rates announced on 8 June interrupted, for a period of around two months, the upward trend in the one-month and three-month EURIBOR as this decision temporarily curbed expectations of a further interest rate increase in the near term. However, between the middle of August and October, the increase in money market rates at the short end of the curve resumed, anticipating the two increases in ECB interest rates that were announced on 31 August and on 5 October. These decisions subsequently contributed to the moderation of expectations of further increases in ECB interest rates.

In the autumn, the money market sentiment gradually changed. While the 12-month EURIBOR had already started to decline in September, shorter-term money market rates gradually started to fall in the course of November. The fall in longer-term money market interest rates was most pronounced,

and in early December 2000 the money market yield curve started to invert. At the end of 2000, the 12-month EURIBOR stood at 4.75% which was around the same level as in early May 2000, and more than 50 basis points below the level reached in September, while the one-month EURIBOR was equal to 4.85%, which was 20 basis points below the peak reached in late November.

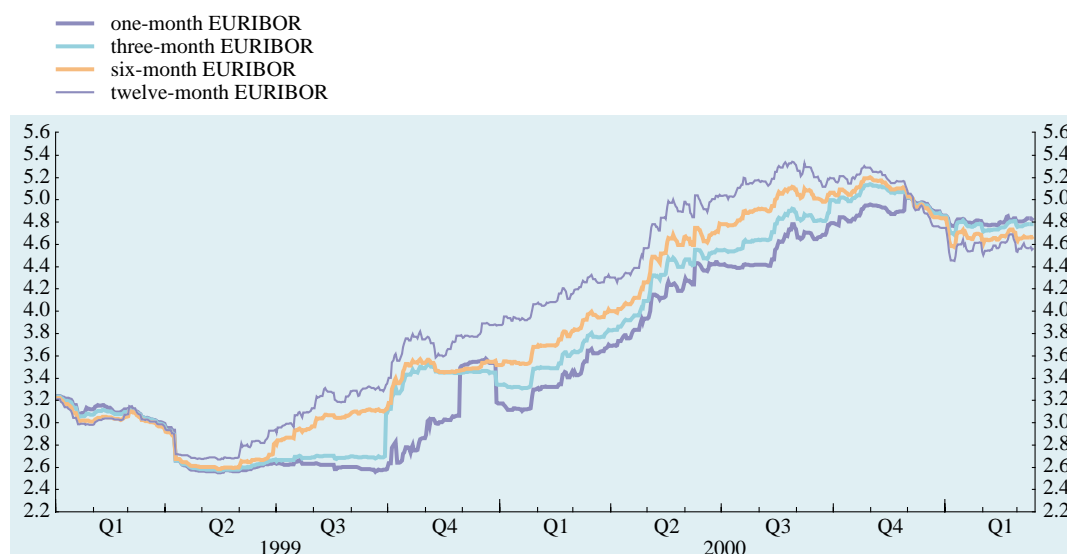
The change in market sentiment in the autumn of 2000 was related to a rise in implied volatility associated with options on futures contracts on the three-month EURIBOR, signalling an increase in the perceived uncertainty about future monetary policy moves on the part of market participants. However, this increase in volatility reversed only a part of the falls in implied money market volatility which were observed in the first ten months of 2000.

In the first two months of 2001, the decline in money market interest rates came to a halt. The slope of the money market yield curve, measured as the difference between the 12-month and one-month EURIBOR, remained slightly inverted throughout this

Chart 6

Short-term interest rates in the euro area

(percentages per annum; daily data)



Source: Reuters.

period, suggesting that market participants expected short-term money market rates to fall somewhat during the remainder of 2001.

Euro area long-term bond yields broadly stable throughout much of 2000

In contrast to the pronounced increase in long-term interest rates which took place during 1999, long-term government bond yields in the euro area remained broadly stable around a level close to 5.5% throughout much of 2000 (see Chart 7 (a)). It was only towards the end of the year, from November 2000 onwards, that bond yields declined somewhat, bringing them down to a level of just above 5.0% by the end of the year. In the US bond markets ten-year bond yields dropped by around 130 basis points in the course of 2000. At the end of 2000, this yield stood at 5.2%, which was the lowest level that had prevailed since the spring of 1999. Reflecting these developments, the differential between US and euro area ten-year bond yields narrowed by around 85 basis points during 2000, to reach a level of around 15 basis points by the end of 2000, which was the lowest level since end-1996 (see Chart 7 (b)).

Upward revisions and a subsequent moderation of global growth expectations appear to have been an important factor in accounting for trends in global long-term bond yields in 2000. In the United States, the robust pace of economic activity placed upward pressure on US long-term bond yields in January. US government bond yields subsequently reversed direction in early February 2000 and fell substantially, prompted by the US Treasury's plans to significantly scale back bond issuance at longer-term maturities and to buy back bonds prior to maturity. This seemed to result in the emergence of a scarcity premium in US government bond prices in early 2000, which also appeared to have contributed to the marked widening of the spread of US swap rates over government bond yields by around 50 basis points in the first months of 2000,

bringing it to the highest levels that had prevailed in a decade. The widening of this spread was primarily due to a substantial drop in government bond yields, while the level of ten-year swap rates remained broadly stable from late-January until end-April 2000.

The prolonged and extensive downward pressure on US bond yields that took place in the second half of 2000 seemed to be attributable primarily to reassessments among investors regarding the pace of future economic activity. In particular, in view of the Federal Reserve's decisions to raise official interest rates in 1999 and early 2000 as well as persistently high oil prices and the strength of the US dollar, market participants increasingly came to expect that the pace of US economic activity would slow down. Against this background, long-term inflation expectations declined, placing additional downward pressure on US bond yields. The downward pressure on US long-term bond yields was reinforced at times during the year, as falling stock prices, together with surging volatility in US stock markets, induced investors to invest in relatively safer securities such as government bonds.

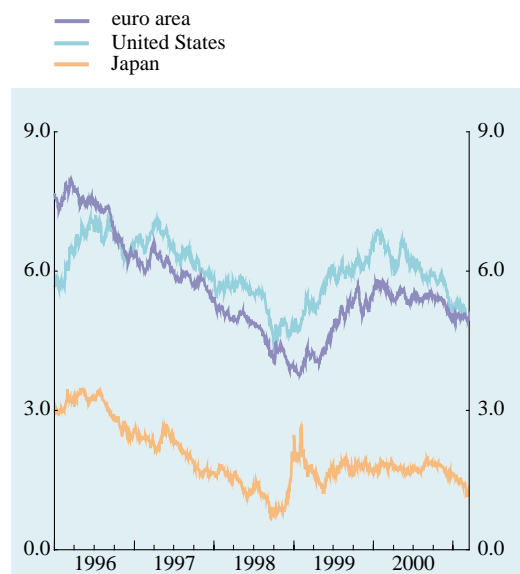
In Japan, long-term government bond yields displayed remarkable stability throughout much of 2000, with the ten-year yield remaining between 1.6% and 1.9% during most of the year. Japanese ten-year bond yields edged above this narrow range only temporarily, around the time of the termination of the zero interest rate policy by the Bank of Japan in August 2000.

While developments in US bond markets from time to time temporarily spilled over to euro area government bond yields during the year, a striking feature was that bond yield movements in the euro area were much less pronounced than in the United States. In addition, the average level around which euro area bond yields fluctuated remained fairly stable throughout the first ten months of 2000. Two factors seem to have largely accounted for this stability in nominal euro area bond yields. First, long-term average

Chart 7

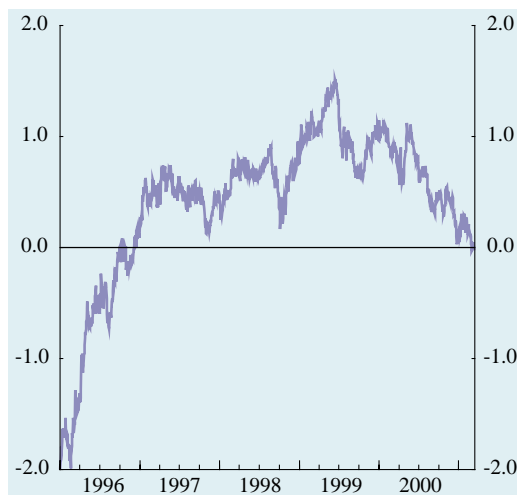
(a) Long-term government bond yields in the euro area, the United States and Japan

(percentages per annum; daily data)



(b) Ten-year interest rate differential of the United States against the euro area

(percentages per annum; daily data)



Source: Reuters.

Note: Long-term government bond yields refer to ten-year bonds or to the closest available bond maturity. From 1 January 2001, Greek data are also included.

inflation expectations among investors seemed to remain stable at relatively low levels during this period, reflecting the confidence of market participants that the actions taken by the Governing Council of the ECB would maintain price stability over the medium term. This was visible from the high degree of stability of the break-even inflation rate derived from the difference between French ten-year nominal government bond yields and the real yield on French ten-year index-linked government bonds (see Chart 8), which remained between 1.5% and 1.8% for much of 2000. Second, long-term growth expectations for the euro area appeared to level off at relatively high levels in 2000, following the rapid increase in real GDP growth in 1999 and early 2000. This was indicated by the stability of the real yield on French ten-year index-linked government bonds at levels between 3.6% and 4.0% for much of 2000. In the last two months of 2000, there was a gradual decline in long-term government bond yields in the euro area, which reflected market expectations of slightly slower economic growth in the

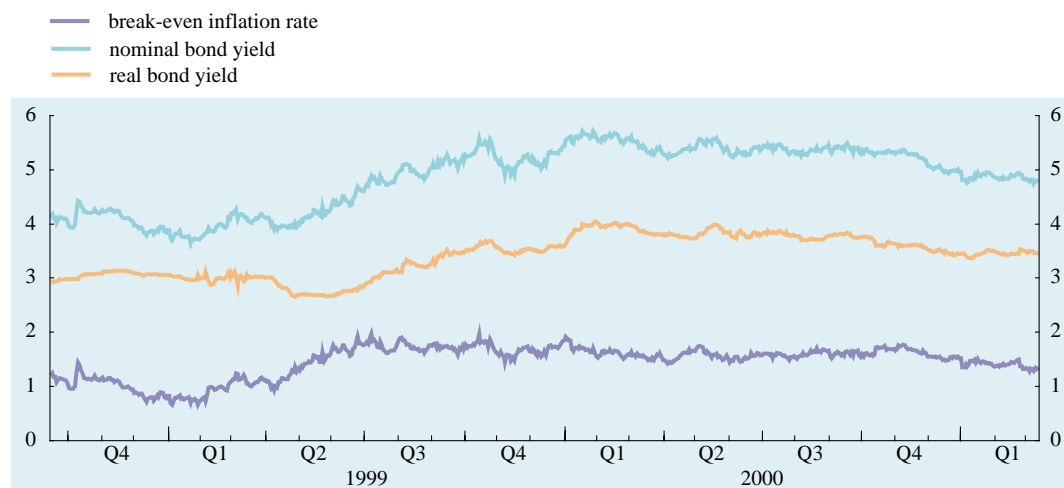
euro area in the shorter term. The main factors underlying this downward revision in expectations regarding the pace of economic activity seemed to include the earlier rises in oil prices as well as the aforementioned downward adjustment of world economic growth – most notably in the United States.

Between end-1999 and end-2000, the slope of the euro area yield curve, as measured by the difference between ten-year bond yields and the three-month EURIBOR, flattened by around 200 basis points to around 20 basis points. Two periods could be distinguished in this process of pronounced flattening of the yield curve in 2000. During the first ten months of the year, it mainly reflected increasing short-term money market rates resulting from increases in ECB interest rates, while long-term bond yields remained broadly stable. During the last two months of 2000, however, short-term interest rates declined, and the continued flattening of the yield curve was therefore attributable to larger declines in long-term bond yields. Furthermore, towards the end of 2000, the yield curve

Chart 8

Break-even inflation rate calculated for the French CPI

(as percentages; daily data)



Sources: French Treasury, ISMA and Reuters.

Note: The real bond yields are derived from the market prices of French bonds which are indexed to the French CPI (excluding tobacco) and mature in 2009. The nominal bond yields are derived from the market prices of French fixed income bonds which also mature in 2009.

inverted slightly at maturities of up to two years, while remaining upward sloping for longer maturities. This could be seen as indicating that the downward revision of growth expectations was concentrated at shorter horizons, while market participants' long-term growth expectations appeared to change little.

In the period from end-2000 to 13 March 2001, ten-year government bond yields in the euro area remained broadly stable at close to 5%. Owing to the fact that long-term bond yields in the United States tended to decline during the same period, in an environment where US official interest rates were cut by 100 basis points, the differential between ten-year government bond yields in the United States and those in the euro area narrowed and was virtually nil by early March 2001. This was the lowest point this spread had reached since early 1997.

Retail rates broadly followed market rates in 2000

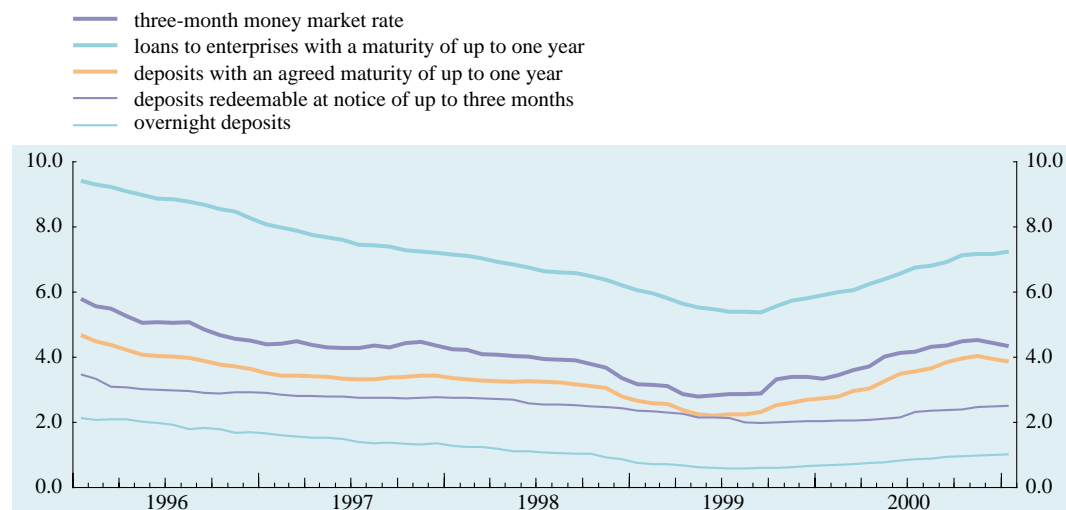
Short-term retail bank interest rates increased until November 2000, following the

trend set by money market rates. However, significant differences could be observed between the rates for various forms of deposits. From the end of 1999 until November 2000, the three-month money market rate rose by 165 basis points. Over the same period, the rates for overnight deposits and deposits redeemable at a period of notice of up to three months both increased fairly modestly, by about 40 basis points, increasing the spread vis-à-vis the three-month money market rate by approximately 125 basis points by the end of 2000. The rate on deposits with maturities of up to one year, by contrast, increased by 134 basis points (see Chart 9). This development is not particularly unusual, given historical experience which shows that the pass-through from market rates has tended to be slower and less complete for deposits redeemable at a period of notice of up to three months than for deposits with an agreed maturity of up to two years, but it increased the relative attractiveness of deposits with agreed maturities of up to two years, as reflected by its relatively strong growth (see Section 1.1 for details of monetary developments). Retail rates for loans to enterprises with maturities of up to

Chart 9

Short-term retail bank interest rates and a comparable market rate

(percentages per annum; monthly averages)



Sources: ECB and Reuters.

Note: From 1 January 2001, Greek data are also included.

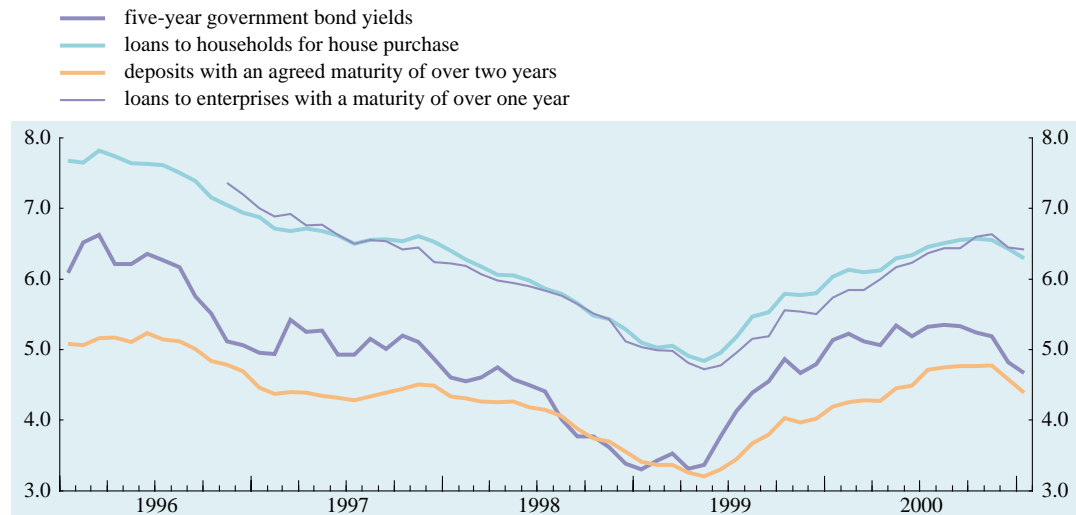
one year increased by 137 basis points up to November. This mirrored the development of short-term market interest rates, with this lending rate peaking at a level of 210 basis points above the three-month money market rate in November (compared with 238 basis points at the end of 1999). From mid-November, money market rates started to decline. This was quickly reflected in the rate on deposits with an agreed maturity of up to one year, which decreased by 17 basis points between November 2000 and January 2001. The lending rate to enterprises for up to one year also declined, albeit to a lesser degree. These developments suggested a relatively speedy pass-through from money market rates. However, other retail interest rates, such as those on overnight deposits and on deposits redeemable at a period of notice of up to three months, did not change much over this period, indicating a higher degree of stickiness in these rates.

Long-term retail bank interest rates generally increased strongly in the first part of 2000, catching up with the increases which had taken place in government bond yields in the course of 1999. Later on, reflecting the stability of long-term bond yields in the first

three quarters of 2000, retail rates generally began to stabilise as from around summer 2000 (see Chart 10). For instance, the rate for deposits with maturities of over two years increased by 69 basis points between the end of 1999 and July 2000, and by only 6 basis points from July to November 2000. Furthermore, the rate for housing loans to households increased by 72 basis points from December 1999 to August 2000, and subsequently stabilised. After November these rates started to decline, reflecting the development of government bond yields late in the year.

Global stock prices dropped in a volatile environment

In 2000, stock price indices in the world's major markets did not continue the upward trend that had been apparent from 1995 onwards. In an environment in which stock prices exhibited significant volatility during most of the year, broadly based benchmark stock price indices ended up lower at the end of 2000 than they had been at the end of 1999. These developments primarily reflected the heightened uncertainty of

Chart 10**Long-term retail bank interest rates and a comparable market rate***(percentages per annum; monthly averages)**Sources: ECB and Reuters.**Note: From 1 January 2001, Greek data are also included.*

market participants with respect to the near and longer-term earnings prospects of firms in general as well as significant downward revisions that were registered with respect to the earnings expectations of firms active in the high-technology sectors.

Stock price developments in the course of 2000 followed similar patterns in the United States, Japan and the euro area (see Chart 11). In the first months of the year, stock price indices generally increased – rather sharply in the euro area. Subsequently, stock prices were subject to some turbulence, after which, from late August onwards, they generally tended to decline. Overall, stock prices in the euro area, as measured by the Dow Jones EURO STOXX index, stood at 6% below their end-1999 levels by the end of December 2000. In the United States, the Standard and Poor’s 500 index fell by 9% over the same period, while in Japan the Nikkei 225 index declined by 27% in 2000. However, the decline in stock price indices during 2000 should be seen from the perspective of the substantial price increases that had taken place over recent years. In particular, these declines followed increases of 40% in the Dow Jones EURO STOXX

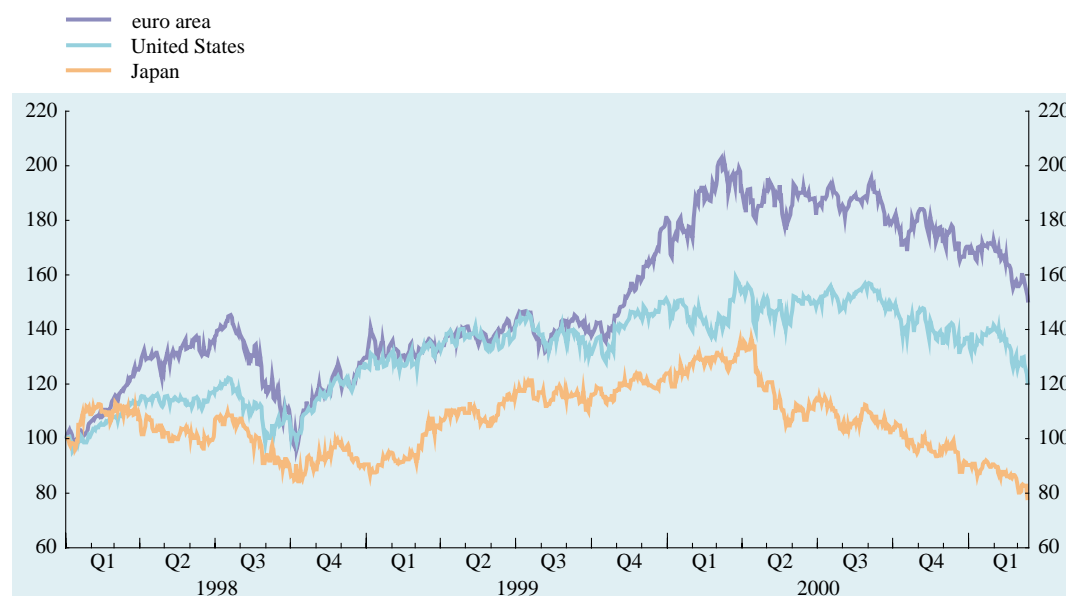
index, 20% in the Standard and Poor’s 500 index and 37% in the Nikkei 225 index in 1999.

Events in the United States were the main driving factors behind stock market movements worldwide. Persistently strong economic growth in the United States at the start of 2000 had created a very optimistic sentiment among investors regarding the long-run profitability of stocks, particularly those of the so-called “new economy”, as best epitomised by internet firms. In the course of the year, evidence accumulated that the US economy was heading towards a slowdown in the pace of economic activity. Simultaneously, market participants revised their long-term expectations of corporate earnings downwards, specifically in the high-technology sector. As a result of this switch in the preference of investors away from high-technology stocks, the Nasdaq Composite index (which contains a high proportion of “new economy” stocks) declined by 37% between the end of 1999 and the end of 2000. This pronounced decline eliminated the substantial increases that had been recorded in 1999, leaving this index back at early 1999 levels by end-2000. Reflecting the higher

Chart 11

Stock price indices in the euro area, the United States and Japan

(1 January 1998 = 100; daily data)



Source: Reuters.

Note: Dow Jones EURO STOXX broad (stock price) index for the euro area, Standard and Poor's 500 for the United States and Nikkei 225 for Japan. From 1 January 2001, Greek data are also included.

degree of uncertainty among market participants about the earnings prospects of firms active in the high-technology segment of the market, the implied volatility on the Nasdaq 100 index fluctuated markedly in the course of the year. In December 2000 it was about one-third higher than one year before (see Box 2).

In Japan, stock prices in the high-technology market segment also showed pronounced declines in 2000. In particular, Japanese telecommunications, media and information technology (TMT) stocks fell by 53% between end-1999 and end-2000. Non-TMT stocks, by contrast, declined by 12% over the same period (as measured by Datastream total market sub-indices). In addition to the emerging concerns among market participants about the general profitability of high-technology stocks spilling over from the United States, the Japanese stock market was further depressed by the subdued economic development in Japan and by a large number of corporate defaults.

While euro area stocks benefited from the overall positive development in economic activity in the euro area, they were not immune to the aforementioned global factors. As in other economies, reflecting the heightened uncertainty of market participants about the prospects for corporate profitability, the volatility of stock prices in the euro area remained rather high during most of 2000. The largest contribution to the overall decline and the pronounced volatility of stock prices in the euro area came from the technology sector as well as from the telecommunications sector. While stock prices in these sectors picked up sharply in the first quarter of 2000, continuing an upward tendency that had been apparent from autumn 1999 onwards, they drifted downwards in the course of the rest of the year. Ultimately, stock prices of the telecommunications sector in the Dow Jones EURO STOXX index declined by 43% in 2000, as market participants became particularly concerned about the inherent risks and the long-run profitability prospects of telecommunications firms in the light of

Box 2

Global stock market volatility increased driven by high-technology stock markets

Stock price trends can provide useful information in the context of the second pillar of the monetary policy strategy of the Eurosystem. The information contained in stock prices derives from the fact that stock prices should reflect, *inter alia*, the expectations of market participants regarding future dividends, which are linked, in turn, to expected corporate profits. As expected corporate profits are generally related to the anticipated pace of economic activity, stock price movements may be indicative of changes in market participants' expectations with regard to economic growth. In this respect, stock price developments can provide information complementary to the information drawn from other asset prices, like nominal bond yields and the real yields on inflation-index linked bonds, for instance. It is also important for central banks to closely monitor developments in stock prices to assess the wealth and confidence effects that might arise from stock price movements. However, from the viewpoint of monetary policy, high stock price volatility, together with the possibility of misalignments between stock prices and their fundamentals, renders the assessment of stock price developments for future economic conditions more difficult.

Over much of 2000, global stock markets were subject to relatively large price fluctuations. As a consequence, average stock price volatility in the major markets increased further in 2000, continuing a tendency that has been apparent for some years. For example, while the average annualised standard deviation of daily percentage stock price changes (historical volatility) in the euro area, as measured by the Dow Jones EURO STOXX index, was 15% between 1990 and 1998, it increased to 17% in 1999 and further to 22% in 2000 (see the chart below).

The worldwide rise in recent years in the volatility of those stock price indices which cover a broad array of different industries was, to a large extent, due to developments in the high-technology sectors of the stock markets. The pronounced divergence in stock price developments between those segments of the market representing the so-called "new economy" and the "old economy" seemed to originate from the United States. The historical volatility of the Nasdaq Composite index – which contains a high proportion of high-technology stocks – almost doubled from 27% per annum in 1999 to 48% in 2000, compared to an average volatility of 16% over the period from 1990 to 1998. By contrast, the historical volatility of the Standard and Poor's 500 index – which contains a higher proportion of old economy stocks – increased only slightly to 22%, on average, in 2000. The same pattern is apparent in the euro area. The stock price volatility of the technology sector and the telecommunications sector of the Dow Jones EURO STOXX index increased from 28% and 27% in 1999 to 51% and 45% in 2000, respectively, while the median volatility of all economic sectors of this index picked up to a lesser degree, from 19% to 22%.

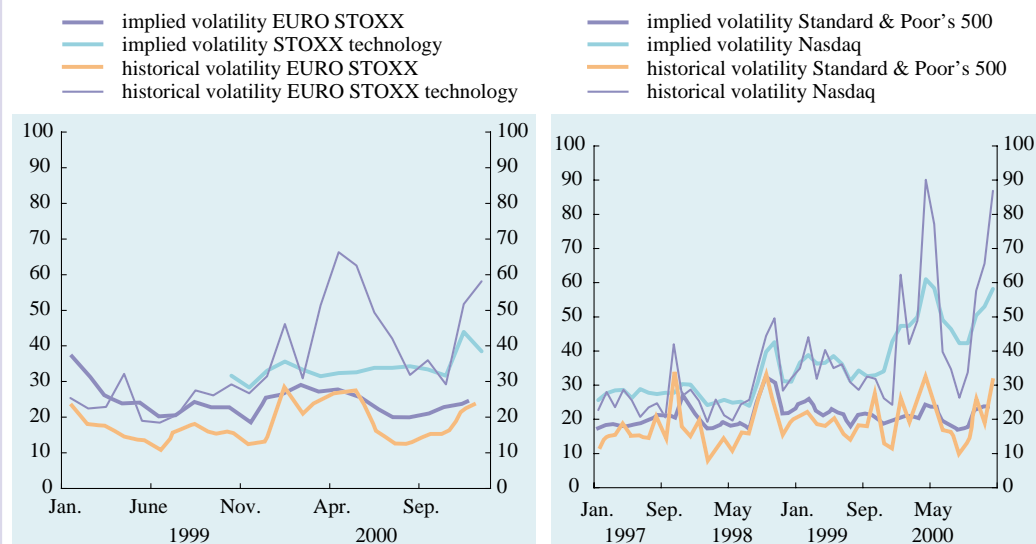
The large price swings that took place in the high-technology sectors of all major markets in the course of 2000 were essentially related to the general reassessment among market participants of the longer-term earnings prospects and the inherent risks of high-technology stocks. While in the first months of the year investors had become increasingly optimistic about the long-term profit perspectives of "new economy" stocks, they seemed to become more pessimistic and uncertain about these prospects afterwards. The high stock price volatility in the high-technology sector reflected unusual difficulties encountered by market participants with the valuation of such stocks. Firms of the "new economy" are usually young and offer the potential for high earnings growth given their innovative character. However, in many cases, these earnings are generally only delivered at later stages in these firms' life cycles while they often report limited earnings at earlier stages or even losses. As a result, particularly given start-up costs associated with investment and uncertain business prospects, considerable uncertainty can surround their long-term profitability prospects. Moreover, high-technology stocks can be particularly vulnerable to business risks (changes in technology and consumer preferences) and liquidity shocks.

The increased degree of uncertainty of market participants was reflected in the heightened level of the implied volatility of stocks contained in the Nasdaq 100 index (see the chart below). The implied volatility is derived

from the prices of options written on corresponding stocks and provides an approximation of the expected standard deviation of percentage stock price changes which, in this case, is over a period of up to three months. Thus, implied volatility is an indicator of the uncertainty as to future price movements. The implied volatility of the Nasdaq 100 index increased from an average value of 36% in 1999 to 51% in 2000. By contrast, the average implied volatility of stocks that form the Standard and Poor's 500 index stood unchanged at 21% in 2000 compared with the 1999 level. The generally high degree of co-movement between the historical and implied volatility in all major markets suggests that the more uncertain market participants became about future stock prices, the higher became their sensitivity to incoming news with regard to earnings or other fundamental factors as reflected in large observed price fluctuations.

Historical and implied stock market volatility

(percentages per annum; monthly data)



Sources: Bloomberg and ECB calculations.

Note: Historical volatility is calculated as the annualised standard deviation of daily stock price percentage changes over one month. For the euro area, historical volatility is calculated on the basis of Dow Jones EURO STOXX stock price indices. Implied volatility is derived from options on stock price indices. For the broad market and the technology sector of the euro area, implied volatility is approximated by using options on the Dow Jones EURO STOXX 50 index and the Dow Jones STOXX technology sector sub-index, respectively.

increasing competition in this sector as well as increasing debt as a result of major investment necessary to develop telecommunications networks and the need to finance the purchase of UMTS licences. Technology stock prices were also volatile in 2000, but did not decline to the same extent. In line with global developments, the technology sector made by far the largest contribution to the heightened degree of price volatility in euro area stock markets in 2000.

In the period from end-2000 to 13 March 2001, stock price indices in the major stock markets dropped sharply. Over this period, the Dow Jones EURO STOXX index declined by 11%, while the Standard and Poor's 500 index and the Nikkei 225 index fell by 12% and 14%, respectively. These developments reflected uncertainty regarding corporate earnings prospects, particularly for the high-technology sectors.

3 Price developments

Rise in inflation mainly owing to external factors

The upward trend in the annual rate of change in the HICP observed since spring 1999 continued in 2000 as a result of external price pressures, while domestic pressures remained subdued. HICP inflation in the euro area stood at 2.3% on average in 2000, significantly up from 1.1% in 1999 (see Table 1). In year-on-year terms, HICP inflation rose from around 1% in mid-1999 to 1.9% in January 2000 and further to 2.9% in November, but fell subsequently to 2.6% in December 2000. This pattern mainly reflected developments in oil prices and the exchange

rate of the euro. Although there was evidence of some upward indirect effects of these developments on domestic prices in the course of 2000, domestic costs, such as unit labour costs, saw only a modest rise during the year.

Oil price increases reinforced by exchange rate movements

The increase in energy prices, on average, contributed more than 1 percentage point to overall inflation in 2000. The annual rate of change in energy prices rose gradually from -4.4% in January 1999 to around 14% from June

Table 1
Price and cost developments in the euro area
(annual percentage changes, unless otherwise indicated)

	1998	1999	2000	2000	2000	2000	2000	2000	2000	2000	2000	2001	2001
				Q1	Q2	Q3	Q4	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.
Harmonised Index of Consumer Prices (HICP) and its components¹⁾													
Overall index	1.1	1.1	2.3	2.0	2.1	2.5	2.7	2.8	2.7	2.9	2.6	2.5	.
<i>of which:</i>													
Goods	0.7	0.9	2.7	2.3	2.3	2.9	3.2	3.3	3.2	3.4	3.0	2.7	.
Food	1.6	0.6	1.4	0.4	0.9	1.9	2.2	2.1	2.0	2.2	2.4	2.7	.
Processed food	1.4	0.9	1.1	1.0	1.0	1.1	1.3	1.3	1.2	1.4	1.4	1.7	.
Unprocessed food	1.9	0.0	1.7	-0.4	0.7	3.1	3.5	3.3	3.2	3.5	3.9	4.4	.
Industrial goods	0.1	1.0	3.3	3.2	3.0	3.4	3.7	4.0	3.8	4.0	3.3	2.7	.
Non-energy industrial goods	0.9	0.6	0.7	0.5	0.6	0.6	1.0	0.8	0.9	1.0	1.1	1.2	.
Energy	-2.6	2.4	13.3	13.7	12.3	13.6	13.7	15.5	14.6	15.2	11.3	8.0	.
Services	1.9	1.5	1.7	1.6	1.7	1.8	1.8	1.8	1.9	1.8	1.8	2.2	.
Other price and cost indicators													
Industrial producer prices ^{1),2)}	-0.7	-0.4	5.4	4.3	5.2	5.8	6.1	6.2	6.6	6.3	5.4	4.8	.
Unit labour costs ³⁾	0.2	1.2	.	0.6	0.5	1.2	.	-	-	-	-	-	-
Labour productivity ³⁾	1.2	0.8	.	1.8	1.4	1.0	.	-	-	-	-	-	-
Compensation per employee ³⁾	1.4	2.0	.	2.4	2.0	2.3	.	-	-	-	-	-	-
Total hourly labour costs ⁴⁾	1.8	2.2	.	3.6	3.8	3.9	.	-	-	-	-	-	-
Oil prices (EUR per barrel) ⁵⁾	12.0	17.1	31.0	26.9	28.8	33.7	34.5	37.2	36.8	37.7	28.8	27.5	29.9
Commodity prices ⁶⁾	-12.5	-3.1	18.1	19.9	18.3	18.0	16.4	21.4	23.1	18.2	8.6	3.3	1.9

Sources: Eurostat, national data, International Petroleum Exchange, HWWA – Institut für Wirtschaftsforschung (Hamburg) and ECB calculations.

1) Figures for January 2001 include Greece, with Greece also included in the base period (i.e. January 2000).

2) Excluding construction.

3) Whole economy.

4) Whole economy (excluding agriculture, public administration, education, health and other services).

5) Brent Blend (for one-month forward delivery). In ECU up to December 1998.

6) Excluding energy. In euro; in ECU up to December 1998.

to November 2000, but fell to 11.3% in December 2000 (see Chart 12). As a result, the annual rate of change in the HICP energy component rose, on average, from 2.4% in 1999 to 13.3% in 2000. These developments reflected the further upward pressure from rising international oil market prices, reinforced by the decline in the exchange rate of the euro, on the HICP energy component in the course of the year. In fact, oil prices rose from €10.3 per barrel in the first quarter of 1999 to €23.1 per barrel in the fourth quarter of 1999 and subsequently to €34.5 per barrel in the fourth quarter of 2000.

In addition to energy, unprocessed food prices also contributed to a rise in the headline inflation rate in the course of 2000, although to a much lesser extent. There was a significant rise in the level of unprocessed food prices in the first half of 2000 owing to a recovery in meat prices and unfavourable

weather conditions which had a larger than normal upward effect on vegetable and fruit prices. The impact of this on the year-on-year rate was reinforced by base effects resulting from the fall in unprocessed food prices in mid-1999. In the second half of 2000 the annual rate of change in unprocessed food prices rose further to reach 3.9% in December 2000, also reflecting rising meat prices resulting from higher prices for beef substitutes owing to the recent BSE scare in some euro area countries. The annual rate of change in unprocessed food prices stood at 1.7% on average in 2000, up from 0.0% in 1999.

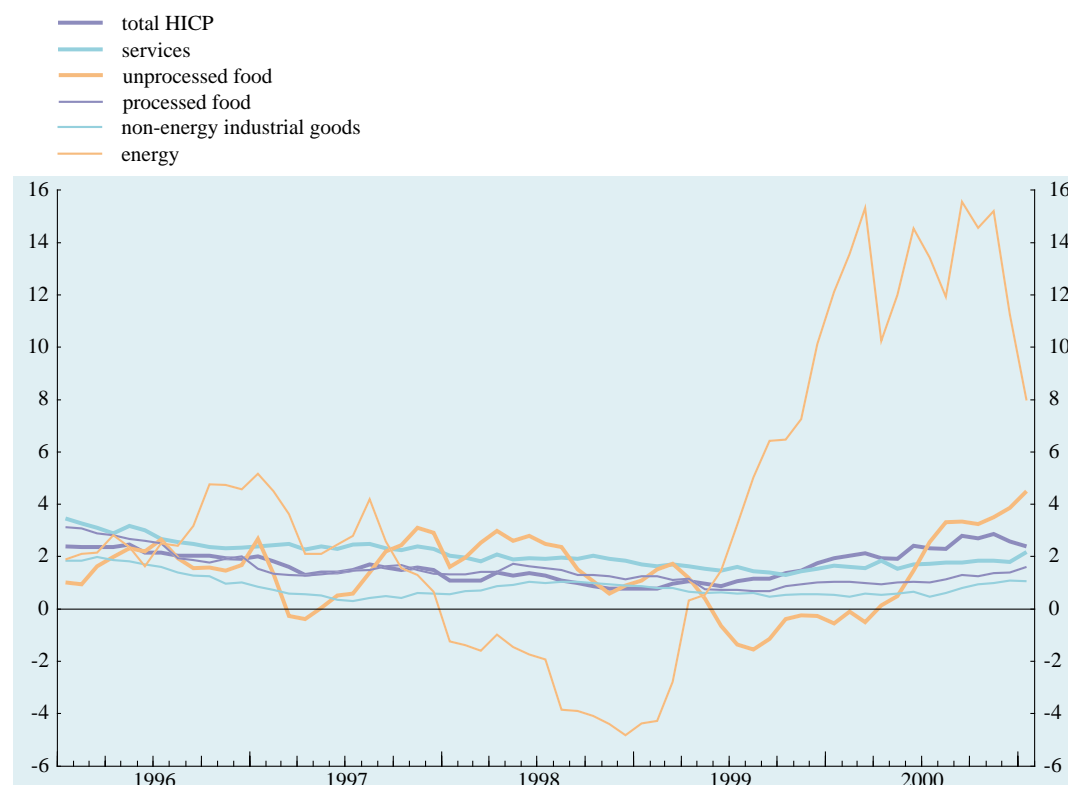
Developments in the less volatile HICP components remained moderate

The annual average rate of increase in the HICP excluding unprocessed food and energy

Chart 12

Breakdown of HICP inflation in the euro area by components

(annual percentage changes; monthly data)



Source: Eurostat.

rose slightly from 1.1% in 1999 to 1.2% in 2000. However, this masks the fact that the rate fell from 1.3% in January 1999 to 0.9% in September 1999, but rose gradually thereafter to stand at 1.5% in December 2000. These developments should be seen against the background of somewhat stronger but still moderate wage developments and a weak pass-through of earlier increases in import prices. One reason for this is that indirect effects of changes in import prices appear gradually and with a lag, implying that the path of inflation in 2000 was still attenuated by indirect effects from the decline in oil and commodity prices up to early 1999. Similarly, the pass-through of rises in import prices, and in particular of oil prices, in 1999 and 2000 will persist for some time in 2001, even though oil prices moderated and the exchange rate of the euro appreciated at the end of 2000. Tighter competition may be another factor preventing a stronger pass-through of the sustained oil price increase in 1999 and 2000.

In particular, the developments in non-energy industrial goods prices indicated a limited pass-through from import prices in 2000. The annual rate of change in non-energy industrial goods prices remained broadly stable at around 0.6% from April 1999 to August 2000. However, towards the end of 2000 there was an increase in the year-on-year rate to 1.1% in December 2000, partly reflecting the pass-through of a rise in the industrial producer prices for consumer goods. As a result of these developments, the annual average rate of change in this HICP component rose from 0.6% in 1999 to 0.7% in 2000.

The annual rate of increase in processed food prices stood at 1.1% on average in 2000, up slightly from 0.9% in 1999. The rate of increase in this component remained close to 1.0% in the first half of 2000 before increasing gradually to stand at 1.4% in December 2000.

Throughout 2000, the annual rate of change in services prices remained broadly stable at around the annual average of 1.7%, and was only slightly higher than the average of 1.5% in 1999. The stable rate of increase in 2000 reflected counteracting factors. On the one hand, generally moderate wage developments contributed to the sustained low increase in services prices. Moreover, deregulation in the telecommunications sector combined with increased competition exerted downward pressure on telecommunications prices (see Box 3 entitled "Price effects of regulatory reforms in euro area network industries"). On the other hand, some indirect effects associated with a rise in import prices led to higher prices in the sub-components for transport and recreation services.

Higher import prices led to a rise in producer prices

As a result of the rise in oil prices and the decline in the exchange rate of the euro, the annual rate of increase in import prices, measured by import unit value indices, was significantly higher in 2000 than in 1999 (see Chart 13). According to the latest available data, the year-on-year rate of change in import prices stood at 25.5% in November 2000. These developments have also affected euro area industrial producer prices, which increased strongly in 2000 – their annual rate of change rose from an average of -0.4% in 1999 to 5.4% in 2000, mainly owing to a rise in intermediate goods prices reflecting increases in oil prices. However, the producer prices of consumer goods contributed as well, albeit to a lesser extent, with an annual rate of increase rising from 0.2% on average in 1999 to 1.5% in 2000.

Wage developments remained moderate

The general outcome of wage settlements in the euro area in 2000 was that broadly moderate increases were granted. Underlying this overall outcome, various factors exerted a dampening influence on wage settlements,

Box 3

Price effects of regulatory reforms in euro area network industries

Over the last couple of years, the EU has pursued an ambitious regulatory reform programme to introduce competition in network industries and to create a single European market in these sectors. This in turn should result in increased efficiency and lower prices for users. Network industries depend on an infrastructure with natural monopoly characteristics, e.g. the distribution networks for electricity, gas and water. As it is not normally economically viable to construct competing networks, competition can only be introduced in these sectors if an appropriate regulatory framework ensures non-discriminatory access to the network for all actual and potential suppliers. This box focuses on the price effects of regulatory reforms in the telecommunications, electricity and gas sectors during the period from 1998 to 2000. At the end of 2000 regulatory reforms in other network industries, such as postal services and water, were still being discussed at the EU level.

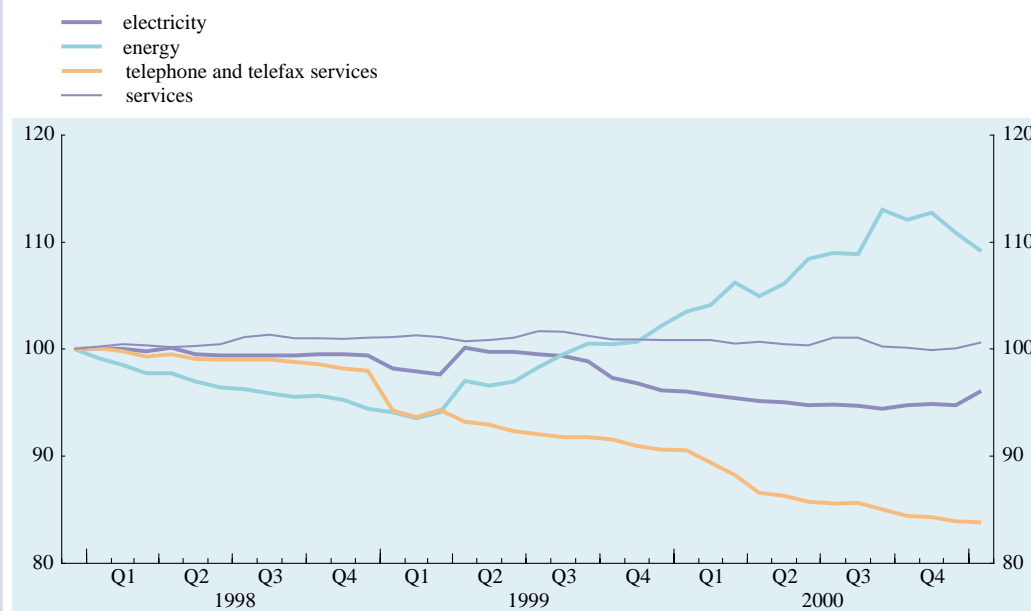
There has been significant progress in the liberalisation of the telecommunications sector in the euro area although a number of implementation issues, such as access to the local telephone market and the cross-subsidisation of services by the dominant national companies, remain unresolved in some countries. For the electricity and gas industries the reform timetables adopted by the Council of Ministers allow for a gradual opening-up of the market over a period of up to ten years. The Electricity Market Directive of 1996 called for an initial liberalisation of 25% of the market in 1999, with this proportion rising to around one-third by 2003. The Gas Market Directive of 1998 requires Member States to open up a minimum of 20% of the market by 2000. This share is due to increase to 33% by 2008. The European Commission regularly compiles information on the progress made with regard to the implementation of these Directives. On the basis of this information, it appears that in 2000 around 56% of the euro area electricity market (including that of Greece) and around 58% of the euro area gas market were opened up, thus clearly exceeding the minimum requirements set for individual countries in the Directives. According to the current plans of the Member States, these shares are set to increase to 68% (for electricity) and 76% (for gas) by 2003. However, it is important to keep in mind that the legal opening-up of network industry markets is a necessary but not a sufficient precondition for the establishment of competition in these markets. In particular, an appropriately designed regulatory framework is crucial to ensure competition in network industries.

The chart below shows the developments in the euro area-wide HICP sub-indices for electricity and telephone and telefax services as well as developments in the broader sub-indices to which they belong, i.e. energy and services, during the period from 1998 to 2000. All sub-indices are shown relative to the overall HICP. Since the liberalisation of European gas markets has started only recently, the sub-index for gas has not been included in this chart. With regard to the telephone and telefax services sub-index, a marked downward trend compared with the overall index is discernible from 1998 onwards; the consumer price fell by 11.7% from December 1997 to December 2000. The electricity sub-index also shows a downward trend, but only since 1999. However, the downward movement was interrupted by an increase in energy taxation in some countries, and the general rise in energy prices also led to a slight rise in electricity prices in late 2000. As a result, the electricity price index for the euro area as a whole only fell by 0.5% from December 1998 to December 2000, equivalent to a fall of around 4.7% relative to the overall euro area HICP. Some of the price declines, especially in the electricity sector, were triggered by the actions of public regulators. In particular, during the first phase of regulatory reform, in which competition may still be limited or non-existent, some regulators try to adjust tariffs gradually towards a market price by means of price caps. The combined decline in prices in the telecommunications and electricity sectors directly reduced overall euro area HICP inflation by 0.1 percentage point on average in 2000.

It should be borne in mind that regulatory reform is only one of the factors determining price developments in network industries. Other important elements include technological progress (in the case of telecommunications), tax changes and gas and other fuel price variations (in the case of electricity).

Price level relative to the overall HICP in the euro area

(index December 1997 = 100; monthly data)



Source: Eurostat.

Nevertheless, the recent trend in prices in these industries suggests that regulatory reform has indeed exerted downward pressure on prices in these sectors.

Further progress with regard to the implementation of the regulatory reforms in the telecommunications sector, together with the creation of single European electricity and gas markets with cross-border competition, should result in further price falls and, in the coming years, may reduce the substantial price differences across Member States which exist at present. The downward trend in prices is likely to continue throughout the regulatory reform process itself and to go on until the industries concerned have adjusted to the new competitive environment and consumers to having a choice of supplier. The timing of the effects within the reform period depends largely on external factors, in particular the legal framework for the reforms. Concerning inflation in the euro area economy as a whole, regulatory reform is likely to have a temporary downward effect. In the electricity and gas sectors, the markets for private households are the last to be liberalised. A substantial part of the potential decreases in consumer prices in these two sectors are therefore likely to take place towards the end of the reform process. However, as there is no legal obligation for Member States to grant households the right to a free choice of electricity and gas suppliers, as they do for industrial users, some countries do not envisage liberalising this segment of the market. This in turn is likely to limit the overall consumer price effect of regulatory reform in these sectors.

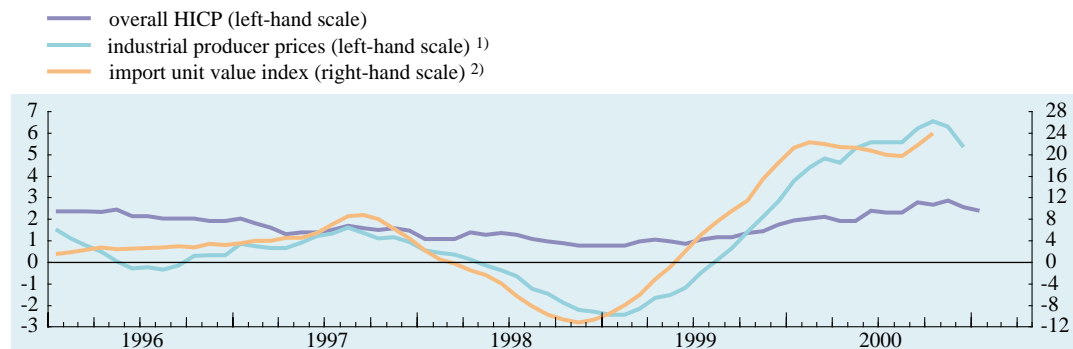
such as employment policies and working time arrangements as well as reductions in taxes and social security contributions in several countries, which social partners took into account in the negotiations. In addition, the pattern of wage increases in the individual euro area Member States tended to reflect

the cyclical situation of the domestic economy at the time the agreements were signed. In particular, in some countries there was some upward tendency in wage settlements as a result of robust economic growth, temporarily higher inflation rates and, in some cases, signs of labour market tightness.

Chart 13

Consumer, producer and import prices in the euro area

(annual percentage changes; monthly data)



Sources: Eurostat and ECB calculations.

1) Excluding construction.

2) Unit value indices refer to transactions between the euro area and the rest of the world; calculations are based on three-month centred moving averages.

In the course of 2000, actual wage growth remained generally moderate. However, while growth in compensation per employee stood at 2.2% on average in the first three quarters of 2000, which was 0.2 percentage point higher than in 1999, growth in total hourly labour costs rose to 3.8% on average in the first three quarters of 2000, up from 2.2% in 1999. During 2000, total hourly labour costs were influenced by several specific developments such as one-off payments in the first quarter of the year in several large Member States, and changes in national legal frameworks, in particular, the working time reduction in France. Moreover, special factors may also have contributed to the difference between growth in compensation per employee and total hourly labour costs. For example, in Germany and the Netherlands, there were fewer working days in 2000 than in 1999. This calendar effect had a temporary upward impact on the increase in hourly labour costs in 2000.

While underlying wage growth remained moderate, growth in unit labour costs declined to 0.8% on average in the first three quarters of 2000, down from 1.2% on average in 1999. This decline mainly reflected a cyclical pick-up in productivity to 1.4% on average in the first three quarters of 2000, up from 0.8% in 1999.

Inflation differentials among euro area countries widened

The euro area economies have experienced a considerable degree of convergence of inflation rates during the past decade. However, it appears that inflation dispersion among the euro area countries – as indicated by some commonly used measures, such as spreads between the highest and lowest observations as well as standard deviations – has increased since mid-1997 and remained relatively high in 2000.

The widest HICP inflation differentials across countries have emerged in product groups such as energy, services and processed food and may be explained as follows. First, with regard to energy price inflation, the clear upward trend in divergence appears to have been caused by the steep rise in oil prices and the decline in the exchange rate of the euro up to November 2000, against a background of differing weights for this component, percentages of excise duties in final energy prices and trade structures among the euro area countries. Second, the wider dispersion in respect of the rate of increase in services prices in 2000 may be related to increasing differences in unit labour cost developments, partly caused by differences in wage increases and national cyclical positions. To some extent, this also reflects the price

effects of uneven progress in regulatory reforms in labour markets and network industries (telecommunications and utilities) as well as a catching-up of living standards in certain euro area countries. Moreover, higher oil prices may have been passed on to prices for transport services to varying degrees. Third, the higher dispersion in price increases for processed food in 2000 is partly due to indirect tax rate hikes in one Member State. Finally, various changes in administered prices at the national level also appear to have led to a widening of inflation spreads last year.

Dispersion measures also point to relatively large differences in unprocessed food price increases, owing to this component's traditional vulnerability to weather-related shocks and seasonal patterns, although there is no clear trend in the dispersion. By contrast, developments in non-energy industrial goods have been characterised by small and stable price increase differentials across euro area countries. This seems to reflect the effect of competition in the tradable goods sector, especially in the context of a Single Market with a single currency.

4 Output, demand and labour market developments

Strong GDP growth in 2000 as a whole, but some slowdown in the second half of the year

Economic activity in the euro area started to recover in the second half of 1999, following a slowdown related to the emerging markets crisis, and euro area growth continued to be high in 2000. Although unfavourable factors, such as a prolonged and steep increase in oil prices, seem to have dampened growth somewhat in the second half of 2000, the rise in GDP for the year as a whole was the largest since 1990.

According to Eurostat, real GDP increased by 3.4% on average in 2000, following a growth rate of 2.5% in 1999 (see Table 2). However, activity slowed from an average quarter-on-quarter growth rate of around 1% in the second half of 1999 to an average of 0.8% quarter-on-quarter in the first half of 2000, and to 0.6% in the second half of the year. Year-on-year growth increased to 3.7% in the second quarter of 2000 and declined thereafter to 3.0% in the last quarter. Box 4 reviews the main characteristics of GDP growth in the euro area in recent years.

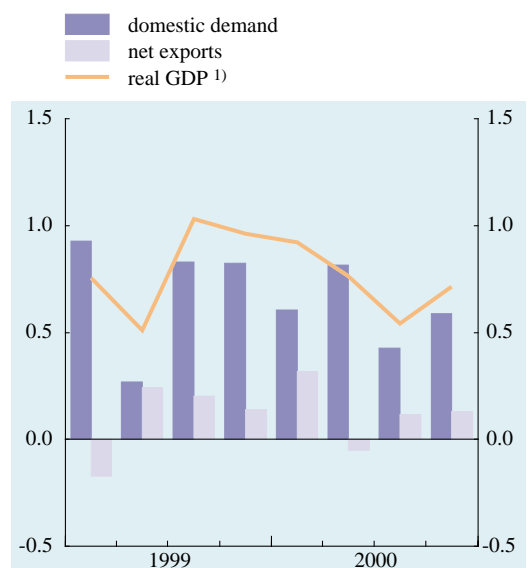
Real GDP growth supported by domestic demand

As in 1999, strong growth in domestic demand provided the most important

contribution to GDP growth in 2000 (see Chart 14). For the year as a whole, the contribution from domestic demand was 2.7 percentage points, compared with 3.0 percentage points in 1999.

Throughout the year, growth in domestic demand remained robust. However, growth in private consumption and, to a lesser

Chart 14
Contributions to quarterly real GDP growth in the euro area
(quarterly percentage point contributions; seasonally adjusted)



Sources: Eurostat and ECB calculations.
 1) Percentage change compared with the previous quarter.

Table 2**Composition of real GDP growth in the euro area***(percentage changes, unless otherwise indicated; seasonally adjusted)*

	Annual rates ¹⁾								Quarterly rates ²⁾				
	1998	1999	2000	1999 Q4	2000 Q1	2000 Q2	2000 Q3	2000 Q4	1999 Q4	2000 Q1	2000 Q2	2000 Q3	2000 Q4
Real gross domestic product	2.8	2.5	3.4	3.3	3.5	3.7	3.2	3.0	1.0	0.9	0.8	0.5	0.7
<i>of which:</i>													
Domestic demand	3.4	3.1	2.8	2.9	2.6	3.2	2.8	2.5	0.8	0.6	0.8	0.4	0.6
Private consumption	3.1	2.8	2.6	2.7	2.6	3.1	2.4	2.1	0.7	0.8	0.8	0.2	0.3
Government consumption	1.0	1.6	1.6	1.6	1.7	1.8	1.4	1.6	0.4	0.6	0.3	0.1	0.6
Gross fixed capital formation	4.8	5.3	4.6	5.5	5.7	4.9	4.0	3.9	0.6	1.8	0.6	1.1	0.4
Changes in inventories ^{3), 4)}	0.4	-0.0	-0.0	-0.1	-0.5	-0.0	0.2	0.1	0.2	-0.3	0.2	0.1	0.2
Net exports ⁵⁾	-0.5	-0.5	0.6	0.4	0.9	0.6	0.5	0.5	0.1	0.3	-0.1	0.1	0.1
Exports ⁵⁾	7.0	4.7	11.7	10.0	12.8	11.4	11.2	11.6	3.0	3.0	2.0	2.8	3.3
Imports ⁵⁾	9.5	6.7	10.4	9.1	10.5	10.1	10.2	10.7	2.7	2.2	2.3	2.6	3.2
Real gross value added:													
Agriculture and fishing ⁶⁾	1.8	2.5	1.5	3.9	2.7	1.0	1.5	0.8	0.5	0.1	-0.9	1.7	-0.1
Industry	1.9	1.6	3.6	3.3	4.2	3.9	3.4	3.0	0.7	1.5	0.5	0.7	0.3
Services	3.2	2.7	3.4	2.8	3.2	3.4	3.3	3.5	0.8	1.1	0.7	0.7	0.9

Sources: Eurostat and ECB calculations.

1) Annual rates: percentage change compared with the same period a year earlier.

2) Quarterly rates: percentage change compared with the previous quarter.

3) As a contribution to real GDP growth; in percentage points.

4) Including acquisitions less disposals of valuables.

5) Exports and imports cover goods and services and include internal cross-border trade within the euro area. Intra-euro area trade is not cancelled out in import and export figures used in national accounts. Consequently, these data are not fully comparable with balance of payments data.

6) Also includes hunting and forestry.

Box 4**The main characteristics of GDP growth in the euro area in recent years**

While the average rate of growth in euro area GDP in the five-year period from 1992 to 1997 was 1.5%, GDP has risen strongly in recent years, by 2.9% on average over the period from 1998 to 2000 (see the table below). Over the past three years, year-on-year GDP growth varied between a low of 1.9% in the first quarter of 1999 and a high of 3.7% in the second quarter of 2000. These fluctuations in the rate of growth of GDP were largely accounted for by substantial variations in the contribution of net trade to GDP growth, while growth in domestic demand remained broadly stable throughout the three years, this being a key factor behind the strength of growth in euro area GDP during this period.

Since 1998 growth in domestic demand has been 3.1% per year on average, after having been relatively subdued in the previous part of the 1990s, rising by an annual average of only 1.1% between 1992 and 1997. Domestic demand was fostered by strong and sustained growth in private consumption over the past three years, at 2.8% per year on average, a much higher level than the average of 1.2% recorded between 1992 and 1997. Strong growth in employment underpinned consumer confidence and contributed to the growth in household disposable income. The upturn in growth at the end of 1997 was accompanied by an increase in the rate of growth in employment, which was then broadly sustained at high levels over the period from 1998 to 2000. Besides strong growth in activity, moderate wage increases in this period contributed to maintaining a robust pace of job creation, especially in the services sector. By increasing price transparency and eliminating exchange rate movements between Member States, Monetary Union may have raised employers' and employees' awareness of the importance of maintaining competitiveness by moderating wage increases.

Gross fixed capital formation also contributed to the strength of domestic demand, rising by around 5% per year over the period from 1998 to 2000, whereas it increased at low rates in the period from 1992 to 1997 (and even decreased strongly in 1993). Investment projects were encouraged by companies needing to update equipment after several years of limited growth in investment. Favourable demand and financing conditions also encouraged investment spending. Moreover, investors' confidence in prolonged robust growth was enhanced by the long-term commitment of monetary authorities to maintaining price stability and of fiscal authorities to ensuring long-term sustainability of public finances in the context of the Stability and Growth Pact. Finally, the ongoing development and integration of capital markets within the euro area improved access to funding for investors.

Contribution of domestic demand and net trade to GDP growth in the euro area

	1992-97	1998	1999	2000
Average growth of				
GDP	1.5	2.8	2.5	3.4
Domestic demand	1.1	3.4	3.1	2.8
Exports	5.8	7.0	4.7	11.7
Imports	4.4	9.5	6.7	10.4
Contribution to GDP growth				
Domestic demand	1.0	3.3	3.0	2.7
Net trade	0.5	-0.5	-0.5	0.6

Sources: Eurostat and ECB calculations.

By contrast with broadly stable growth in domestic demand, the pattern of net trade in goods and services was more varied over the past three years, leading to variations in GDP growth. The contribution from net trade in goods and services to year-on-year GDP growth was negative in 1998 and early 1999; it turned positive in the course of 1999 and continued to have a positive impact on GDP growth in 2000, although it declined in the course of the year. Different factors account for the decline in the contribution of net exports to GDP growth in 1998 and early 1999, on the one hand, and that during 2000, on the other. With regard to the first period, the crisis in emerging markets and the ensuing general slowdown in world trade growth had a negative impact on volumes of euro area exports of goods and services. Eurostat's data on volumes of trade in goods only show that the slowdown in the trade of goods within the euro area was much less pronounced and briefer than that in trade with non-euro area countries, in line with sustained growth in domestic demand. In volume terms, growth in exports of goods and services (including intra-euro area trade) declined from 12% year-on-year in the first quarter of 1998 to 0.6% in the first quarter of 1999. Imports also slowed down over this period, but to a lesser extent (from 12.5% year-on-year in the first quarter of 1998 to 4.5% in the first quarter of 1999). By contrast, in 2000 growth rates in volumes of both imports and exports of goods and services (including intra-euro area trade) increased sharply and their rate of growth has been broadly sustained since mid-1999. Therefore, at the end of 2000, year-on-year growth rates of export and import volumes were above 10%. High growth in domestic activity stimulated demand for imports in 2000. As a result, by contrast with developments in 1998 and early 1999, the strength of imports, rather than weakening exports, was at the origin of the decline in the contribution from net trade to GDP growth. In this respect, developments in imports in 2000 are a further indication of the strength of final demand, especially exports and investment, the latter being favourable to GDP growth in the medium term.

Overall, the strength of domestic demand has been a key feature of the past few years. The establishment of Monetary Union may have enhanced wage moderation, thereby contributing to favourable conditions for high and sustainable growth in domestic activity. Moreover, as illustrated by developments in 2000, a decline in the contribution from net trade to GDP growth may be the result of high import volumes induced by strong domestic economic activity rather than weak growth in exports.

extent, in investment, although high for the year as a whole, declined in the second half of 2000. Changes in inventories made a positive contribution to growth in domestic demand in the latter part of the year.

In 2000, growth in private consumption remained strong for the third consecutive year, at 2.6%, following 2.8% in 1999. High growth in employment contributed both to increases in income and to sustained consumer confidence. The income of the self-employed is also likely to have benefited from the high level of economic activity. In addition, reductions in direct taxes had a positive impact on growth in household disposable income in 2000. However, despite these positive factors, growth in private consumption fell significantly in the second half of 2000 to 0.2% quarter-on-quarter on average, compared with 0.8% in the first half of the year. The lower growth in private consumption can to some extent be explained by the losses in real income related to the increase in oil prices.

However, other indicators pointed to some resilience of growth in private consumption to higher oil prices. First, consumer confidence remained high at the end of last year. According to the European Commission Consumer Survey, consumer confidence reached a record high in August 2000. It declined slightly in the autumn, but remained close to record levels at the end of the year. Second, retail sales of household equipment goods were robust throughout most of the year. These sales were likely to be the hardest hit by the losses in real income following the increase in oil prices, as they entail high expenditure which can often be postponed. Further increases in sales of such large items are consistent with an optimistic assessment by households of future developments.

With regard to government consumption, growth in 2000 stood at 1.6%, in line with the average growth rate of 1.5% seen in the 1990s.

For 2000 as a whole capital formation increased by 4.6%, compared with 5.3% in 1999. Following three years of robust growth in gross fixed capital formation, its ratio to GDP increased from a low point at 20.1% in 1997 to around 21.5% last year. High growth in gross fixed capital formation was maintained throughout 2000, despite the worsening terms of trade which tended to dampen growth in profit margins. Growth in capital formation was encouraged by strong activity both inside and outside the euro area. According to the European Commission Business Survey, confidence in the manufacturing sector rose steadily to reach a record high in June 2000. It declined thereafter, but remained at high levels. Investment projects were encouraged by relatively tight production capacity. Capacity utilisation rates in the manufacturing sector increased continuously during the year, and at the end of 2000 were only slightly below the peaks reached in the late 1980s. Moreover, high profitability, built up over the past few years, together with favourable financing conditions, ensured that firms had the financial resources to invest. One other factor which probably raised total spending on new capital in the euro area was the more intensive use of information and communications equipment. Finally, available evidence on the split between housing and business investment suggests that the strength of investment last year is likely to have been accounted for mostly by high growth in investment in machinery and equipment.

The contribution of changes in inventories to GDP growth was zero for 2000 as a whole. Caution is warranted when interpreting data on inventories, as they have sometimes been revised substantially in the past. The contribution of changes in inventories was relatively high in the latter part of 2000, thereby partly offsetting the slowdown in final domestic demand. According to the European Commission Business Survey, levels of stocks in the industrial sector were relatively low in 2000, although they increased during the year.

Euro area trade in goods and services increased substantially

Volumes of both exports and imports of goods and services – including intra-euro area trade – increased very rapidly last year. For 2000 as a whole, the contribution of net exports to GDP growth was positive at 0.6 percentage point, having been negative in 1999, at -0.5 percentage point.

However, the annual figures obscure a gradual decline in the contribution of net trade to GDP growth in the course of 2000, as the rate of growth in import volumes started to approach that of exports. As a consequence, from the second quarter of 2000 onwards, net trade tended to contribute less to GDP growth.

Services sector activity supported by strong growth in domestic demand

Data on value added by main sector of activity were compiled by the ECB and first published in the May 2000 issue of the Monthly Bulletin. These data provide useful information for an analysis of economic developments at the sectoral level, notably for the services sector. In January 2001 Eurostat first published estimates of value added by main sector of activity.

Growth of real gross value added in the services sector was strong in 2000, at 3.4%, compared with 2.7% in 1999. Within the services sector, market services (which include retail and wholesale trade, financial and real estate services, and transport and telecommunications services) experienced the most rapid growth rates at around 4.5% year-on-year in 2000, while the growth rate of public administration and social services was around 1%. The upturn in activity in market services was partly accounted for by the recovery in the industrial sector, which benefited sectors such as transport and financial services. The overall strength of private consumption last year is also likely to have fostered growth in the provision of

services to households. Strong growth in services, which account for around two-thirds of value added in the euro area, was an essential factor in the high economic growth achieved last year.

Industrial production recovered in 2000

As has been the case in the past few years, growth in industrial activity was significantly affected by external developments last year: it recovered strongly in the first half of 2000 as world economic growth rose. Moreover, euro area exporters' competitiveness was enhanced by moderate increases in wages and domestic prices and by the depreciation of the euro in the course of 2000. However, in the second half of 2000, world economic activity did not accelerate further, thereby no longer boosting growth in euro area industrial production, which was dampened by the prolonged increase in oil prices.

As both trade and domestic activity picked up in the course of 1999, growth in industrial production rose to high levels in the second half of 1999 and the first half of 2000. Year-on-year growth in industrial production excluding construction rose markedly throughout the first half of 2000, rising to 8.2% in May 2000. It started to decline thereafter, thereby following the pattern of industrial confidence shown by the European Commission Business Survey. The sharp increase in the growth rate of industrial production in December 2000 is likely to have been at least partially accounted for by favourable working day effects. For 2000 as a whole, industrial production increased by 5.4%, its fastest rate of growth since 1985, the first year for which official euro area data on industrial production are available (see Table 3).

Owing to a relatively high level of energy consumption by the industrial sector compared with the overall services sector, industrial production is likely to have been affected more significantly by the sharp increase in energy prices in 2000. With regard to the impact of the depreciation of

Table 3**Industrial production in the euro area***(percentage changes)*

	Annual rates ¹⁾								Quarterly rates ²⁾				
	1998	1999	2000	1999 Q4	2000 Q1	2000 Q2	2000 Q3	2000 Q4	1999 Q4	2000 Q1	2000 Q2	2000 Q3	2000 Q4
Total industry excl. construct.	4.3	1.9	5.4	4.3	4.8	6.0	5.7	5.2	1.7	0.5	2.1	1.0	1.8
Manufacturing	4.7	1.9	5.8	4.8	5.0	6.3	6.1	5.8	1.2	1.0	1.8	1.8	1.4
<i>by main industrial groupings:</i>													
Intermediate goods	4.0	2.3	5.2	5.6	5.6	6.2	5.0	4.2	1.5	0.8	1.4	0.9	1.5
Capital goods	6.6	1.5	9.2	2.8	6.9	8.7	10.1	10.9	1.6	2.3	2.8	2.9	3.4
Consumer goods	2.7	1.8	2.6	3.9	1.4	3.9	2.9	2.4	1.0	-2.1	2.7	0.9	1.4
Durable consumer goods	6.3	3.1	7.1	5.7	7.6	8.3	7.3	5.3	1.8	1.7	1.8	1.3	1.8
Non-durable consumer goods	2.0	1.5	1.7	3.5	0.0	2.9	2.1	1.7	0.9	-2.9	2.9	0.8	1.4

Sources: Eurostat and ECB calculations.

1) Annual rates: percentage change compared with the same period a year earlier by using data adjusted for variations in the number of working days.

2) Quarterly rates: percentage change compared with the previous quarter by using seasonally and working day adjusted data.

the euro, the negative consequences of higher input costs are likely to have been at least partly offset by improved competitiveness for exporters of manufactured goods. The extent to which these two opposite effects balance out varies between industrial sectors and depends on the share of imported goods in their inputs relative to production and the share of their production which is exported outside the euro area.

Within industry, the slowdown in the second half of the year was most marked in the intermediate goods sector. For 2000 as a whole, production in this sector rose by 5.2%, following 2.3% in 1999. Year-on-year growth increased to 8.9% in May 2000, but then declined. Demand for intermediate goods seems to have been sustained, in view of strong growth in the production of capital goods, but high oil prices accounted for the slowdown later in the year. Growth in the production of capital goods remained remarkably strong at 9.2% in 2000, its highest rate for at least a decade. Although similar rates of growth have been seen in the past, they have never been sustained for such a long period. Growth in the production of capital goods was also sustained throughout the year, underpinned by the strength of investment in the euro area. In particular, the

production of electronics and information and communications goods increased by around 20% in 2000. Growth in the production of durable consumer goods was also strong in 2000, at 7.1%, following 3.1% in 1999, in line with robust retail sales of household equipment goods.

In the construction sector, growth moderated somewhat, as the effect of tax incentives which had bolstered activity in 1999 started to fade. The value added increased by 1.3% in 2000, following 1.9% in 1999. Finally, the value added in agriculture and fishing rose by 1.5% in 2000, after 2.5% in 1999.

Sustained employment growth in 2000

On the basis of available national data, employment in the euro area as a whole is estimated to have increased at a slightly faster pace in 2000 than in 1999, i.e. at 2.0% compared with 1.7%. The upturn in economic activity from the beginning of 1999 stimulated net job creation throughout the second half of 1999 and in 2000, leading to the largest increases in euro area employment since the start of the 1990s. Employment growth in 2000 was also underpinned by continued

wage moderation and further labour market policies. It should be noted, however, that in the summer of 2000 there was a significant revision of the entire German employment data series. Consequently, euro area employment growth has been revised upwards, particularly for the period since 1996.

Higher employment growth was observed in the two main sectors of the economy (see Table 4), closely following the sectoral growth pattern described above. With year-on-year growth rates of above 2.6% in the first three quarters of the year, the services sector clearly remained the main driving force behind job creation in 2000, fuelled by sustained growth in domestic demand. Employment growth in the industrial sector also experienced more positive developments in 2000. Indeed, after a modest increase in 1999, employment growth in total industry picked up in the first three quarters of 2000. This was largely the result of a strong positive contribution from the construction sector in the first quarter of the year, while, in the second and third quarters, there was a significant improvement in employment growth in the manufacturing sector. By

contrast, the fall in job creation in the agricultural sector continued in 2000, albeit at a significantly slower pace than in recent years.

Pace of decline in unemployment broadly maintained in 2000

The gradual decline in euro area unemployment which started in July 1997 continued in 2000, at a broadly similar pace to that in 1999 (see Chart 15). Box 5 reviews the decline in unemployment from a longer-term perspective. The standardised rate of unemployment fell to 8.7% at the end of 2000, compared with 9.6% in December 1999. In the first half of 2000 the decline was sharp, with the unemployment rate falling by nearly 0.1 percentage point each month. In the second half of the year the decline in unemployment slowed down. All in all, for the second consecutive year, the number of unemployed people in the euro area fell by an average of more than 1 million in 2000. By the end of 2000 there were around 11.4 million unemployed people in the euro area.

Table 4
Labour market developments in the euro area

(annual percentage changes and percentages)

	1998	1999	2000	1998	1998	1999	1999	1999	1999	2000	2000	2000	2000
				Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Labour force	0.8	0.8	.	0.8	0.7	0.9	0.7	0.8	0.8	1.0	1.1	1.0	.
Employment	1.6	1.7	.	1.7	1.9	1.8	1.5	1.7	1.7	1.9	2.2	2.0	.
Agriculture ¹⁾	-1.1	-2.8	.	-1.4	-2.2	-3.6	-2.6	-2.7	-2.4	-1.1	-1.2	-1.1	.
Industry ²⁾	0.7	0.5	.	0.9	0.8	0.6	0.4	0.3	0.6	0.8	0.9	1.0	.
– excl. construction	1.2	0.3	.	1.3	0.9	0.9	-0.1	0.0	0.3	0.2	0.9	1.0	.
– construction	0.2	0.8	.	-0.1	0.8	-0.3	1.3	1.0	1.2	2.6	1.3	1.3	.
Services ³⁾	2.1	2.5	.	2.3	2.7	2.7	2.4	2.6	2.4	2.6	2.9	2.7	.
Rates of unemployment⁴⁾													
Total	10.9	9.9	9.0	10.8	10.6	10.3	10.1	9.9	9.6	9.4	9.1	8.9	8.7
Under 25 years	21.3	19.1	17.3	21.1	20.8	20.1	19.3	18.9	18.2	18.0	17.4	17.1	16.7
25 years and over	9.4	8.7	7.9	9.3	9.1	8.9	8.8	8.6	8.4	8.2	7.9	7.8	7.6

Sources: National data and ECB calculations for labour force data; Eurostat for employment and unemployment data.

1) Also includes fishing, hunting and forestry.

2) Includes manufacturing, construction, mining and quarrying, electricity, gas and water supply.

3) Excludes extra-territorial bodies and organisations.

4) Percentage of the labour force according to ILO recommendations.

Box 5

The decline in unemployment from a longer-term perspective

Since June 1997 the euro area unemployment rate has fallen by 2.9 percentage points, i.e. at an average rate of around 0.2 percentage point per quarter, to stand at 8.7% in December 2000, which corresponds to 11.4 million unemployed people. This reflects the economic upturn combined with sustained moderate wage developments and, in addition, the effect of reforms in the euro area labour market. The decline since 1997 has been the strongest and the most sustained by far since that observed in the late 1980s. It follows a period in which the unemployment rate remained at very high levels between early 1994 and mid-1997 after having increased sharply from a low of 7.8% in mid-1990 to a peak of 11.7% in early 1994. In absolute terms, unemployment has declined by around 3.5 million since June 1997, wiping out two-thirds of the sharp increase recorded from mid-1990 to June 1997. This box reviews the decline in unemployment in the euro area since 1997 in greater detail, focusing in particular on the age, gender, skills and duration patterns.

Standardised unemployment rates in the euro area

(as a percentage of the labour force)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Total	7.9	8.2	9.2	10.8	11.6	11.3	11.5	11.5	10.9	9.9	9.0
Males	6.1	6.4	7.3	9.1	9.8	9.4	9.8	9.8	9.1	8.3	7.4
Females	10.5	10.9	11.9	13.3	14.2	14.0	14.0	14.0	13.3	12.2	11.1
Under 25 years	16.6	16.9	18.5	22.2	23.6	23.3	23.9	23.2	21.3	19.1	17.3
25 years and above	6.2	6.6	7.5	8.9	9.7	9.5	9.8	9.9	9.4	8.7	7.9

Source: Eurostat.

Note: Standardised unemployment rates are only available from July 1990.

Strong employment growth largely accounts for the decline in unemployment

The decline in unemployment stemmed from the vigorous growth in employment. Total employment has been growing at an average year-on-year rate of 1.8% since mid-1997, compared with a decline of 0.2% between mid-1990 and mid-1997. This corresponds to an increase of around 7 million, whereas earlier in the 1990s, by comparison, employment fell by over 1 million. It is worth noting that the decline in unemployment took place against a background of remarkable growth in the labour force. Mainly on account of an increasing participation rate, labour force growth has accelerated since 1997, standing at an average annual rate of 0.9%, compared with 0.4% earlier in the decade.

The recent positive employment performance was to a large extent the result of the robust economic growth in the second half of the 1990s. However, there are also signs that economic expansion has become more labour-intensive compared with the previous period of strong growth in the late 1980s. This seems to be confirmed when employment is measured in terms of full-time equivalents rather than simply by the number of people employed. One explanation could be that, by contrast with the late 1980s, real labour cost developments have remained moderate during the current upturn, owing to wage moderation and cuts in employers' social security contributions for certain groups in some countries. Moreover, the favourable employment developments should also have been facilitated by labour market reforms, such as measures to promote flexible and part-time jobs, financial incentives to employ low-skilled workers and tighter entitlement conditions for unemployment benefits.

All groups, including those with high levels of unemployment, are benefiting from the improvements in the labour market

All groups, in particular those most affected by high unemployment, such as women, young people, older people, the low-skilled and the long-term unemployed, have experienced a decline in unemployment since 1997.

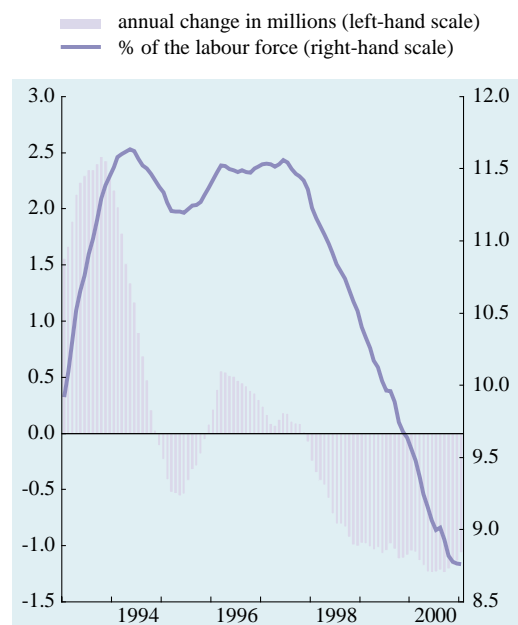
First, the female unemployment rate fell by 3.4 percentage points from June 1997 to 10.7% in December 2000, compared with a fall of 2.6 percentage points to 7.2% in December 2000 for male unemployment. This may be explained by the marked rise in employment in the services sector, where around 80% of female employment is concentrated and where part-time employment is most widespread, by the increasing proportion of women with tertiary education and by tax relief for childcare expenses in some countries.

Second, although youth unemployment (among people aged under 25) in the euro area is still approximately twice as high as the overall unemployment rate, it has decreased sharply, from 23.5% in June 1997 to 16.6% in December 2000. This is all the more noticeable because the youth participation rate also increased, after having decreased steadily from 1987 to 1997. The cuts in social security contributions in many countries, along with the easing of regulations for fixed-term contracts and the introduction of initiatives aimed at promoting part-time employment, are likely to have contributed directly to raising the employability of young people, especially for those who are low-skilled or do not have any work experience. The unemployment rate for low-skilled workers indeed decreased by 1.5 percentage points from 1997 to 12.5% in 1999. Moreover, special youth schemes, such as on-the-job training, placement assistance, apprenticeships and employment subsidies, may also have contributed. Overall, around one-third of the total decrease in unemployment is attributable to this group, even though it represented only 12% of the labour force. The unemployment rate for older people (aged between 55 and 59 years), which has more than doubled over the past two decades, fell by over 1 percentage point from 1997 to 11.1% in 1999.

Third, the number of long-term unemployed appears to have decreased faster than overall unemployment. Data for 2000 are not yet available, but the proportion of those unemployed for more than a year to total unemployment decreased by 2.4 percentage points between 1997 and 1999, after rising sharply earlier in the 1990s. Long-term unemployment probably benefited from the economic recovery, but also from labour market reforms aimed in particular at improving the employability of the most vulnerable groups and increasing work incentives. However, long-term unemployment still accounts for around half of total unemployment.

Further falls in unemployment require structural reform and continuing wage moderation

Overall, the decline in unemployment since 1997 has been significant. A sustainable continuation of this decline in the coming years will necessitate, in addition to wage moderation, ongoing reforms in the labour markets of the euro area. This is needed all the more urgently because of rising recruitment difficulties in some sectors and possible risks that some countries will experience labour shortages in the medium term. In particular, the coexistence of still high unemployment and numerous unfilled vacancies may suggest a mismatch between labour supply and demand, which may be due to, inter alia, a skills mismatch, geographical mismatch, inactivity traps and inadequate wage structures. This situation would call for targeted measures aimed at the underlying source of the mismatch, such as a training and education policy, the reduction of factors limiting labour mobility, and incentives for unemployed or inactive people to re-enter the labour market.

Chart 15**Unemployment in the euro area***(monthly data; seasonally adjusted)**Source: Eurostat.*

The decline in unemployment was accompanied by a marked increase in the labour force. Labour force growth is estimated to have risen slightly, from 0.8% in 1999 to around 1% in 2000. This increase may be attributable at least in part to the economic upturn which, by increasing the likelihood of finding a job, provides a greater incentive to participate in the labour market. It is also related to a shift in the composition of the population, which is increasing the relative weight of middle-age groups, the participation rate of which is generally higher than that of other groups.

5 Fiscal developments

Budget balances improved in 2000

The budget balances of euro area governments continued to improve in 2000, mainly as a result of the sale of UMTS licences in a number of countries and because of cyclical factors. According to the latest data available from Eurostat, a surplus of 0.3% of GDP was achieved on average (see

The breakdown by age shows that although youth unemployment was still twice as high as the total unemployment rate, overall, it decreased in 2000, from 18.0% in December 1999 to 16.6% in December 2000. This decrease was nevertheless slightly smaller than that in 1999, when youth unemployment fell by more than 340,000, compared with 311,000 in 2000, and could be indicative of a continued increase in the participation rate of this age group. However, around a quarter of the total decline in unemployment was still attributable to the fall in youth unemployment in 2000, even though this group represented only around 12% of the total labour force. By contrast, the decline in unemployment for those aged 25 years and above was greater in 2000 than in 1999. This rate fell from 8.4% in December 1999 to 7.6% in December 2000, i.e. a fall of 820,000 in the number of unemployed people (compared with 725,000 in 1999). In 2000, both male and female unemployment rates declined, from 8.3% in 1999 to 7.4% in 2000 for males and from 12.2% to 11.1% for females, and the gap between average male and female unemployment rates narrowed slightly. The continued convergence of unemployment rates across age and gender groups, which could reflect a gradual reduction of the mismatch in the labour market, was nonetheless slightly less pronounced than in 1999. Finally, the dispersion of unemployment rates between euro area countries decreased further in 2000, with the most significant reductions generally occurring in the countries with the highest levels of unemployment.

Table 5, column 5). Sales of UMTS licences contributed 1.1% of GDP to the improvement in the euro area aggregate budget balance. Even excluding these one-off windfall proceeds, the budget balance improved in all euro area countries as a result of the impact of strong economic growth on tax revenue and unemployment-related expenditure. On average, a deficit-to-GDP ratio of 0.8% of

Table 5**Fiscal positions in the euro area***(as a percentage of GDP)***General government surplus (+) or deficit (-)**

	1997	1998	1999	2000 including UMTS proceeds	2000 excluding UMTS proceeds
Euro area	-2.6	-2.1	-1.2	0.3	-0.8
Belgium	-1.9	-0.9	-0.7	0.0	0.0
Germany	-2.7	-2.1	-1.4	1.3	-1.2
Spain	-3.2	-2.6	-1.2	-0.3	-0.4
France	-3.0	-2.7	-1.6	-1.3	-1.3
Ireland	0.7	2.1	2.1	4.5	4.5
Italy	-2.7	-2.8	-1.8	-0.3	-1.5
Luxembourg	3.6	3.2	4.7	5.3	5.3
The Netherlands	-1.1	-0.7	1.0	2.0	1.3
Austria	-1.7	-2.3	-2.1	-1.1	-1.5
Portugal	-2.7	-2.2	-2.0	-1.4	-1.7
Finland	-1.5	1.3	1.8	6.7	6.7

General government gross debt

	1997	1998	1999	2000
Euro area	74.8	73.1	72.0	69.7
Belgium	125.3	119.8	116.4	110.9
Germany	60.9	60.7	61.1	60.2
Spain	66.7	64.7	63.4	60.6
France	59.3	59.7	58.7	58.0
Ireland	65.1	55.0	50.1	39.1
Italy	120.1	116.2	114.5	110.2
Luxembourg	6.0	6.4	6.0	5.3
The Netherlands	70.0	66.8	63.2	56.3
Austria	64.7	63.9	64.7	62.8
Portugal	59.1	55.3	55.0	53.8
Finland	54.1	48.8	46.9	44.0

Sources: Eurostat and the ECB for euro area aggregates.

Note: Data are based on the ESA 95.

GDP was recorded (net of UMTS proceeds), compared with 1.2% in 1999 (see Table 5, column 6). The deficit targets of the 1999/2000 updated stability programmes were met in virtually all euro area countries.

Underlying the overall picture for the euro area are some considerable differences between fiscal developments in the individual countries. Ireland and Finland further increased their budget surplus ratios substantially in 2000, by more than 2 percentage points, aided by high economic growth and, in the case of Ireland, by an

exceptional one-off factor in 1999 which had a downward effect on the surplus. In all other euro area countries, balances improved by 0% to 1% of GDP. As a result, only five countries (Germany, France, Italy, Austria and Portugal) showed a deficit excluding UMTS proceeds of above 0.5% of GDP in 2000, compared with seven countries in 1999. Portugal, Austria and Italy have the highest budget deficit ratios in the euro area and were also among the countries which made limited progress in consolidation. Spain and Belgium achieved budgets near to or in balance, while continued surpluses were

registered in four countries (Ireland, Luxembourg, the Netherlands and Finland).

The euro area average debt-to-GDP ratio decreased by 2.3 percentage points, to 69.7%. The debt ratio declined in all euro area countries in 2000. The Netherlands, Belgium, Italy and Ireland reported debt ratios declining by more than 4 percentage points. Deficit-debt adjustments, reflecting among other things financial transactions which leave the deficit unaffected but have an impact on debt, exerted an upward effect of 0.3 percentage point on the euro area average debt ratio in 2000. Among other factors, the revaluation of foreign currency-denominated debt contributed to this effect.

Expansionary fiscal policies arising from insufficient expenditure restraint

The improvement in the fiscal balances excluding UMTS proceeds was mainly due to favourable economic developments which boosted tax revenues and helped contain primary expenditure (expenditure excluding interest expenditure) in 2000. However, the “growth dividend” was largely used to finance additional tax cuts and expenditure, rather than for more rapid deficit reduction. In early 2000 the expenditure-to-GDP ratio was expected to decline by around 1 percentage point, owing to lower interest expenditure, lower unemployment benefits and a lower government wage bill. On account of additional spending, however, the decline in the ratio was considerably smaller than anticipated. This runs counter to the 2000 Broad Economic Policy Guidelines, which recommended that better than expected growth be used to achieve safer budgetary positions, rather than to raise expenditure or to lower taxes.

Developments in the primary balance (budget balance excluding interest expenditure) indicate that fiscal policy actions in the euro area did not contribute to budgetary improvements in 2000. After adjustment for UMTS proceeds, the primary surplus

improved only marginally. As this improvement was less than the effect of economic growth on tax revenues and unemployment expenditures would have suggested, the cyclically adjusted primary budget surplus declined slightly. At the individual country level, this indicator showed a deterioration, particularly in Luxembourg and the Netherlands. The improvement was relatively strong in Finland, which had already achieved a sizeable surplus. The other euro area countries reported only minor changes in their cyclically adjusted primary balances. This suggests that many governments have halted or even reversed their fiscal consolidation efforts.

According to the budgetary plans of the euro area countries, the accommodating stance of fiscal policies in 2000 will be further relaxed in 2001. Significant further tax cuts will be implemented in 2001, but these will not be complemented by sufficient primary expenditure restraint. The budget balance net of UMTS proceeds is expected to remain broadly stable this year, while the primary surplus will probably decline for the first time since the early 1990s.

Further consolidation and comprehensive structural fiscal reform needed

Bearing in mind the expectation of sustained economic growth in 2001, the expansionary fiscal policies planned for this year in a number of euro area countries are not conducive to containing aggregate demand and inflationary pressures. Particularly in the countries experiencing high economic growth rates, inflationary pressures will receive an additional stimulus from expansionary fiscal policies. There are, moreover, other compelling reasons for countries to resume fiscal consolidation with vigour. The cyclically adjusted budgets of some countries are significantly in deficit, and cannot therefore be seen as being “close to balance or in surplus”, as required by the Stability and Growth Pact. In these cases, further consolidation measures are required to achieve, as soon as possible, a sufficient margin for

automatic stabilisers to operate freely. For several countries, high levels of government debt should also be regarded as an argument for continuing fiscal consolidation. Finally, the longer-term sustainability of fiscal policies requires sufficient budgetary room to be created to deal with the upward pressure which ageing populations will place on government expenditure in the medium and long term.

Structural fiscal reform, which stimulates employment and growth, can help to support fiscal consolidation and sustainability. The tax reforms which many Member States have implemented or are planning to introduce are, therefore, welcome. By lowering tax rates significantly, such reforms reduce distortions in the economy and have the potential to lead to positive long-term labour market and supply-side effects. Such effects could help to prevent supply shortages and contain inflationary pressures through the enhanced flexibility of economies. However, cutting taxes without supplementary reforms on the expenditure side leads to an unwarranted deterioration in the underlying fiscal position. Additional structural expenditure reform is therefore required, including a reorientation of expenditure towards investment in physical and human capital. Such reforms would also enhance positive employment and supply-side effects, especially if they form part of a comprehensive reform

strategy which includes regulatory changes. The structural reform of benefit systems is particularly important in the area of pensions (see Box 6).

Progress in consolidation and comprehensive structural fiscal reform should, therefore, feature prominently in Member States' updates of their stability programmes. The latter were submitted to the EU Council and the European Commission by the end of 2000 and in early 2001, covering the period up to 2003/2005. They indicate that progress towards safe budgetary positions is planned in countries where this is not yet the case, although the pace of consolidation has improved little in general compared with the previous updates of the stability programmes, despite upward revisions of projected economic growth in most cases. The countries which still recorded budget deficits in 2000 are planning to achieve balanced budgets or surpluses in 2001 (Spain and Greece), 2002 (Austria), 2003 (Italy) or 2004 (Germany, France and Portugal). As a result of the planned budgetary improvements and robust economic growth, government debt ratios will continue their declining trend. From 2002 onwards only Greece, Italy and Belgium will still have debt ratios above the 60% threshold.

Box 6

Population ageing and the need for pension reform in the euro area

Population ageing will put growing pressure on public finances

Virtually all euro area countries currently provide the largest share of their old-age pension benefits through compulsory, pay-as-you-go systems, where pensions are predominantly financed by current contributions from workers. The importance of funded public or private pension plans is, by contrast, mainly small, even though some euro area countries are increasing their reliance on such plans. Existing systems have resulted in large increases in public pension expenditure over recent decades, as governments have extended eligibility to receive pensions, the generosity of benefits and the pursuit of redistributive goals.

Pension expenditure is expected to increase further over the next few decades as populations age. Eurostat demographic projections anticipate that, since birth rates remain low and life expectancy is rising, all euro area countries will experience significant population ageing over the next few decades. The ratio of elderly people to those of working age (also referred to as the elderly dependency ratio) is projected to double by the year 2050, rising from just under 27% to more than 53%.

Several attempts have been made recently to assess the soundness of current pension systems and quantify the fiscal costs associated with ageing populations. Long-term projections of future pension expenditure/contributions, which are based on a common set of macroeconomic assumptions for the different countries and demographic trends, find that pension expenditure in relation to GDP will increase substantially in most countries if current policies are maintained. Although these underlying assumptions are subject to margins of uncertainty, the size of such an increase in pension expenditure is likely to pose a serious challenge to the sustainability of public finances and the debt burden in the decades to come.

Major pension reforms are needed

Awareness of the fiscal risks associated with current demographic developments is clearly on the rise and a lively debate on reform options is under way. Proposals for “parametric” reform focus on changes to benefits and contributions within the framework of existing public pay-as-you-go pension schemes. “Systemic” reforms towards funded systems basing future benefits on accumulated assets have also been proposed.

Owing to the political difficulties and technical complexity of pension arrangements, policy initiatives have so far favoured parametric reforms. However, while the measures taken have, until now, been largely sufficient to contain any major budgetary imbalances, they appear inadequate to finance the projected increase in public spending on pensions in the long run. Further reforms of this type could be aimed at adjusting the indexation of pensions, the replacement ratio or the retirement age. The last of these three would have the advantage of smoothing out the pension expenditure trend without jeopardising the living standard of the elderly.

A gradual supplementation of traditional pay-as-you-go systems by funded schemes could contribute to the sustainability of public finances. They would also promote financial market developments and would probably allow good returns through the choice of the most efficient investment strategy. Furthermore, an actuarially fair connection between contributions and benefits could reduce labour market distortions. Governments should support this development by providing the legal and fiscal frameworks required to reform existing pension schemes. Some countries have already successfully embarked on this policy path.

In summary, important policy adjustments are required to contain public expenditure and to avoid tax increases or a significant deterioration in governments’ budgetary positions owing to population ageing. Postponement of pension reform would, over time, only further increase the extent of the required adjustments. Moreover, population ageing coupled with a continuation of the prevailing low labour force participation rate and early effective retirement age could result in a deterioration of economic performance, lower living standards and even higher fiscal burdens for future generations. Labour market policies which reduce structural unemployment and increase labour force participation are, therefore, important complements to pension reform. Finally, it is important that countries eliminate remaining fiscal imbalances and reduce public debt before the costs of ageing populations rise further.

6 The global macroeconomic environment, exchange rates and the balance of payments

Record year for global economic growth

2000 was one of the most favourable of the past 25 years for the world economy, with its combination of strong output growth and comparatively low inflation, while world trade expanded at a robust pace. While all

regions of the world made a positive contribution to this performance, economic growth was particularly strong in North America and in some East Asian economies – in particular China. After a very strong first half, however, economic activity in the United States slowed down substantially in

the second half of 2000. During the same period, a slowdown in activity was also felt in other regions of the world, especially in Latin America and East Asia. Some uncertainty also arose in individual emerging market economies, as reflected in the isolated episodes of financial distress in Argentina and Turkey.

The strong performance of the global economy in the course of 2000 was increasingly affected by the continued increase in oil prices. Crude oil prices rose from USD 26.6 in the first quarter of 2000 to USD 32.5 in November 2000, only showing clear signs of easing during the last month of the year, when prices temporarily dropped to USD 23.0. The earlier price hikes resulted from a combination of several factors, including robust world demand, tight inventories of crude and refining products, and heightened tension in the Middle East. In contrast to this strong rise in oil prices, non-oil commodity prices exhibited a modest increase of 1.7% in US dollar terms, particularly as a result of a slow downward adjustment in the supply of agricultural products in response to the lower prices witnessed in 1999.

In the United States, the year 2000 marked the high point of nine years of economic expansion, with real GDP growing at 5% and unemployment remaining very low, at an average annual rate of 4%. At the same time, productivity in the non-farm business sector grew by 4.1%, up from 2.9% in 1999, and therefore contributed to sustaining the strong economic expansion. Annual CPI inflation rose quite significantly in 2000 to 3.4%, from 2.2% in 1999, as a result of oil prices remaining high for a more protracted period than previously expected, while unit labour costs increased by only 0.7%, down from 1.8% in 1999. The main driving force behind the robust economic expansion in 2000 was private domestic demand. Private consumption grew by 5.3%, the same rate of growth experienced in 1999, while private business investment growth accelerated further to 10.2%, as compared with 6.6% in 1999. The negative contribution of net exports to real GDP growth was 0.9 percentage point, almost

the same as in 1999 (1 percentage point). The robust growth of real GDP in 2000 was mainly concentrated in the first half of the year, while increasing signs of internal and external imbalances in the US economy were accumulating. Indeed, the very low savings rate – -0.1% in 2000, down from 2.2% in 1999 – and the increase in the current account deficit to 4.4% of GDP in 2000, up from 3.6% in 1999, cast doubts on the sustainability of the pace of economic expansion. Against this background, the US economy started to slow down considerably in the third quarter of 2000 amid a continuing decline in consumer and producer confidence. In fact, the deceleration of the economy involved both private consumption and private investment, with real consumption expenditure in the last quarter of 2000 growing by only 0.7% (quarter-on-quarter), down from 1.9% (quarter-on-quarter) in the first quarter of 2000. Furthermore, by the end of the year, signs of strain in the US financial markets started to appear (as described in Section 2.2). Against the background of reduced corporate profitability and weaker economic prospects, stock market prices declined significantly, in particular in the high technology sector, and corporate bond spreads widened, especially in the “junk bond” segment.

During the first half of 2000 the Federal Open Market Committee (FOMC) of the Federal Reserve System responded to rising inflationary pressures and continued the monetary policy tightening initiated in June 1999 by raising the target for the federal funds rate to 6.5%, i.e. to 1 percentage point higher than it was at the end of 1999. Although the FOMC continued to see the risks as being mainly on the inflation side during most of the second half of 2000, it left its target rate unchanged as uncertainties about the development of domestic demand increased. On the occasion of its last meeting in 2000, which was held on 19 December, the FOMC changed its assessment of the balance of risks, as it believed that the risks were weighted mainly towards conditions which may generate economic weakness.

Following this shift in the risk assessment, the FOMC lowered its target for the federal funds rate by a total of 100 basis points to 5.5% in January 2001.

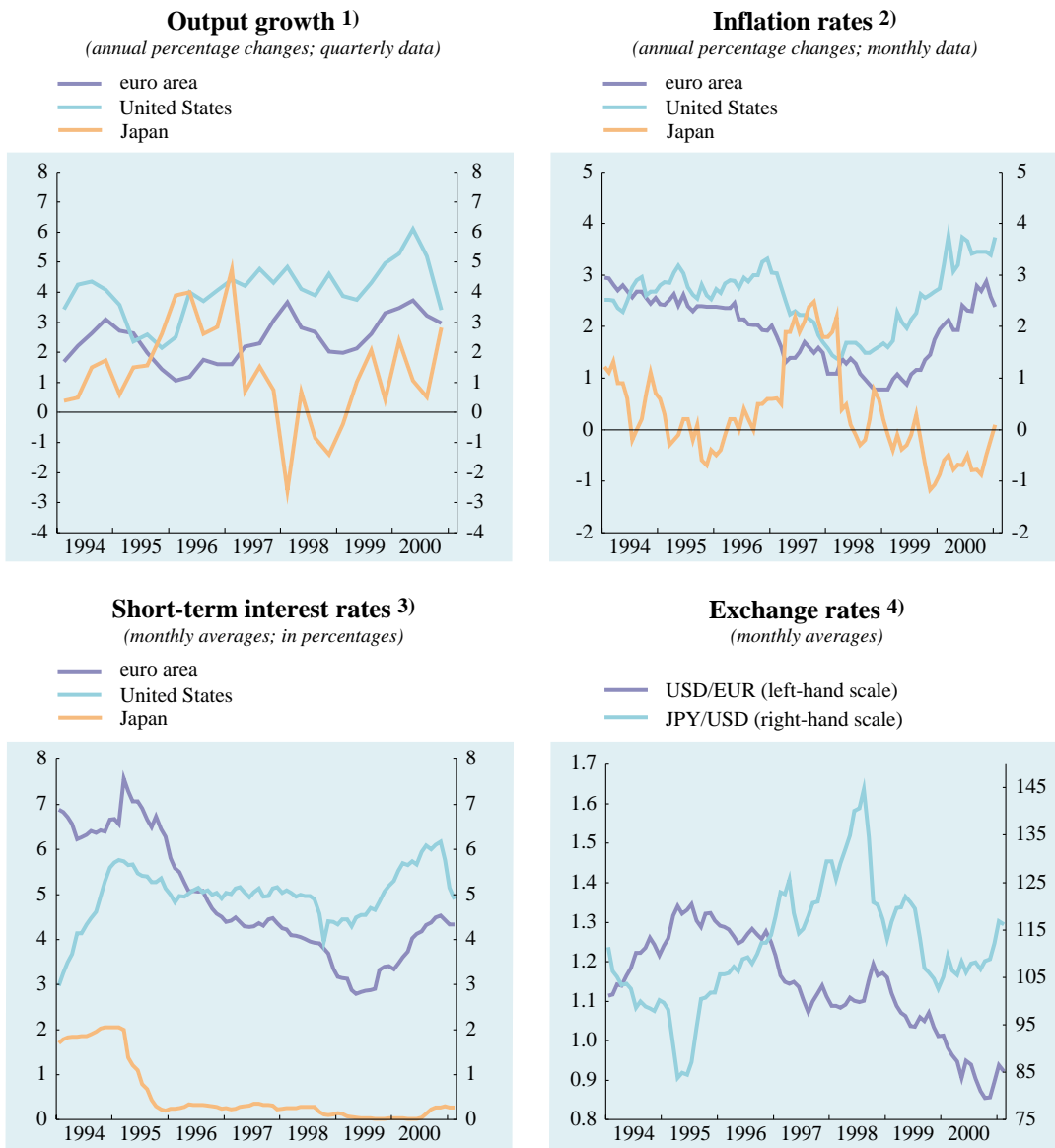
In Japan economic conditions improved only slightly in 2000 and uncertainties about the sustainability and robustness of the recovery increased again towards the end of the year. In the wake of the recession in the second half of 1999, economic activity picked up again at the beginning of 2000. However, in the third quarter growth turned negative, to be followed once more by positive growth in the fourth quarter. Government spending lent strong support to the economy during the first half of 2000, followed by a substantial decrease in the second half, as the effects of the 1999 supplementary fiscal package began to fade. At that time, business fixed investment recovered, fuelled by favourable profit conditions, adding to evidence that a self-sustained recovery driven mainly by private demand could finally be emerging. However, the favourable results in the corporate sector, which remained largely limited to larger manufacturing firms, failed to spill over to the household sector, and private consumption remained sluggish despite some improvements in the income and labour market situations. On the price side, deflationary pressures persisted, as the Consumer Price Index (CPI) declined by 0.7% on average during 2000, although they could be partly attributed to ongoing structural changes in the Japanese economy. The Bank of Japan abandoned its 18-month-long zero interest rate policy in August 2000 and raised its target for the uncollateralised overnight call rate to 0.25%, as it believed that the economy had reached a stage at which deflationary concerns had been dispelled. In the light of the remaining uncertainties regarding the Japanese recovery, the Government approved a moderate supplementary fiscal package worth approximately JPY 4.8 trillion in real spending towards the end of 2000. That was followed by a moderate easing of the monetary policy stance by the Bank of Japan in February 2001.

Other economies in Asia performed strongly in 2000, primarily reflecting robust export-led growth driven by strong demand in export markets. This strong performance was set against a backdrop both of declining equity markets, with the exception of China, which were heavily influenced by the decline in US high technology stocks, and of increasing pressure on trade balances given the region's dependency on oil imports. Over the last quarter of 2000 increasing concerns arose with regard to growth prospects in the region in view of, in particular, uncertain global developments in 2001 which, in turn, tended to widen the sovereign bond yield spreads over the last quarter of 2000. China continued to post robust growth in 2000 driven by strong capital flows in anticipation of further trade and investment liberalisation in connection with accession to the World Trade Organisation (WTO) in 2001.

In 2000 transition countries were characterised by a strong rebound in economic activity and by a generally more favourable economic climate. Higher growth was a common feature throughout the region, with Russia's performance in 2000 being particularly noteworthy, as growth is estimated to have been above 7% and the current account and fiscal balances improved substantially. While this development can mostly be ascribed to high energy prices – with Russia being a net exporter of energy – and a competitive exchange rate, economic growth was more broadly based than in 1999, with a significant recovery in both consumer and investment demand. At the same time, Russian bond spreads narrowed markedly in 2000, remaining, however, wide compared with those of other emerging markets.

With regard to central and eastern European accession countries, their economic performance was very positive in 2000, sustained by the favourable out-turn in the euro area. Robust economic growth was, however, accompanied by somewhat higher inflation rates and by relatively high current account deficits, which in some instances prompted tighter monetary policies. Overall,

Chart 16
Main developments in major industrialised economies



Sources: National data, BIS, Eurostat and ECB calculations.

- 1) Eurostat data are used for the euro area; for the United States and Japan national data are used.
- 2) Data for the euro area up to 1995 are estimates for the HICP based on national CPI data; after 1995 HICP data are used.
- 3) Euro area data are ECB calculations and are averages of national three-month interbank rates, from 1999 onwards three-month EURIBOR are used.
- 4) Up to 1999 the USD/EUR line shows USD/ECU data.

the financial situation was less favourable compared with the previous year as stock markets in the region were characterised by severe downward corrections concentrated in the second half of the year.

As regards developments in other countries, the Turkish stock market experienced severe losses from mid-2000 onwards, after its overall index nearly tripled in 1999. These losses intensified at the end of November 2000, in the wake of a severe liquidity crisis in the Turkish banking sector, requiring the announcement of an increased commitment by the IMF to restore confidence and stabilise markets. After a short period of relative stability, however, financial problems re-emerged in February 2001, ultimately leading to the abandonment of the pre-announced crawling peg regime. The crisis showed signs of easing after the Turkish lira was floated and a set of policy measures were announced, which were designed to achieve the Turkish Government's goals of reducing inflation and ensuring sustainable growth.

Latin America achieved a strong rebound in 2000 from the recession experienced the year before, with real output growth reaching 4.2%. By contrast with the positive result in the real sector, financial markets exhibited a weak performance, characterised by widening sovereign bond yield spreads, declining stock prices and the interruption of the downward trend in interest rates. The Mexican economy expanded at the fastest pace in almost 20 years, with real GDP expected to grow at about 7% in 2000 and the unemployment rate dropping to a level of only 2%, supported by strong exports to the United States, high oil prices and buoyant private consumption. Brazil's recovery was driven by exports, although lower interest rates and increased credit availability allowed investment and consumer spending to broaden the base of the expansion. In Argentina, lower than expected economic growth in 2000 was the result of weak domestic confidence and concerns over fiscal imbalances, as well as increasing current account deficits resulting from the appreciation of the peso against the

currencies of major trading partners and an increasing debt servicing burden. In the last quarter of the year, such fragile economic conditions, coupled with increasing political tensions, led to the eruption of severe financial turbulence, which nonetheless eased after the announcement of an IMF-led financial support programme. By the end of the year the outlook for the region as a whole was showing signs of improvement, although domestic political uncertainty, doubts about the extent of the slowdown in the United States and, in some countries, the fall in oil prices were giving cause for concern.

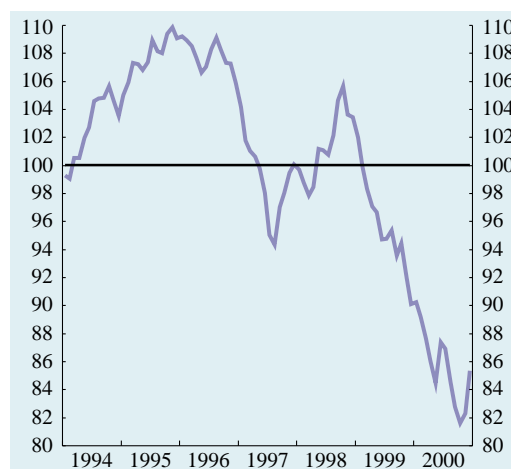
Euro rebounded towards the end 2000

The euro continued to decline against the currencies of the major trading partners of the euro area during most of 2000, before rebounding strongly towards the end of the year. The declining trend of the euro was temporarily interrupted in May and June 2000 when the single currency strengthened, but downward pressure subsequently resumed and persisted until the

Chart 17

Nominal effective exchange rate¹⁾

(monthly averages; index: 1999 Q1 = 100)



Source: ECB.

1) Data are ECB calculations (see the article in the April 2000 issue of the Monthly Bulletin). An upward movement of the index represents an appreciation of the euro. The horizontal line shows the average over the period shown (January 1994 to February 2001).

autumn. On 22 September 2000 the central banks of the G7 expressed their shared concern about the potential implications of the decline of the euro for the world economy and intervened jointly in the foreign exchange markets. Amid concerns about the global and domestic repercussions of the exchange rate of the euro, unilateral intervention by the ECB and the national central banks (NCBs) on behalf of the ECB in support of the euro took place again in early November 2000. Towards the end of the year, the euro staged a sharp recovery amid firming signs of an economic slowdown in the euro area's major trading partners and sustained growth prospects for the euro area. At the end of 2000 the nominal effective exchange rate index was, on balance, only around 2% lower than at the beginning of the year, although around 8% below its average level in 1999. On 13 March 2001, the cut-off date for data for this Annual Report, the euro, as measured by the nominal effective exchange rate, had appreciated by almost 4% with regard to the average for 2000. Trends in the euro's real effective exchange rates, which are adjusted for price and labour cost development differentials between the euro area and its major trading partners, tracked the nominal index fairly closely.

Against the US dollar, the euro depreciated throughout most of 2000, reaching a trough of USD 0.8252 on 26 October 2000, which implied a depreciation of around 18% compared with the beginning of the year. The strength of the US dollar was partly attributed to markets focusing on the differences in relative economic performance and prospects between the United States and the euro area. However, as economic developments and prospects for the euro area improved in the course of the year, the decline in the external value of the euro became increasingly inconsistent with medium-term economic fundamentals, eventually leading to concerns that prompted intervention in foreign exchange markets. Amid growing evidence of a slowdown in the US economy, the euro rebounded in late 2000. At the end of 2000 the euro was

quoted at USD 0.93, which was almost 8% weaker than at the beginning of the year. In early 2001 the euro fluctuated in a range of between USD 0.90 and USD 0.95 and on 13 March it traded at USD 0.9202, which was roughly the same level as the average for 2000.

Compared with the beginning of the year, the euro depreciated by roughly 13% against the Japanese yen until its trough on 26 October 2000. This development was fuelled by indications that the Japanese economy was entering a phase of more sustainable growth. Towards the end of the year, however, revisions in the outlook for the Japanese economy triggered a revision of the markets' exchange rate assessment. Thereafter, the euro appreciated by 20% in the period up to the end of 2000, when it was quoted at JPY 106.92, implying an appreciation of 4% compared with 3 January 2000. Vis-à-vis the US dollar, the yen also weakened by almost 13% in the course of the year. On 13 March 2001 the euro was quoted at JPY 110.27, i.e. about 11% higher than the average for 2000.

Current account deficit increased

The current account of the euro area reported a deficit of €28.3 billion in 2000, compared with a deficit of €5.8 billion in 1999. The main reason for this development was a reduction in the goods surplus from €83.4 billion in 1999 to €59.8 billion in 2000, as the increase in the imports of goods exceeded the rise in the exports of goods. The growth in the imports of goods partly reflected the strong increase in import prices which, in turn, was attributable to the combined effects of the strong rise in oil prices and the depreciation of the euro. Strong domestic demand in the euro area also contributed to increasingly higher import volumes as the year progressed. Exports of goods grew primarily as a result of increasing export volumes related to strong foreign demand and the improving price competitiveness of the euro area.

Significant movements in the other components of the current account partially offset one another as the income deficit fell from €32.4 billion to €24.7 billion, whereas the deficit for current transfers increased from €45.0 billion in 1999 to €49.9 billion in 2000, and the services deficit increased slightly from €11.8 billion to €13.5 billion.

Combined direct and portfolio investment net outflows declined slightly

Combined direct and portfolio investment net outflows amounted to €143.4 billion in 2000, which was somewhat lower than in 1999 (€162.3 billion). This primarily reflected lower net outflows of direct investment and higher net inflows of debt instruments which more than offset the significant increase in net outflows of equities.

Taking a more detailed view of individual items, debt instruments recorded net inflows of €145.6 billion, significantly higher than in 1999 (€7.7 billion), which were mainly related to substantial foreign investment in euro area bonds and notes. The narrowing in the positive interest rate differential of the United States vis-à-vis the euro area during 2000 may have been one of the factors motivating foreign investment in euro area bonds and notes.

The decline in net direct investment outflows was mainly related to strong growth of direct investment by non-residents in the euro area, which more than offset higher direct investment abroad by euro area residents. Direct investment in the euro area increased to €303.1 billion in 2000, from €166.2 billion in 1999. This increase was due to both higher inflows of equity capital (including reinvested earnings), notably related to a very large transaction, and particularly strong growth of inflows of the “other capital” item, which mostly consists of inter-company loans.

Portfolio investment equity net outflows rose substantially in 2000, to €266.0 billion (from €49.4 billion in 1999). In 2000, both direct investment and portfolio investment equity accounts were strongly affected by the acquisition of companies through the exchange of shares. In most cases, in accordance with international standards, the investment in the respective firm was recorded as direct investment and the settlement of the transaction in shares as portfolio equity investment. In particular, in early 2000, a single transaction resulted in a very high inflow of direct investment and an outflow of portfolio investment/equity of a similar size.



**Hospital Infantil Virgen del Rocío, Niños Ud.
Oncología Pediátrica, Seville, Spain**

Designed by children at the hospital. Untitled

Chapter II

Central bank operations

I Monetary policy implementation

I.1 Overview

The operational framework for the implementation of the single monetary policy worked efficiently in 2000, confirming the positive overall experience of 1999. Therefore, no significant changes were made within the framework in the course of the year, with the exception of a switch from a fixed rate tender procedure to a variable rate tender procedure for the main refinancing operations (MROs) and the publication of the estimated aggregate liquidity needs of the banking system.

The ECB published a revised version of the document entitled “The single monetary policy in Stage Three: General documentation on Eurosystem monetary policy instruments and procedures” (General Documentation) on 5 December 2000. This document contains a detailed description of the monetary policy instruments and procedures applied by the Eurosystem. The revised version includes the changes to the operational framework endorsed by the Governing Council of the ECB between the publication of the previous versions of the General Documentation on 18 September 1998 and 31 August 2000. The overall design of the operational framework, comprising the three main elements, namely open market operations, standing facilities and minimum reserves, remains unchanged.

Among the open market operations, the MROs are the most important, playing a pivotal role in steering liquidity conditions and signalling the stance of monetary policy. They provide the bulk of liquidity to the financial sector. They are liquidity-providing reverse transactions, conducted as standard tenders at weekly intervals and with a maturity of two weeks. Moreover, the Eurosystem executes longer-term refinancing operations (LTROs) with a maturity of three months. These operations are aimed at providing longer-term refinancing to the financial sector, on a monthly basis, without the intention of sending signals to the market or

guiding market interest rates. In addition, the Eurosystem may conduct other types of open market operations in order to smooth the effects on interest rates caused by unexpected liquidity fluctuations in the market (known as fine-tuning operations) or with a view to adjusting the structural position of the Eurosystem vis-à-vis the financial sector (known as structural operations). In 2000 the Eurosystem conducted fine-tuning operations on two occasions, while no structural operations were executed.

The standing facilities are aimed at providing and absorbing overnight liquidity, signalling the general stance of monetary policy and setting an upper and a lower limit for overnight market interest rates.

Besides the standing facilities, the Eurosystem requires credit institutions to hold minimum reserves consisting of cash balances with the Eurosystem equal to 2% of their short-term liabilities. The purpose of this requirement is the stabilisation of money market interest rates and the enlargement of the liquidity deficit of the banking system vis-à-vis the Eurosystem. The stabilisation of money market rates is facilitated by the fact that the reserve requirement must only be fulfilled on average in a one-month maintenance period. This has a significant smoothing effect on the demand for reserves by credit institutions and thereby also on the behaviour of money market interest rates. This also enables the Eurosystem, under normal circumstances, to limit its open market operations to MROs and LTROs. As the required reserves are remunerated at the average rate, over the maintenance period, of the Eurosystem’s MROs, they do not entail any significant cost for the banking industry.

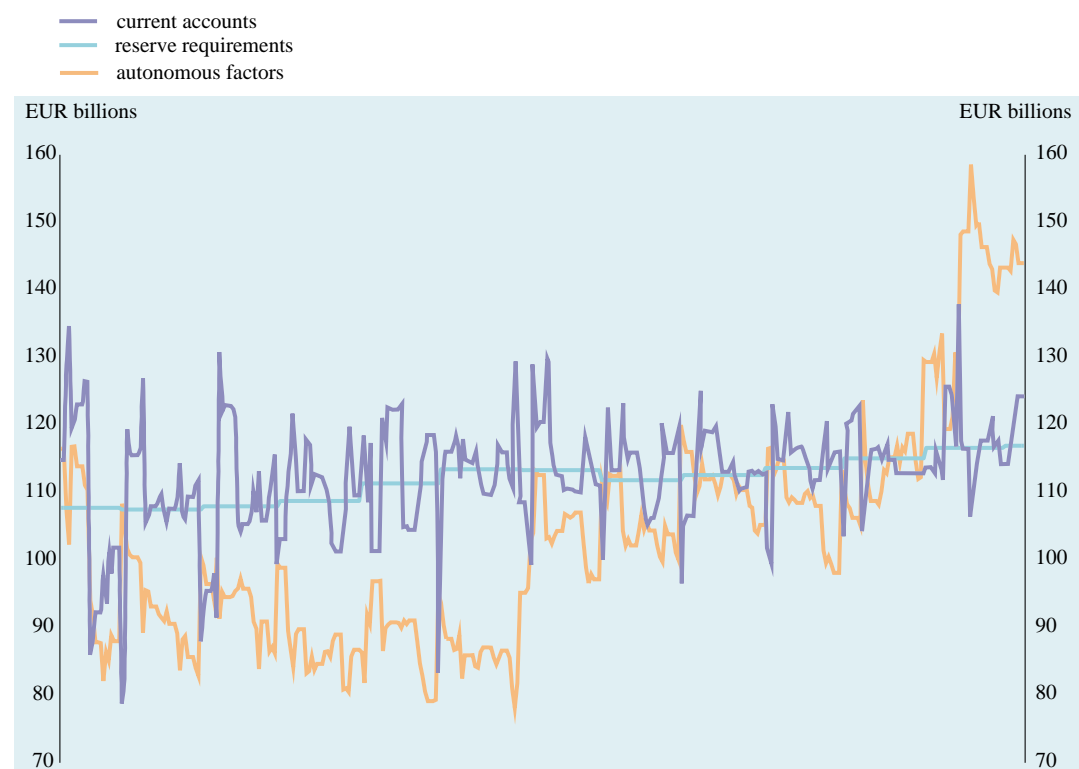
In its management of the liquidity conditions in the euro area through open market operations, the ECB focuses on the interbank market for reserves. In this context, reserves are understood as being the current account deposits that credit institutions in the euro

area hold with the Eurosystem in order to fulfil the minimum reserve requirements. The supply of such reserves is determined by the net effect of the liquidity provided through monetary policy operations and the liquidity withdrawn by so-called “autonomous factors”. The latter refer to the central bank’s balance sheet items which do not depend on monetary policy operations, such as banknotes in circulation, government

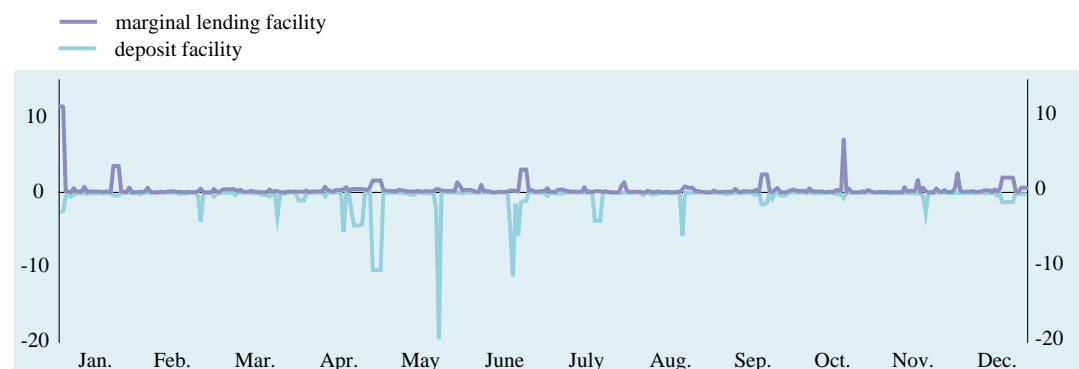
deposits, items in the course of settlement and net foreign assets. The level of the autonomous factors averaged €103.1 billion in 2000, ranging from €78.2 billion to €158.6 billion (see Chart 18). The average level of the autonomous factors in 2000 was €19.8 billion higher than in 1999. The day-to-day movements of the autonomous factors are often considerable; changes in the order of €10 billion are relatively frequent.

Chart 18

Liquidity factors and the use of standing facilities in the euro area in 2000



Standing facilities



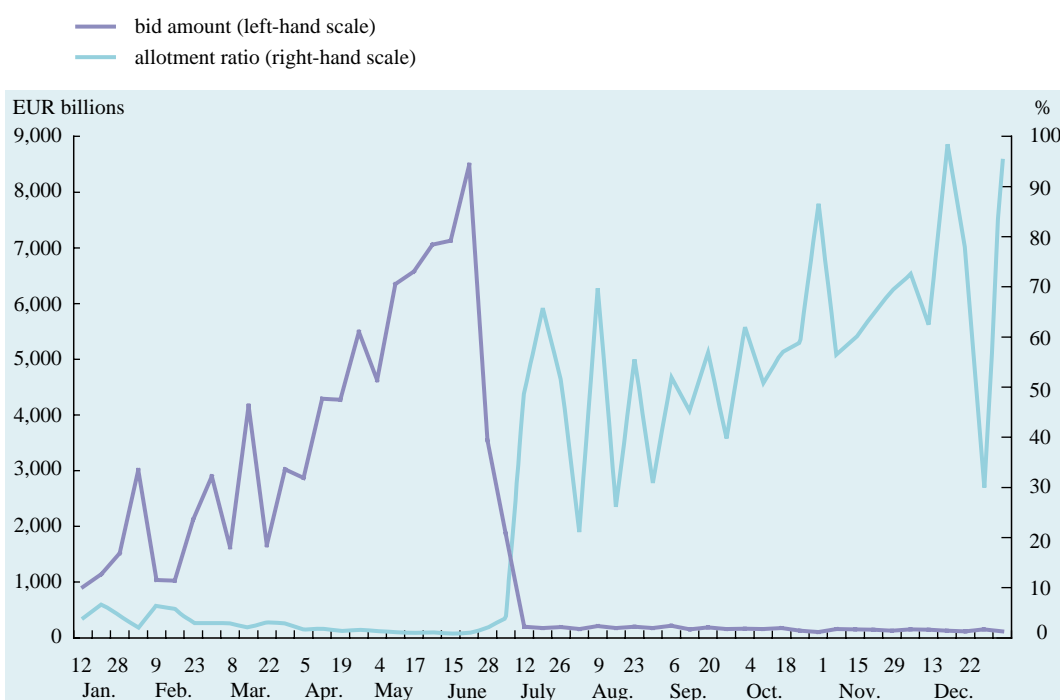
Government deposits with some of the NCBs represent the most volatile of these factors. The volatility of the government deposits (measured by the standard deviation of the daily changes) amounted to more than €4.9 billion, compared with around €1.0 billion for banknotes.

In 2000 the average level of reserve requirements of credit institutions in the euro area amounted to €111.8 billion, which was €10.2 billion or 10% higher than in 1999. The rise in the level of reserve requirements, together with the increase in the autonomous factors, caused the overall liquidity deficit of the banking sector vis-à-vis the Eurosystem to increase by €29.8 billion or 16% compared with 1999. In 2000 the average daily amount of liquidity provided through the open market operations amounted to €213.1 billion, while the use of the standing facilities resulted in a daily net withdrawal of liquidity of €0.2 billion.

1.2 The main refinancing operations

In 2000 the Eurosystem conducted a total of 51 MROs. The allotment volumes varied between €35 billion and €128 billion, with the average amounting to €80 billion. Of all the liquidity provided through regular open market operations, 74% was supplied by the MROs. In 1999 and during the first half of 2000 all MROs were conducted as fixed rate tenders. However, in response to the severe overbidding which had developed in the context of the fixed rate tender procedure, the Governing Council decided, on 8 June 2000, to switch to a variable rate tender procedure (American auction procedure) as from the operation to be conducted on 27 June 2000. At the same time, the Governing Council decided to establish a minimum bid rate for the purpose of signalling the monetary policy stance, which had been indicated in the previous procedure by the rate applied to the fixed rate tenders. The minimum bid rate was initially set at the same level as the rate applied to the previous fixed rate tender operation. When

Chart 19
Total bid amount and allotment ratio in 2000



announcing the switch to the variable rate tender, it was highlighted that the change of tender procedure was not intended as a change in the monetary policy stance. It was also emphasised that the Governing Council would retain the option of reverting to fixed rate tenders, if and when this was deemed appropriate.

The price mechanism of the variable rate tender procedure encourages the Eurosystem's counterparties to bid in line with their liquidity needs. The switch from a fixed rate tender procedure to a variable rate tender procedure therefore had a significant impact on the bidding behaviour in the MROs (see Chart 19). The average amount of bids submitted in the MROs conducted as fixed rate tenders in the first half of 2000 was €3,614 billion, indicating a substantial increase compared with 1999, when it had been €954 billion. As a consequence, the average allotment ratio fell from around 11% in 1999 to 2.7% in the first half of 2000. The largest bid, €8,491 billion, was recorded in the operation on 6 June 2000. In the last two MROs executed prior to the announcement of the switch to the variable rate tender, the allotment ratio was below 1%. The strong rise in bids in the first half of 2000 was exacerbated by the fact that, during most of that period, there were market expectations of interest rate hikes by the ECB, and short-term money market rates were often significantly above the main refinancing rate. This made it attractive for banks to bid for large amounts of liquidity from the central bank.

Following the switch to a variable rate tender procedure, the amount of bids fell sharply. The average aggregate bid amount in the operations conducted from 27 June 2000 to the end of the year was €161 billion, while the average allotment ratio was 58%. The switch to the variable tender procedure caused the number of counterparties participating in the MROs to fall from an average of 814 in the first half of 2000 to 640 in the second half. In the variable rate tenders, the average spread between the

minimum bid rate established by the Governing Council and the marginal bid rate was 8 basis points. The largest observed spread between the marginal and the minimum bid rates was 43 basis points on 30 August 2000, reflecting the strong rate hike expectations prevailing at the time. The spread between the marginal rate and the average weighted rate amounted to 2 basis points on average, with a maximum of 6 and a minimum of 0 basis points. The small size of this spread indicates that the expectations of counterparties regarding the marginal rate of the operations were relatively homogeneous and that the volumes of bids submitted at considerably higher rates were small.

The switch to the new tender procedure was accompanied by a decision to start publishing an estimate of the aggregate liquidity needs of the banking system in order to facilitate the task of counterparties in preparing their bids. The liquidity needs of the banking system relate to two groups of items. The first is the reserve requirements and the second is the net result of all other factors affecting the consolidated balance sheet of the Eurosystem, i.e. the autonomous factors. Of these two components, the reserve requirements are generally known with a high degree of accuracy a few days after the start of the maintenance period, while the estimate of the autonomous factors is less certain. In 2000 the average absolute forecast error (i.e. the average absolute difference between the estimated value of the autonomous factors published once a week for the nine subsequent days and the corresponding outcome) was €1.11 billion. The standard deviation of the difference between the estimated and the actual values was €1.34 billion.

1.3 The longer-term refinancing operations

In addition to the MROs, the Eurosystem also conducts LTROs, which are liquidity-providing reverse transactions with a monthly frequency and with a maturity of

three months. On average over the year, LTROs provided about 26% of the total refinancing through regular open market operations. LTROs are not, as a rule, conducted with the intention of steering the liquidity situation, of sending signals to the market or of guiding market interest rates. In order for the Eurosystem to act as a rate-taker, LTROs have been conducted in the form of variable rate tenders with pre-announced allotment volumes. The American auction procedure was applied. While the first six LTROs in 2000 had a volume of €20 billion, the last six amounted to €15 billion. On average over the year, a volume of liquidity of €17.5 billion was provided through this type of operation. On average, 270 counterparties participated in the LTROs in 2000.

1.4 Other open market operations

In 2000 the Eurosystem carried out two fine-tuning operations. The first of these aimed at absorbing the ample liquidity prevailing at the start of the year, which was due, on the one hand, to the ECB's commitment to prevent liquidity constraints during the transition to the new millennium and, on the other, to the heavy recourse of the Eurosystem's counterparties to the marginal lending facility on 30 December 1999. The operation was conducted as a liquidity-absorbing fine-tuning operation with a one-week maturity on 5 January 2000 and was carried out by means of a collection of fixed-term deposits in a variable rate, quick tender with a pre-announced maximum bid rate of 3%. While the announcement was for an intended allotment amount of €33 billion, the bids amounted to only €14.4 billion. Of the 210 counterparties eligible for the Eurosystem's fine-tuning operations, 43 participated in the operation. The second fine-tuning operation was related to unexpected heavy recourse to the deposit facility of €11.2 billion on 20 June 2000, which caused liquidity tightening towards the end of the maintenance period. The Eurosystem

conducted the operation on the following day, specified as a liquidity-providing variable rate transaction, in the form of a quick tender with overnight maturity. The bids amounted to €18.8 billion, while the amount allotted was €7.0 billion. 38 counterparties participated in the operation.

1.5 Standing facilities

The width of the interest rate corridor determined by the two standing facilities remained unchanged at 200 basis points throughout the year. Both the marginal lending rate and the deposit rate were set symmetrically, implying a spread of 100 basis points between each rate and the fixed tender rate or the minimum bid rate of the MROs. The average use of both standing facilities declined compared with the previous year, indicating that the reserve management of the Eurosystem's counterparties had become more effective and that, on average, the liquidity management by the Eurosystem achieved more balanced liquidity conditions at the end of the maintenance periods.

Over the year, average daily recourse to the marginal lending and deposit facilities amounted to €0.4 billion and €0.5 billion respectively. Normally, recourse to standing facilities is relatively low during most of the maintenance period, as can be seen from Chart 18 above. In particular, counterparties generally use the deposit facility only after they have fulfilled their reserve requirements, which – for most credit institutions – occurs only on the last few days of the maintenance period. Accordingly, about 85% of the use of the deposit facility in 2000 took place in the last five days of the maintenance period. The same applies, although to a lesser extent, to the use of the marginal lending facility.

Sometimes the use of the standing facilities can be substantial owing either to exceptional circumstances, such as those described in Section 1.4 above, or to technical problems in settling payments.

1.6 The minimum reserve system

The average level of reserve requirements of credit institutions in the euro area amounted to €111.8 billion in 2000. The actual level of the aggregate reserve requirements varied between €107.5 billion (during the maintenance period ending on 23 February 2000) and €116.6 billion (during the maintenance period ending on 23 December 2000). Of the 7,521 credit institutions subject to minimum reserves, 5,304 fulfil their requirement directly with the relevant NCBs of the Eurosystem, while others fulfil them indirectly through an intermediary. The reserve holdings of banks fluctuated between €78.7 billion and €137.8 billion in the course of the year, indicating that a substantial buffer against unexpected liquidity withdrawals was available (see Chart 18). Indeed, the EONIA showed limited volatility in 2000. The standard deviation of its daily changes was only 14 basis points, despite the very low frequency of fine-tuning operations. Consequently, the two main functions of the minimum reserve system, namely the stabilisation of money market interest rates and the enlargement of the structural liquidity deficit of the banking sector, were successfully fulfilled.

As a consequence of the smooth functioning of the minimum reserve system, no changes were made to its main features, i.e. to the averaging provisions, to the duration of the maintenance period (one month, starting on the 24th of each month and ending on the 23rd of the following month) or to the remuneration of the required reserves (remuneration at the average of the marginal interest rates of the MROs relevant for the reserve maintenance period). Similarly, no changes were made to the reserve ratio (which remained at 2% of the relevant liabilities), the reserve base or the amount of the lump-sum allowance (€100,000) deductible from the required reserves. The only new elements introduced into the system in 2000 were the amendments to Regulation (EC) No. 2818/98 of the European Central Bank on the application of minimum

reserves (ECB/1998/15) and Regulation (EC) No. 2819/98 of the European Central Bank concerning the consolidated balance sheet of the monetary financial institutions sector (ECB/1998/16)¹. The purpose of these amendments was to specify more clearly how mergers and divisions of institutions affect their reserve requirements and to improve procedures regarding the exchange of information between credit institutions and the NCBs on the reserve requirement figures. This latter amendment, in particular, has made it possible for the Eurosystem to have at its disposal definitive figures on reserve requirements before the end of the maintenance period, which has improved the precision of liquidity management. Furthermore, the new procedure eliminates late revisions to reserve requirements. The new Regulations became effective in November 2000.

Furthermore, in order to enhance transparency as regards the sanctions policy of the ECB in the field of minimum reserves, the ECB made public on 2 February 2000 the penalty interest rate applied in the case of breaches of the obligation to hold minimum reserves. Normally, the penalty rate is the marginal lending rate plus 2.5 percentage points. In the event of repetitive breaches, i.e. in cases where an institution fails to fulfil its reserve requirements more than twice during any 12-month period, the penalty rate is the marginal lending rate plus 5 percentage points. The number of breaches of reserve requirements continued to decline in 2000. The average number of infringements per maintenance period was 92, whereas in 1999 it was 139. Moreover, in most cases, the deficiencies were small. Around 80% of the sanctions imposed were for amounts below €500.

¹ See the ECB Regulation of 31 August 2000 (ECB/2000/8).

1.7 The Eurosystem's eligible collateral and its use for credit operations

The Statute of the ESCB demands that all the Eurosystem's credit operations be covered by adequate collateral. The collateral framework of the Eurosystem is designed to protect the Eurosystem against incurring losses in its monetary policy and payment systems operations (see Section 5 below on risk management), to ensure the equal treatment of counterparties and to enhance operational efficiency. Common eligibility criteria are applied to collateral accepted for credit operations conducted by the Eurosystem. At the same time, due regard is shown to differences in central bank practices and financial structures across the euro area and to the need on the part of the Eurosystem to ensure sufficient availability of adequate collateral for its credit operations. According to Article 102 (ex Article 104a) of the Treaty, privileged access by public institutions to financial institutions is prohibited; accordingly, no discrimination should be made in the collateral framework on grounds of the public or private nature of the issuers.

In order to take account of existing differences in the financial structure of Member States, assets eligible for credit operations include a large number of different instruments. A distinction is made between two categories of assets eligible for the credit operations of the Eurosystem. These two categories are referred to as "tier one" assets and "tier two" assets respectively. This distinction has no bearing on the quality of the assets and their eligibility for the various types of Eurosystem monetary policy operations, with the exception that tier two assets are not normally expected to be used by the Eurosystem in the case of outright transactions. Tier one assets consist of marketable debt instruments fulfilling uniform euro area eligibility criteria specified by the ECB. Tier two assets consist of assets which are of particular importance for national

financial markets and banking systems and for which eligibility criteria are established by the NCBs, subject to the minimum eligibility criteria established by the ECB. Tier two assets may be marketable or non-marketable debt instruments or they may consist of equities. A public list of tier one and marketable tier two assets is updated weekly and published by the ECB on its website (www.ecb.int). As at end of December 2000, the amount of total marketable eligible assets potentially available for Eurosystem operations was just over €6,300 billion (up from €6,150 billion in January 2000). Eligible assets actually held by credit institutions accounted for approximately one-third of this total amount. The overwhelming proportion of this amount (93%) was composed of tier one assets, while the remaining 7% was made up of tier two assets (over half of this amount being equities valued at market prices). 57% of the assets were government securities, 32% were securities issued by credit institutions and the remaining 11% were assets issued by non-financial corporations. In terms of maturities, 85% of the assets were long-term bonds, while medium-term notes, short-term securities and equities each represented approximately 5% of the total assets. Of the total amount of marketable eligible assets, approximately 10% were effectively put forward or deposited by counterparties to secure the Eurosystem's monetary policy and intraday credit operations throughout the year.

Eurosystem counterparties may use eligible assets on a cross-border basis, i.e. obtain funds from the NCB of the Member State in which they are established by making use of assets located in another Member State (see also Section 2.2). In the year under review, predominantly domestic collateral was used by counterparties; the cross-border use of collateral remained stable at approximately 17%, with almost all of the collateral used cross-border being accounted for by tier one assets.

1.8 Participation of the Eurosystem's counterparties in monetary policy operations

The Eurosystem's monetary policy framework allows a broad range of counterparties to participate in monetary policy operations. All credit institutions subject to minimum reserves may access the standing facilities and participate in open market operations based on standard tenders. However, counterparties must also fulfil any operational criteria specified in the contractual or regulatory arrangements applied by the Eurosystem so as to ensure the efficient conduct of monetary policy operations. As a consequence, about 3,600 of the around 7,500 euro area credit institutions subject to minimum reserves at the end of December 2000 had access to the deposit facility, and 3,000 to the marginal lending facility. About 2,500 credit institutions could participate in open market operations based on standard tenders. A limited group currently consisting of around 200 institutions has been selected as eligible for fine-tuning operations.

Compared with the situation prevailing at the end of 1999, the total number of credit institutions declined by around 400, 200 of which had access to the standing facilities. This decrease was mainly due to consolidation in the banking industry. No relevant change occurred, however, in the overall number of institutions with access to open market transactions in 2000 compared with the end of 1999.

The effective participation of counterparties in the Eurosystem's main refinancing operations ranged from 655 to 923 bidders during the time when the fixed rate tender procedure was applied (i.e. in the first half of 2000), while it ranged from 496 to 800 in the second half of 2000, when the variable rate tender procedure was applied. Generally, the overall number of bidders from one week to the next was more volatile during the fixed rate tender period than in the variable rate tender period. Participation in LTROs ranged

from 165 to 354 counterparties during the year. On average, the number of participants decreased in the second half of 2000, compared with the first half. The number of counterparties eligible for fine-tuning operations decreased during 2000 from 211 to 198.

1.9 Money market activity

In 2000 the euro area money market functioned smoothly and the successful process of integration initiated in 1999 was confirmed, thereby contributing to an efficient re-distribution, throughout the euro area, of the liquidity provided by the Eurosystem through its monetary policy operations.

According to available information, overall money market activity in the euro area increased compared with 1999. In the interbank market for deposits, in which banks exchange short-term liquidity without the guarantee of collateral, activity remained steady compared with 1999, while it grew significantly in other segments of the money market, including the repo market and, particularly, the interest rate swap market, where activity may have doubled compared with 1999. Activity in the unsecured deposit market seems to have concentrated further on very short-term maturities, notably in overnight transactions, while repo market activity increasingly appears to have concentrated on slightly longer maturities (of up to one month). Most of the increase in activity in the very liquid interest rate swap market is attributed to the success of EONIA-indexed transactions.

As regards developments in the short-term securities markets (Treasury bills, commercial paper and certificates of deposit), some progress was made regarding integration, although it remained limited compared with that prevailing in other segments of the money market. Cross-border activity within the euro area increased somewhat.

2 Payment and settlement systems operations

2.1 The TARGET system

The Trans-European Automated Real-time Gross settlement Express Transfer (TARGET) system operated successfully throughout 2000 and is now recognised by market participants as the core euro payment system. It provides an efficient service for time-critical large-value payments, especially those related to money market and foreign exchange market operations.

TARGET upgrade

On 20 November 2000 the TARGET 2000 upgrade – the first common TARGET software release since the system commenced live operations in January 1999 – went live. The upgraded software included the new message format for customer payments MT103 (and its straight-through processing version, the MT103+). This new standard facilitates the implementation by banks of the transparency requirements set out in Directive No. 97/5/EC of the European Parliament and the Council of 27 January 1997 on cross-border credit transfers. All TARGET components were modified before or during the weekend of 18 and 19 November 2000, the same weekend as the SWIFT network was updated.

TARGET operations in 2000

In 2000 the daily average of payments processed by the system as a whole (i.e. both cross-border and domestic payments) was 188,157, representing a value of €1,033 billion (see Table 6).

TARGET cross-border traffic in 2000 amounted to 41.8% of the total TARGET value, compared with 38.9% in 1999, and to 21.2% of the total TARGET volume, compared with 17.6% in 1999. Of the cross-border TARGET payments, 96.5% in terms of value and 65.5% in terms of volume were

interbank transactions, with the remainder being customer payments. The average value of a cross-border interbank payment was €10.8 million and the average value of a cross-border customer payment was €1.1 million. Information on peak traffic days in terms of volume and value is provided in Table 7.

Further statistics can be found on the ECB's website at www.ecb.int under the TARGET heading in the "Payment statistics" section.

Table 6
Payment traffic in TARGET *)

Volume	1999	2000	Change, %
Overall			
Total	42,257,784	47,980,023	13.5
Daily average	163,157	188,157	15.3
Domestic			
Total	34,804,458	37,811,112	8.6
Daily average	134,380	148,279	10.3
Cross-border			
Total	7,453,326	10,168,911	36.4
Daily average	28,777	39,878	38.6
Value, EUR billions			
	1999	2000	Change, %
Overall			
Total	239,472	263,291	9.9
Daily average	925	1,033	11.7
Domestic			
Total	146,236	153,253	4.8
Daily average	565	601	6.4
Cross-border			
Total	93,236	110,038	18.0
Daily average	360	432	20.0

*) In 1999: 259 operating days; in 2000: 255 operating days.

Table 7
Peak traffic in TARGET in 2000

Volume		
Overall	283,745	29 Dec.
Domestic	236,658	29 Dec.
Cross-border	60,770	29 Sep.
Value (EUR billions)		
Overall	1,551	30 Nov.
Domestic	1,032	30 Nov.
Cross-border	586	30 June

TARGET availability in 2000

After a large number of tests were carried out in 1999, the transition to the year 2000 passed without any significant problems for TARGET.

TARGET availability clearly improved in 2000, showing that the teething problems encountered in 1999 had been successfully overcome. The number of incidents in TARGET during 2000 decreased substantially, by 70%.

TARGET calendar

In 2000, in addition to Saturdays and Sundays, TARGET was closed on New Year's Day, Good Friday (Catholic/Protestant), Easter Monday (Catholic/Protestant), 1 May (Labour Day), Christmas Day and 26 December 2000. In some countries in which these days were normal business days, the NCBs kept their real-time gross settlement (RTGS) systems open for limited domestic operations. For 2001, the Governing Council has decided to have an exceptional additional closing day on 31 December in order to safeguard the smooth conversion of retail payment systems and internal bank systems to the euro.

In December 2000 a long-term calendar for TARGET operating days was established which will be applicable as from 2002 until further notice. Accordingly, TARGET will be closed, in addition to Saturdays and Sundays, on New Year's Day, Good Friday (Catholic/Protestant), Easter Monday (Catholic/Protestant), 1 May (Labour Day), Christmas Day and 26 December. On these closing days, TARGET as a whole, including all the national RTGS systems, will be closed completely. Some operational and legal adaptation might be necessary in some Member States. Therefore, the competent authorities of those Member States have been invited to take action, where necessary, to remove any legal impediment to implementing the long-term calendar for TARGET operating days. A long-term calendar was deemed necessary to eliminate uncertainties for

financial markets and, as indicated by the banking sector, to avoid problems arising from different national TARGET operating days. On TARGET closing days no standing facilities will be available at the NCBs. These days will not be settlement days for the euro money market or for foreign exchange transactions involving the euro. The EONIA and the foreign exchange reference rate will not be published either. Furthermore, the correspondent central banking model (CCBM) for the cross-border use of collateral will be closed on TARGET closing days.

TARGET reimbursement scheme

On 1 January 2001 a TARGET reimbursement scheme was introduced for the benefit of TARGET participants in the event of TARGET malfunctioning. The scheme will apply whenever the same-day processing of payment orders within TARGET cannot be completed. The reimbursement scheme is intended to compensate participants for certain higher costs they incur when having recourse to the standing facilities of the Eurosystem in the event of a malfunctioning. In order to ensure a level playing-field, the scheme also applies to participants in euro RTGS systems of non-participating NCBs. The legal framework for this scheme is reflected in the "TARGET Guideline", which is to be published in the Official Journal of the European Communities and also made available on the ECB's website.

Relations with TARGET users

In 2000 the ECB and the NCBs maintained an ongoing dialogue with TARGET users in order to enable them to make the best possible use of the system. Regular meetings of the national TARGET User Groups were held. These meetings bring together the NCBs and the national banking communities. In addition, meetings were organised at the Eurosystem level. These ensured that the NCBs and the ECB were aware of, and better able to respond to, participants' business needs.

2.2 The correspondent central banking model

The CCBM came into operation on 4 January 1999. It was established to enable all Eurosystem counterparties and TARGET participants to use, on a cross-border basis, all eligible assets as collateral in either monetary policy or intraday credit operations. Since the start of Stage Three of EMU, the CCBM has been the main instrument in the cross-border use of collateral and it is increasingly being employed. In 2000 collateral submitted to the Eurosystem via the CCBM represented 15%, on average, of the total collateral provided. This percentage is remarkable when compared with the 3% of collateral held in custody through link arrangements between securities settlement systems (SSSs), the CCBM's only alternative for transferring cross-border collateral (see Chart 20). The remaining 82% of collateral is held domestically.

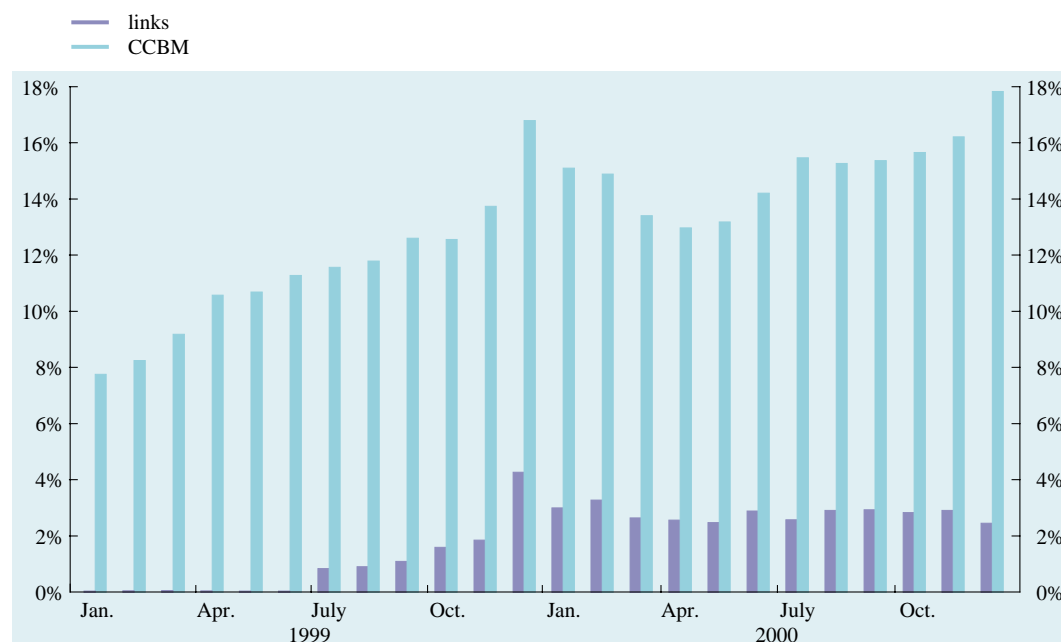
The total collateral provided to the Eurosystem refers to the sum of domestic collateral, cross-border collateral held via the

CCBM and cross-border collateral held via the links between SSSs. The first wave of links was approved in May 1999.

Throughout the year, assets held in custody by the Eurosystem through the CCBM averaged €100 billion (on average €114 billion was held by the ESCB). The main collateral provider (acting as correspondent central bank) was Italy, with 36% of the total assets held through the CCBM, followed by Germany with 17% and Luxembourg and Belgium with 15% each. The high amount of collateral provided by Luxembourg and Belgium is due to the fact that Clearstream Luxembourg and Euroclear, the two international central securities depositories (CSDs), are located in these countries.

The main users of collateral (acting as home central bank) were Germany, with 42% of the collateral held through the CCBM, Luxembourg (16%), the Netherlands (15%) and France (11%). Owing to the relative scarcity of domestic collateral in Ireland and Luxembourg, foreign collateral held via the

Chart 20
Developments in cross-border collateral as a percentage of total collateral provided to the Eurosystem



CCBM on a cross-border basis amounted to 54% of all collateral held in Luxembourg by counterparties and to 63% of that held in Ireland.

Of the two categories of assets eligible for Eurosystem credit operations, also referred to as tier one and tier two assets, the cross-border use of collateral mainly involves tier one assets.

Although the CCBM was designed as an interim solution, it will continue to operate at least until the market has developed comprehensive and fully effective alternatives

for the transfer of cross-border collateral. The establishment of direct links between SSSs has been an important first step in this direction. However, the use of the links to date has not been as extensive as expected. As a matter of fact, only 29 of the 62 eligible links are frequently and significantly used. The lack of delivery versus payment (DVP) features and the lack of harmonisation of the settlement procedures of domestic SSSs are the reasons most frequently quoted by users when they explain the low use of links. In this respect, the implementation of DVP features could lead to an increase in the use of links in the future.

3 Foreign exchange operations and investment of foreign reserve assets

The Eurosystem is responsible for holding and managing the foreign reserve assets of the EU Member States participating in EMU. Both the ECB and the NCBs hold and manage foreign reserve assets.

3.1 Foreign exchange operations of the ECB

In 2000 the ECB and the NCBs on behalf of the ECB conducted foreign exchange operations that consisted, on the one hand, of sales of foreign currency interest income, and, on the other, of intervention operations in the foreign exchange market.

The investment of the foreign currency component of the foreign reserve assets of the ECB from the start of 1999 led to an increase in their value by an amount corresponding to over €2.5 billion at the end of August 2000, mostly on account of interest income. In order to maintain the structure and risk profile of the balance sheet of the ECB as it stood at the beginning of 1999, the Governing Council decided on 31 August 2000 that inflows derived from the interest income of the foreign reserve assets would be sold against euro. These sales were initiated on 14 September 2000 and were

spread over a number of days, so that they were concluded in approximately one week.

On 22 September 2000 the ECB intervened in the foreign exchange market for the first time since the introduction of the euro. On the initiative of the ECB, the monetary authorities of the United States, Japan, Canada and the United Kingdom joined the ECB in a concerted intervention against the background of the exchange rate developments described in Chapter I. The concerted intervention was followed by unilateral intervention by the ECB on 3, 6 and 9 November, which were to be seen as a continuation of the concerted action.

3.2 The foreign reserve assets of the Eurosystem

At the end of 2000 the ECB net foreign reserve assets amounted to €43.5 billion, as compared with €46.8 billion at the end of 1999. This change reflects various factors such as the sales of the interest income earned on the ECB's foreign reserves, the foreign exchange intervention carried out by the ECB during the year and the quarterly revaluation at market prices of the foreign reserves assets. The ECB can make further calls on the NCBs' foreign reserve assets

under the conditions defined in secondary European Community legislation (Council Regulation (EC) No. 1010/2000 of 8 May concerning further calls of foreign reserve assets by the European Central Bank).

The Governing Council has defined the currency distribution of the foreign reserves of the ECB, consisting of gold, US dollars and Japanese yen, on the basis of prospective operational needs and may change it if and when it deems this appropriate. There is no active trading of the currency composition of reserves for investment purposes, in order to avoid any interference with the single monetary and foreign exchange policy of the Eurosystem. In line with the Central Bank Gold Agreement of 26 September 1999, which stipulated that the signatories would not increase their activity in gold lending and gold futures and options markets, gold assets continue not to be managed actively.

The NCBs continue to manage their own foreign reserves as they see fit, but their operations are subject, above a certain limit, to notification to or approval of the ECB, in order to ensure consistency with the single monetary policy.

As regards the foreign reserves of both the ECB and the euro area NCBs, a template on “international reserves and foreign currency liquidity” is published monthly, with a one-month lag, in line with the IMF’s Special Data Dissemination Standards, in addition to the consolidated financial statement of the Eurosystem which is published on a weekly basis on the ECB’s website (www.ecb.int).

3.3 Developments in the Eurosystem’s approach to foreign reserve management

The aim behind the management of the ECB’s foreign reserves is to ensure that, at any point in time, the ECB has an adequate amount of liquid resources at its disposal for any foreign exchange intervention, if and

when the Governing Council decides that this is necessary. When interventions take place, as was the case in 2000, the foreign currency assets of the ECB are used. Liquidity and security are therefore the basic requirements for the investment of the ECB’s foreign reserves. Subject to these constraints, the ECB’s foreign reserves are managed to maximise their value.

The ECB’s foreign reserves are managed in a decentralised manner by the euro area NCBs, on the basis of key investment guidelines and a strategic benchmark determined by the Governing Council and a tactical benchmark decided by the Executive Board. In addition to the currency distribution, the ECB defines four key parameters for the investment of its foreign reserves. First, a two-level investment benchmark (i.e. a strategic benchmark and a tactical benchmark) for each currency; second, permitted deviations from these benchmarks in terms of the interest rate risk; third, a list of eligible instruments and operations; and, fourth, limits for credit risk exposures (see also Section 5). NCBs then use the leeway given to them by the deviation bands and risk limits to maximise the return on the portfolios they manage on behalf of the ECB, with continuous monitoring by the ECB. When conducting the ECB’s investment activity, NCBs act on behalf of the ECB, on a disclosed agency basis, so that the ECB’s counterparties can distinguish the operations carried out by the NCBs on behalf of the ECB from those carried out by NCBs while managing their own reserves.

Since its launch, this framework has functioned satisfactorily, but work is continuously being carried out with a view to refining and improving it. This is the case especially with regard to the selection of eligible assets and instruments in which the foreign reserves are invested. The range of instruments was initially somewhat limited and a prudent attitude will continue to be adopted. However, a gradual extension of the permissible investment instruments has been undertaken.

4 The ECB's own funds management

The ECB has been endowed with an initial capital of approximately €4,000 million. The principal purpose of the capital is to provide the ECB with own funds which should provide it with sufficient income, while maintaining an appropriate level of security. Since these funds are currently invested in euro-denominated assets, it is of the utmost importance to prevent any interference with the Governing Council's monetary policy decisions. Thus, in order to prevent the misuse of privileged information in the management of the ECB's own funds and to protect the ECB's reputation, a "Chinese wall" was established, i.e. a strict functional and physical separation between the unit managing the own funds and the other units of the ECB. In addition, the ECB follows a relatively passive investment approach, particularly in the money market area, in order not to generate any monetary policy signals.

The decision-making bodies of the ECB determine the key parameters for the investment of own funds in the European bond markets. Within that framework, the aim is to maximise the return on the own funds portfolio.

The list of eligible counterparties for the ECB's own funds investment and the relevant legal documentation, while prepared separately from those relating to the management of the ECB's foreign reserve assets, meet the same criteria of prudence and efficiency. In line with the gradual extension of the range of permissible investment instruments, the active use of bond futures for managing own funds began in 2000 and an automatic securities lending programme for own funds was launched in February 2001.

5 Risk management

5.1 Introduction

The ECB and the Eurosystem NCBs incur risks when managing assets, e.g. foreign reserve assets and own capital, in implementing monetary policy and in payment systems operations. These risks are mainly of a credit, market, liquidity and operational nature. There is a framework in place for identifying and managing these risks on an integrated and centralised basis in line with best market practices. The ECB also provides ongoing assessments and analytical expertise in risk management which feed into a dialogue at the Eurosystem level on risk management practices. The main sources of risk, including the type of operation and the method of management, are described below.

5.2 Investment operations

The financial investments of the ECB consist of the ECB's foreign currency reserves and own capital, denominated in euro. The performance

and risks of the investment operations are reported regularly to the relevant portfolio managers and also to the senior decision-makers within the ECB and the Eurosystem.

The ECB's investments are mainly driven by currency distribution and strategic investment benchmarks. The strategic benchmarks, of which there is one for each currency portfolio, are constructed in-house and specify the types of assets and appropriate maturities in which the portfolio managers can invest. Considerations of risk and return are at the forefront of the decision-making process when these benchmarks are constructed.

The performance of both the benchmarks and the actual portfolios is measured in compliance with the Association of Investment Management and Research (AIMR) recommendations. Investment performance is also analysed to identify the sources of performance.

The ECB takes a prudent stance towards risk in its investment decisions. Great emphasis is

placed on high creditworthiness and liquidity, and the latter is especially relevant for the foreign currency reserves. The ECB follows a careful, analytical and proactive approach which ensures that the full risk implications of decisions are understood. There is a detailed credit and market limits system in place. Credit limits are decided on a global basis for the ECB and then distributed to the NCBs according to the amount of funds they are managing on behalf of the ECB. Compliance is monitored centrally. Market risk limits are applied consistently throughout the Eurosystem with all similar portfolios subject to the same market risk constraints, regardless of size. Liquidity risk is also monitored and closely observed. Finally, the value at risk of all portfolios is measured and reported regularly. The value at risk figure captures and aggregates the most significant forms of price risk for the ECB's investments.

5.3 Monetary policy and payment systems operations

The Eurosystem's operations include monetary policy and payment systems operations (principally via the TARGET system, through the provision of intraday liquidity). The Eurosystem is responsible for providing an adequate risk control framework for these operations. Specifically, the Eurosystem incurs a risk when a counterparty, in a contractual relationship with the Eurosystem, is unable to meet its credit obligations.

The Eurosystem ensures, through its risk control framework, that only assets deemed to have a sufficient credit quality are eligible as collateral for its operations. In the assessment of the credit standard of debt instruments, the Eurosystem takes into account, inter alia, available ratings by market agencies and the NCBs' own credit assessment systems, as well as certain institutional criteria to ensure particularly high protection for the holders. The ECB monitors the credit assessment provided by the NCBs' credit assessment systems.

In the event of the default of a counterparty, the Eurosystem can use collateral to recover

the liquidity provided. It is in such situations that the Eurosystem incurs market risk associated with the collateral received. The Eurosystem's risk control framework limits market and liquidity risks by applying appropriate and consistent risk control measures, primarily through haircuts and margin calls, to the assets delivered as collateral. To obtain an adequate level of risk control measures, the Eurosystem evaluates, in line with best market practices, parameters such as current and potential price developments and related price volatilities. In this regard, the Eurosystem's risk control framework also provides mark-to-market valuation principles which are followed on a daily basis in order to value the assets pledged as collateral.

In the course of 2000 some technical changes were made to the risk control measures applied to eligible assets. The changes introduced were purely technical and do not reflect changes in the collateral policy (i.e. eligibility criteria). Rather, they are aimed mainly at giving more homogeneity to the large range of existing haircuts applied to tier two assets. In this respect, four groups of instruments with relatively homogeneous liquidity characteristics have been identified. The revised risk control framework is also intended to facilitate checking procedures in the Eurosystem and to enhance the transparency of the risk control framework. For tier one assets, no changes have been introduced, but specific haircuts have been introduced for a particular kind of asset ("inverse floater securities").

5.4 Current developments

Efforts are being devoted to the continued improvement of the risk management framework of the Eurosystem. Current developments include the adoption of a more general treatment of liquidity risk of the assets underlying monetary policy and investment operations. Moreover, there have been significant shifts towards monitoring the financial risks of the ECB across its balance sheet.



Greece

Designed by Marios Spilopoulos. Untitled

Chapter III

Entry of Greece to the euro area

I Monetary, financial and economic developments in Greece

On 19 June 2000 during the summit in Santa Maria da Feira the ECOFIN Council confirmed that Greece had fulfilled the necessary conditions to adopt the single currency as of 1 January 2001. The Council based its decision on the Convergence Reports prepared by the ECB and the European Commission, the opinion of the European Parliament and a proposal from the European Commission. On the same day the Council also decided that the conversion rate between the drachma and the euro should be equal to the drachma's central rate against the euro in the exchange rate mechanism ERM II, i.e. GRD 340.750 to the euro. The convergence of the drachma towards its ERM II central rate had been facilitated by a 3.5% revaluation of its central rate on 17 January 2000 and had de facto already been successfully completed by mid-December 2000, some days before the irrevocable fixing of the conversion rate at which the euro replaced the Greek drachma on 1 January 2001.

In 2000 Greece continued to experience strong output growth above the average for the euro area. The rate of real GDP growth in 2000 was 4.1%, compared with 3.4% in 1999 (see Table 8). Growth was supported by strong domestic demand. The growth of private consumption accelerated from 2.9% in 1999 to 3.1% in 2000 and investment growth picked up substantially from 7.3% to 9.3%. Public investment continued to benefit strongly from the inflow of EU structural funds. The contribution of net exports to growth, which was 0.2 percentage point of GDP in 1999, turned negative to stand at -0.6 percentage point of GDP in 2000. Strong domestic demand resulted in an acceleration in the growth rate of imports (mainly investment goods, raw materials and passenger cars) from 3.9% in 1999 to 7.4% in 2000, only partly offset by the increase in exports. In addition, the considerable oil price increases in 2000 and the appreciation of the US dollar made imports significantly more expensive. The persistent and sizeable Greek goods

trade deficit was partially compensated for by substantial surpluses on the services account and by capital inflows in the form of both direct and portfolio investment. Nevertheless, the Greek current plus new capital account deficit rose to around 6.9% of GDP in 2000.

Employment is estimated to have grown by 1.2% in 2000. This is a considerable improvement compared with the negative growth rate for employment recorded in 1999 (-0.7%) and reflects the rapid expansion of the economy. Moreover, it is likely that recently introduced labour market programmes will have a positive impact on employment creation. Unemployment is estimated to have decreased from 12.0% in 1999 to 11.3% in 2000. However, the lack of timely employment data creates considerable uncertainty with regard to the actual labour market figures for 2000.

The average rate of HICP inflation in Greece during 2000 was 2.9% against 2.1% in 1999. The acceleration of inflation during 2000 was strongly influenced by the rise in oil prices and the appreciation of the US dollar. Furthermore, unit labour costs increased by around 1.5% in 2000 compared with 0.6% in 1999, and the inflation-reducing impact of the indirect tax cuts introduced in 1999 dropped out of the annual HICP rate. (For a discussion of the inflation differentials between Greece and the euro area, see Box 8 in Chapter IV.)

Fiscal consolidation continued in 2000. The government budget deficit followed a downward trend, declining from 1.8% of GDP in 1999 to 0.9% in 2000. The fiscal balance improved considerably faster than previously expected, which was mainly attributable to strong tax revenues. The government debt ratio is estimated to have decreased from 104.6% of GDP in 1999 to 103.9% in 2000. This relatively small reduction is due to the appreciation of the US dollar and the Japanese yen throughout most of 2000 which increased the drachma value of outstanding debt

denominated in foreign currencies and to financial operations such as equity injections into state-owned enterprises. The Greek Stability Programme, presented in December 2000, outlines budget surplus targets of 0.5% and 1.5% of GDP for 2001 and 2002 respectively. Government debt is projected to decline to 98.9% of GDP in 2001 and further to 96.0% in 2002.

During 2000 the monetary policy of the Bank of Greece continued to be geared towards the achievement of price stability. At the same time, the Bank of Greece aimed to secure a smooth transition to the euro, cutting its official interest rates mainly towards the end of the year. In January 2000 the central bank's 14-day deposit rate stood at 9.75%. By June, when the ECOFIN Council confirmed that Greece had fulfilled the necessary conditions to adopt the single currency, the Bank of Greece had lowered its main refinancing rate

to 8.25%. Following a number of intermediate steps, this rate was reduced to 4.75% on 27 December, thus bringing it fully into line with the minimum bid rate for the main refinancing operations of the ECB. The Greek three-month interest rate declined in parallel and, by the end of 2000, the short-term interest rate spread between Greece and the euro area had completely disappeared.

In February 2001 the spread between Greek long-term interest rates (as measured by the ten-year government bond yields) and comparable euro area rates amounted to 34 basis points, i.e. 56 basis points less than in January 2000 when Greek long-term interest rates stood at 6.6%. The resulting small spread in comparison with other euro area bond yields demonstrates the success of the stability-oriented policies pursued in Greece.

Table 8

Macroeconomic indicators for Greece

(annual percentage changes, unless otherwise indicated)

	1994	1995	1996	1997	1998	1999	2000	2000 Q1	2000 Q2	2000 Q3	2000 Q4
Real GDP	2.0	2.1	2.4	3.5	3.1	3.4	4.1	.	.	.	.
<i>Contribution to real GDP growth:</i> ¹⁾											
Real domestic demand including stocks	1.1	3.7	3.5	3.9	5.1	3.2	4.7	.	.	.	.
Net exports	0.9	-1.6	-1.1	-0.4	-2.0	0.2	-0.6	.	.	.	.
HICP	10.3	8.8	7.9	5.4	4.5	2.1	2.9	2.6	2.3	2.8	3.8
Compensation per employee	10.8	12.2	8.8	13.5	6.0	4.8	4.5	.	.	.	.
Unit labour costs, whole economy	10.7	11.6	5.9	9.3	6.4	0.6	1.5	.	.	.	.
Import deflator (goods and services)	5.6	7.5	5.0	2.7	4.2	1.2	6.1	.	.	.	.
Current plus new capital account (% of GDP) ²⁾	-0.1	-2.5	-3.7	-4.0	-3.0	-4.1	-6.9	.	.	.	.
Total employment	1.9	0.9	-0.4	-0.3	3.4	-0.7	1.2	.	.	.	.
Unemployment rate (% of labour force) ³⁾	8.9	9.1	9.8	9.7	11.2	12.0	11.3	.	.	.	.
Fiscal balance (% of GDP) ^{4), 5)}	-10.0	-10.2	-7.4	-4.0	-2.5	-1.8	-0.9	.	.	.	.
Consolidated gross debt (% of GDP) ⁴⁾	109.3	108.7	111.3	108.3	105.5	104.6	103.9	.	.	.	.
Three-month interest rate (% per annum) ⁶⁾	26.7	16.4	13.8	12.9	13.9	10.3	7.9	8.9	8.5	7.9	6.2
Ten-year government bond yield (% per annum) ⁶⁾	.	.	.	9.8	8.5	6.3	6.1	6.4	6.1	6.1	5.8
Exchange rate against the ECU or euro ^{6), 7)}	288	303	306	309	331	326	337	333	336	338	340

Sources: Eurostat, European Commission, national data and ECB calculations. Note: National accounts are according to the ESA 95.

1) Percentage points.

2) Bank of Greece data (settlement basis); data for 2000 are provisional.

3) ESA 95 basis.

4) Consistent with the Maastricht Treaty definition.

5) General government surplus (+) / deficit (-).

6) Average of period values.

7) Units of national currency per ECU until the end of 1998; thereafter, per euro.

Box 7

Statistical implications of the enlargement of the euro area to include Greece

The entry of Greece into the euro area represented the first occasion on which statistical series for the euro area have needed to include an additional Member State. A range of statistical issues thus needed to be addressed, concerning both data availability for the additional country and procedures for calculating the area-wide aggregates. To ensure smooth and timely availability of the new euro area statistics including Greece, statistical preparations have been stepped up since the ECOFIN Council decided on 19 June 2000 that Greece fulfilled the criteria for participating in the single currency as of 1 January 2001. The preparation of statistics for the enlarged euro area has been co-ordinated, where necessary, with the European Commission to ensure consistency in all statistical domains.

In summary, the enlargement of the euro area to include Greece as from 1 January 2001 has two main statistical implications. First, residents of Greece have become residents of the euro area. Second, the Greek drachma is a national denomination of the euro. Consequently, from a statistical perspective, the composition of the “rest of the world” and “foreign currencies” has changed. This in turn affects all monetary, financial and other economic statistics for the euro area as a whole.

For Greece this implied as from January 2001 an obligation to meet all the statistical requirements of the ECB as set out in Council Regulation (EC) No. 2533/98. The statistical requirements of the ECB are presented in the document “Statistical information collected and compiled by the ESCB” (May 2000). The Bank of Greece, as a member of the European System of Central Banks and the General Council of the ECB, was fully informed about the requirements of the ECB and was therefore ready to meet the statistical obligations covering monetary, banking, balance of payments and other financial statistics. In addition, the Bank of Greece had to carry out the necessary preparations for the integration of Greek credit institutions into the ECB minimum reserve system and to adapt the relevant statistical requirements.

For the existing euro area members the enlargement of the euro area to include Greece implied that, from January 2001 onwards, they had to report transactions (or flows) and positions with residents of Greece as part of the euro area, instead of as transactions and positions with non-euro area residents. The Greek drachma has to be recognised as a further national denomination of the euro until the completion of the transition to the euro (i.e. until the replacement of banknotes and coins expressed in the national legacy currencies by the euro).

During the second half of 2000 the ECB undertook all the necessary technical preparations for the data exchange with the Bank of Greece. It also assisted in making the necessary amendments to the statistical reporting framework of the existing euro area Member States. Regarding the publication of euro area statistics by the ECB, as for example in the statistical section of the ECB Monthly Bulletin, reference statistical series relating to the euro area will continue to cover the Member States making up the euro area at the time in question. This means that stock data, such as employment and Monetary Financial Institution (MFI) balance sheet data, and flow data, such as balance of payments statistics, referring to periods up to and including December 2000 cover the euro area of 11 participating countries, while data referring to periods or dates from January 2001 cover the extended euro area of 12 participating countries (i.e. including Greece). To the extent possible, absolute and percentage changes for 2001 calculated from a base in 2000 make allowance for the change in composition of the euro area.

For analytical purposes, historical data for the 11 euro area countries plus Greece for a number of key series have been made available in the January 2001 issue of the ECB Monthly Bulletin (pages 65* and 66* in the “Euro area statistics” section) and on the ECB’s website.

The Greek broad monetary aggregate M4N¹ grew by 10.4% in 2000, considerably above the 5-7% reference range set by the Bank of Greece. There are a number of reasons for the strong growth of M4N in 2000. First, there were a number of institutional changes with regard to the treatment of repos. Second, M4N was affected by portfolio redistributions into money market funds fuelled by the protracted decline in share prices. Third, the economic expansion was stronger than had been anticipated when the reference range was computed. Domestic credit also expanded rapidly during 2000, namely by 20.2% compared with 12.2% in 1999. This primarily reflected the rapid growth in credit to the private sector, attributable to the removal of the temporary reserve requirement on excess credit growth at the end of March 2000, the decline in interest rates, the dynamic growth of the economy and valuation differences on foreign currency loans.

Following the achievement of its goal to adopt the single currency, the main challenge for Greece is to ensure an appropriate national policy mix. The economy is likely to continue its rapid growth, not least in view of the expansionary impulse resulting from the necessary relaxation of monetary conditions in the run-up to euro area membership. In order to counter inflationary pressures, the Government needs to adopt a more restrictive fiscal policy. Furthermore, continued wage moderation must be ensured and further structural reforms must be introduced without delay. In this respect, there is a continued need for further legislative changes designed to address labour market shortcomings. Moreover, it is important to accelerate social security system reforms, to maintain the momentum of the privatisation programme, to increase the efficiency of the public administration and to ease the regulatory burden on the economy.

2 Legal aspects of the integration of the Bank of Greece into the Eurosystem

The ECB and the Bank of Greece put in place a number of legal instruments with a view to ensuring the integration of the Bank of Greece into the Eurosystem on 1 January 2001, the date on which Greece was to adopt the euro. This adaptation of the Eurosystem's legal framework was the consequence of the decision taken by the EU Council on 19 June 2000 to abrogate the derogation of Greece.² Prior to the above-mentioned EU Council Decision and pursuant to Article 122 (2) of the Treaty, the ECB reviewed the statute of the Bank of Greece and relevant Greek legislation in the light of Article 109 of the Treaty. On the basis of its findings, the ECB's assessment of the compatibility of Greek legislation with the Treaty and with the Statute of the ESCB was favourable in the ECB's "Convergence Report 2000" on Greece and Sweden. The introduction of the euro in Greece and the integration of the Bank of Greece into the Eurosystem initiated the following legal changes. The Bank of

Greece amended its statute by removing certain imperfections, which had been detected in 1998. The Bank of Greece consulted the ECB on its amended statute on 24 March 2000. An ECB Opinion proposing certain amendments to the draft statute of the Bank of Greece was adopted on 17 April 2000. Consequently, following a consultation by the Bank of Greece, on 27 June 2000 the Governing Council of the ECB adopted an ECB Opinion welcoming the provisions of the law ratifying the statute of the Bank of Greece. Like the national central banks of the other 11 euro area Member States in the past, the Bank of Greece submitted for

¹ M4N was an official monetary aggregate of Greece prior to its entry into the euro area. This concept did not fully coincide with the euro area broad monetary aggregate M3.

² Council Decision (EC) No. 427/2000 of 19 June 2000 in accordance with Article 122 (2) of the Treaty on the adoption by Greece of the single currency on 1 January 2001, OJ L 167, 7.7.2000, pp. 19-21.

consultation on 11 August 2000 a draft law concerning additional measures in relation to Council Regulations (EC) Nos. 1103/97, 974/98 and 2866/98, on the introduction of the euro.³ On 1 September 2000 an ECB Opinion was adopted which recognised the successful efforts on the part of the national legislator to ensure the compatibility of the national legislation with the Treaty and the Statute of the ESCB.

One of the repercussions of the EU Council Decision of 19 June 2000 was that the Council Regulations concerning the introduction of the euro had to be amended by adding Greece to the list of participating Member States and by determining the irrevocably fixed exchange rate of the Greek drachma to the euro.⁴ On 7 June 2000 the EU Council consulted the ECB on proposals for three Council Regulations amending the existing ones containing provisions concerning the introduction of the euro. The ECB provided its Opinion⁵ welcoming the proposals and the EU Council adopted three Regulations amending the existing ones in order to ensure that Greece would be subject to the same provisions as all other euro area Member States upon adoption of the euro.⁶

As regards the legal preparation for the integration of the Bank of Greece and pursuant to Article 27.1 of the Statute of the ESCB, the Governing Council adopted a Recommendation⁷ proposing external auditors for the Bank of Greece for the annual accounts starting from the financial year 2001.⁸ Finally, the ECB reviewed its legal framework and introduced, where necessary, amendments resulting from the fact that the Bank of Greece would be a fully participating national central bank as from 1 January 2001. The ECB also reviewed the Greek legal documentation implementing the legal framework of the Eurosystem in the areas of monetary policy and TARGET. In particular, the operating rules for HERMES, the system for the real-time settlement of payment orders in euro managed by the Bank of Greece, which is a component of TARGET, were reviewed and amended. The legal

documentation of the Bank of Greece used for monetary policy operations was reviewed and amended to reflect the Guidelines on monetary policy instruments and procedures of the Eurosystem. A new ECB Regulation concerning transitional provisions for the application of minimum reserves by the European Central Bank following the adoption of the euro by Greece⁹ entered into force, as well as legal instruments for the paying-up of the remaining capital and the transfer by the Bank of Greece of foreign reserves to the ECB.¹⁰ Finally, the ERM II agreement was terminated for the Bank of Greece.

³ Which later became Law 2842/2000, Government Gazette 207/27.9.2000, with effect from 1 January 2001.

⁴ Council Regulation (EC) No. 974/98 of 3 May 1998 on the introduction of the euro, OJ L 139, 11.5.1998, pp. 1-5; Council Regulation (EC) No. 1103/97 of 17 June 1997 on certain provisions relating to the introduction of the euro, OJ L 162, 19.6.1997, pp. 1-3; and Council Regulation (EC) No. 2866/98 of 31 December 1998 on the conversion rates between the euro and the currencies of the Member States adopting the euro, OJ L 359, 31.12.1998, pp. 1-2.

⁵ Opinion of the ECB of 16 June 2000 at the request of the Council of the European Union pursuant to Article 123 (5) of the Treaty establishing the European Community (CON/00/12), OJ C 177, 27.6.2000, pp. 11-12.

⁶ Council Regulation (EC) No. 1478/2000 of 19 June 2000 amending Regulation (EC) No. 2866/98 on the conversion rates between the euro and the currencies of the Member States adopting the euro, OJ L 167, 7.7.2000, p. 1; Council Regulation (EC) No. 2595/2000 of 27 November 2000 amending Regulation (EC) No. 1103/97 on certain provisions relating to the introduction of the euro, OJ L 300, 29.11.2000, p. 1; Council Regulation (EC) No. 2596/2000 of 27 November 2000 amending Regulation (EC) No. 974/98 on the introduction of the euro, OJ L 300, 29.11.2000, p. 2.

⁷ Recommendation of the ECB of 5 October 2000 on the external auditors of the national central banks (ECB/2000/10), 2000/612/EC, OJ L 259, 13.10.2000, p. 65.

⁸ The Council adopted Council Decision (EC) No. 737/2000 of 20 November 2000 amending Decision 1999/70/EC concerning the external auditors of the national central banks, OJ L 298, 25.11.2000, p. 23.

⁹ Regulation (EC) No. 2548/2000 of the ECB of 2 November 2000 concerning transitional provisions for the application of minimum reserves by the European Central Bank following the introduction of the euro in Greece, OJ L 291, 18.11.2000, pp. 28-29.

¹⁰ Decision of the ECB of 16 November 2000 providing for the paying-up of capital and the contribution to the reserves and provisions of the ECB by the Bank of Greece, and for the initial transfer of foreign-reserve assets to the ECB by the Bank of Greece and related matters (ECB/2000/114), OJ L 336, 30.12.2000, pp. 110-117; and the Agreement of 16 November 2000 between the ECB and the Bank of Greece regarding the claim credited to the Bank of Greece by the ECB under Article 30.3 of the Statute of the ESCB and related matters, OJ L 336, 30.12.2000, pp. 122-123.

3 Operational aspects of the integration of the Bank of Greece into the Eurosystem

Following the decision by the EU Council on 19 June 2000 to abrogate the derogation of Greece, the ECB conducted technical preparations, with a view to fully integrating the Bank of Greece into the Eurosystem. In line with the provisions of the Treaty, the Bank of Greece has joined the Eurosystem with exactly the same rights and obligations as the national central banks (NCBs) of other countries that had adopted the euro at its inception.

The preparations were conducted in co-operation with the Bank of Greece and, where appropriate, in a multilateral fashion with the 11 NCBs of the Eurosystem. Technical preparations for the integration of the Bank of Greece into the Eurosystem covered a wide range of issues, notably in the fields of financial reporting and accounting, monetary policy operations, foreign reserve management and foreign exchange operations, payment systems, statistics and banknote production. In the field of operations, preparations involved the extensive testing of the instruments and procedures for the implementation of the monetary policy and foreign exchange operations of the Eurosystem. These extensive preparations were instrumental in facilitating the smooth integration of the Bank of Greece into the Eurosystem as of 1 January 2001.

3.1 Monetary policy operations

The introduction of the euro in Greece on 1 January 2001 meant that credit institutions located in Greece became subject to the Eurosystem's reserve requirements as from that date. A list of 57 Greek credit institutions subject to the Eurosystem's reserve requirements was published on the ECB's website for the first time on 31 October 2000.

The euro was introduced in Greece on 1 January 2001, i.e. in the course of the regular Eurosystem reserve maintenance period, which started on 24 December 2000 and ended on 23 January 2001. This required transitional provisions for the application of minimum reserves in Greece during this maintenance period. Indeed, the first maintenance period for Greek counterparties only started on 1 January 2001 but ended on the regular date of 23 January 2001.

On 1 January 2001, the accession of Greece to the euro area increased the aggregate reserve requirements of euro area credit institutions by €2.1 billion. The autonomous liquidity factors in the balance sheet of the Bank of Greece, including the fixed-term deposits mentioned below, contributed, on average, an overall liquidity injection of €1.5 billion in the period from 1 to 23 January 2001. Hence, the net average liquidity deficit contributed by Greece to the euro area in this period amounted to €0.6 billion.

Finally, in order to obtain a full picture of the liquidity effects of the accession of Greece, account has to be taken of the fact that some of the monetary policy operations conducted by the Bank of Greece in 2000 only mature in 2001. These include some fixed-term deposits with a maturity of up to 18 months, collected from counterparties in order to achieve a smoothing of the liquidity injection stemming from the harmonisation of the reserve requirements on drachma-denominated deposits with those of the Eurosystem, as well as from the abolition of the previous system of special reserve requirements on certain categories of foreign currency-denominated deposits in Greece prior to the introduction of the euro.

The impact of the accession of Greece on euro area liquidity conditions was taken into account by the ECB by adjusting the allotment amounts in its main refinancing operations at the beginning of 2001 accordingly.

The introduction of the euro in Greece was also reflected in the incorporation of Greek assets (either assets located in Greece or assets initially denominated in Greek drachmas) into the list of assets eligible as collateral for the Eurosystem's credit operations. These assets were incorporated in the list of eligible assets published on the ECB's website on 29 December 2000, and they became effectively eligible on 1 January 2001. Greek assets added a total of €89.6 billion to the overall amount of assets eligible for the credit operations of the Eurosystem.

3.2 Contribution to the ECB's capital, reserves and foreign reserve assets

Upon the establishment of the ECB in June 1998, in common with other NCBs of countries which did not adopt the euro at the start of Stage Three of EMU, the Bank of Greece paid up 5% of its subscribed capital share in the ECB as a contribution to the ECB's operational costs. In accordance with Article 49 of the ESCB Statute, as at 1 January 2001, the Bank of Greece paid up the

remaining 95% of its subscription to the ECB's capital. The total subscribed share of the Bank of Greece amounts to €102,820,000, equivalent to 2.0564% of the ECB's subscribed capital of €5 billion. The Bank of Greece contributed further amounts to the reserves of the ECB, and to provisions equivalent to reserves, corresponding to its participation in the ECB.

At the beginning of 2001, the Bank of Greece transferred foreign reserve assets to the ECB in proportion, based on its share in the ECB's subscribed capital, to the foreign reserve assets transferred by other NCBs at the beginning of 1999. The Bank of Greece was credited with a corresponding claim on the ECB. The contribution was made in accordance with the rules and procedures used for the initial transfer of foreign reserve assets by the 11 participating NCBs in 1999. 15% of the total contribution was made in gold, and the remaining 85% in those foreign currencies in which the ECB's foreign reserve assets are invested. Furthermore, the Bank of Greece was appointed as agent for the ECB in the context of its foreign exchange operations.



**Les enfants de l'unité de pédiatrie de l'Institut
Gustave Roussy et le Rire Médecin, France**

Designed by Marine, Hugues, Tiphaine, Romain, Christine, Farid, Guillaume,
Foué, Christelle, Magalie, Adel and Si-Amed. Untitled

Chapter IV

Economic developments in the other countries of the European Union

The Eurosystem and the NCBs of the non-participating EU countries co-operate closely in the context of the General Council of the ECB with a view to contributing to the maintenance of price stability in the EU as a whole. In this context, a regular review of macroeconomic conditions as well as monetary and exchange rate policies is an integral part of the co-ordination exercise between the Eurosystem and the three NCBs currently not participating in the single monetary policy. Although these NCBs conduct their monetary policies under different institutional and operational frameworks, the ultimate goal of monetary policy for all of them is to maintain price stability.

Denmark

Real GDP in Denmark grew by around 2.5% in 2000, up from 2.1% in 1999 (see Table 9). The rise in output growth was largely based on a recovery of domestic demand, including stocks, which had been subdued in 1999. Private consumption, however, remained weak compared with other components of domestic demand, as reflected, inter alia, in a significant decline in car sales. The contribution of net exports to real GDP growth declined significantly in 2000. An exceptional factor in 2000 was the severe storm in late 1999 which resulted in the need for substantial investments. The labour market continued to be relatively tight, as the unemployment rate stabilised at around 4.7%. Labour supply did not increase significantly and remains a key area of concern in the medium term. Overall, the Danish economy conveys the impression of having achieved more sustainable growth in 2000, with reduced risks of overheating and a more balanced composition of demand than in previous years.

Price developments in 2000 were mainly affected by large oil and import price increases, in addition to effects from higher energy taxation and food and public services prices. Domestic inflationary pressures eased

against a background of weaker hourly wage growth, with profit margins nonetheless being squeezed by rising oil and import prices. Overall, the rate of increase in the Harmonised Index of Consumer Prices (HICP) remained relatively stable at around 2.8% throughout the year, implying a convergence with the level of inflation in the euro area. The annual average inflation rate was 2.7% in 2000, up from 2.1% in 1999. Despite some moderation, wage costs continued to increase faster than in the euro area. Without a further easing of wage growth, competitiveness could continue to deteriorate. (For a more detailed discussion of the inflation differentials between the non-participating EU countries and the euro area, see Box 8.)

Public finances in Denmark continued to be in a strong position in 2000. Despite a slightly lower general government surplus than in the previous year, government debt continued to decline. The general government surplus was 2.5% of GDP in 2000, down from 3.1% in 1999. Following the restrictive effects of the so-called Whitsun tax package, fiscal policy was eased slightly in 2000. According to the update of Denmark's Convergence Programme, presented in December 2000, the surplus is expected to remain relatively stable and the fiscal policy stance is predicted to be tightened somewhat in the coming years. The government debt ratio fell to 47.3% of GDP in 2000, down by 5.3 percentage points compared with 1999.

On 28 September, a majority of Danish voters rejected the adoption of the euro in a referendum. However, Denmark remains a member of ERM II without any change in the monetary policy strategy of Danmarks Nationalbank. The Government and Danmarks Nationalbank issued a joint statement announcing that they would continue to pursue the fixed exchange rate policy vis-à-vis the euro within the framework of the narrow band of ERM II. The Government also stated its intention to stand ready to tighten fiscal policy if necessary. Given the fixed exchange rate policy,

developments in key official and short-term market interest rates should primarily be seen against the background of the interest rate decisions of the Governing Council of the ECB and developments in the exchange rate of the Danish krone against the euro. The Danish krone remained stable in 2000, at around a level marginally stronger than its ERM II central rate of DKK 7.46038 against the euro. The only factor generating some volatility in the DKK exchange rate against the euro, countered by foreign exchange interventions and key interest rate changes, was the run-up to and the aftermath of the referendum on Denmark's adoption of the euro. From early 2000 until the referendum, Danmarks Nationalbank raised its lending rate by a total of 1.8 percentage points to 5.1%, broadly following similar interest rate increases by the Eurosystem. However, following the referendum on the euro, the lending rate was increased by 0.5 percentage

point in order to avoid uncertainty concerning the krone. The krone remained broadly stable after the referendum and the lending rate was reduced by a total of 0.2 percentage point, in line with a gradual strengthening of the krone. In 2000 short-term interest rates, as measured by the three-month money market rate, rose by 1.6 percentage points, and the spread vis-à-vis the comparable euro area rates remained broadly stable at around 40 basis points, with the exception of the periods before and after the referendum when it was higher. At the end of February 2001 short-term interest rates stood at 5.2%, constituting a spread of 40 basis points against euro area rates.

Long-term interest rates, as measured by ten-year government bond yields, followed the trend in the international capital markets, with the positive interest rate differential

Table 9

Macroeconomic indicators for Denmark

(annual percentage changes, unless otherwise indicated)

	1994	1995	1996	1997	1998	1999	2000	2000 Q1	2000 Q2	2000 Q3	2000 Q4
Real GDP	5.5	2.8	2.5	3.0	2.8	2.1	2.5	2.6	3.4	2.7	.
<i>Contribution to real GDP growth:</i> ¹⁾											
Real domestic demand including stocks	6.5	3.9	2.1	4.6	4.4	-0.6	.	2.4	3.2	2.3	.
Net exports	-1.0	-1.2	0.4	-1.7	-1.7	2.8	.	0.2	0.2	0.4	.
HICP	1.8	2.0	2.1	1.9	1.3	2.1	2.7	2.8	2.9	2.6	2.6
Compensation per employee	3.5	3.5	3.3	3.5	3.8	4.2	.	3.4	4.3	4.1	.
Unit labour costs, whole economy	-2.2	1.4	2.1	1.9	2.3	3.0	.	1.9	2.6	1.6	.
Import deflator (goods and services)	0.7	1.2	-0.1	2.2	-1.1	0.6	.	7.7	9.0	10.7	.
Current plus new capital account (% of GDP)	.	.	.	0.1	-0.1	0.2	0.2	0.2	0.2	0.5	0.0
Total employment	1.4	0.5	0.6	1.2	1.3	1.1	0.9	1.0	1.5	0.0	.
Unemployment rate (% of labour force)	8.2	7.3	6.8	5.6	5.2	5.2	4.7	4.8	4.6	4.7	4.8
Fiscal balance (% of GDP) ^{2),3)}	-2.6	-2.3	-1.0	0.4	1.1	3.1	2.5	.	.	.	.
Consolidated gross debt (% of GDP) ²⁾	76.5	72.1	65.1	61.4	55.8	52.6	47.3	.	.	.	.
Three-month interest rate (% per annum) ⁴⁾	6.2	6.1	3.9	3.7	4.1	3.3	4.9	3.8	4.6	5.7	5.4
Ten-year government bond yield (% per annum) ⁴⁾	7.8	8.3	7.2	6.3	4.9	4.9	5.6	5.8	5.7	5.7	5.4
Exchange rate against the ECU or euro ^{4),5)}	7.54	7.33	7.36	7.48	7.50	7.44	7.45	7.45	7.46	7.46	7.45

Sources: Eurostat, European Commission, national data and ECB calculations.

Note: National accounts are according to the ESA 95. HICP data before 1995 are estimates based on national definitions and are not fully comparable with HICPs starting in 1995.

1) Percentage points.

2) Consistent with the Maastricht Treaty definition.

3) General government surplus (+) / deficit (-).

4) Average of period values.

5) Units of national currency per ECU until the end of 1998; thereafter, per euro.

vis-à-vis comparable euro area interest rates remaining relatively constant at around 20-30 basis points. Throughout the year, long-term interest rates remained relatively stable at around 5.7% before declining to 5.2% at the end of the year. In February 2001 the spread vis-à-vis the average euro area rates amounted to around 10 basis points, i.e. broadly unchanged since the beginning of 2000.

Sweden

Real GDP in Sweden continued to grow strongly in 2000. Output growth was up by 3.6%, compared with 4.1% in 1999 (see Table 10). As in the two preceding years, output growth was driven mainly by domestic demand, including stocks. Domestic demand continued to be supported by rising employment and real wages, a relaxation of the fiscal policy stance and increasing household wealth. Private consumption, in particular, grew strongly by 4.1%, while both exports and imports of goods and services followed the trend in world trade and increased by around 10%. The contribution of net exports to GDP growth remained positive at 0.9 percentage point, but was down from 1.1 percentage points in 1999. The unemployment rate declined further to 5.1% of the labour force in December, compared with an average of 7.2% in 1999. Employment grew by 2.2% in 2000 and, as before, new jobs mainly originated in the private services sector. At the same time, the labour force increased as the number of labour market programmes was scaled down and fewer people stayed in education. The number of job vacancies also rose rapidly and it took increasingly longer to fill them. Despite some signs of labour shortages in the construction and services sectors, as well as for skilled technicians in manufacturing, there was not yet a general situation of labour shortages.

Annual inflation rates, as measured both by the HICP and the CPI excluding interest expenditure and direct effects of altered

indirect taxes and subsidies (UNDIX),¹ remained relatively low and stable in 2000 despite the increase in oil and import prices and rapid output growth. The annual average HICP inflation rate was 1.3%, up from 0.6% in 1999. Sweden thus remained among the EU countries with the lowest inflation rates throughout the year. The reasons for the relatively subdued price developments can be found in the dampening effects of the liberalisation of public utilities, low rent increases, a reduction of the profit share, and possibly a lower level of resource utilisation than previously thought. The profit share has been falling back to the long-term average for a number of years, indicating that further increases in unit labour costs could be more difficult to accommodate in the profit share. Wage developments thus remain an area of concern in terms of maintaining competitiveness, employment growth and price stability.

The fiscal surplus of the Swedish general government increased to 4.0% of GDP in 2000, compared with 1.8% in 1999. The government debt ratio also improved significantly, falling from 65.2% of GDP in 1999 to 55.6% in 2000. The updated Swedish Convergence Programme, presented in November 2000, sets the estimated budget surpluses for 2001 and 2002 at 3.5% and 3.3% of GDP respectively. The debt ratio is projected to decline to 53.2% of GDP in 2001 and further to 48.9% in 2002.

Sveriges Riksbank operates with a flexible exchange rate regime and has conducted monetary policy with an explicit inflation target since 1993. Monetary policy is targeted at keeping CPI inflation at 2%, with a tolerance margin of plus or minus 1 percentage point. In 2000 the repo rate was increased twice, on 4 February, by 0.50 percentage point, and on 7 December, by 0.25 percentage point to 4.0%. The decision in December originated from the

¹ In Sweden headline CPI is the target variable. However, since transient factors are taken into account, monetary policy decisions have in practice been based on an assessment of UNDIX.

Table 10**Macroeconomic indicators for Sweden***(annual percentage changes, unless otherwise indicated)*

	1994	1995	1996	1997	1998	1999	2000	2000 Q1	2000 Q2	2000 Q3	2000 Q4
Real GDP	4.1	3.7	1.1	2.1	3.6	4.1	3.6	4.2	4.1	3.7	2.3
<i>Contribution to real GDP growth: ¹⁾</i>											
Real domestic demand including stocks	3.0	1.8	0.7	0.7	3.9	3.0	2.7	3.4	3.4	3.6	0.5
Net exports	1.2	1.9	0.4	1.4	-0.3	1.1	0.9	0.8	0.7	0.1	1.8
HICP	2.9	2.7	0.8	1.8	1.0	0.6	1.3	1.2	1.2	1.3	1.5
Compensation per employee	4.8	2.8	6.8	3.8	3.3	1.3	7.0	8.3	6.4	7.1	6.3
Unit labour costs, whole economy	-0.1	0.5	5.1	0.7	0.9	-0.4	5.5	5.7	4.5	5.3	6.7
Import deflator (goods and services)	4.0	5.9	-4.2	0.7	-0.5	1.4	5.9	5.6	5.1	6.2	6.7
Current plus new capital account (% of GDP)	.	.	.	.	0.6	0.5	0.5	0.7	0.3	0.5	0.7
Total employment	-0.9	1.6	-0.6	-1.1	1.5	2.2	2.2	1.5	2.1	2.1	3.1
Unemployment rate (% of labour force)	9.4	8.8	9.6	9.9	8.3	7.2	5.9	6.5	6.0	5.7	5.4
Fiscal balance (% of GDP) ^{2),3)}	-10.9	-6.8	-3.4	-1.5	1.9	1.8	4.0	.	.	.	.
Consolidated gross debt (% of GDP) ²⁾	79.0	77.6	76.0	73.0	71.8	65.2	55.6	.	.	.	.
Three-month interest rate (% per annum) ⁴⁾	7.7	8.8	6.0	4.4	4.4	3.3	4.1	4.0	4.1	4.1	4.1
Ten-year government bond yield (% per annum) ⁴⁾	9.7	10.2	8.0	6.6	5.0	5.0	5.4	5.8	5.3	5.3	5.1
Exchange rate against the ECU or euro ^{4),5)}	9.16	9.33	8.51	8.65	8.90	8.82	8.45	8.50	8.27	8.40	8.61

Sources: Eurostat, European Commission, national data and ECB calculations.

Note: National accounts are according to the ESA 95.

1) Percentage points.

2) Consistent with the Maastricht Treaty definition.

3) General government surplus (+) / deficit (-).

4) Average of period values.

5) Units of national currency per ECU until the end of 1998; thereafter, per euro.

assessment that the risk of inflation being above the target of 2% in two years' time had increased. Short-term interest rates remained largely stable throughout 2000 and in the first two months of 2001 at around 4%, a level almost 70 basis points below comparable euro area short-term interest rates at the end of February 2001. After having appreciated in the first part of 2000, the krona depreciated against the euro in the second half of the year. This was partly associated with the negative short-term interest rate differential, but was also due to stock market volatility and portfolio adjustments linked to the pension reform, which allows individuals to invest their pension premiums in various domestic and international pension funds.

Long-term interest rates declined by around 1 percentage point in the course of 2000 and stood at 4.9% by the end of February 2001.

The ten-year spread vis-à-vis euro area interest rates turned negative from 20 basis points above the latter at the beginning of the year to 20 basis points below at the end of the year. At the end of February 2001 the negative spread was 10 basis points.

United Kingdom

In the United Kingdom real GDP grew by 3.0% in 2000, compared with 2.3% in 1999. Output growth peaked in the second quarter of 2000 and decelerated thereafter (see Table 11). Household consumption remained the main contributor to output growth, but export demand was also strong, particularly in the first half of the year.

Real household consumption grew by 3.7% in 2000, down from 4.5% in 1999. Increased real earnings, lower unemployment and high

house prices contributed to the strength of consumer demand. After having peaked in the third quarter, there were some signs that consumption growth eased in the last quarter of 2000 following a much weaker performance by the stock markets. Gross fixed capital formation grew by 2.3% in 2000, down from 5.4% in 1999, and growth in business investment was weak in the first half of the year, before picking up strongly in the last quarter. Export volumes grew rapidly, but the pace decelerated in the second half of the year, following the path of world demand. Import growth remained robust throughout most of the year, reflecting both buoyant domestic demand and the strength of the pound sterling vis-à-vis the euro.

Employment grew quickly in the first half of the year and levelled off in the second. The unemployment rate stabilised at just below 5.5% in the second half of 2000, down from

around 6% at the end of the previous year. After reaching a peak in February 2000, primarily owing to the effect of bonuses, earnings growth decelerated in the months to July to an annual rate of 3.9%, before picking up again in the second half of the year to reach an annual rate of 4.4% at the end of 2000.² Unit labour costs decelerated, both as a result of slower growth in labour compensation and because productivity growth picked up in the course of 2000, after having reached a low of 1% in 1999.

Notwithstanding strong output growth and some evidence of capacity constraints, the RPIX inflation rate remained well below the 2.5% target throughout the year. Measured by the HICP, inflation fell from 1.3% in 1999 to 0.8% in 2000. The slow growth of import

² Wage growth is derived from data from national sources not included in Table 11.

Table 11
Macroeconomic indicators for the United Kingdom

(annual percentage changes, unless otherwise indicated)

	1994	1995	1996	1997	1998	1999	2000	2000 Q1	2000 Q2	2000 Q3	2000 Q4
Real GDP	4.4	2.8	2.6	3.5	2.6	2.3	3.0	3.1	3.5	3.0	2.5
<i>Contribution to real GDP growth:¹⁾</i>											
Real domestic demand including stocks	3.5	1.8	3.0	3.8	4.7	3.8	3.9	3.2	4.8	4.5	2.9
Net exports	0.9	1.0	-0.5	-0.3	-2.0	-1.5	-0.9	0.0	-1.4	-1.5	-0.5
HICP	2.0	2.7	2.5	1.8	1.6	1.3	0.8	0.8	0.6	0.8	0.9
Compensation per employee	3.1	3.1	3.4	4.4	5.0	4.6	3.6	4.7	3.3	3.2	3.4
Unit labour costs, whole economy	-0.3	1.0	1.9	2.8	3.4	3.5	1.6	2.6	1.0	1.3	1.7
Import deflator (goods and services)	3.1	6.1	0.3	-6.7	-6.3	-2.5	1.0	-0.3	0.5	1.0	2.9
Current plus new capital account (% of GDP)	-0.5	-0.9	0.1	2.7	0.1	-3.4	.	-5.2	-4.3	-5.8	.
Total employment	0.9	0.7	1.1	2.0	1.1	1.3	1.0	1.0	1.2	1.1	0.8
Unemployment rate (% of labour force)	9.6	8.7	8.2	7.0	6.3	6.1	5.5	5.9	5.6	5.4	5.3
Fiscal balance (% of GDP) ^{2), 3)}	-6.8	-5.8	-4.4	-2.0	0.4	1.3	1.3	.	.	.	.
Consolidated gross debt (% of GDP) ²⁾	50.6	52.5	52.7	51.1	48.0	45.7	41.0	.	.	.	.
Three-month interest rate (% per annum) ⁴⁾	5.5	6.7	6.0	6.8	7.3	5.4	6.1	6.1	6.2	6.1	6.0
Ten-year government bond yield (% per annum) ⁴⁾	8.2	8.3	7.9	7.1	5.6	5.0	5.3	5.6	5.3	5.3	5.1
Exchange rate against the ECU or euro ^{4), 5)}	0.78	0.83	0.81	0.69	0.68	0.66	0.61	0.61	0.61	0.61	0.60

Sources: Eurostat, European Commission, national data and ECB calculations.

Note: National accounts are according to the ESA 95. HICP data before 1995 are estimates based on national definitions and are not fully comparable with HICPs starting in 1995.

1) Percentage points.

2) Calendar year estimates. Consistent with the Maastricht Treaty definition.

3) Calendar year estimates. General government surplus (+) / deficit (-).

4) Average of period values.

5) Units of national currency per ECU until the end of 1998; thereafter, per euro.

Box 8

Inflation differentials between the non-participating EU countries and the euro area

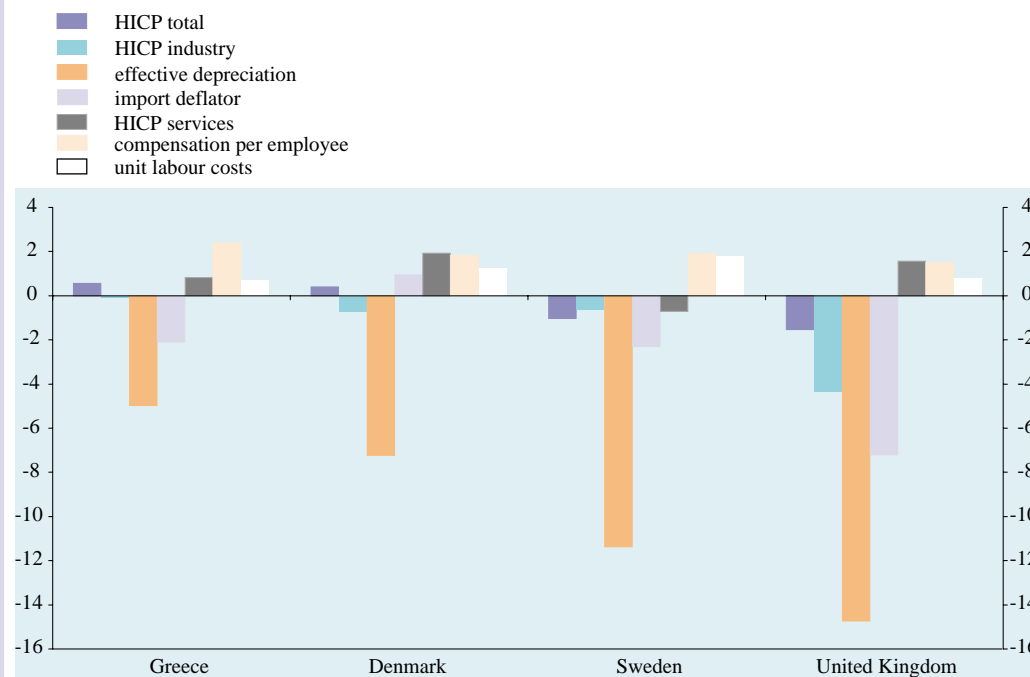
HICP inflation differentials between the four non-euro area EU Member States and the euro area average ranged from -1.6 to +0.5 percentage points in 2000. In the two ERM II countries, Denmark and Greece, inflation was somewhat higher than the euro area average, but the spreads remained relatively small when compared with those of the 1990s. They were also small when compared with the inflation spreads within the euro area. Sweden and the United Kingdom experienced low inflation rates in 2000, despite strong output growth in recent years; HICP inflation in both these countries was below that of the best performing euro area Member State.

When looking at the components of HICP inflation, it is found that the relative inflation performance of the four countries vis-à-vis the euro area was very different for industry and services. In all four non-euro area countries, HICP inflation for industrial products (excluding energy and food) was lower than in the euro area. In the case of the United Kingdom, HICP inflation in industry was more than 4 percentage points below that of the euro area. HICP inflation for services, however, was higher in the non-participating EU countries than in the euro area, with the exception of Sweden. The highest inflation rate for services was recorded in Denmark, where it stood almost 2 percentage points above that of the euro area.

This common pattern of relatively low HICP inflation in industry and higher inflation in services, as compared with the euro area, seems to be at least partly related to deviating exchange rate movements and labour cost

Inflation indicators relative to the euro area

(spread of annual growth rates vis-à-vis euro area growth rates in 2000 in percentage points)



Sources: Eurostat, ECB calculations and estimates.

Note: "Effective depreciation" is defined as the inverse of the change in the effective exchange rate. All variables refer to annual averages. Import deflator, compensation per employee and unit labour costs refer to the average of the first three quarters of 2000 for Denmark and are based on ECB annual growth estimates for the euro area. For Sweden, compensation per employee is defined as wages and salaries per employee and unit labour costs are equal to unit wage and salary costs.

developments in 2000 (see chart above). A number of other country-specific factors, not depicted in the chart, are also likely to have played a role, such as rises in prices of public services in Denmark or developments in indirect taxes in Greece.

The annual average nominal effective exchange rates of non-participating EU countries did not depreciate as markedly as that of the euro area; in the case of the United Kingdom, the annual average nominal effective exchange rate appreciated in 2000. For the two ERM II countries, this less marked depreciation was the result of differences in their trade patterns by comparison with the euro area. For Sweden and the United Kingdom, there was an additional effect from the appreciation of the respective bilateral exchange rates of the krona and the pound sterling vis-à-vis the euro. Stronger currencies were generally reflected in lower import price inflation, affecting both input costs and competition in output markets for tradeable products. In the case of the United Kingdom, the import deflator rose in 2000 by 7.2 percentage points less than that of the euro area. The relative strength of the pound sterling has therefore contributed significantly to the more favourable inflation performance of the United Kingdom in industrial goods.

By contrast, the rise in compensation per employee and unit labour costs was greater in all four countries than in the euro area. This is likely to have contributed to the comparatively high HICP inflation for services of these countries. Sweden is the exception in this case, as it combined low HICP inflation for services of just 1% with an increase in compensation per employee and in unit labour costs above that of the euro area average. The explanation for this can be found primarily in the price-dampening effects of liberalisation in the public utilities sector.

To summarise, all four non-participating EU countries appear to have experienced externally generated and more domestically generated inflationary pressures than the euro area in 2000. Certainly in the United Kingdom, the appreciation of the pound sterling and the concomitant fall in consumer prices for industrial goods were critical in keeping HICP inflation at the lowest level among the EU Member States. In Sweden, low services price inflation, related to the liberalisation process in the public utilities sector, contributed significantly to the environment of price stability. Denmark and Greece had inflation rates above those of the euro area in the services sector, which was probably related to stronger increases in wage and unit labour costs.

prices as a result of the appreciation of the pound sterling vis-à-vis the euro may have contributed significantly to keeping inflation low (see Box 8). Strong import price competition and lower export margins affected profit margins, particularly in the manufacturing sector. The net rate of return of manufacturing companies in the third quarter is estimated to have been at its lowest level since 1993.

The general government budget surplus as a percentage of GDP is estimated to have remained at 1.3% in 2000, approximately the same as in 1999 (excluding receipts from UMTS licences). The update of the United Kingdom's Convergence Programme, presented in December 2000, projected a

government budget in balance by 2002, in line with the Government's long-term fiscal targets. According to the Programme, there is a projected rise in spending, in particular for the Government's priority areas of health, education and transport. Capital expenditure is expected to increase markedly as a result of the Government's commitment to double its net investment as a proportion of GDP. The government debt ratio fell in 2000 to an estimated 41.0% of GDP from 45.7% in 1999. It is projected to fall to 36.5% by 2002.

The Bank of England conducts monetary policy within a flexible exchange rate regime with an explicit inflation target, set by the United Kingdom Government at 2.5%. In 2000, the repo rate was raised in January

and February, on both occasions by 0.25 percentage point, amid concerns about future inflationary pressures, and was left unchanged at 6.0% throughout the rest of 2000. In February 2001, the Bank of England lowered its repo rate by 0.25 percentage point to 5.75%. Short-term interest rates remained around 6.0% throughout 2000, before falling to around 5.5% at the end of February 2001, around 0.8 percentage point above euro area short-term rates. Long-term interest rates fell from around 5.8% at the beginning of 2000 to 4.8% at the end of

February 2001, which was around the same level as euro area rates.

After having appreciated against the euro in late 1999 and during the first four months of 2000, the pound sterling depreciated against the euro throughout May and June, from its strongest level of GBP 0.57 to GBP 0.63. From late June to the end of the year, the pound sterling rebounded strongly before losing ground to the euro. At the end of February 2001, it stood at GBP 0.64.



Our Lady's Hospital for Sick Children, Ireland

Designed by Eamonn Coleman. Untitled

Chapter V

European, international and bilateral issues

I European issues

In 2000 the ECB continued to maintain and develop its relations with the institutions and bodies of the European Community. In particular, through its participation in meetings of the ECOFIN Council, the Eurogroup, the Economic and Financial Committee (EFC) and the Economic Policy Committee (EPC), the ECB continued to engage in a constructive dialogue with representatives of the Member States and the European Commission, at both the political level and the technical level.¹

At the political level, the ECB's contacts with EU and, in particular, euro area finance ministers took place primarily through its participation in meetings of the ECOFIN Council and the Eurogroup. In accordance with Article 113 (2) of the Treaty, the ECB is invited to attend meetings of the ECOFIN Council "whenever matters are discussed which relate specifically to the tasks and objectives of the ESCB". In 2000 such matters pertained to, inter alia, the enactment of the legislation necessary for Greece to adopt the euro, the joint ECB-Eurostat action plan on statistical requirements in EMU, and the ECOFIN Council's discussion of the exchange rate strategies of countries applying for membership of the EU. While the ECB's participation in meetings of the ECOFIN Council depended on the issues under discussion, the ECB took part in all the meetings of the Eurogroup so as to regularly discuss with the euro area finance ministers and the European Commission matters related specifically to the single currency.

At the technical level, the ECB has continued to contribute to the analysis and advice provided to the ECOFIN Council and the Eurogroup by both the EFC and the EPC. While the ECB's participation in meetings of the EFC derives directly from Article 114 of the Treaty, its participation in meetings of the EPC was, until September 2000, based solely on an invitation from the Chairman of the EPC. However, with the adoption by the ECOFIN Council of a new EPC statute on

29 September 2000, the ECB's participation in meetings of the EPC has now been put on an equal legal footing with that of the Member States and the European Commission.

As a participant in meetings both of the EFC and of the EPC, the ECB took part in the regular, ongoing work conducted in the context of the Community's various economic policy procedures and multilateral surveillance exercises. In particular, the ECB was involved in the preparation of the Broad Economic Policy Guidelines and the assessment of the Member States' stability and convergence programmes. Furthermore, the ECB provided input into discussions on a number of issues, such as the impact of ageing populations on public finances, the contribution of public finances to growth and employment, and the development of structural performance indicators, on which work was mandated by the Lisbon Special European Council on employment, economic reform and social cohesion (see below).²

The ECB has also continued to participate in the twice-yearly Macroeconomic Dialogue (MED), which brings together representatives not only of the Member States, the European Commission, the ECB and the non-euro area central banks, but also of European employers' organisations and trade unions. In 2000 the MED continued to develop as a forum in which representatives of all the major actors which decide on or influence policy-making at the macroeconomic level can usefully exchange views, both on the economic outlook and on the policy challenges ahead.

From among the broad range of issues dealt with in European institutions and bodies in 2000,

¹ The ECB's relations with the European Parliament are dealt with separately in Chapter XI of this Annual Report.

² The ECB's involvement in more specialised working groups and committees is discussed in the relevant chapters of this Annual Report.

the following developments are highlighted as being of particular significance from an economic and institutional point of view.

1.1 The role of the Eurogroup

The Eurogroup (formerly the Euro-11 Group) was established by the Luxembourg European Council in December 1997, as an informal body in which the finance ministers of the euro area Member States could meet among themselves to discuss “issues connected with their shared specific responsibilities for the single currency”. The European Council also envisaged that the European Commission, and “when appropriate” the ECB, would be invited to take part in these meetings. In practice, since the beginning of Stage Three of EMU, not only the European Commission, but also the ECB has been invited to and has participated in all Eurogroup meetings. Meetings of the Eurogroup have therefore tended to serve a dual purpose. First and foremost, the Eurogroup is a forum in which euro area finance ministers can discuss together and, where necessary, co-ordinate their economic policies. Second, the Eurogroup, being of an informal nature, has provided a particularly appropriate setting for the ongoing dialogue between ministers, the European Commission and the ECB, in which they can regularly share their assessments of the economic situation in the euro area and of forthcoming policy challenges. In order to increase the visibility of the Eurogroup to the general public, the euro area finance ministers agreed on the following initiatives in 2000.

First, as and when the Eurogroup ministers consider it appropriate to communicate their shared views to markets and to the public at large, this is to be achieved in as clear and concise a manner as possible by the publication of statements or communiqués. Two such statements were released during 2000, both of them expressing the shared concern, not only of the Eurogroup but also of the Commission and the ECB, regarding the low level of the exchange rate of the euro.

Second, it was decided that each Eurogroup meeting should be followed by a press conference to be given by the Eurogroup President. These press conferences serve to provide information about which issues have been discussed and to communicate the views of the Eurogroup to interested members of the public. When appropriate, the President of the ECB also attends these press conferences.

1.2 The Lisbon Special European Council on employment, economic reform and social cohesion

On 23 and 24 March 2000 the European Council held a special meeting in Lisbon dedicated to employment, economic reform and social cohesion. At this meeting, the Heads of State or Government set the EU a new strategic goal for the next decade, defined in the Council’s conclusions as being “to become the most competitive and dynamic knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion”. In order to achieve this ambitious goal, an overall strategy was defined. This strategy is based on the following three elements: to prepare the transition to a knowledge-based economy, to modernise the European social model, and to sustain a healthy economic outlook by the pursuit of appropriate macroeconomic policies.

Within the context of the common efforts to prepare the transition to a competitive and dynamic knowledge-based economy, the ECB attaches particular importance to the objective of providing a framework for *efficient and integrated financial markets*. In this respect, the European Council agreed to accelerate the completion of the Single Market for financial services, inter alia by setting a timetable whereby the Risk Capital Action Plan should be completed by 2003 and the Financial Services Action Plan by 2005.

With regard to the attainment of the overall strategic objectives, the European Council

agreed that no new processes were needed to implement the Lisbon strategy. Rather, existing processes such as the Broad Economic Policy Guidelines and the Luxembourg, Cardiff and Cologne Processes already offered the necessary instruments. These processes could, however, be reinforced by laying down guidelines with specific timetables, establishing quantitative and qualitative indicators and benchmarks, more effectively translating European guidelines into national and regional policies and undertaking periodic monitoring, evaluation and peer review, organised as a mutual learning process. Moreover, the European Council outlined its intention to take “a pre-eminent guiding and co-ordinating role” and to “hold a meeting every spring devoted to economic and social questions”.

The ECB welcomes the impetus given by the European Council to the economic reform process. The dedication of almost an entire European Council meeting to economic and social questions, and the decision to hold such meetings annually from now on, illustrate the importance attached by the Heads of State or Government to ongoing structural reforms. The success of the “Lisbon strategy” will, of course, ultimately depend on the timely and comprehensive implementation of the various policy measures identified. Nonetheless, the ongoing structural reform efforts benefit from the full political backing of the European Council.

1.3 Intergovernmental Conference

In line with the “Protocol on the institutions with the prospect of enlargement of the European Union”, as annexed to the Amsterdam Treaty, and the conclusions of the Helsinki European Council of December 1999, a “conference of representatives of the governments of the Member States” was convened in early 2000. The stated objective of this Intergovernmental Conference (IGC) to revise the Treaties was to prepare the European institutions for enlargement, with a

view to ensuring the proper functioning of the Community’s decision-making bodies and processes after expanding to include 12 or more new Member States. To this end, the mandate of the IGC comprised five specific items:

- the extension of qualified majority voting (QMV) in the EU Council;
- the size and composition of the European Commission;
- the weighting of votes in the EU Council;
- the review of the provisions on “closer co-operation”; and
- other necessary amendments to the Treaties arising with regard to the European institutions.

The expansion of the membership of the EU to 27 or more Member States will have an immediate effect on the composition and functioning of the institutions of the Community, such as the EU Council, the European Commission, the European Parliament, the different Courts and the consultative committees. By contrast, the new Member States are not expected to join the euro area immediately upon their accession to the EU, but only after having demonstrated their capability to fulfil the Maastricht convergence criteria in a sustainable manner. Nevertheless, from a medium to longer-term perspective, the Eurosystem – and the Governing Council of the ECB as its supreme decision-making body – will also have to be prepared for a potentially significant increase in the number of Member States adopting the euro.

Treaty changes pertaining to institutional aspects of the ESCB and the ECB

The Treaty of Nice – which resulted from the IGC – also deals with the institutional aspects of the Eurosystem. However, rather than stipulating precisely how the institutional features of the Governing Council are to be amended in view of a future large-scale expansion of the euro area, the French Presidency launched the proposal to include

in the Treaty a kind of “enabling clause” which would allow for the future amendment of specific institutional features of the Governing Council without there being a need to convene a new full-scale IGC.

Since the French Presidency’s proposal for such an enabling clause amounted to an “institutional change in the monetary area” which, in accordance with Article 48 of the Treaty on European Union, requires the ECB to be formally consulted, the ECB delivered, on 5 December 2000, an ECB Opinion at the request of the Presidency of the Council of the European Union on a proposal to amend Article 10.2 of the Statute of the European System of Central Banks and of the European Central Bank (CON/00/30).

Subsequently, the IGC agreed that, in legal terms, such an enabling clause should take the form of a new paragraph 6 in the relevant

Article 10 (entitled “The Governing Council”) of the Statute of the ESCB. This new Article 10.6 stipulates that a change to Article 10.2 (pertaining to voting procedures in the Governing Council) can be enacted without there being a need to convene a new full-scale IGC. Significantly, it gives both the Governing Council and the European Commission a right of initiative to launch such a revision of Article 10.2 of the Statute of the ESCB by means of a recommendation (see also Box 9).

The ECB regards the insertion of this enabling clause into the Statute of the ESCB as a useful provision which permits a response to the challenges of enlargement and the adaptation of the ECB’s decision-making structures in order to guarantee the efficient conduct of a stability-oriented monetary policy also in an enlarged euro area. At present, the need for such an adjustment is not expected to arise

Box 9

Relevant provisions of the Treaty of Nice

“Provisions relating to the operation of the Governing Council of the ECB in the Protocol on the Statute of the European System of Central Banks and of the European Central Bank.

Article 10 of the Statute

Addition of a new paragraph 6

10.6 The provisions of paragraph 2 [pertaining to voting procedures in the Governing Council] may be amended by the Council meeting in the composition of the Heads of State or Government, acting unanimously either on a recommendation from the ECB and after consulting the European Parliament and the Commission, or on a recommendation from the Commission and after consulting the European Parliament and the ECB. The Council shall recommend such amendments to the Member States for adoption. The amendments shall enter into force after having been ratified by all the Member States in accordance with their respective constitutional requirements.

A recommendation made by the ECB under this paragraph shall require a decision by the Governing Council acting unanimously.

* * *

Declaration to be included in the Final Act of the Conference on Article 10.6 of the Statute of the European System of Central Banks and of the European Central Bank

The Conference expects that a recommendation within the meaning of Article 10.6 of the Statute of the European System of Central Banks and of the European Central Bank will be presented as soon as possible.”

in the near future. However, the Governing Council will assess all options available and make its recommendations as and when appropriate.

Other relevant Treaty changes

The IGC also agreed to extend decision-making by QMV to four provisions in Title VII of the Treaty (“Economic and Monetary Policy”). Specifically, QMV will be introduced for decisions on external representation in the context of EMU (Article 111.4). However, a declaration is added to the Treaty of Nice which specifies that “procedures must be such as to enable all the Member States in the euro area to be fully involved in each stage of preparing the position of the Community at international level”. QMV will also be introduced for measures related to the introduction of the euro (Article 123.4). The

conversion rate of national currencies to the euro will, however, continue to be determined by means of a unanimous decision. Furthermore, decisions on certain emergency provisions relating to Community measures and financial assistance in cases of severe economic conditions or natural disasters (Articles 100.1 and 100.2) will in the future also be taken by QMV. In this context, a further declaration will be added to the Treaty to state that any financial aid granted under Article 100 is to be compatible with the “no bail-out” rule (Article 103) and has to respect the ceilings set for existing EU budget lines.

All changes to the Treaties will enter into force once the Treaty of Nice has been ratified by all the Member States in accordance with their respective constitutional requirements.

2 International issues

2.1 Institutional arrangements with international organisations

The Eurosystem continued to be involved in international co-operation on monetary, economic and financial matters. The practical arrangements adopted in 1998 and 1999 for the international representation and co-operation of the ECB, as described in the Annual Report 1999, remained broadly unchanged in 2000. With regard to the relations between the International Monetary Fund (IMF) and the euro area, two developments are worth noting.

First, on 15 November 2000, the IMF approved the ECB’s application to become a prescribed holder of Special Drawing Rights (SDRs), the international reserve asset issued by the IMF. The prescribed holder status allows the ECB to exchange SDRs against freely usable currencies (the US dollar, the euro, the pound sterling and the Japanese yen) in voluntary transactions with IMF

member countries and other prescribed holders. The ECB’s application was in line with Article 30.5 of the Statute of the ESCB, which stipulates that the ECB may hold and manage SDRs.

Second, on the occasion of the regular five-yearly review of the SDR valuation and interest rate baskets on 1 January 2001, the IMF decided to substitute a currency-based approach for the country-based approach

Table 12

Currency weights in the SDR valuation basket

(percentages)

Currency	29 December 2000	1 January 2001
US dollar	45	45
euro	25	29
Japanese yen	18	15
pound sterling	12	11

Box 10

Revision of the SDR valuation and interest rate baskets by the IMF

The exchange rate of the SDR is determined as a weighted average of the exchange rates of the most important international currencies. Until the introduction of the euro, the currencies included in the SDR basket were the US dollar, the Deutsche Mark, the French franc, the pound sterling and the Japanese yen. With the introduction of the euro on 1 January 1999, the Deutsche Mark and the French franc components were replaced by equivalent amounts of euro. However, the criteria for selecting component currencies and assigning weights continued to be based on country indicators. Consequently, the weight of the euro component reflected only the economic weight of Germany and France.

These criteria have now been adjusted to accommodate the existence of monetary unions such as the euro area. Hence the weight of the euro component in both the SDR valuation and interest rate baskets is now determined on the basis of euro area-wide indicators, of which the exports of goods and services of the euro area – excluding internal trade – are the most important. The new weights of the components in the SDR valuation basket are reported in Table 12.

The IMF also reviewed its method for determining the SDR interest rate. The interest rate continues to be determined as the weighted average of interest rates on short-term (i.e. three-month) financial instruments denominated in the currencies included in the SDR basket. In line with the shift to a currency-based SDR valuation method, the three-month EURIBOR became the representative rate for the euro component, replacing the national rates, namely the three-month interbank deposit rate in Germany and the rate on three-month Treasury bills in France.

applied until then for determining the composition of the SDR valuation and interest rate baskets (see Box 10).

2.2 Multilateral and bilateral surveillance of macroeconomic policies

Regular peer reviews (multilateral surveillance) and reviews by independent institutions – like the IMF or the OECD (bilateral surveillance) – of economic and financial developments and policies are particularly important for the Eurosystem, as they enhance the Eurosystem's ability to analyse the impact of external developments on euro area variables. It should be noted, however, that the Eurosystem is not involved in *ex ante* international co-ordination of its monetary policy with the policies carried out by non-euro area countries. Such *ex ante* co-ordination could be incompatible with the mandate of the Eurosystem – which is to maintain price stability in the euro area – and with its independence.

Multilateral surveillance

The ECB participated in the exchange of information and views with other policy-makers in multilateral organisations and fora. Regular meetings on economic and financial developments and policies in major economic areas contributed to, *inter alia*, clarifying views on the appropriateness of current policies and on the impact of external developments on the euro area economy.

In 2000, several international meetings provided an opportunity for such multilateral exchanges of views. The President of the ECB together with the EU Presidency represented the euro area in the sessions of the meetings of G7 finance ministers and central bank governors devoted to surveillance and exchange rate issues. As illustrated by the concerted intervention conducted on 22 September 2000, the meetings of G7 finance ministers and central bank governors provide a framework for consultation on foreign exchange market developments that may lead to co-operation when appropriate.

The President of the ECB also participated in the discussions on the state of the world economy in a number of other informal fora, such as the G10 and G20 meetings of ministers and governors.

The ECB participated in the EPC of the OECD. The EPC discussed the short-term global outlook and near-term policy requirements, as well as policy issues related to growth, including the possible emergence of a New Economy in OECD economies. The subcommittees and working parties of the EPC, including Working Party No. 1, Working Party No. 3 and the Short-term Economic Prospects Working Group, assisted the EPC in preparing these discussions.

Bilateral surveillance

The ECB not only contributed to multilateral surveillance, but also participated in bilateral reviews of economic policies with the IMF and the OECD. In 2000, the IMF held two Article IV consultations on the euro area's monetary and exchange rate policies, which supplemented the national consultations on other policies, such as fiscal and structural policies. In discussing the report prepared by the IMF staff, the IMF Executive Directors noted that strong macroeconomic fundamentals and favourable external developments have resulted in robust growth in the euro area. They took the view that EMU has strengthened the macroeconomic policy framework of the euro area, not only through the conduct of the single monetary policy, but also through better co-ordination of fiscal and structural policies. The IMF Executive Board deemed the conduct of monetary policy since the introduction of the euro as appropriately cautious. Finally, the Board highlighted the need for continued structural reforms in labour and product markets to create the conditions for sustained non-inflationary growth.

In April 2000 and November 2000, the IMF published the reports of the IMF staff on the euro area Article IV consultations, together with Public Information Notices (PINs)

summarising the assessment of the IMF's Executive Board. These publications formed part of a pilot project aimed at enhancing the transparency of bilateral surveillance. This pilot project has now been successfully concluded and the IMF has decided to continue its policy of encouraging national authorities to agree to the publication of Article IV reports and PINs.

At the OECD, the ECB was involved in all discussions of the Economic and Development Review Committee on reviews of the economic situation in individual OECD member countries. In addition to its country reviews, the OECD decided to initiate a first formal review of euro area-wide policies, which will be concluded in 2001. In preparation for this review, an OECD mission visited the ECB to conduct an assessment of the single monetary and exchange rate policy and the overall economic situation in the euro area.

2.3 Monitoring of developments in global financial markets

The ECB takes a particular interest in the work conducted in international organisations and fora on international financial market developments.

In 2000 the IMF continued to pay close attention to financial market developments. As part of the preparatory work for the publication of the yearly International Capital Markets Report, an IMF delegation visited the ECB to discuss recent developments in the European financial markets, with a special focus on financial integration and policies to ensure financial stability.

The ECB participated in the discussion among finance ministers and central bank governors of the G10 countries on financial sector consolidation. This discussion covered patterns, causes and implications of consolidation for financial risks, monetary policy, competition, payment systems and related policy issues.

Furthermore, the ECB took part in several committees operating under the auspices of the central bank governors of the G10 countries. The Basel Committee on Banking Supervision (BCBS) focused its activity on an in-depth revision of the capital adequacy framework (see Chapter VII). The ECB participated in the regular monitoring of market developments by the Committee on the Global Financial System (CGFS), aimed at identifying potential sources of vulnerabilities and assessing changes in the operational infrastructure of financial markets. In this context, the ECB contributed to improving the banking statistics of the Bank for International Settlements (BIS) as well as to reports on electronic trading, on the use of collateral and on the determinants of market liquidity. The ECB was also involved in the work of the Committee on Payment and Settlement Systems (CPSS), which has been chaired by a member of the ECB's Executive Board since June 2000, and in that of the Gold and Foreign Exchange Committee.

Within the OECD, the ECB continued to take part in the examinations of structural developments of global financial markets carried out by the Financial Markets Committee.

The Financial Stability Forum (FSF), which the ECB attended as an observer, concentrated on measures to enhance financial market stability. In particular, the FSF defined a package of measures to address concerns about financial risks that may arise from the activities of highly leveraged institutions (HLIs). The proposed measures concentrate on sound risk management practices by counterparties of HLIs. More direct regulatory measures on the HLIs themselves were also considered, but not recommended at this stage.

In a report on offshore financial centres (OFCs), the FSF concluded that concerns about the transparency and stability of some OFCs should be addressed through the enhanced implementation of internationally recognised standards and codes. The FSF released a

grouping of OFCs into three categories based on an assessment of their legal infrastructures and supervisory practices, the level of co-operation and the resources devoted to supervision and co-operation. Following the recommendations of the FSF, the IMF launched a programme to assess the compliance of OFCs with international standards and to provide technical assistance to help OFCs implement supervisory standards. Additional areas of work of the FSF include the identification of incentives to implement international standards and codes for countries in general, the development of international guidance on deposit insurance schemes and the implications of electronic finance for supervision, regulation and market functioning.

2.4 The architecture of the international financial system

Given that financial market stability is essential to its statutory objectives, the Eurosystem and, more generally, the ESCB take a keen interest in the ongoing debate on the risks to global financial stability that may arise from disruptive developments in international financial markets. They were therefore actively involved in developing views on ways to strengthen the architecture of the international monetary and financial system, focusing on the promotion of sound domestic economic policies and the improvement of financial crisis management.

Soundness of domestic economic policies

Sound economic policies are a key requirement for an orderly integration into the global economic and financial system. Sound policies extend beyond the traditional macroeconomic policy domain and encompass, in particular, prudent management of the risks associated with external liabilities, a carefully conducted liberalisation of capital movements and an appropriate exchange rate policy.

In 2000, several international organisations and fora analysed how the management of

risks associated with external liabilities of the public and private sectors could be improved. The IMF, the FSF and the G20 formulated and started implementing a number of proposals to improve the monitoring and management of these risks. With regard to public sector liabilities, the IMF and the World Bank started developing guidelines on public debt management. Furthermore, important progress was made in official reserve management through the implementation of the template on international reserves and foreign currency liquidity under the IMF's Special Data Dissemination Standard (SDDS). As part of the implementation of this new template, the ECB started releasing monthly data on the official reserves of the ECB and the Eurosystem. The ECB also contributed to the work of the IMF on developing guidelines on the management of foreign exchange reserves. With regard to private sector liabilities, in particular those of financial institutions, countries should promote careful risk management through appropriate supervisory and regulatory regimes.

International organisations and fora also devoted specific attention to the orderly liberalisation of the capital account. The Eurosystem holds the view that capital account liberalisation is inherently beneficial, provided that it is carefully designed and sequenced in line with the development of a robust financial sector. In particular, liberalisation should start with the most stable elements of capital flows, i.e. long-term flows such as foreign direct investment. Furthermore, domestic financial systems should be sufficiently strong before restrictions on capital flows are totally lifted. The Eurosystem also emphasises that, for certain countries, regional economic integration may provide an impetus to open the capital account.

The appropriateness of exchange rate regimes was another main item on the agenda of international meetings. The Eurosystem stresses that the choice of an exchange rate regime hinges on country-specific

characteristics. A basic requirement for an appropriate exchange rate regime is its consistency with the overall policy framework, as well as with the patterns of regional trade and financial links. In addition, the assessment of a particular regime should take into account the dynamic interaction between exchange rate policy and other policy areas.

The need to reduce the vulnerability of individual countries to crises through sound domestic policies has led the IMF to review its surveillance activities. As a result, the IMF is increasingly focusing its surveillance on monetary, fiscal, and exchange rate policies, along with their institutional foundations and closely related structural reforms. Similarly, surveillance increasingly takes into account regional developments, as evidenced by the Article IV consultations for the euro area. The IMF is also intensifying its surveillance over the soundness of the financial systems in individual countries. In particular, the IMF and the World Bank decided to continue their joint Financial Sector Assessment Program (FSAP) after successfully completing a pilot project.

In addition to more focused macroeconomic surveillance, specific attention was paid to the implementation of standards and codes. The FSF compiled a compendium of 12 internationally accepted standards and codes that are relevant to sound and well-functioning financial systems. The IMF continued to monitor compliance with international standards and codes by preparing Reports on the Observance of Standards and Codes (ROSCs) for a number of member countries. In this context, the ECB requested the IMF to prepare a ROSC on the monetary policy and payment systems policy of the euro area. This ROSC, which is to be finalised in 2001, will contain an assessment of compliance with (i) transparency principles for monetary policy and payment systems oversight as set out in the IMF's Code of Good Practices on Transparency of Monetary and Financial Policies and (ii) the Core Principles for

Systemically Important Payment Systems, issued by the CPSS. The ROSC on the euro area is to complement the ROSCs of individual euro area countries, such as those of France and Ireland, which were completed in 2000 or early 2001.

Management of financial crises

The private sector is playing an increasingly important role in the financing of emerging market economies. In times of financial distress, the public sector has often taken over this role, as private sector creditors are generally only involved in the resolution of financial crises on a case-by-case basis. Therefore, the IMF, the G7 and other international organisations saw a need to continue work on general principles to strengthen the framework for financial crisis management. The IMF set up a Capital Markets Consultative Group to promote

regular dialogue with market participants from the private sector. The IMF's financing mechanisms were redesigned to make them more effective in preventing and handling crisis situations. In particular, there was agreement on a number of changes to ensure that countries do not rely on financial resources from the IMF for excessively long periods or in excessively large amounts.

The ESCB stresses the need for clear rules that would set out the respective responsibilities of the private and public sectors in the resolution of crises. In view of the limited resources of the IMF and because of moral hazard considerations, the role of the IMF should focus on the mobilisation of financial support and the formulation of appropriate policy advice. In this vein, the ESCB emphasises that public lending should be limited and that private sector involvement should be sought in all cases of international financial crises.

3 Bilateral issues

In 2000 the ECB continued to deepen its working relations with many central banks outside the EU. The ECB prepared policy positions on a number of issues which are of relevance to its co-operation with other central banks. In particular, it established working relations with central banks of accession countries, as well as those of other neighbouring European countries, key emerging market economies and selected industrialised countries.

3.1 Relations with accession countries

The Eurosystem intensified its dialogue with the central banks of those countries which are candidates for accession to the EU ("accession countries"), as the prospect of the accession of new Member States is a key issue for the Eurosystem. Working relations with accession countries' central banks have been strengthened through regular dialogue

at both the policy and the technical level. Regular bilateral and multilateral co-operation across a wide range of central banking areas took place in 2000. The Eurosystem also monitored economic and institutional developments in these countries closely, specifically legislative discussions and developments relating to the independence of the central banks in these countries, where it was able to provide support. The Eurosystem analysed macroeconomic issues and, in particular, exchange rate policy strategies pursued by accession countries. In this respect, the ECB contributed to the discussions in the ECOFIN Council on the framework for the exchange rate strategies of accession countries and to the related ECOFIN report to the European Council.

Accession countries' exchange rate regimes currently vary from fixed pegs, the extreme form of which is a currency board, to free floats. Until their entry into the EU, accession

countries are not subject to any specific Treaty requirements relating to exchange rate strategies. Fulfilling the Copenhagen criteria should be the focus of accession countries' policies at this stage and the setting-up of an appropriate microeconomic foundation for a competitive market economy is of key importance to achieving sustainable macroeconomic stabilisation. The large variety of exchange rate arrangements might seem appropriate to the specific demands of the transition process, taking into account progress on structural reform as well as the implications of individual policy choices. However, although such diversity may be warranted before EU membership, potential new EU members foreseeing joining the new exchange rate mechanism (ERM II) may already wish to consider the suitability of their current policies with a view to their prospective membership of this mechanism.

When acceding to the EU, accession countries will become "Member States with a derogation" and will be required to treat their exchange rate policy as a matter of common concern. This means that Member States shall refrain from pursuing exchange rate policies that hamper the smooth functioning of the Single Market. They will be expected to join ERM II, since new Member States will not have an "opt-out" clause concerning the EMU chapter and will ultimately adopt the euro. ERM II can be joined at any time following accession, in accordance with the procedures set out in the relevant Council Resolution.

ERM II is sufficiently flexible to accommodate the exchange rate regimes currently pursued in the majority of the accession countries. The Eurosystem examined the compatibility of different exchange rate regimes with the requirements for participation in ERM II. Exchange rate regimes based on a peg or a managed float using the euro as the reference currency can in principle be accommodated, whereas this would obviously not be the case for a regime based on a freely floating exchange rate. In addition, crawling pegs and exchange rate regimes based on reference

currencies other than the euro are, in the view of the Eurosystem, incompatible with the ERM II framework.

The Eurosystem also examined whether euro-based currency board arrangements (CBAs) can be maintained while participating in ERM II. The Eurosystem is of the view that such arrangements cannot be regarded as a substitute for participation in ERM II, but may, under some circumstances, constitute a unilateral commitment enhancing compliance with the requirement under ERM II to maintain exchange rate stability. Accession countries which have operated a sustainable euro-based CBA would not be required to go through a double regime shift to adopt the euro. The sustainability of euro-based CBAs will be assessed on a case-by-case basis. The unilateral commitment derived from a euro-based CBA will not impose any additional obligations on the ECB to those deriving from the relevant Council Resolution. Moreover, participation in ERM II while maintaining a euro-based CBA would not exempt the relevant parties from commonly defining a central rate against the euro.

In some accession countries, as an alternative path to adopting the single currency, i.e. outside the framework of the Treaty, the idea of adopting the euro as legal tender, or "euroisation", has been raised. The Eurosystem, however, does not consider euroisation to be an acceptable way for an accession country to adopt the euro. Accession countries are on a predefined path to entry into the EU and ultimately into the euro area, which implies that they must follow the procedures and comply with the requirements laid down in the Treaty. Euroisation by an accession country would conflict with the economic reasoning behind EMU, which foresees the eventual adoption of the euro as the end of a convergence process within a multilateral framework. This approach is, in itself, a reflection of the consensus view that a successful monetary union requires prior macroeconomic convergence between the participating

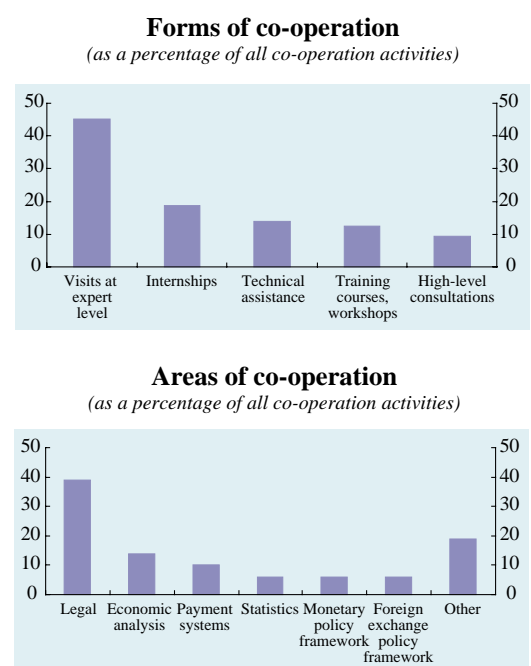
Member States and common agreements on key issues, such as the eventual adoption of the irrevocably fixed conversion rate.

In 2000 the ECB stepped up its co-operation with the central banks of accession countries. These activities took the form of multilateral seminars, bilateral visits at the expert level, high-level consultations, internships, the provision of technical assistance and regular professional working relations at the expert level. About 60 activities were organised in 2000, involving central banks from all the accession countries (see Chart 21). The central bank co-operation addressed a large number of issues related to economic analysis, legal systems, payment and securities settlement systems, the monetary policy framework, the exchange rate policy framework, statistics, accounting, internal audit, banknotes and prudential supervision. In the legal field, the Eurosystem, in co-operation with the central banks of the accession countries, conducted a detailed

examination of the status of legislation in the central banking and financial market areas. Such co-operation activities serve as an important means of promoting an orderly integration of the central banks of accession countries into the ESCB and ultimately into the Eurosystem.

To meet the increasing demand for co-operation in a co-ordinated way, the ECB and the national central banks of the euro area have started to elaborate a framework for their co-operation activities. As part of this framework, they have started sharing information on their co-operation activities with accession countries' central banks and will continue to do so on a regular basis. The main objectives of the framework are to mobilise all available resources, to benefit from the experience of the different components of the Eurosystem, to ensure the necessary support for the central banks of all accession countries and to make sure that consistent approaches and strategies are followed.

Chart 21
Co-operation activities between the ECB and the central banks of accession countries



Central bank co-operation between the Eurosystem and accession countries' central banks also takes the form of high-level seminars. The Vienna Seminar organised by the ECB and the Oesterreichische Nationalbank on 15 December 2000 was the second high-level seminar to bring together the Eurosystem and the governors of the central banks of the 12 EU accession countries (Bulgaria, Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia and Slovenia). It followed the Helsinki Seminar, the first seminar which was held at the level of the governors.

The purpose of the Vienna Seminar was to hold a more in-depth discussion of important monetary policy issues to ensure the smooth future integration of accession countries' central banks into the ESCB and, ultimately, the Eurosystem. After the 1999 Helsinki Seminar had set out the general policy framework, the discussion in December 2000 focused on three specific issues: price

dynamics in accession countries, the role of central banks in the accession process and co-operation between the Eurosystem and the accession countries' central banks.

Similar events will continue to be held in the years to come. The next seminar will take place in Berlin in 2001.

3.2 Relations with other countries

The ECB also developed its relations with the central banks of European countries that are not in the accession process, key emerging market economies and selected industrialised countries. The President and the other members of the Executive Board

visited a number of third countries and received delegations from these countries.

Attention was paid to third countries on or near the European continent. In some countries of south-eastern Europe and of the Commonwealth of Independent States (CIS), the euro has replaced the euro area national currencies as a reference currency in exchange rate policies. The authorities of Montenegro informed the ECB that the euro would be the sole legal tender in their territory from 13 November 2000 and that all cash holdings in Yugoslav dinars would be converted into Deutsche Mark until the introduction of euro banknotes and coins. The decision to introduce the euro was taken unilaterally without involvement of the ECB.

Box 11

Main conclusions emerging from the Vienna Seminar

- Accession countries will need to further advance the process of bringing down inflation rates in the years to come, while not delaying the much-needed relative price adjustments within the economy. Such price adjustments are part of the process of transition and “real convergence” (catching up) and will typically entail inflation rates that will, for some time, range above those prevailing in the euro area, and gradually approach them.
- Nominal and real convergence should be pursued in parallel. Progress in nominal and real convergence will imply an orderly closing of the gap between the accession countries and the euro area economy, both in terms of per capita income and price levels. In this process, monetary policy needs to be supported by prudent fiscal and wage policies and adequate structural reforms.
- No common prescription is appropriate for monetary policy strategies and for exchange rate policies before EU accession. Different regimes are feasible, as long as they are supported by an appropriate and stability-oriented economic policy stance.
- The strict implementation of EU Treaty obligations in accession countries, in particular those concerning the independent status of the central bank, will be of fundamental importance for the integration of the accession countries into the European Union and, eventually, into the euro area.
- Entry into the euro area will be based upon fulfilment of the convergence criteria. The Treaty establishing the European Community requires strict and sustainable fulfilment of these criteria, which will be applied to future euro area entrants in the same way as they have been in the past.
- The ongoing dialogue between the Eurosystem and accession countries' central banks will be further expanded. In particular, the Eurosystem stands ready to enhance its central bank co-operation activities in all relevant areas, including economic and monetary policy analysis, payment systems, statistics, legal issues and other areas.

The ECB also participated in meetings of regional networks and fora on or near the European continent. In particular, the ECB attended the annual meeting of the Central Bank Governors' Club in Ankara, an informal grouping that includes central banks of countries in the Balkans, the Black Sea region and the Caucasus. In addition, the ECB took part in the Working Table on Economic Reconstruction, Development and Co-operation within the framework of the Stability Pact for south-eastern Europe.



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Designed by Pedrotti Riccardo and Francesca Zavanone. Untitled

Chapter VI

Payment and securities settlement systems

I General issues/introduction

Statement on the role of the Eurosystem in the field of payment systems oversight

In its statement of June 2000, the Governing Council explained that promoting the smooth functioning of payment systems is a core function of central banks and is directly linked to its responsibilities for monetary policy and financial stability. Sound and efficient payment and settlement systems are essential for the smooth implementation of monetary policy and contribute towards the stability of the financial system as well as to public confidence in the euro. In order to achieve these objectives, the Eurosystem carefully monitors developments in the field of payment and settlement systems, offers payment and settlement services directly and ensures compliance with relevant standards for systems operated by itself as well as by the private sector. This oversight role of the Eurosystem – which covers both large-value interbank funds transfer systems and retail payment systems – is recognised in the Treaty establishing the European Community (Article 105 (2)) and the Statute of the ESCB (Articles 3 and 22).

The Governing Council formulates the common oversight policy stance by determining the objectives and setting the standards with which payment systems have to comply. In areas not specifically covered by the common oversight policy, policies defined at the NCB level apply within the framework of the common policy. Enforcement of the common oversight policy stance is ensured by the NCBs in relation to payment systems legally incorporated in their jurisdiction. However, in view of the special characteristics of some systems, the Governing Council can entrust the ECB with the oversight responsibility for such systems. The common oversight policy stance can be ensured by ECB legal acts in accordance with Article 22 of the Statute of the ESCB or more informal tools (e.g. moral suasion). An appropriate co-ordination and reporting

framework ensures consistency in the implementation of oversight policies.

The Eurosystem's oversight policy is based in particular on the principles for the minimisation of systemic risk set out in the 1993 Report of the Committee of Governors of the Central Banks of the Member States of the European Economic Community entitled "Minimum common features for domestic payment systems". In the context of the preparations for EMU, this report confirmed the safety standards set out in the 1990 "Report of the Committee on Interbank Netting Schemes of the Central Banks of the Group of Ten countries" (Lamfalussy report). In 2000 further work was carried out with a view to providing guidance on the implementation of Standard I of the Lamfalussy report (which requires payment systems to have a well-founded legal basis) by requiring legal opinions for foreign participants in euro large-value payment systems. The guiding principles of the Eurosystem's oversight policy in the field of electronic money are the requirements set out in the ECB's "Report on electronic money" of 1998.

Since the beginning of this year, the "Core principles for systemically important payment systems", as approved by the G10 Governors in January 2001, have also formed part of the standards applied by the Eurosystem when performing its oversight role.

Memorandum of Understanding

Since close co-operation between payment systems overseers and banking supervisors contributes to an overall strategy of risk reduction in the financial system, and is thus essential, the ECB and the NCBs of the Eurosystem and of the non-participating Member States, in their capacity as overseers of payment systems, and the EU banking supervisory authorities have agreed to a "Memorandum of Understanding" (the

Memorandum). The Memorandum replaces a previous arrangement in place since 1994 and takes into consideration both the new institutional environment created by the establishment of the Eurosystem and the Eurosystem's oversight framework. It focuses on an exchange of information between payment systems overseers and banking supervisors in relation to large-value interbank funds transfer systems (IFTSs), in order to ensure the soundness and stability of such systems and of their participants (credit institutions and investment firms). The Memorandum may also serve as a starting-point for organising co-operation on retail payment systems, including electronic money schemes (see also Chapter VII, Section I).

Co-operation with accession countries

The ECB participates in multilateral co-operation with accession countries in the field of payment and settlement systems. In 2000 the ECB focused on key reforms of payment and settlement systems under way in these countries and on an exchange of views on payment issues related to the accession process. In this connection, the ECB hosted a major two-day seminar entitled "Payment and settlement systems and the accession process" in mid-February 2000, which was attended by representatives of the European Commission and the central banks of the Member States and of 12 accession countries. Furthermore, bilateral contacts and working relationships were established and maintained throughout the year. Closer co-operation with accession countries is planned for 2001. More detailed information on the ECB's relations with accession countries is provided in Chapter V.

2 Oversight of large-value payment systems

Developments in large-value payment systems in euro

In 2000 the five large-value payment systems that process payments in euro alongside TARGET continued to operate smoothly. These systems are the Euro Clearing System (Euro I), which is run by the Clearing Company of the Euro Banking Association (EBA), and four domestic systems: Euro Access Frankfurt (EAF) in Germany, Paris Net Settlement (PNS) in France, Servicio de Pagos Interbancarios (SPI) in Spain and Pankkien On-line Pikasiirrot ja Sekit-järjestelmä (POPS) in Finland.

The ECB continues to play its three-fold role in respect of Euro I. Besides its oversight role, which includes monitoring general developments in the system, the ECB provides end-of-day settlement services. In addition, the ECB holds the liquidity pool for Euro I, which has been established in order to ensure the timely settlement of Euro I in the event of a failure of participants. Some

fluctuation in the membership of Euro I occurred in 2000, owing to the withdrawal of some participants, mainly as a consequence of mergers between banks and new members joining. Overall, the number of participants remained stable at 72 (as at the end of December 2000).

Continuous Linked Settlement (CLS)

The CLS Bank (CLSB), established in New York, has confirmed that it intends to settle foreign exchange transactions on a payment-versus-payment basis as from October 2001. As foreseen by the framework for co-operative oversight set up by the Lamfalussy report, the Federal Reserve System has the lead oversight responsibility for the CLS system and has involved the central banks of the other eligible currencies in the oversight of the system design. It is envisaged that the Bank of England will be the designating authority under the European Parliament and Council Directive 98/26/EC

of 19 May 1998 on settlement finality in payment and securities settlement systems. Since the euro will be one of the currencies to be settled under the scheme from the start, the Eurosystem has closely followed the development of the system and has liaised closely with the other relevant overseers and CLSB itself. An account for CLSB will soon be opened in the ECB payment mechanism (EPM) for testing purposes and, subject to final approval of the system, the ECB will open an account for CLSB for live operations.

In 2000 and in early 2001, representatives of the Eurosystem met with the euro area shareholders of CLS Services, the holding company which is managing the project, to discuss risk management, liquidity and operational issues relating to the settlement of the euro leg of foreign exchange transactions. The meetings focused on the impact of CLSB's operations on euro area large-value payment systems and on liquidity management issues in euro.

Developments in the correspondent banking business in euro

The Eurosystem has an interest in following developments not only in large-value and retail payment systems in euro, but also in the payment business as a whole. To this end, the Eurosystem, in co-operation with the central banks of non-participating Member States, carried out a survey-based study of the recent

evolution in correspondent banking in the EU. It provided evidence that EMU, together with its new payment system infrastructure, new payment systems initiatives (e.g. in the field of retail payments and CLS), technological innovation and financial sector consolidation have been sources of major changes in the way correspondent banking activities are now carried out. All these factors have led to an ongoing concentration of correspondent banking business among a limited number of market players. Some banks have become the settlement institutions for a large group of banks or run innovative payment arrangements that combine the features of correspondent banking and fund transfer systems. In some cases, the scale of the payment activities of those market players exceeds the turnover of the smaller euro large-value payment systems mentioned above. A further step towards higher concentration is expected to occur in 2002, after the introduction of the euro banknotes and coins, since the correspondent banking relations that currently exist in respect of payments in legacy currencies will no longer be needed.

These trends have an impact on efficiency, competition and risk in the payment business, all of which the Eurosystem considers from an oversight perspective. As banks are the main players in this field, analysis of developments and of their implications is carried out in co-operation with national banking supervisory authorities.

3 Oversight of retail payment systems

Cross-border retail services

In 2000, the Eurosystem continued to organise regular meetings with banks, payment systems operators and the European Credit Sector Associations in order to encourage discussions and facilitate co-operation aimed at the timely fulfilment of the objectives set out in the report entitled "Improving cross-border retail payment services – the Eurosystem's view" (September

1999). In this context, a Progress Report was published in September 2000 which describes the progress made by the banking and payment systems industry since the publication of the 1999 report. Furthermore, it provides an interim assessment up to the end of August 2000 against the objectives and identifies the outstanding issues. The Progress Report indicates that the banking and payment systems industry has committed itself to the fulfilment of the Eurosystem

objectives. Progress has been made towards preparing the ground for a more efficient handling of cross-border retail credit transfers. In this respect, standards allowing straight-through processing (STP) of payment orders have been introduced, the EBA has established a payment system for cross-border low-value payments (Step I, see below) and substantial progress to reduce balance of payment reporting requirements as from 2002 has been achieved. Nevertheless, the Eurosystem has also identified some unresolved issues. It is urging the banks and payment systems to commit publicly to an early implementation date for the STP standards. In addition, more progress is expected with regard to customer prices and the elimination of charges for the payee, if the payer has asked to bear all costs. The European Credit Sector Associations are currently developing solutions to the problem. The Eurosystem recognises that achieving the objectives not only depends on banks but also on companies and customers, who should include sufficient information on invoices and payment orders to permit STP. The Eurosystem has therefore invited the banking and payment systems industry to launch an information campaign.

The Eurosystem will continue to monitor closely the activities of the banking sector and the progress made towards the fulfilment of the objectives, in order to ensure that the preparations ultimately translate into adequate services for European citizens. Further meetings and workshops bringing together the Eurosystem and market representatives are planned.

Step I initiative by the EBA

In response to the Eurosystem's objectives for cross-border retail payment services, the EBA developed a cross-border retail payment service which uses the existing technical platform of its Euro I large-value system. This service is called "STEP I" (derived from "Straight-Through Euro Processing") and was launched on 20 November 2000. A bank

which has joined the STEP I arrangement is able to submit retail payments to, and receive them from, other STEP I participants and settle the netted balances via a bank that is participating in the Euro I large-value system (settlement bank). To date, 21 banks have joined the STEP I initiative. STEP I is supposed to be the nucleus for further developments of the EBA in the area of cross-border retail payment systems.

The ECB has assessed STEP I from a payment systems oversight perspective. The assessment of STEP I has not focused on STEP I itself, but rather on the impact it may have on the soundness and smooth functioning of Euro I and on a Euro I bank which is acting as a settlement bank for STEP I banks. Against this background, the Governing Council of the ECB confirmed its non-objection to the launch of STEP I. The ECB will continue to follow the further development of STEP I. It will only be possible to evaluate the full extent of STEP I's contribution to the achievement of the Eurosystem's objectives for cross-border retail payment services once it has been operating live for some time.

Electronic money

The Eurosystem continually follows developments in electronic money and its implications for central banks. In 2000 it co-operated actively with the European Community institutions on the new regulatory framework for electronic money institutions (ELMIs), a process which led to the publication on 27 October 2000 of the European Parliament and Council Directive No. 2000/46/EC on the taking-up, pursuit and prudential supervision of the business of electronic money institutions and European Parliament and Council Directive No. 2000/28/EC amending Directive No. 2000/12/EC relating to the taking-up and pursuit of the business of credit institutions. This new regulatory framework largely answers the monetary policy, prudential and payment systems concerns of the ECB.

Particular attention was also paid to the technical security approaches to electronic money schemes and their interoperability within the euro area. The Eurosystem is studying different approaches adopted by electronic money schemes and market initiatives in this area, as it considers these factors important for the reliable functioning of systems and for protection against criminal abuse.

Preparation of retail systems in euro for the 2002 cash changeover

In 2000 the ECB and the euro area NCBs started to collect information on the state of preparations for the final changeover to

the euro on 1 January 2002, also in relation to the Commission Recommendation of 11 October 2000 on measures to facilitate the preparation of economic operators for the changeover to the euro. Within the field of payment and settlement systems the focus is on the preparation both of retail payment systems, such as automated clearing houses (ACHs), point of sale (POS) networks and electronic money schemes, and of retail payment instruments. The information obtained so far does not indicate any insurmountable problems. The ECB and the NCBs will continue to monitor developments closely throughout 2001.

4 Other payment systems activities

In February 2000, the ECB published a document entitled "Payment systems in the European Union: Addendum incorporating 1998 figures", a statistical update of the 1996 report entitled "Payment systems in the European Union" (the "Blue Book"). In view of the fundamental changes that have taken place since 1996, the ECB, in close

co-operation with the NCBs, has been working on a new, third edition of the Blue Book to be published in the second quarter of 2001. It will provide an updated and restructured descriptive guide to the payment and securities settlement systems operating in the euro area and the EU Member States, and include statistics for 1999.

5 Securities settlement systems policy

The Eurosystem has a general interest in the smooth functioning of securities settlement systems (SSSs). The Eurosystem's interest stems from several concerns.

First, according to the Statute of the ESCB, central bank credit for monetary policy or payment systems is granted only on the basis of adequate collateral. As most collateral transfers occur via SSSs, their appropriate functioning is a condition for the smooth implementation of monetary policy operations.

Second, SSSs and payment systems are closely linked. Should SSSs be subject to sudden disruptions, the liquidity arising from securities transactions may not be available

to the market and could result in liquidity shortages, which, in turn, could trigger a systemic disruption within large-value payment systems.

The Eurosystem's attention extends to securities clearing organisations, since they are increasingly performing certain functions traditionally performed by SSSs, such as the matching and netting of settlement instructions.

Assessment of securities settlement systems

In 1998, in its capacity as a user of SSSs, the Eurosystem set standards for the use of EU

SSSs in its credit operations and assessed the EU SSSs against these standards. The results of the assessment, and in particular the list of eligible SSSs and their conditions of use, are published on the ECB's website.

The Eurosystem completed a second assessment in 1999 and carried out a third assessment in 2000 to update the list of eligible SSSs and their conditions of use which was published in February 2001. The SSSs have maintained their efforts during 2000 to enhance their level of compliance with the standards. As a result there are now eight SSSs in the EU that can be used without preconditions. In addition to the changes to comply further with the standards, the European SSSs industry is subject to a strong consolidation process at both a national and a cross-border level. In this respect, four SSSs (CBISSO in Ireland, CGO in the United Kingdom, LDT and CAT in Italy) have been removed from the list of eligible SSSs. Other SSSs have announced and agreed to merge (e.g. Deutsche Börse Clearing and Cedel, forming Clearstream, and Euroclear with Sicovam SA, Necigef and CIK). However, consolidation has led to an integration of technical and operational platforms rather than towards a formal reduction of the number of SSSs.

Assessment of links

The Eurosystem has also continued to assess links between SSSs, in line with its policy of encouraging the development of market solutions for the cross-border use of collateral and to foster the integration of European financial markets. The links that have been assessed so far allow the cross-border transfer of securities on a free-of-payment basis.

In 1999 the Eurosystem assessed and deemed eligible a total of 47 links. The Eurosystem continued the exercise in February, May and October 2000, which in the end resulted in a total of 64 eligible links.

However, following the withdrawal of CBISSO, CGO, LDT and CAT from the list of the eligible SSSs, the total number of eligible links had decreased to 62 by the end of December 2000 (an up-to-date list of eligible links can be found on the ECB's website).

Integration of the European securities market

The Eurosystem has a keen interest in the integration of the securities market and is therefore analysing aspects of the market infrastructure that are determinants in this process. In this respect, the following barriers to the development of an integrated European financial market have been identified in close contact with market participants and will need to be addressed:

- insufficient development of procedures for cross-border settlement on a DVP basis;
- multiplicity of master agreements as legal documentation for collateralised operations such as repos (the Eurosystem has been associated with and has participated in discussions towards developing a harmonised legal framework in the field of collateralised operations);
- lack of harmonisation in SSS procedures and in the collateralisation processes;
- heterogeneity of legal, regulatory and fiscal regimes.



Mitarbeiterkinder der Luxair S.A., Luxembourg

Designed by Paule Lemmer. Title: Tracing the EURO

Chapter VII

Financial stability and prudential supervision

I Developments in the institutional framework for financial stability

The increasing integration of banking and financial activities in the euro area and the EU led the EU authorities, in the course of 2000, to review *the institutional arrangements and the regulatory framework for financial stability* in place. Two issues arose. The first was the capacity of the present institutional arrangements to accommodate changes in financial markets and to provide sufficient safeguards of financial stability. The second was whether the regulatory framework might lag behind financial market developments, hence creating obstacles to the process of market integration. Both issues were tackled by ad hoc groups: the Working Group on Financial Stability, set up by the Economic and Financial Committee (EFC), and the Committee of Wise Men on the regulation of European securities markets, established by the EU Council meeting in the composition of ministers of finance and economy (ECOFIN). The ECB followed these initiatives closely in view of its keen interest in the euro area and the EU having an institutional and regulatory framework that is both effective in ensuring financial stability and conducive to more integrated financial markets.

The "Report on financial stability"¹ of the EFC Working Group concludes that the existing institutional arrangements provide a coherent and flexible basis for safeguarding financial stability in increasingly integrated markets, but that their operational functioning needs some enhancement. In particular, the report puts forward four recommendations for adapting the practical arrangements to the prevailing trends in the financial sector: (i) strengthening cross-sectoral co-operation at the EU level between banking, securities and insurance supervisors, inter alia by clarifying and extending the concept of a co-ordinating supervisor for large financial groups, (ii) enhancing exchanges of information both between different supervisory authorities and between supervisory authorities and central banks on

major financial institutions and market trends, (iii) reinforcing the co-operation between supervisors and central banks in order to tackle potential financial problems with cross-border implications, and (iv) working on convergence in supervisory practices.

The ECB supports the stance taken in the report. Given the current trends in financial markets as well as the fact that prudential supervision remains a national responsibility the smooth co-operation among supervisors is needed to facilitate preventive and corrective action to maintain the stability of the financial system in the euro area and the EU.

The EFC has sent the "Report on financial stability" to *all relevant EU committees*, together with a request to take formal measures to implement the recommendations and to report on all progress. The main bodies involved in the field of banking supervision are the ESCB's Banking Supervision Committee (BSC), the Banking Advisory Committee (BAC) and the Groupe de Contact (GdC). In all these fora, work is under way to implement the recommendations and step up multilateral co-operation. Particular emphasis is placed on convergence in supervisory practices, which is the most innovative and challenging area of work. The GdC, which has already been operating as a forum for co-operation on supervisory practices for a long time, is very active in this field. The BSC's contribution to this process is focused, in particular, on those supervisory arrangements having a bearing on systemic stability and on those aspects calling for co-operation between the Eurosystem/ESCB and banking supervisors.

In the latter context, a *Memorandum of Understanding* has been agreed upon by the EU payment systems overseers (including the

¹ Published on 8 April 2000.

ECB) and the EU banking supervisors for co-operation and the exchange of information (see also Chapter VI of this Annual Report). The agreement replaces a previous arrangement in place since 1994. The EU banking supervisors contributed to the preparation of the Memorandum through the BSC. The new framework – which is needed since payment system oversight and prudential supervision share the common objective of ensuring financial stability – is intended to cope with the change in the way the two functions now interact, triggered by the establishment of EMU. The Memorandum addresses co-operation and the exchange of information in three different sets of circumstances: (i) the establishment of a payment system and applications for access to such system, (ii) on-going activities, and (iii) crisis management situations.

Significant steps forward were also taken in the field of *cross-sectoral co-operation* between supervisors, in particular through the setting-up of the Cross-Sector Roundtable of Regulators. All the relevant EU committees participate in the Roundtable² and the European Commission facilitates the process.

2 Developments in the banking sector

The integration of banking and financial markets in the euro area proceeded further in 2000, significantly increasing the relevance of cross-border wholesale activities and the foreign components of securities portfolios, while lending and deposit-taking maintain a significant degree of segmentation into national or even regional markets. In December 2000 85% of bank deposits and 90% of bank loans (excluding interbank transactions) consisted of business with domestic counterparties (see Table I). However, the picture is rather different when interbank transactions are taken into consideration. The share of cross-border interbank transactions within the euro area has increased steadily, stimulated by the single currency and the single monetary policy, accounting for more than 50% of overall gross transactions in both unsecured and repo

This informal forum allows for a more in-depth exchange of information between the different sectoral groups of supervisors on matters of common interest.

The Eurosystem also has a general interest in the move towards *more integrated securities markets*. The tasks of the Eurosystem to promote the smooth functioning of payment systems and to contribute to the smooth conduct of national policies in the field of prudential supervision and financial stability give the ECB an even stronger incentive to monitor and assess relevant developments in securities market infrastructures and the regulatory framework. Consequently, the ECB actively participated in the consultation process initiated by the Committee of Wise Men on the regulation of European securities markets. The Committee has been mandated by ECOFIN to assess the current conditions of the regulation of securities markets and to make proposals in order to eliminate existing obstacles to the integration of financial markets. The proposals put forward by the Committee for achieving a more flexible and effective regulatory process at the EU level are broadly supported by the ECB.

² The participating committees are the BSC, the BAC, the GdC, the High Level Securities Supervisors Committee (HLSS), the Forum of European Securities Commissions (FESCO), the Insurance Committee (IC) and the Insurance Conference.

other euro countries and the rest of the world has increased steadily since 1998.

The analysis of balance sheet data, however, does not give a complete account of the cross-border activities of banks, since these data do not reflect some services which have experienced particularly high growth in the recent past. This is the case, for instance, for fee-generating activities, such as corporate finance and asset management services.

In the face of the increasing linkages between banks and the common trends affecting their business, the activity of the BSC – in the context of the Eurosystem's task to contribute to the smooth conduct of supervisory and financial stability policies – has been further developed along *two main lines*.

First, the analytical tools for the macroprudential analysis of the banking sector have been sharpened by proposing a comprehensive framework for monitoring the systemic risk associated with the banking sector from an EU and euro area-wide perspective. In particular, this framework, based on the combination of statistical information and a qualitative and, to the extent possible, forward-looking assessment by the national supervisory authorities, is intended to identify and examine on a systematic basis any events or developments which could threaten the stability of the banking sector. Significant progress has been made on enhancing the information base used for this analysis, which includes both central bank and supervisory data. A set of "macroprudential indicators" has been identified and ways to further enhance the information continue to be explored.

A *first assessment* of the EU banking sector stability was carried out by the BSC in the course of 2000 and will be regularly updated in the future. The regular monitoring of systemic stability in the EU and euro area also allows specific issues to be identified for further analysis. During the first monitoring exercises, particular attention was devoted

to the analysis of the effects of asset price movements on the EU banking sector³ and of EU banks' interest margins and credit standards.⁴ With regard to the latter, the main finding was that a narrowing in banks' lending margins has taken place in recent years (between September 1997 and September 2000), which has been largely attributed to the ongoing tightening of competition. In particular, cross-border competition intensified in some areas, with the Nordic countries and the UK and Irish markets being clear examples of integrating regional financial markets, while the growth of "remote banking" supported increased competitive pressures from new entrants. In order to ensure that the lower lending margins are sustainable, banks should adopt sound provisioning policies and risk management systems, effective cost controls and adequate asset quality and capital. With regard to banks' lending standards, the overall assessment by supervisory authorities is broadly satisfactory, although there is evidence that banks' internal rating systems are often based heavily on current economic conditions rather than on developments in asset quality over the business cycle. However, there are already some examples of banks moving towards a more long term-oriented approach in which loan quality throughout the economic cycle is evaluated.

Second, the BSC enhanced its *analysis of major structural developments* within the EU banking systems. This activity has proven to be a valuable contribution to the work of the national supervisory authorities, in terms of identifying issues of concern and areas where closer monitoring and/or an adaptation of supervisory practices is needed. Following up on earlier work on the possible effects of EMU and technology on the EU banking systems and on the income structure of the EU banks,⁵ work in the year 2000

³ See the report entitled "Asset prices and banking stability", published by the ECB in April 2000.

⁴ See the report entitled "EU banks' margins and credit standards", published by the ECB in December 2000.

⁵ See the ECB's Annual Reports for 1998 and 1999.

Table 13**Domestic and cross-border on-balance-sheet activities of euro area OMFIs**

	EUR billions unless stated otherwise			
	Dec. 1997	Dec. 1998	Dec. 1999	Dec. 2000
<i>Total interbank assets</i> ¹⁾	4,681	4,981	5,355	5,689
Loans to OMFIs	3,886	4,087	4,303	4,465
domestic business (%)	59.7	61.4	62.1	60.8
business with other euro area countries (%)	15.2	16.6	17.5	17.6
business with the rest of the world (%)	25.1	22.0	20.4	21.6
Other claims on OMFIs (securities and money market paper)	795	894	1,052	1,224
domestic business (%)	80.0	78.2	72.7	68.1
business with other euro area countries (%)	12.7	14.5	18.4	19.8
business with the rest of the world (%)	7.3	7.3	8.9	12.1
<i>Total loans to non-banks</i> ²⁾	5,887	6,296	6,789	7,392
domestic business (%)	91.8	91.6	90.8	90.2
business with other euro area countries (%)	2.3	2.6	3.0	3.2
business with the rest of the world (%)	5.9	5.8	6.2	6.6
<i>Fixed income securities issued by non-banks</i> ²⁾	1,416	1,503	1,597	1,548
domestic business (%)	71.2	66.9	60.1	54.6
business with other euro area countries (%)	16.0	19.2	24.5	26.5
business with the rest of the world (%)	12.8	13.9	15.4	18.9
<i>Equity holdings</i>	379	478	604	745
<i>Other assets</i>	1,019	1,014	1,190	1,322
<i>Total assets</i>	13,382	14,272	15,535	16,696
<i>Total interbank deposits</i>	4,104	4,469	4,883	5,179
domestic business (%)	58.9	58.5	57.4	55.2
business with other euro area countries (%)	14.5	15.7	16.1	15.5
business with the rest of the world (%)	26.6	25.8	26.5	29.3
<i>Total deposits from non-banks</i> ²⁾	5,074	5,343	5,645	5,991
domestic business (%)	88.5	87.6	85.8	84.6
business with other euro area countries (%)	5.5	5.6	5.3	5.2
business with the rest of the world (%)	6.0	6.8	8.9	10.2
<i>Fixed income securities</i> ³⁾	2,064	2,281	2,613	2,831
<i>Capital and reserves</i>	688	744	838	924
<i>Other liabilities</i>	1,452	1,435	1,556	1,771
<i>Total liabilities</i>	13,382	14,272	15,535	16,696

Source: ECB.

1) These items do not include shares.

2) Including general government.

3) The item includes money market paper.

concentrated on the effects of the restructuring of the banking and financial industry through mergers and acquisitions⁶ and on banks' involvement in wealth management, namely private banking and asset management.

For a number of years, the EU banking system has been in a process of restructuring. In the period from January 1995 to June 2000, most mergers and acquisitions involved domestic banks and, in particular, smaller institutions. Consolidation initially took place at the national level and was more pronounced in the smaller countries. By contrast, some of

the larger countries still have rather fragmented banking markets, even though the degree of concentration has increased. More recently, merger and acquisition activity has intensified and larger institutions have been more frequently involved. In international bank mergers and acquisitions, most transactions involved at least one institution from outside the European Economic Area (EEA). Some regional banking groups and

⁶ See the report entitled "Mergers and acquisitions involving the EU banking industry – facts and implications", published by the ECB in December 2000.

conglomerates have been established, but no definite “trend” towards cross-border mergers and acquisitions within the EEA, EU or euro area could be discerned. However, the driving forces behind the process are not confined within national borders. The increasing relevance of deals involving large credit institutions appears related to the transformation of money and capital market activity in the EU and euro area after the introduction of the euro. The trend towards bank consolidation in the United States signals that some factors at play have indeed a global reach. An additional feature of the restructuring is the formation of financial conglomerates – defined as groups of financial companies operating in different sectors of the financial industry – which was observed in many Member States. The process of conglomeration is mainly bank-driven, as banks have been actively expanding into asset management.

Wealth management – comprising private banking services for wealthy individuals and asset management, i.e. the services of managing financial portfolios, selling products and advising clients – is growing rapidly in the EU. This growth has provided the commercial incentive for EU banks to enter the business at a time when competition is intensifying in their more traditional markets. Wealth management provides an opportunity for banks to cross-sell products to clients and

thus to counter trends towards disintermediation. Private banking is somewhat different, in that it allows for the bundling of services and products, thereby countering the trend towards lower margins on standardised products.

Banks have played an important role in asset management for many years, but their involvement may have increased in the recent past. Private banking, which used to be considered a specialist business, has seen a significant number of new entrants, including many of the larger universal and investment banks. These business lines are seen by the banks both as being more profitable and as offering more stable returns than traditional banking. Their profitability is increased by the fact that, in general, they have lower capital requirements because many related activities are conducted off-balance-sheet. Reputational risks are however considered higher in wealth management than in traditional banking. There are indications of increasing competition in wealth management. Entry barriers are falling owing to the development of the internet, which might increase the influx of new service providers.

Besides the two major areas mentioned above, new work was initiated by the BSC in the field of analysing country risk, while work on central credit registers and supervisory early warning systems continued.

3 Developments in the regulatory field

At the core of the developments in the regulatory field at the international level was the revision of the framework for banks’ capital adequacy carried out by the Basel Committee on Banking Supervision (BCBS). In the year 2000 most of the work of the BCBS was devoted to refining its proposal and a second consultative paper was released in January 2001, for comments by the end of May. It is planned for the new framework to be adopted by the end of 2001 and implemented in 2004 by all G10 countries, or even worldwide, given the global reach of the Basel Accord.

The proposed new regulatory regime rests on *three pillars*. The first pillar – minimum capital requirements – relies on a new framework for measuring credit risk, which includes: (i) the reshaping of the standardised approach, providing for the use of the ratings attributed by the external agencies, and (ii) the introduction of the internal ratings-based (IRB) approach, relying on the risk measurement systems adopted by the banks themselves. Other relevant elements of the first pillar are the explicit supervisory treatment of asset securitisation, the

recognition of a wide range of risk mitigation techniques and a specific capital charge for operational risk. The other two pillars include the supervisory review process and enhanced market discipline. The former is intended to ensure that banks' capital positions are in line with their overall risk profile. The latter aims at providing market participants with the necessary information to allow them to make an adequate assessment of the risk profile and capital adequacy of banks. One of the main innovative features of the new regulatory regime is the greater overall risk sensitivity of the capital requirements. It also provides banks with incentives to move along the spectrum of approaches proposed for addressing credit and operational risk, thus adopting more sophisticated and risk-sensitive techniques.

The ECB, which participates as an observer in the BCBS, submitted an opinion on the first consultative paper issued by the BCBS in June 1999. This opinion focused mainly on the need to strike the right balance between instruments for disciplining the risk-taking behaviour of individual banks (the micro level) and the overall impact of regulatory capital on financial and macroeconomic conditions (the macro level).

At the EU level, the main developments in the regulatory field included work on: (i) the regulatory capital requirements for EU credit institutions and investment firms, and (ii) financial conglomerates. Both initiatives are being carried out by the European Commission with the assistance of the relevant sectoral advisory committees, in line

with the priorities set in the Financial Services Action Plan in order to refine the EU regulatory framework for financial markets. In both fields, the European Commission is expected to put forward a proposal for a draft Directive in the course of 2001.

The work on *capital adequacy* in the EU is intended to bring the Community rules on capital adequacy into line with the new regime to be agreed by the BCBS, while taking into account the specificity of the EU financial sector and the fact that the regulatory framework is legally binding on all EU credit institutions and investment firms. At the beginning of 2001 the European Commission issued a second consultative paper outlining the main aspects of the new regulatory framework.

The work on *financial conglomerates* aims at establishing a comprehensive regulatory framework in the EU. The latter is intended to cover several issues, including the capital adequacy of financial conglomerates, intra-group transactions and risk concentration, the fitness and propriety of managers and the suitability of shareholders, the role of a co-ordinator in the supervision of conglomerates and the exchange of information among authorities. The ECB also contributes to the work of the European Commission by participating in BAC as an observer.

In addition, the Directive on the re-organisation and winding down of credit institutions, providing for mutual recognition of such proceedings, has been adopted.



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Chapter VIII

Production of the euro banknotes and coins and preparations for the cash changeover

1 Production of the euro banknotes and coins

Euro banknotes are being produced by the NCBs and by privately and publicly owned companies. Printing is proceeding at the 14 printing works involved in euro banknote production. (The printing works in Greece, a late entrant, started production in the last quarter of 2000.) The volumes required have been revised in the light of Greece's entry to the Eurosystem and of changes in the estimated requirements. It will now be necessary to have available some 14.25 billion

banknotes (including both the launch and the logistical stocks; see Table 14) with a total face value of around €642 billion by January 2002.

The Member States are responsible for the production of euro coins. They are being struck by 15 mints in 11 countries. According to current estimates, the total number of euro coins will be around 50 billion, with a value of close to €16 billion.

2 Quality of the euro banknotes and coins

A database has been established in order to compile quality-related information from the mints and the printing works. This database will be used to provide monthly aggregated data regarding the quality of euro banknotes and coins.

working well and any quality variations which do occur are subject to investigation and careful decision-making within the scope of the established ISO 9000-based procedures.

2.1 Quality of the banknotes

The goal of ensuring a common quality standard throughout all of the participating printing works is a demanding one. The implementation of a common quality system has involved a substantial amount of work and the system has now been confirmed as being operational in all printing works. Work continues on optimising the quality systems. The mechanisms for identifying variations are

2.2 Quality of the coins

The ECB continues to act as an independent assessor of coin quality, carrying out its responsibilities at the mints involved in euro coin production. These responsibilities include supporting the quality system, monitoring of mints via periodic quality audits, and monthly reporting on progress. Progress throughout the year was steady and the ECB did not have to alert the ministers of finance and economy to any quality-related problems.

3 Protecting the euro banknotes and coins against counterfeiting

The implementation of the Counterfeit Monitoring System (CMS) database, which will store technical and statistical data on counterfeit euro banknotes and coins, has proceeded in accordance with the timetable. Following the drafting of the user requirements and the conducting of a feasibility study in 1999, the functional specifications were completed in the first half of 2000. This was followed by the development phase. It is envisaged that the

implementation, testing and acceptance of the CMS will continue until June 2001. A five-month period (July to November 2001) has been allocated for training and corrective measures, if needed. Finally, in December 2001, one month before the issue of the euro banknotes and coins, the CMS database will become operational.

In parallel with the CMS database, the Counterfeit Analysis Centre (CAC) is being

set up at the ECB. The basic activities involved in the establishment of this Centre are the recruitment of its staff – including counterfeit experts and technical and administrative staff – and the acquisition of the required specialised technical equipment. The CAC will be equipped with the instruments necessary for analysing differences between counterfeit and genuine banknotes, particularly in respect of the security features of the euro banknotes.

Contacts with Europol, Interpol and the European Commission have been stepped up

with a view to establishing the communication and collaboration arrangements necessary to ensure an effective information flow for the purposes of preventing and combating counterfeiting.

The ECB, together with Europol and the European Commission, co-operated closely to prepare a draft Council Regulation on the protection of the euro against counterfeiting. The ECB was duly consulted in September 2000 and presented its Opinion in December.

4 The Euro 2002 Information Campaign

As part of the preparations for the introduction of the euro banknotes and coins, the ECB and the 12 NCBs of the Eurosystem are conducting a “Euro 2002 Information Campaign”. The campaign has a budget of €80 million. Following a public competition, Publicis Worldwide B.V. was chosen as the agency to assist the ECB with the campaign. The contract was signed in spring 2000 and the campaign is being implemented internationally by the ECB and nationally by the 12 NCBs of the Eurosystem.

The campaign, which is being co-ordinated with similar initiatives prepared by national authorities, focuses on:

- the appearance of the banknotes and coins,
- the authentication features,
- the denominations, and
- the overall changeover modalities.

Three principal channels are being used to deliver these messages: a mass media campaign, public relations and press activities, and co-operation with other groups active in this area (the Partnership Programme).

4.1 The Mass Media Campaign

The Mass Media Campaign – which will start in late 2001 and run through to early 2002 –

will support the introduction of euro banknotes and coins by providing the general public with information on their appearance and authentication features and on the cash changeover. The campaign will run on television and in newspapers in all euro area countries. The design of the media material and the choice of slots, etc. will be co-ordinated nationally in order to maximise use of the relevant media landscape, as well as to ensure co-ordination of content and media plans with other campaigns, particularly those organised by the national authorities.

4.2 PR and press activities

Public interest in the introduction of euro banknotes and coins will grow significantly as 1 January 2002 approaches. The campaign endeavours to maximise this interest and to ensure that accurate information about the banknotes and coins is provided via public relations and press activities. These efforts will contribute to raising awareness about the changeover and to making the public more receptive to the new money. A PR programme is being rolled out over the course of 2001. It includes the “Euro 2002 Information Campaign conferences” – a series of conferences in Eurosystem countries – and a “Countdown to the euro”, which highlights significant countdown dates and involves the

distribution of media kits, etc. to support the PR programme. As with other elements of the campaign, this is being implemented both nationally and internationally.

4.3 The Partnership Programme

The aim of the Partnership Programme is to broaden the impact of the Information Campaign:

- by involving partners who can help to accurately inform the public about the changeover;
- by maximising the multiplier effect that these organisations can have; and
- by ensuring an efficient distribution of Eurosystem information on euro banknotes and coins to where it will be most needed, for example, retail outlets.

The public, banking, retail, tourism, travel and educational sectors are some of the key areas involved.

The Partnership Programme is being implemented nationally by the NCBs and internationally by the ECB.

4.4 Other elements

A dedicated website was launched at the beginning of 2001 at www.euro.ecb.int. It has a central role to play in making comprehensive information available on euro banknotes and coins.

The campaign also focuses on cashiers and police forces, as well as target groups outside the euro area. Specific measures are being taken to help vulnerable sectors of the population.

A number of initiatives have already been undertaken to ensure that comprehensive information will also be made available outside the euro area, with particular emphasis on the accession countries, as well as certain other countries in which the currencies of Eurosystem countries are widely used.

5 Changeover to the euro banknotes and coins in 2002

With regard to the cash changeover, a Eurosystem Cash Changeover Co-ordination Committee was established comprising representatives from the ECB and the 12 NCBs. The Committee will have overall responsibility for the co-ordination of the changeover to euro banknotes and coins through to the end of February 2002. It will monitor the preparatory work relating to the issuance of, and changeover to, the euro banknotes and coins as well as establish a Eurosystem-wide information exchange framework in the run-up to €-day and thereafter. Similar committees were established to prepare for the adoption of the euro at the beginning of 1999 and for the transition to the year 2000.

5.1 Financial modalities for the 2002 cash changeover

The Governing Council of the ECB has agreed on the general principles of the framework for the 2002 cash changeover.¹ In reaching its decisions, the Governing Council took due account of the major role which credit institutions will play in making the 2002 cash changeover a successful operation. These decisions relate to the following matters:

- frontloading/sub-frontloading,
- the debiting model, and
- coverage of risks.

¹ Guideline of the ECB adopting certain provisions on the 2002 cash changeover (ECB/2001/1), OJ L 55, 24.2.2001, p. 80.

Frontloading/sub-frontloading

The Eurosystem recognises that the shortening of the cash changeover period agreed by the ECOFIN Council in November 1999 will require the active frontloading of euro banknotes and coins to credit institutions and, through the latter, to certain other target groups (i.e. sub-frontloading to retailers, cash-in-transit companies and the cash-operated machine industry).

In the light of this, the Governing Council has approved the start of frontloading and sub-frontloading of banknotes to professional target groups as from 1 September 2001. However, each NCB is free to operate within the maximum lead time in order to meet the needs of frontloading. This also implies that the lead time determined nationally may differ from target group to target group as well as between banknotes and coins. In nine countries the national authorities are providing euro coins to credit institutions as from September 2001 because their bulk makes them more difficult to transport and their lower value means that the risk to credit institutions is lower than for banknotes. Three countries envisage frontloading banknotes at the same time. Most of the other countries will postpone the distribution of banknotes until November or December 2001.

With regard to the different target groups, all countries acknowledge the need to supply credit institutions with both euro banknotes and coins prior to 1 January 2002.

In addition, 11 countries will provide the retail sector with euro coins and in particular low-denomination euro banknotes prior to €-day (sub-frontloading). This is due to the fact that, unlike banknotes, coins are generally brought into active circulation by the retail sector, rather than by credit institutions. With regard to the cash-operated industry and in view of the need to load machines with coins prior to €-day, seven countries will sub-frontload coins to this sector, while the other five are considering this option.

According to the ECOFIN Council statement made in November 1999, euro coins can be provided to the general public in the second half of December 2001. The supply of euro coins to the general public is currently envisaged in ten countries. However, there are no plans at this stage to provide coins to the general public in two countries, because these countries take the view that the possible benefits of supplying the public with euro coins do not outweigh the distribution costs or the risks associated with early circulation.

Debiting model

The Governing Council agreed on a debiting model which will adequately reflect additional cash holdings of credit institutions resulting from the 2002 cash changeover. The debiting model, which is simple and easy to implement, will not interfere with the relationship between credit institutions and their clients. Thus:

- euro banknotes and coins frontloaded to credit institutions or their appointed agents shall be debited in their respective accounts with the NCBs, at face value, in accordance with the “linear debiting model”, i.e. one-third of the frontloaded sum on 2, 23 and 30 January 2002 respectively;
- euro cash delivered to and returned by credit institutions as from 1 January 2002 is to be debited/credited in accordance with current practice; and
- cash denominated in national currency units and returned to credit institutions as from 1 January 2002 is to be credited in accordance with current practice.

Coverage of risks

The Governing Council has approved the following scheme for the coverage of risks:

Frontloaded euro banknotes shall remain the property of NCBs until the end of December

2001. In the event that arrangements for the retention of ownership are not considered by NCBs to be legally feasible or legally enforceable, eligible assets can be provided as collateral for the NCBs' rights with regard to frontloaded euro banknotes. Such assets may also be provided as collateral in parallel with arrangements for the retention of ownership.

Eligible assets shall be provided to NCBs by the close of business on the last business day of 2001, at the latest, as collateral for the amounts of frontloaded banknotes and coins delivered on or before 31 December 2001.

All assets considered eligible collateral for Eurosystem credit operations or other such assets as may be approved by the Governing Council upon the proposal of an NCB are eligible as collateral for frontloading and sub-frontloading. Cash in the form of a deposit on a dedicated account, remunerated at the same rate as applied for minimum reserves, or in another form deemed appropriate by the NCBs, can also be provided as eligible collateral.

NCBs shall ensure that credit institutions cover at least the risk of loss resulting from the destruction, theft or robbery of frontloaded banknotes and coins, which remain the property of NCBs, by taking out insurance policies or by any other appropriate means. The conditions for frontloading take no account of the credit institutions' own risk insurance, which remains their sole responsibility.

In order to ascertain compliance by credit institutions or their appointed agents with their obligations regarding the prevention of anticipated public use of the frontloaded euro banknotes, and with the sole purpose of verifying the presence of the frontloaded banknotes, NCBs may ensure that auditing and inspection provisions are included in any statutory or contractual arrangements drawn up for frontloading.

Any breach by the credit institutions or their appointed agents of their obligations,

including, but not limited to, putting the euro banknotes into circulation or acting in a way that is conducive to putting them into circulation before 1 January 2002, shall be deemed to damage the Eurosystem's objective of a smooth cash changeover and shall be subject to the payment of contractual or statutory penalties, as appropriate, to be required by NCBs in an amount proportional to the respective damage.

In turn, the credit institutions will be required by NCBs to include provisions in their sub-frontloading contracts with retailers that provide an equivalent level of protection.

Eligible assets shall be provided to NCBs as collateral from the moment of sub-frontloading and for the amounts of sub-frontloaded banknotes and coins until discharge of the guaranteed obligations.

5.2 Cash changeover in markets outside the euro area

Given that the euro in fiduciary form will be put into circulation as from 1 January 2002 every effort should be made to ensure the smooth introduction of and changeover to the new currency, in order that customers requiring euro banknotes can obtain them in an efficient manner. In the light of this, it is also very important to proactively address the issue of the international changeover and to adequately prepare both the markets and the public located outside the euro area in order to keep costs and disruptions to a minimum.

The Governing Council of the ECB has adopted the following measures which will help to ensure the smooth launch of euro banknotes and coins outside the euro area:

- credit institutions which are counterparties for monetary policy operations within the Eurosystem will be allowed to distribute frontloaded euro banknotes to their branches, or headquarters, as appropriate, located outside the euro area;

- credit institutions with their main place of business inside the euro area will be allowed to sub-frontload euro banknotes to their subsidiaries which are also credit institutions and located outside the euro area; and
- credit institutions with their main place of business inside the euro area will be allowed to sub-frontload to other credit institutions which have neither their registered nor their head office inside the euro area.

The financial modalities applicable to frontloading/sub-frontloading are those outlined under section 5.1 with the exception that credit institutions will only be allowed to start distributing euro banknotes to markets outside the euro area as from 1 December 2001. In addition, outside the euro area, it will not be possible to sub-frontload euro banknotes to any third parties whatsoever.

Apart from these steps, the Eurosystem is exploring additional measures in the first half of 2001, including the direct involvement of central banks outside the euro area.

5.3 Duration of the dual circulation period

In practice, the actual speed of the cash changeover will depend on the response of the public, on the capacity of the various parties involved and on existing national infrastructures. The longer the cash changeover period, the higher the dual cash handling costs to be borne by the credit institutions and the retail sector will be. In the light of this, a consensus has emerged in favour of shortening the period of dual circulation considerably from the maximum of six months decided by the EU Council in 1995.

In eight Member States the dual circulation period will last until the end of February 2002. Some countries have opted for a dual circulation period which is shorter than the maximum two months agreed by the ECOFIN

Council. In the Netherlands the guilder will cease to be legal tender on 28 January 2002. Germany has decided to withdraw legal tender status from its national banknotes and coins at the end of 2001, but this legal “big bang” is accompanied by a commitment on the part of the different sectors concerned to accept the Deutsche Mark at least until 28 February 2002. In Ireland (subject to government approval) and France national banknotes and coins will cease to be legal tender on 9 and 17 February 2002 respectively.

Details of the national changeover plans can be found on the Eurosystem’s official euro website at www.euro.ecb.int in the section “Getting ready for the euro”.

5.4 Exchange of national banknotes at national central banks

Euro banknotes and coins will not be issued until 1 January 2002. In the meantime, banknotes in the euro area continue to be in the national currencies. During the transitional period, to ensure substitutability between the national currency units, the exchange of banknotes denominated in the national currencies of the euro area is governed by Article 52 of the Statute of the ESCB. This means that each NCB will, at least in one location in the respective country, ensure that banknotes of other participating Member States can be either exchanged against national banknotes and coins or, upon request, credited to an account with the institution effecting the exchange if the national legislation provides for this. In both cases, exchange will be at the respective par value. The Governing Council has decided to extend the current Article 52 arrangements beyond 2001 until the end of March 2002. In this case, national currency units will be exchanged against euro.

Some 500 NCB branches throughout the euro area have continued to be involved in the exchange of non-national euro area banknotes. Banknotes repatriated under this

arrangement to their respective issuing countries were worth a total value of €9.3 billion and amounted to 169.7 million banknotes in total.

representatives were generally satisfied with the machine-readability of the euro banknotes.

5.5 Adaptation of ATMs, currency sorting and accepting machines

In May and September 2000 centralised test weeks for the manufacturers of banknote-accepting and processing machines were organised under the supervision of the ECB in Neu-Isenburg, near Frankfurt. The goal was to offer companies an opportunity to test the euro banknotes in order to gain basic information which would be of assistance in adapting the machines and sensors to the euro banknotes. In total, 55 companies participated in the tests. On the basis of the analyses of the test results, the company

Table 14
Number of euro banknotes to be produced by 1 January 2002
(in millions)

Belgium	530
Germany	4,342
Greece	597
Spain	1,924
France	2,240
Ireland	222
Italy	2,380
Luxembourg	46
Netherlands	659
Austria	550
Portugal	536
Finland	225
Total for the euro area	14,251



Sir-Karl-Popper-Schule, Vienna, Austria

Designed by Christian Ludwig Attersee. Untitled

Chapter IX

Development of the statistical framework

I Introduction

In 2000 the statistical work of the ECB focused on ensuring that the information needed to support the functions of the Eurosystem continued to be received, processed, disseminated and published in a timely manner to high quality standards and with good supporting documentation. This work was carried out in close co-operation with the NCBs, which collect data from reporting agents and compile the national statistics necessary to construct the euro area aggregates. The basis for the euro area statistics compiled by the ECB is presented in a document entitled "Statistical information collected and compiled by the ESCB", dated May 2000. This document is an update of the report entitled "Statistical

requirements for Stage Three of Monetary Union (Implementation Package)" of July 1996, and describes the statistics currently provided. The document covers money and banking and related statistics, balance of payments and related statistics and financial accounts, including government finance statistics. Information needs in the areas of prices and costs, national accounts, the labour market, government receipts and expenditure, short-term indicators of output and demand, and business and consumer surveys, which were originally stated in the Implementation Package, are reaffirmed in the document entitled "Statistical requirements of the ECB in the field of general economic statistics" of August 2000.

2 Money and banking statistics and statistics on financial markets

The compilation and publication of consolidated Monetary Financial Institution (MFI) balance sheet statistics in the euro area proceeded smoothly in 2000, allowing timely reporting of euro area monetary developments by the ECB. In April the publication of quarterly data in the ECB Monthly Bulletin was extended to cover, in particular, the counterpart and instrument breakdowns of deposits held at MFIs, and the breakdown by instrument of MFIs' main outstanding claims on and liabilities to the rest of the world. Seasonally adjusted monetary aggregates are published each month; the methodology is described in an ECB document entitled "Seasonal adjustment of monetary aggregates and HICP for the euro area" and published in August 2000.

Better consistency has been achieved between flows derived from the euro area MFIs' consolidated balance sheet and corresponding balance of payments flows.

MFIs report balance sheet data on a monthly and quarterly basis. The "List of MFIs", updated monthly, is published on the ECB's website. It is necessary to maintain a

consistent application of the definition of an MFI across the euro area and the European Union.

The ECB Regulation concerning the consolidated balance sheet of the MFI sector (ECB/1998/16), which entered into force on 1 January 1999, was updated in 2000. The first update, which was finalised in August, made a number of changes that enhance legal clarity for the application of the minimum reserve system. These concerned the late revision of minimum reserves data, mergers and divisions involving credit institutions (which are the majority of MFIs) and the revision of Annex II of the ECB Regulation. A second update was finalised in early November and provides for transitional provisions relating to the minimum reserves system in the light of Greece's entry into the euro area. In addition, work started on improving the MFI balance sheet statistics and harmonising the way revaluation adjustments are made to derive flows from the MFI balance sheet statistics. MFI ("retail") interest rate statistics are also being improved; in the course of 2000 a start was made on a harmonised reporting framework. At present

ten euro area retail interest rates are available with a monthly frequency on the basis of existing national statistics. These are published in the ECB Monthly Bulletin. The ECB also publishes key national retail interest rates for all EU Member States on its website. The ECB collects available data on electronic money and will publish them at regular intervals. The ESCB is aware of the implications of new requirements for reporting agents and performs a preparatory merits and costs analysis in which they may be consulted.

In November an amended ECB Guideline was issued concerning certain statistical reporting requirements of the ECB and the procedures for reporting by the national central banks in the field of money and banking statistics. The ECB Guideline is binding on the Eurosystem.

The monthly securities issues statistics, which were first published in late 1999 with a breakdown by original maturity, residency and currency of denomination, were improved in 2000 in terms of coverage, sectoral breakdown and data accuracy. Early in the year a breakdown by issuing sector was

published for outstanding amounts and gross issues denominated in euro, followed by a further expansion in March 2000, with the sectoral breakdown for net issues. Historical data on securities issues were published on the ECB's website in March 2001.

Data on stock market indices have been extended. Financial market statistics are published in the ECB Monthly Bulletin and are also available on the ECB's website.

The first set of quarterly data on the aggregated balance sheet of credit institutions (as opposed to the MFI sector as a whole) has been reported for the purposes of macro-prudential analysis.

Preparations were carried out in 2000 for the development of quarterly balance sheet and related statistics on non-monetary financial intermediaries other than insurance corporations and pension funds. Collective investment institutions (excluding money market funds, which are in the MFI sector) account for the bulk of such intermediaries in the euro area.

3 Balance of payments, international reserves and international investment position statistics, and effective exchange rates

The compilation and publication of monthly and quarterly euro area balance of payments statistics proceeded smoothly in 2000. Further improvements, where needed, were made in the Member States' contribution to the euro area aggregate. The ECB has contributed to discussions about the future development of balance of payments data collection systems, especially those relying on traditional bank settlement sources, in the new circumstances created by EMU. One aim is to ease cross-border payments within the euro area.

With regard to the reliability of statistics, portfolio investment and the other investment account present the greatest challenges to compilers of balance of payments and related statistics. Further work

has been undertaken on the creation of a centralised securities database, which is seen as the key to significant improvements in portfolio investment data in the medium term. Moreover, it should also bring significant benefits to other statistical areas of concern to the ECB. A major difficulty remains the recording of holdings of negotiable securities.

The fourth edition of the publication entitled "European Union balance of payments/international investment position statistical methods" provides detailed information for users of these statistics. The new edition includes a compilation guide, describing in more detail the underlying methodology used for each balance of payments and international investment position item.

Regarding statistics on international reserves, in 2000 the ECB started to publish aggregated data for the Eurosystem with separate data for the ECB, using the template on international reserves and foreign currency liquidity developed jointly by the International Monetary Fund (IMF) and the Bank for International Settlements (BIS). Since April 2000 a complete set of monthly data using the template has been published on the ECB's website. In October the ECB published a document explaining in detail the compilation of the international reserves of the Eurosystem. Consistent national data are published by Member States.

Net international investment position data for the euro area relating to the end of 1999, together with revised data for the end of 1997 and end of 1998, were published in 2000. The ECB will require data in a form permitting the external assets and liabilities

of the euro area as a whole to be compiled separately from September 2002 onwards (data for the end of 2001).

Through the adoption of Guideline No. ECB/2000/4 by the Governing Council on 11 May 2000, the legal framework for the compilation of the euro area balance of payments, international reserves and international investment position statistics was updated.

The ECB publishes data on nominal and real effective exchange rates for the euro. In addition to the indices which have been compiled by the ECB since October 1999 on effective exchange rates, indices covering the currencies of a wider group of trading partners and more deflators (producer prices, unit labour costs) have been published since April 2000.

4 Financial accounts

In 2000 the ECB intensified its work on financial accounts, which will cover quarterly financial flows and a quarterly statement of financial assets and liabilities outstanding. Financial accounts are a useful analytical tool to support the conduct of monetary policy and other tasks of the Eurosystem. They link real economy developments (saving and investment) with financial transactions and balance sheets, and shed light on the way monetary policy affects the euro area economy.

For the compilation of data on the financing and investment of euro area non-financial sectors, two main sources are available –

euro area financial statistics and national financial accounts. Euro area financial statistics are compiled by the ECB in close co-operation with national authorities, whereas national financial accounts data are compiled by Member States. Euro area financial statistics cover, for the time being, monetary statistics, balance of payments and international investment position statistics, and securities issues statistics, and are properly consolidated at the euro area level. Although national financial accounts cannot yet be consolidated at the euro area level, they will be very useful for the construction of euro area financial accounts.

5 Government finance statistics

In September 2000 the ECB introduced in its Monthly Bulletin a new and extended presentation of euro area general government fiscal positions based mainly on data provided by NCBs, with detailed information about

government debt and an analysis of the difference between the government deficit and the change in government debt. The ECB co-operates closely with the European Commission in this area.

6 General economic statistics

In addition to money and banking statistics, balance of payments statistics and financial accounts, economic statistics are also important for carrying out of the tasks of the Eurosystem. Economic statistics include price and cost data, national accounts, government revenue and expenditure (on which the European Commission enacted a new Regulation (No. 1500/2000) in July 2000), labour market statistics and a wide range of other economic statistics.

Responsibility for economic statistics at the EU level lies mainly with the European Commission (Eurostat). The ECB works closely with the European Commission to have the requirements in this area satisfied. The availability of statistics

for all euro area countries and a sufficient degree of harmonisation in the national data are particularly important. Following a request from the ECOFIN Council, the ECB and the European Commission collaborated closely to establish an Action Plan identifying those fields for each Member State and for each statistical area where urgent progress is needed. The areas identified as most needing improvement include quarterly national accounts, quarterly public finance statistics, labour market statistics, a range of data in the area of short-term business indicators, and external trade statistics. The Action Plan, presented to the ECOFIN Council in September, also proposes modifications to statistical regulations.

7 Co-operation with the European Commission and international institutions

At the European level, the division of statistical responsibilities between the ECB and the European Commission (Eurostat) continued to work well in 2000. Money and banking statistics are the responsibility of the ECB; responsibility for balance of payments, international investment position and financial accounts statistics is shared between the ECB and the European Commission; prices, costs and other economic statistics are the responsibility of the European Commission.

The ECB also has close contacts with other international organisations regarding the development of statistics, in particular with the IMF and the BIS. In co-operation with Community institutions and international organisations, the ECB contributes to defining current international statistical standards and promotes adherence to them.

8 Statistics relating to non-participating Member States and accession countries

All EU Member States have been strongly encouraged to undertake the statistical preparations for participation in Stage Three of EMU. Details on the statistical implications of the enlargement of the euro area to include Greece are provided in Chapter III.

In 2000 the Eurosystem provided technical assistance to the central banks of those countries aiming to join the EU, the accession countries. The ECB itself provided assistance, in particular through multilateral seminars.

This technical assistance is primarily intended to help the accession countries to implement data collection and compilation systems that will allow them, in due course, to meet the ECB's statistical requirements, and to contribute to fully consistent (aggregated and consolidated) statistics for the euro area. This will pave the way for their future integration into the ESCB and, later, the Eurosystem. Methodological manuals covering the accession countries are in preparation.



Jardim de Infância de Gueifães, nº I – Maia, Portugal
Designed by Emerenciano, Inês, Ricardo, Maria and Ana. Title: All together

Chapter X

Other tasks and activities

I Advisory functions

Article 105 (4) of the Treaty and Article 4 of the Statute of the ESCB require that the ECB be consulted by the relevant Community institution and the responsible national authorities,¹ as appropriate, on any proposed Community or national legislation which falls within the ECB's fields of competence.

The limits and conditions applicable to the consultation of the ECB by national authorities in respect of draft legislation are set out in Council Decision 98/415/EC of 29 June 1998. Article 2 (1) and (2) of this Decision elaborates the specific areas in which the ECB is to be consulted, namely on any draft legislation relating to:

- currency matters;
- means of payment;
- NCBs;
- the collection, compilation and distribution of monetary, financial, banking, payment systems and balance of payments statistics;
- payment and settlement systems; and
- rules applicable to financial institutions insofar as they materially influence the

stability of financial institutions and markets.

In addition, the authorities of non-euro area Member States² must also consult the ECB on any draft legislative provisions on the instruments of monetary policy.

In total, 32 consultations were initiated in 2000, three of which related to the adoption of the euro by Greece; four involved the introduction of the euro banknotes and coins in 2002 and seven involved Community legal acts. The remaining consultations related to national legislative proposals.

The box below summarises the consultations initiated in 2000.

¹ In accordance with the Protocol on certain provisions relating to the United Kingdom of Great Britain and Northern Ireland, as annexed to the Treaty, Article 105 (4) of the Treaty and Article 4 of the Statute of the ESCB shall not apply to the United Kingdom. Hence, the obligation to consult the ECB does not extend to the national authorities of the United Kingdom.

² Other than the United Kingdom (see footnote 1).

Box 12 Consultation procedures in 2000

No. ¹	Originator	Subject
1	Austria	Austrian Banking Act.
2	European Commission	Reclassification of settlements under swap arrangements and under forward rate agreements.
3	Denmark	The Law on Statistics Denmark regarding the incorporation of a legal basis for the collection and compilation of financial statistics by Danmarks Nationalbank.
4	Portugal	Implementation of Directive 98/26/EC of 19 May 1998 on settlement finality in payment and securities settlement systems ("Settlement Finality Directive").
5	The Netherlands	Closure of De Nederlandsche Bank on 5 May 2000.
6	Denmark	Deposit and Investor Guarantee Act.
7	Greece	Articles of the Statute of the Bank of Greece and other issues relating to the adoption of the euro by Greece.
8	Finland	Centralisation of book-entry registers with a central securities depository.
9	Austria	The participation of Austria in the IMF's Reduction of Multilateral External Debts of Heavily Indebted Poor Countries Initiative.

No. ¹	Originator	Subject
10	EU Council	European Parliament and Council Regulation (EC) amending Council Regulation (EC) No. 2223/96 on the reclassification of settlements under swap arrangements and under forward rate agreements.
11	Luxembourg	Electronic commerce.
12	EU Council	Euro regulations on Greece.
13	Ireland	Orders under the Economic and Monetary Union Act, 1998.
14	Austria	The ways in which measures in the field of currency in connection with the issuance of euro banknotes and coins are to be adopted (Euro Act) and the ways in which the Austrian Coinage Act of 1988 and the Central Bank Act of 1984 are to be amended.
15	Greece	Ratification of the amendments to the Statute of the Bank of Greece endorsed by its General Assembly of Shareholders on 25 April 2000.
16	Ireland	Counterfeiting of euro-denominated banknotes and coins.
17	Germany	Issue of a DEM 1 gold coin and the establishment of a "Monetary Stability" Foundation.
18	Luxembourg	Circulation of securities and other financial instruments and the transfer of title by way of security (amending and completing several other acts).
19	France	Introduction of the euro in Saint-Pierre-et-Miquelon and Mayotte. ²
20	EU Council	Protection of the euro against counterfeiting.
21	Greece	Additional measures in implementing Council Regulations (EC) 1103/97, 974/98 and 2866/98, as applicable, on the introduction of the euro.
22	Spain	Introduction of the euro.
23	Germany	Collection of balance of payments statistics in Germany.
24	Denmark	Danish Securities Trading Act.
25	Austria	Ancillary measures for, and the amendment of the existing legislation governing, the introduction of the euro in relation to co-operatives (Euro-GenBeG).
26	Sweden	Modification of the Sveriges Riksbank Act (1988:1385).
27	European Commission	Two Commission Regulations on the Harmonised Index of Consumer Prices.
28	Germany	Collection of balance of payments statistics in Germany.
29	The Netherlands	Coinage Act (in relation to the introduction of the euro coins).
30	EU Council	Modification of Article 10.2 of the Protocol on the Statute of the European System of Central Banks and of the European Central Bank.
31	France	An agreement between the Banque de France and IEDOM (Institut d'émission des départements d'outre-mer). ³
32	Denmark	Act on Financial Enterprises.

¹ Consultations are numbered according to the order in which they are received by the ECB.

² Position taken by the ECB under Council Decision 1999/95/EC of 31 December 1998 concerning the monetary arrangements in the French territorial communities of Saint-Pierre-et-Miquelon and Mayotte, OJ L 30, 4.2.1999, p. 29.

³ This consultation represents a follow-up to an earlier Opinion of the ECB on the statute and role of the IEDOM (ECB consultation procedure No. in 1999).

2 Compliance with the prohibitions on monetary financing and privileged access

Pursuant to Article 237 (d) of the Treaty, the General Council of the ECB is entrusted with the task of monitoring the fulfilment by the 15 EU NCBs of their obligations under Articles 101 and 102 of the Treaty and Council Regulations (EC) Nos. 3603/93 and 3604/93. In addition, the General Council monitors the ECB's compliance with these provisions. Article 101 prohibits the ECB and the NCBs from providing overdraft facilities or any other type of credit facility to governments and Community institutions or bodies, as well as from purchasing debt instruments directly from them. Article 102 prohibits any measure, not based on prudential considerations, which establishes privileged access by governments and Community institutions or bodies to financial institutions. In parallel with the General Council, the European Commission monitors Member States' compliance with the above provisions.

The General Council considers it to be of the utmost importance that the above Treaty provisions and the associated Council Regulations (EC) be respected under all circumstances. Monetary financing of governments and public institutions, as well

as any form of privileged access to financial institutions, could significantly hamper the credibility of the single monetary policy and may give rise to higher inflation expectations. Moreover, it could reduce the incentives for further progress in fiscal consolidation in euro area countries by providing governments with an easy way in which to finance their debt.

The General Council also monitors the EU central banks' secondary market purchases of debt instruments issued by both the domestic public sector and the public sector of other Member States. According to the recitals of Council Regulation (EC) No. 3603/93, the acquisition of public sector debt instruments in the secondary market must not be used to circumvent the objective of Article 101 of the Treaty. Such purchases should not become a form of indirect monetary financing of the public sector.

For 2000, the General Council did not find any case of non-compliance with the above Treaty requirements and the associated Council Regulations (EC) by the NCBs of Member States or by the ECB.

3 The administration of the borrowing and lending operations by the European Community

In accordance with Article 123 (2) of the Treaty and Article II of Council Regulation (EEC) No. 1969/88 of 24 June 1988, the ECB continued the administration of the borrowing and lending operations concluded by the European Community under the Medium-Term Financial Assistance mechanism.

In 2000 the ECB received the sums due in respect of capital and interest on outstanding

loans from the remaining borrower country (Italy) and paid them to creditors vis-à-vis the European Community. The total amount of outstanding Community lending operations with Italy, as at 31 December 1999, was €2,483 million. Following the final repayment made by Italy in November 2000, no balance remained outstanding at the end of 2000.



Helsinki Art School for Young People, Finland

Designed by Annu Martikainen. Title: Colours playing along

Chapter XI

External communication and accountability

I The ECB's communication policy and activities

I.1 Communication policy objectives

The ECB attributes great importance to effective external communication. While the ECB has been able to draw on the expertise and credibility of the euro area NCBs, it does not – unlike the latter – have a long track record of its own, and it operates in a multilingual and multicultural environment. These factors have played a major role in the further development and refinement of the communication policy of the ECB and of the Eurosystem. They provide an explanation for the fact that the ECB communicates more actively than most other central banks.

The ECB has established an external communication policy based on a commitment to the principles of openness, transparency and accountability. It is recognised that effective communication is instrumental in the achievement of the ECB's wider objectives. In line with the generally decentralised organisation of the ESCB and the Eurosystem, the NCBs in the Eurosystem play an important role in achieving the goals of the Eurosystem's communication policy. A continuous co-ordination of communication activities takes place within the ECB's decision-making bodies and the External Communications Committee, which brings together the communication experts of the ECB as well as those of the NCBs.

The general objectives of the Eurosystem's communication policy are:

- to contribute to the effectiveness and efficiency of monetary policy; and
- to enhance public understanding of the Eurosystem and its policies in the participating countries and beyond.

Two guiding principles for achieving these goals have been adopted:

- 1 A "single voice" communication on the single monetary policy for the euro area is considered to be desirable.

- 2 The transparency of the Eurosystem's policy objectives, tasks and measures should be promoted, thereby contributing to the Eurosystem's accountability; confidence in and knowledge of the way in which the Eurosystem functions should be fostered.

A number of other principles need to be observed in order for communication to be effective: external communication should be consistent throughout the euro area, treatment of different countries and media should be equal and non-discriminatory, and information should be provided on a timely basis.

The Statute of the ESCB imposes some communication obligations on the ECB by law. The ECB is required to publish a report on the activities of the ESCB at least once every quarter, and it has to deliver an Annual Report on these activities and on the monetary policy of the Eurosystem. Furthermore, the ECB is obliged to publish a consolidated weekly financial statement of the Eurosystem.

Since the introduction of the euro on 1 January 1999, the ECB has taken the view that it should go beyond the legal requirements in its communication efforts. From the outset, it was recognised that many means of communication would have to be used in order to reach the ultimate communication objectives. This recognition led to, among other things, the decisions to publish an ECB Monthly Bulletin, rather than just a quarterly report, and to hold press conferences at regular intervals.

Based on the above-mentioned general principles, the Eurosystem uses a host of different communication tools. The members of the Executive Board of the ECB and the governors of the NCBs, as well as the staff of the Eurosystem, dedicate a significant amount of time and resources to external communication. The decision-making bodies

of the ECB and the External Communications Committee continuously review the extent to which the general objectives are being met.

1.2 Communication activities

In its choice of communication tools, the ECB seeks to disseminate information to the general public and its elected representatives, to financial markets and to other interest groups in a way that takes due account of the diversity of the target groups. A number of different channels are used to meet these requirements:

- Press conferences are held by the President and the Vice-President on a regular basis, usually immediately after the first Governing Council meeting of each month.
- The ECB's Monthly Bulletin normally appears a week after the first Governing Council meeting of the month, and contains details of the ECB's view on the economic situation, as well as articles on special issues relating to the activities of the Eurosystem. In addition, the ECB's Monthly Bulletin includes a statistics section providing a wide range of economic and financial data on the euro area.
- The Annual Report of the ECB is a means of giving an account of the monetary policy of the previous and current years. It also deals with other activities of the Eurosystem and the ESCB.
- The President of the ECB appears before the Committee on Economic and Monetary Affairs of the European Parliament once a quarter. These public hearings are dealt with in Chapter XI, Section 2, of this Annual Report.
- Public speeches and interviews given by the members of the ECB's decision-making bodies constitute an important way of directly addressing important audiences.
- Press releases mainly serve to make statistical information or short policy announcements available to the public.
- Brochures and other printed publications are provided for target groups ranging from the general public to specialists in various fields.
- The Working Paper Series seeks to disseminate the results of research conducted within the ECB, or presented in the context of ECB conferences and seminars, to the broad academic and financial market communities. The ECB's Working Papers are published in the name of the authors.
- The Occasional Paper Series, launched in July 2000, presents policy-related topics to a wide audience, including other policy-makers, academics, the media and the general public. The ECB's Occasional Papers are published in the name of the authors.
- The direct feeding of pages to wire services gives the ECB the opportunity to disseminate market-sensitive information in real time to financial market participants.
- Groups of visitors are received at the ECB on an almost daily basis throughout the year. In this way visitors – of which there were approximately 10,000 last year – receive first-hand information on the ECB and its activities.
- Academic conferences are organised to help stimulate interaction between economists interested in central banking issues.

The rapidly increasing level of internet access among the population of the euro area has greatly facilitated the process of making information available on demand. The ECB's website (www.ecb.int) now plays a major role in communication with the public. On the website, all documents published by the ECB can be viewed and downloaded. E-mail hotlines are provided to deal with various kinds of queries. Furthermore, the ECB's website provides links to the websites of all the EU NCBs, where many of the publications are available in the respective languages.

A substantial part of the demand for information is already satisfied by means of electronic distribution, and the latter is rapidly gaining in importance. This trend is

expected to continue. However, it will not replace communication via the mass media, which serve as important intermediaries between the ECB and the general public.

2 The exchange of information and views with the European Parliament

2.1 Relations between the ECB and the European Parliament

During 2000 the members of the Executive Board of the ECB and the President in particular continued their appearances before the European Parliament to report on monetary policy and other activities of the ESCB. These regular appearances are based on Article 113 (3) of the Treaty, which requires the ECB to address an annual report on the activities of the ESCB and on the monetary policy of both the previous year and the current year to the European

Parliament, the EU Council, the Commission and the European Council. This report is presented by the President of the ECB to the European Parliament, which may hold a general debate on that basis. Moreover, the President of the ECB and the other members of the Executive Board may, at the request of the European Parliament or on their own initiative, be heard by the competent committees of the European Parliament.

The regular appearances of the President and other members of the Executive Board before the European Parliament are an essential tool

Box 13

Public appearances of ECB representatives before the European Parliament in 2000

On 5 July 2000, the President presented the ECB's Annual Report 1999 at the European Parliament's plenary session.

The following appearances by ECB representatives took place before the Committee on Economic and Monetary Affairs:

- quarterly exchanges of views with the President (20 March, 20 June, 12 September, 23 November);
- exchange of views with Mr. Issing on the Commission's report entitled "EU Economy – 1999 Review" (10 January);
- presentation of the ECB Recommendation for a Council regulation concerning further calls of foreign reserve assets by the ECB (27 January);
- presentation of the ECB's views on the Commission proposal for a European Parliament and Council Directive on the taking up, the pursuit and the prudential supervision of the business of electronic money institutions (28 February);
- presentation of the ECB's Annual Report 1999 by the Vice-President (17 April);
- presentation of the ECB's Convergence Report 2000 by the Vice-President (3 May);
- exchange of views with Mr. Domingo Solans on the Euro 2002 Information Campaign on euro banknotes and coins (5 June).

to provide the European public and its directly elected representatives with detailed explanations regarding the fulfilment of the Treaty mandate.

In line with agreed practice, the President of the ECB appeared before the Committee on Economic and Monetary Affairs of the European Parliament each quarter. The focus of these appearances was on monetary policy and economic developments, in particular on the factors potentially affecting price stability. The President reported on the decisions taken by the Governing Council in the area of monetary policy as well as within other fields of ESCB competence, and explained the analysis underpinning these decisions in detail.

In addition, members of the Executive Board of the ECB appeared before the Committee on Economic and Monetary Affairs on a number of other occasions. The Vice-President presented the Annual Report 1999 and the Convergence Report 2000 covering Greece and Sweden. Other members of the Executive Board appeared before the Committee to provide information on the preparation of the Euro 2002 Information Campaign and to present the ECB's views on the 1999 review of the EU economy by the Commission. Finally, the ECB participated at an expert level in meetings of the Committee to present the ECB Recommendation for a Council Regulation concerning further calls of foreign reserve assets by the ECB and to explain the ECB's concerns on draft secondary legislation regarding electronic money institutions. Box 13 provides an overview of the public appearances of ECB representatives before the European Parliament in 2000.

In addition to these public appearances, a number of contacts between the ECB and the European Parliament took place outside the formal setting of official parliamentary meetings. In particular, a delegation of members of the Committee on Economic and Monetary Affairs visited the ECB on 23 October 2000 to exchange views with the Executive Board.

2.2 Views of the ECB on selected topics raised at meetings with the European Parliament

In the course of the various exchanges of views between the ECB and the European Parliament within the scope of the Committee on Economic and Monetary Affairs, a range of issues has been addressed. The following sections provide an overview of the discussions on some key topics.

The contribution of the single monetary policy to the general economic policies in the Community

Article 105 of the Treaty stipulates that without prejudice to the objective of price stability, the ESCB shall support the general economic policies in the Community. Against this background, one of the main topics raised in the exchanges of views between the ECB and the European Parliament was how the single monetary policy could best contribute to the general economic policy objectives of the Community, such as sustainable and non-inflationary growth and a high level of employment.

In this respect, the President of the ECB recalled that the best contribution of monetary policy to growth and employment objectives was to provide economic agents with the well-founded expectation that future economic developments would be characterised by price stability. A climate of price stability would allow businesses and consumers to take investment and spending decisions undistorted by inflation or deflation. Indeed, price stability contributes to a more efficient allocation of resources within the economy and creates conditions conducive to growth and employment.

Therefore, the focus of the single monetary policy is – and has to remain – on the maintenance of price stability, which is the primary task assigned to the Eurosystem by the Treaty. The need to focus on price stability has also been explicitly recalled in

the European Parliament's resolution on the ECB's Annual Report 1999, which states that "the ECB's contribution to promoting growth and employment lies primarily in adopting credible and lasting measures to ensure price stability" (recital H).

External value of the euro

Broad attention was also given to the external value of the euro, the ECB's assessment of the reasons underlying the developments of the euro exchange rate and the issue of appropriate policy responses.

The President explained that developments in the external value of the euro were regularly and carefully analysed by the Governing Council in particular as to their potential impact on price stability within the euro area. The Eurosystem shared the concerns that the euro exchange rate did not reflect the robust economic fundamentals of the euro area. He also stressed that available economic indicators would suggest that the euro had a strong potential to appreciate.

In this context, the President evoked the conclusions reached by euro area governments in the framework of the Eurogroup, in particular the need to speed up the process of fiscal consolidation and to promote structural reforms with a view to increasing the growth potential of the euro area. The importance of structural reforms is also underscored by the European Parliament's resolution on the ECB's Annual Report 1999 (paragraph 11).

Euro area cross-border retail payment services

In September 1999, the Eurosystem launched an initiative aimed at improving cross-border retail payment services within the euro area and defined seven main policy objectives, which the European banking industry is expected to fulfil by the beginning of 2002. The European Parliament expressed great

interest in this initiative as well as in the first follow-up report, which was published by the ECB in September 2000.

During the exchanges of views with the Committee on Economic and Monetary Affairs, the President recalled the rationale behind the Eurosystem's initiative, namely that the fees charged for cross-border retail payment transactions in the euro area and the execution time for such transactions should be similar to those of domestic retail payments. The President also reported on the contacts that the ECB had established with the European banking industry with a view to exploring practical ways and means of enhancing the efficiency of cross-border retail payment systems.

In presenting the main findings of the progress report to the Committee, the President pointed out that most of the objectives defined by the Eurosystem had not yet been fulfilled, but that substantial progress had been made in preparing the ground for a more efficient handling of cross-border retail payments. The Eurosystem would continue to closely monitor developments in cross-border retail payment services in order to ensure that the preparations currently under way would ultimately translate into adequate services for European citizens.

More detailed information on the Eurosystem's initiative to improve cross-border retail payment services and the progress report published in this context is provided in Chapter VI.

The Euro 2002 Information Campaign

Another focal issue pertained to the need to adequately prepare European citizens for the introduction of euro banknotes and coins on 1 January 2002. In this respect, the Committee on Economic and Monetary Affairs expressed interest in more detailed information on the Euro 2002 Information Campaign, which is conducted by the Eurosystem. Upon invitation by the

Committee, a member of the Executive Board presented the main features of the information campaign to the Committee.

During the discussion, Committee members attached great importance to an efficient co-ordination of the different information campaigns prepared and conducted at the European and national levels. Moreover, due attention should be paid to the proper information of vulnerable groups such as the blind and partially sighted.

The ECB pointed out that the Euro 2002 Information Campaign would be co-ordinated with all relevant institutions at the European and national levels so as to avoid contradicting and confusing messages as well as a duplication of messages and information gaps. Indeed, the ECB closely co-ordinates its information activities with the European Commission and the European Parliament. The main platform for the co-ordination of the communication strategies are the quarterly meetings of the National Directors of Communication on the Euro, which are attended by representatives of the ECB, the European Commission and the Member States. Moreover, a representative from the European Commission is taking part in the Eurosystem's working group for the Euro 2002 Information Campaign. Furthermore, the ECB is engaged in a process of co-operation with organisations representing vulnerable groups, such as the European Blind Union, in the context of the "Euro made easy" project. More detailed information on the Euro 2002 Information Campaign can be found in Chapter VIII, Section 4.

The ECB Recommendation for a Council Regulation concerning further calls of foreign reserve assets by the ECB

Based on the relevant Treaty provisions (in particular Article 107 (6) of the Treaty and Article 30.4 of the Statute of the ESCB), the ECB presented a Recommendation for a Council Regulation regarding the transfer of foreign reserve assets by the national central banks of the Eurosystem to the ECB beyond the initial amount of €50 billion. As stipulated by the Treaty, the European Parliament was consulted in this procedure. In the course of the consultation process, ECB experts attended a meeting of the Committee on Economic and Monetary Affairs to present the Recommendation and to answer any questions by the Committee in this regard.

The ECB pointed out that the Recommendation for such a Council Regulation was required by the Treaty and was not intended to actually increase foreign reserves at the current juncture. It was also emphasised that the ECB would make use of such a provision only to replenish its holdings of foreign reserves up to the initial amount.

The Recommendation presented by the ECB met with clear support by the Committee. The Committee underlined that the ECB needed to have the possibility to draw on foreign reserves held by the NCBs of the Eurosystem. The ECB Recommendation subsequently met with the approval of the European Parliament at its plenary session.



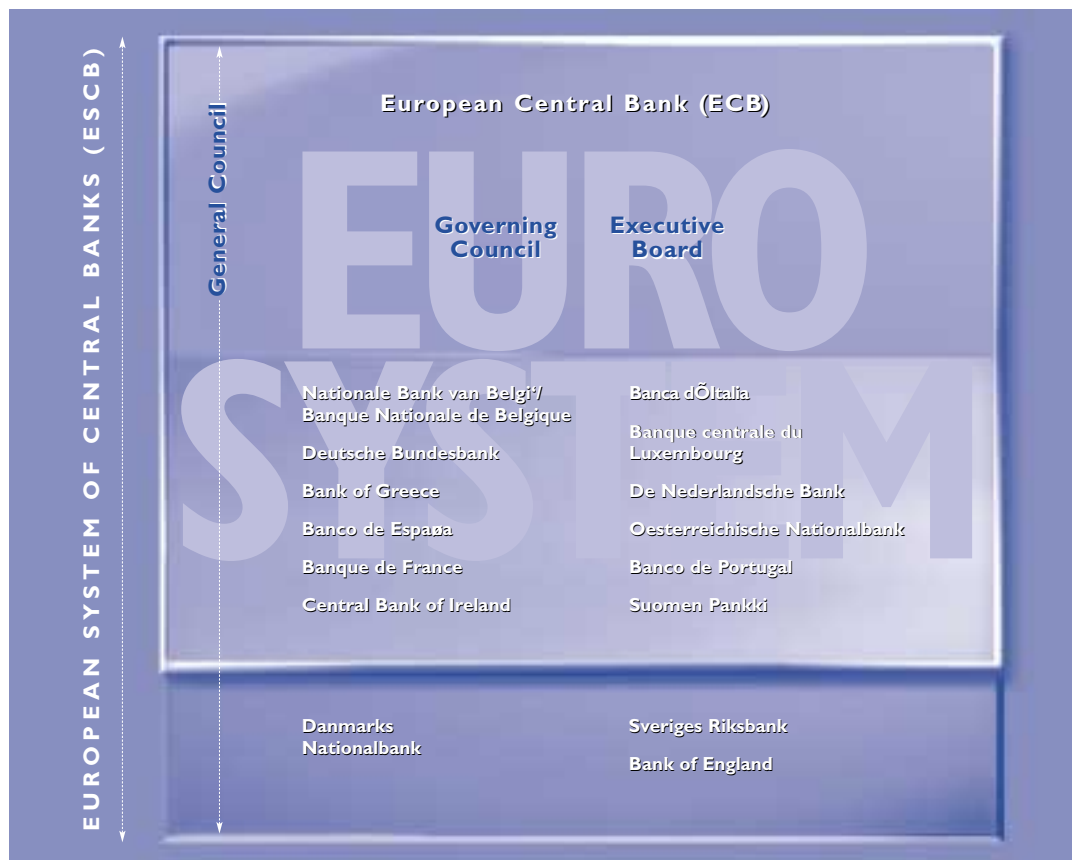
Académie du Westhoek, Koksijde, Belgium

Designed by Chantal Grand. Title: Euro 2000 – Unity

Chapter XII

The institutional framework of the Eurosystem and the European System of Central Banks

I The Eurosystem and the European System of Central Banks



The European System of Central Banks (ESCB) is composed of the European Central Bank (ECB) and the national central banks (NCBs) of all 15 EU Member States, i.e. it includes the three NCBs of the Member States which have not yet adopted the euro. (See Chapter III on the entry of Greece into the euro area.) In order to enhance transparency and facilitate understanding of the structure of central banking in the EU, the term “Eurosystem” has been adopted by the Governing Council of the ECB. The Eurosystem comprises the ECB and the NCBs of the Member States which have adopted the euro (participating Member States). As long as there are Member States which have not yet adopted the euro, it will be necessary to make a distinction between the Eurosystem and the ESCB.

The ECB has legal personality under public international law. It has been established as

the core of the Eurosystem and ensures that the tasks of the Eurosystem are carried out either through its own activities or via the NCBs. In taking its decisions on the way in which the tasks should be carried out, the ECB is committed to the principle of decentralisation in accordance with the Statute of the ESCB.

Each of the NCBs has legal personality according to the national law of its respective country. Despite having separate legal personality, the euro area NCBs form an integral part of the Eurosystem. As such, NCBs carry out the tasks conferred upon the Eurosystem in accordance with the rules established by the ECB. Inter alia, through the participation of their respective representatives in the various ESCB Committees (see Section 4 below), the NCBs also contribute to the work of the ESCB. The NCBs may perform non-Eurosystem functions

on their own responsibility, unless the Governing Council finds that such functions

interfere with the objectives and tasks of the Eurosystem.

2 The decision-making bodies of the ECB

The Eurosystem and the ESCB are governed by the decision-making bodies of the ECB: the Governing Council and the Executive Board. Without prejudice to this, the General Council is constituted as a third decision-making body of the ECB, if and for as long as there are Member States which have not yet adopted the euro as their currency. The functioning of the decision-making bodies is governed by the Treaty establishing the European Community (Treaty), the Statute of the ESCB and the relevant Rules of Procedure.¹ While decisions relating to the objectives and tasks of the Eurosystem/ESCB are taken centrally, operations in the euro area are decentralised and are carried out by the NCBs to the extent deemed appropriate and possible.

2.1 The Governing Council

The *Governing Council*, which is the supreme decision-making body of the ECB, comprises all the members of the Executive Board and the governors of the NCBs of the Member States which have adopted the euro. According to the Treaty, the main responsibilities of the Governing Council are:

- to adopt the guidelines and take the decisions necessary to ensure the performance of the tasks entrusted to the ESCB; and

- to formulate the monetary policy of the euro area, including, as appropriate, decisions relating to intermediate monetary objectives, key interest rates and the supply of reserves in the Eurosystem, and to establish the necessary guidelines for their implementation.

When taking decisions on monetary policy and on other tasks of the Eurosystem, the members of the Governing Council do not act as national representatives, but in a fully independent personal capacity. This is reflected in the principle of “one member, one vote”.

In 2000 the Governing Council met, as a rule, every other week at the ECB’s premises in Frankfurt am Main, Germany. However, three of these meetings were held by means of teleconferencing. Moreover, in line with the decision taken earlier that the Governing Council would meet twice a year in another euro area country, one meeting was hosted by the Banco de España in Madrid and one by the Banque de France in Paris.

¹ The Rules of Procedure have been published in the *Official Journal of the European Communities*, see *Rules of Procedure of the European Central Bank*, OJ L 125, 19.5.1999, p. 34 and L 314, 8.12.99, p. 32; *Rules of Procedure of the General Council of the ECB*, OJ L 75, 20.3.1999, p. 36 and L 156, 23.6.1999, p. 52; *Decision of the European Central Bank of 12 October 1999 concerning the Rules of Procedure of the Executive Board of the European Central Bank (ECB/1999/17)*, OJ L 314, 8.12.1999, p. 34. With the exception of the latter, they have been reproduced in the ECB’s first legal yearbook “*Compendium: Collection of legal instruments, June 1998 – May 1999*”, October 1999.

The Governing Council



Back row (left to right): Yves Mersch, Lucas D. Papademos, J. Caruana, Antonio Fazio, Matti Vanhala, Guy Quaden, Ernst Welteke, Nout Wellink, Jean-Claude Trichet, Maurice O'Connell, Klaus Liebscher, Vítor Constâncio
Front row (left to right): Otmar Issing, Tommaso Padoa-Schioppa, Christian Noyer, Willem F. Duisenberg, Sirkka Härmäläinen, Eugenio Domingo Solans

Willem F. Duisenberg
Christian Noyer
Jaime Caruana (as from 12 July 2000)
Vítor Constâncio
(as from 23 February 2000)
Eugenio Domingo Solans
Antonio Fazio
Sirkka Härmäläinen
Otmar Issing
Klaus Liebscher
Yves Mersch
Maurice O'Connell
Tommaso Padoa-Schioppa
Lucas D. Papademos²
Guy Quaden

Luis Ángel Rojo (until 11 July 2000)
António José Fernandes de Sousa
(until 22 February 2000)
Jean-Claude Trichet
Matti Vanhala
Nout Wellink
Ernst Welteke

President of the ECB
Vice-President of the ECB
Governor of the Banco de España
Governor of the Banco de Portugal

Member of the Executive Board of the ECB
Governor of the Banca d'Italia
Member of the Executive Board of the ECB
Member of the Executive Board of the ECB
Governor of the Oesterreichische Nationalbank
Governor of the Banque centrale du Luxembourg
Governor of the Central Bank of Ireland
Member of the Executive Board of the ECB
Governor of the Bank of Greece
Governor of the Nationale Bank van België/
Banque Nationale de Belgique
Governor of the Banco de España
Governor of the Banco de Portugal

Governor of the Banque de France
Governor of Suomen Pankki
President of De Nederlandsche Bank
President of the Deutsche Bundesbank

² The Governor of the Bank of Greece attended all the meetings of the Governing Council of the ECB in the second half of 2000 as a 'special invitee' following the decision taken by the EU Council on 19 June 2000 to abrogate Greece's derogation with effect from 1 January 2001.

2.2 The Executive Board

The *Executive Board* comprises the President, the Vice-President and four other members, appointed by common accord of the governments of the participating Member States at the level of the Heads of State or Government. The main responsibilities of the Executive Board are:

- to prepare the meetings of the Governing Council;
- to implement monetary policy in accordance with the guidelines and decisions laid down by the Governing

Council and, in doing so, to give the necessary instructions to the Eurosystem NCBs;

- to be responsible for the current business of the ECB; and
- to assume certain powers delegated to it by the Governing Council, including certain ones of a regulatory nature.

Current practice is for the Executive Board to meet at least once a week in order to decide on the implementation of the monetary policy, the preparation of the meetings of the Governing Council and internal ECB matters.



Back row (left to right): Eugenio Domingo Solans, Tommaso Padoa-Schioppa, Otmar Issing
Front row: Christian Noyer, Willem F. Duisenberg, Sirkka Härmäläinen

Willem F. Duisenberg
Christian Noyer
Eugenio Domingo Solans
Sirkka Härmäläinen
Otmar Issing
Tommaso Padoa-Schioppa

President of the ECB
Vice-President of the ECB
Member of the Executive Board of the ECB
Member of the Executive Board of the ECB
Member of the Executive Board of the ECB
Member of the Executive Board of the ECB

2.3 The General Council

The *General Council* is composed of the President and the Vice-President of the ECB and the governors of all 15 NCBs, i.e. of both participating and non-participating Member States. It carries out those tasks taken over from the European Monetary Institute which, on account of the fact that the Member States have not all adopted the euro, still have to be performed by the ECB in Stage Three of EMU. Therefore, the General Council is primarily responsible for reporting on the progress made towards convergence by the non-participating Member States³ and for giving advice on the necessary preparations for

irrevocably fixing the exchange rates of the currencies of those Member States (see Chapter IV). Moreover, the General Council contributes to particular activities of the ESCB, such as advisory functions (see Chapter X) and the collection of statistical information (see Chapter IX). In 2000 the General Council met five times in Frankfurt am Main.

³ *In accordance with the Protocol on certain provisions relating to the United Kingdom of Great Britain and Northern Ireland and the Protocol on certain provisions relating to Denmark, both of which are annexed to the Treaty, this reporting shall be carried out for the United Kingdom and Denmark only if they decide to apply to adopt the euro.*

The General Council



*Back row (left to right): Klaus Liebscher, Guy Quaden, Antonio Fazio, Matti Vanhala, Lucas D. Papademos, Urban Bäckström, Ernst Welteke, Nout Wellink, Edward A. J. George, Maurice O'Connell, Jean-Claude Trichet
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 Nout Wellink
 Ernst Welteke

*President of the ECB
 Vice-President of the ECB
 Governor of Danmarks Nationalbank
 Governor of Sveriges Riksbank
 Governor of the Banco de España
 Governor of the Banco de Portugal
 Governor of the Banca d'Italia
 Governor of the Bank of England
 Governor of the Oesterreichische Nationalbank
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 Governor of the Nationale Bank van België/
 Banque Nationale de Belgique
 Governor of the Banco de España
 Governor of the Banco de Portugal
 Governor of the Banque de France
 Governor of Suomen Pankki
 President of De Nederlandsche Bank
 President of the Deutsche Bundesbank*

3 The organisation of the ECB

3.1 Corporate governance

In addition to the decision-making bodies of the ECB described in the previous sections, the corporate governance of the ECB also encompasses a number of external and internal control layers. The Statute of the ESCB (Article 27) provides for two layers, namely the external auditors and the European Court of Auditors.⁴ More recently, an independent Anti-Fraud Committee was established as an additional control layer. Moreover, the Directorate Internal Audit, which reports directly to the President of the ECB, continuously performs audit missions under a mandate from the Executive Board.

The internal control structure of the ECB is based on a functional approach, whereby each organisational unit (Division, Directorate or Directorate General) is responsible for its own internal control and efficiency. In order to ensure this, the business units implement a set of operational control procedures within their area of responsibility. In addition to these controls, certain organisational units advise and make proposals to the Executive Board on specific control issues on a horizontal basis (e.g. Directorate Controlling and Organisation and the Middle Office Division).

The mandate of the Directorate Internal Audit is defined in the ECB-Audit Charter. The ECB-Audit Charter was established on the basis of professional standards which apply internationally.⁵ The ESCB audit policy was established by the Governing Council in order to ensure audit coverage for joint projects and joint operational systems at the ESCB level.

In October the Executive Board approved the Code of Conduct of the European Central Bank.⁶ The Code of Conduct gives guidance to, and sets benchmarks for, the staff of the ECB and the members of the Executive Board, all of whom are encouraged to maintain high standards of professional ethics

in the performance of their duties at the ECB as well as in their relations with NCBs, public authorities, market participants, media representatives and the public in general. In this respect, it echoes the inquiry conducted at the European Ombudsman's own initiative into a code of good administrative behaviour for Community officials in their relations with the public.

The Executive Board also adopted a set of internal controls, including detailed rules preventing the abuse of sensitive financial market information ("insider trading rules" and "Chinese walls"). The staff of the ECB and the members of the Executive Board are thereby prohibited from taking advantage, whether directly or indirectly, of inside information to which they have access by conducting private financial activities at their own risk and for their own account, or at the risk and for the account of a third party. The Conditions of Employment for Staff of the European Central Bank were amended accordingly.⁷

The budgetary authority of the ECB is vested in the Governing Council, which adopts the budget of the ECB, acting on a proposal put forward by the Executive Board. In addition, the Budget Committee assists the Governing Council in matters related to the ECB's budget.

In order to join the efforts of the institutions of the European Communities and the

⁴ The competencies of the European Court of Auditors cover the examination of the operational efficiency of the management of the ECB (Article 27.2 of the Statute of the ESCB).

⁵ The principles and standards of the relevant professional institutes, such as the Institute for Internal Auditors (IIA) and the Information Systems Audit and Control Association (ISACA).

⁶ See the Code of Conduct of the European Central Bank in accordance with Article 11.3 of the Rules of Procedure of the European Central Bank, OJ C 76, 8.3.2001, p.12 and the ECB's website.

⁷ See Part 1.2 of the ECB Staff Rules containing the rules on professional conduct and professional secrecy, OJ C 76, 8.3.2001, p.15.

Member States to combat fraud and other illegal activities, the originally existing layers of control within the ECB were enhanced by the establishment of the Anti-Fraud Committee on the basis of the ECB Decision on fraud prevention (ECB/1999/5).⁸ The Committee took up its responsibilities at the beginning of the reporting year and appointed *John L. Murray* as chairperson. The Anti-Fraud Committee, which held three meetings during the year, is regularly kept informed by the Directorate Internal Audit about all issues related to the performance of its tasks. In particular, the Committee followed the establishment of internal procedures for the prevention of fraud at the ECB. In its first annual report, the Anti-Fraud Committee concluded that it had detected no occurrence of fraud or other illegal activities detrimental to the financial interests of the ECB.

3.2 Human resources management

Staffing

At the end of 2000 the number of staff employed by the ECB from all 15 Member States stood at 941. This compares with 732 staff at the end of 1999. On 30 November 2000 the Governing Council approved the ECB's budget for 2001, which envisages bringing the ECB's staff to slightly over 1,100 in the course of the year. As a consequence, the Executive Board decided on a number of organisational adjustments aimed at reinforcing the ECB's managerial structure, which are reflected in the revised organisational chart of the ECB which took effect as from 4 January 2000 and was further adjusted with effect from 5 December 2000. As part of its recruitment effort the ECB offered relocation services, temporary accommodation, a job-finding programme for spouses and language training for new staff and their spouses.

Human resources management policies

Work progressed on the codification of the rules for recruitment. A draft is currently under consideration by the Staff Committee and a final version is expected in early 2001. The rules aim to ensure that recruitment and promotion are based upon the principles of professional qualification, publicity, transparency, equal access and non-discrimination and to establish fair and equal practices for recruitment procedures.

The Executive Board approved a proposal to establish the function of a Staff Counsellor and Equal Opportunities Adviser. As an independent external expert the Adviser will review the situation with regard to equal opportunities at the ECB and provide recommendations on policy measures. The expertise and independent status of such an adviser will be conducive to timely recommendations with a high level of credibility. The role of such an external consultant may go beyond the issue of gender to other areas of equal opportunities (e.g. disability issues and non-gender-related discrimination). In addition, the Adviser can act as an impartial "sounding board" in situations of (potential) conflict at work and as a mediator, assisting the parties in reaching a mutually acceptable outcome.

The ECB's childcare facility and the European School

The ECB's childcare facility opened its doors at its provisional premises for 30 children. The definitive premises should become available in mid-2001, aiming to accommodate approximately 70 children from the age of three months until they enter primary school.

⁸ See the Decision of the European Central Bank of 7 October 1999 on fraud prevention (ECB/1999/5), OJ L 291, 13.11.1999, p. 36. In connection with this, the Rules of Procedure of the European Central Bank were amended by a new Article 9a, see OJ L 314, 8.12.1999, p. 32.

The Board of Governors of the European Schools approved the application submitted by the Federal Republic of Germany to establish a European School in Frankfurt. This project had been actively pursued by the ECB. The location for the school has been decided and building plans are being drawn up. The aim is to open the school by the 2002/03 school year.

Pensions

The system for the governance of the ECB Retirement Plan was completed with the establishment of the Oversight Committee and the Investment Committees. The Oversight Committee, the members of which are elected by the beneficiaries, represents the interests of the beneficiaries by monitoring the overall running of the Retirement Plan. The Investment Committees, some members of which are elected by the staff and some appointed by the Governing Council, advise on the investment strategy of the ECB's and the staff's funds forming the assets of the Retirement Plan and monitor the performance of the investment manager.

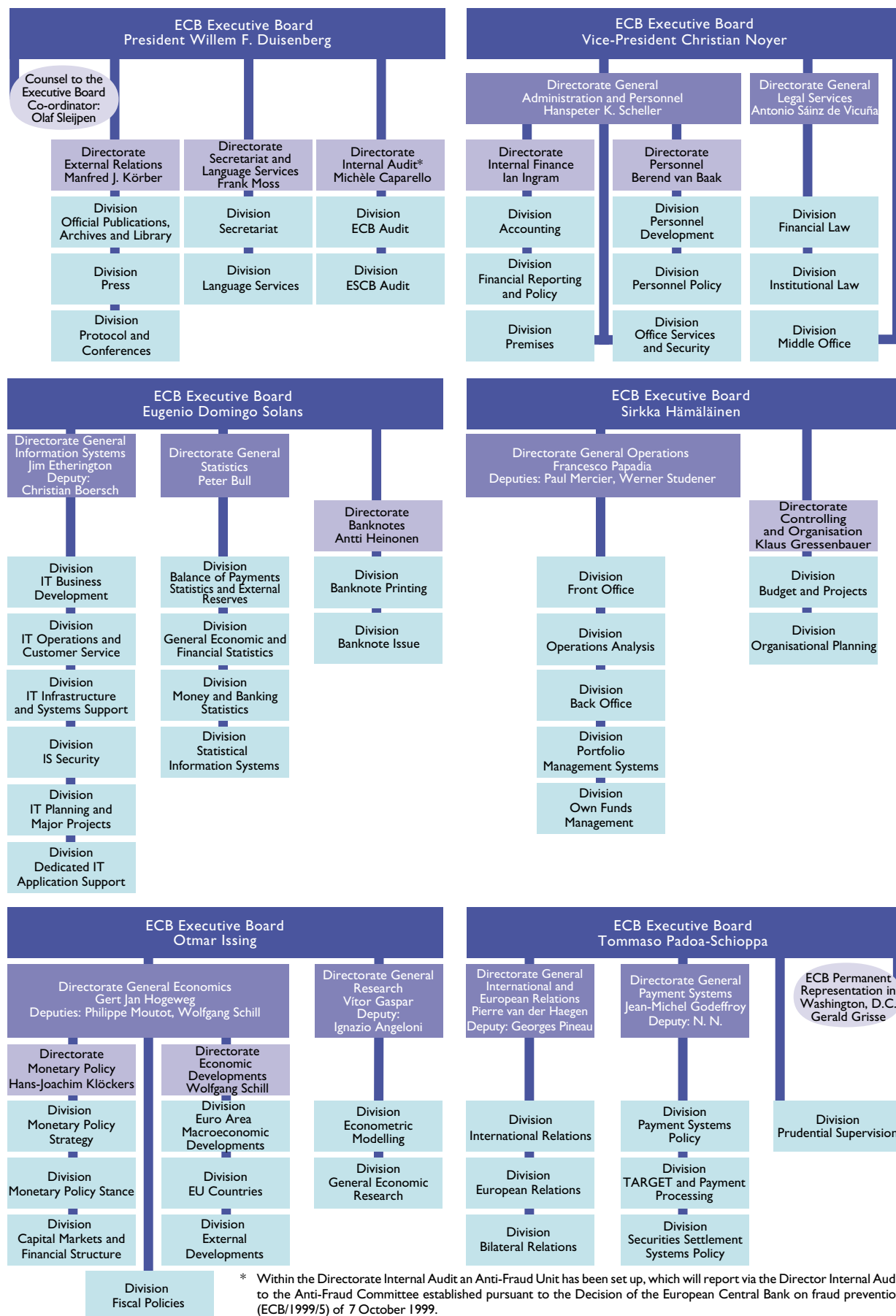
An agreement on the transfer of pension rights to the Retirement Plan has been reached with Luxembourg and the Netherlands. Agreements with other EU countries have been and will continue to be actively pursued.

Staff relations

In June a new Staff Committee, which was extended from seven to nine members, was elected. The Spokesperson and two Deputy Spokespersons of the Staff Committee are released from their normal duties by 50% and the other members by 20%. Where these fall within the scope of its competence, the Staff Committee is consulted on changes to the Conditions of Employment and to the Staff Rules, and on related matters.

At their own initiative, members of staff have created an in-house trade union, the Union of the Staff of the European Central Bank (USE). On a voluntary basis the ECB has established an institutional dialogue at the highest management level with USE. However, the ECB has rejected its request to be recognised as a social partner for the purpose of concluding collective agreements. USE, together with an external trade union, has submitted the issue to the European Court of First Instance.

3.3 The organisational chart of the ECB



* Within the Directorate Internal Audit an Anti-Fraud Unit has been set up, which will report via the Director Internal Audit to the Anti-Fraud Committee established pursuant to the Decision of the European Central Bank on fraud prevention (ECB/1999/5) of 7 October 1999.

4 ESCB Committees

The ESCB Committees have continued to play an important role in the performance of the tasks of the Eurosystem/ESCB. At the request of both the Governing Council and the Executive Board, they have provided expertise in their fields of competence and have facilitated the decision-making process. The ESCB Committees are composed of representatives of the Eurosystem central banks and, where appropriate, of other competent bodies, such as national

supervisory authorities in the case of the Banking Supervision Committee. The NCBs of the non-participating Member States have each also appointed a representative to take part in the meetings of an ESCB Committee whenever it deals with matters which fall within the field of competence of the General Council. At present there are 12 ESCB Committees, all of which were established under Article 9 of the Rules of Procedure of the ECB.

ESCB Committees and their chairpersons

Accounting and Monetary Income Committee (AMICO) Hanspeter K. Scheller	International Relations Committee (IRC) Hervé Hannoun
Banking Supervision Committee (BSC) Edgar Meister	Legal Committee (LEGCO) Antonio Sáinz de Vicuña
Banknote Committee (BANCO) Antti Heinonen	Market Operations Committee (MOC) Francesco Papadia
External Communications Committee (ECCO) Manfred J. Körber	Monetary Policy Committee (MPC) Gert Jan Hogeweg
Information Technology Committee (ITC) Jim Etherington	Payment and Settlement Systems Committee (PSSC) Jean-Michel Godeffroy
Internal Auditors Committee (IAC) Michèle Caparelo	Statistics Committee (STC) Peter Bull

In addition to the ESCB Committees, the Budget Committee has been established by the Governing Council on the basis of Article 15 of the Rules of Procedure of the ECB. It is composed of representatives of the

Eurosystem central banks and is chaired by *Mr. Liam Barron*. It assists the Governing Council in matters related to the ECB's budget.



Kinderkrebstation der Klinik Innsbruck, Austria

Designed by Marie Luise Klimbacher. Untitled

Chapter XIII

Annual Accounts of the ECB and Consolidated Balance Sheet of the Eurosystem 2000

Balance Sheet as at 31 December 2000

Assets	Note number	2000 €	1999 €
1 Gold and gold receivables	1	7,040,906,565	6,956,995,273
2 Claims on non-euro area residents denominated in foreign currency	2		
Balances with banks and security investments, external loans and other external assets		37,475,047,829	41,923,041,208
3 Claims on euro area residents denominated in foreign currency	2	3,824,522,571	2,595,090,860
4 Claims on non-euro area residents denominated in euro	3		
Balances with banks, security investments and loans		698,252,463	3,002,567,659
5 Other claims on euro area credit institutions denominated in euro	3	288,143,000	565,724,243
6 Securities of euro area residents denominated in euro	4	3,667,731,194	3,537,141,285
7 Intra-Eurosystem claims	5		
Other claims within the Eurosystem (net)		13,080,794,017	0
8 Other assets			
8.1 Tangible and intangible fixed assets	6.1	64,168,178	42,589,467
8.2 Other financial assets	6.2	81,758,341	76,083,163
8.3 Off-balance-sheet instrument reevaluation differences	6.3	251,564,471	0
8.4 Accruals and deferred expenditure	6.4	862,316,142	777,032,332
8.5 Sundry items	6.5	3,747,484	6,774,149
		1,263,554,616	902,479,111
9 Loss for the year		0	247,281,223
Total assets		67,338,952,255	59,730,320,862
Memorandum item			
Forward claims denominated in euro		2,885,697,468	

Liabilities	Note number	2000 €	1999 €
1 Liabilities to euro area credit institutions denominated in euro	7	288,143,000	265,724,244
2 Liabilities to other euro area residents denominated in euro	8	1,080,000,000	1,080,000,000
3 Liabilities to non-euro area residents denominated in euro	9	3,421,112,123	301,656,911
4 Liabilities to non-euro area residents denominated in foreign currency Deposits, balances and other liabilities	10	4,803,381,255	4,708,950,946
5 Intra-Eurosystem liabilities			
5.1 Liabilities equivalent to the transfer of foreign reserves	11	39,468,950,000	39,468,950,000
5.2 Other liabilities within the Eurosystem (net)	5	0	1,720,937,646
		39,468,950,000	41,189,887,646
6 Other liabilities	12		
6.1 Accruals and deferred income		1,626,022,228	1,237,727,166
6.2 Sundry items		52,005,650	36,881,237
		1,678,027,878	1,274,608,403
7 Provisions	13	2,637,039,135	21,862,239
8 Revaluation accounts	14	7,972,626,864	6,860,539,710
9 Capital and reserves	15		
9.1 Capital		3,999,550,250	3,999,550,250
9.2 Reserves		0	27,540,513
		3,999,550,250	4,027,090,763
10 Profit for the year		1,990,121,750	0
Total liabilities		67,338,952,255	59,730,320,862
Memorandum item			
Forward liabilities denominated in foreign currency		2,885,697,468	

Profit and Loss Account for the year ending 31 December 2000

	Note number	2000 €	1999 €
Interest income on foreign reserve assets		2,507,164,892	1,733,987,854
Other interest income		4,657,469,867	3,122,690,418
<i>1.1 Interest income</i>		7,164,634,759	4,856,678,272
Remuneration of NCBs' claims in respect of foreign reserves transferred		(1,375,110,826)	(913,067,289)
Other interest expense		(4,375,476,075)	(2,988,344,639)
<i>1.2 Interest expense</i>		(5,750,586,901)	(3,901,411,928)
1 Net interest income	1	1,414,047,858	955,266,344
2.1 Realised gains/losses arising from financial operations	2	3,352,768,266	(466,056,435)
2.2 Write-downs on financial assets and positions	3	(1,084,563)	(604,920,383)
2.3 Transfer to/from provisions for foreign exchange rate and price risks		(2,600,000,000)	0
2 Net result of financial operations, write-downs and risk provisions		751,683,703	(1,070,976,818)
3 Net income from fees and commissions	4	673,498	232,200
4 Other income	5	904,158	436,898
Total net income		2,167,309,217	(115,041,376)
5 Staff costs	6 & 7	(80,275,827)	(61,022,091)
6 Administrative expenses	8	(82,808,524)	(60,748,855)
7 Depreciation of tangible and intangible fixed assets		(14,103,116)	(10,468,901)
Profit/(Loss) for the year		1,990,121,750	(247,281,223)

Frankfurt am Main, 13 March 2001

EUROPEAN CENTRAL BANK

Willem F. Duisenberg
President

Accounting policies¹

Form and presentation of the financial statements

The financial statements of the European Central Bank (ECB) have been designed to present fairly the financial position of the ECB and the results of its operations. They have been drawn up in accordance with the following accounting policies, which the Governing Council of the ECB considers to be appropriate to the function of a central bank. These policies are consistent with the provisions of Article 26.4 of the Statute of the ESCB, which require a standardised approach to the rules governing the accounting and reporting operations of the Eurosystem.

Accounting principles

The following accounting principles have been applied:

- economic reality and transparency;
- prudence;
- recognition of post-balance-sheet events;
- materiality;
- the accruals principle;
- going concern;
- consistency and comparability.

Basis of accounting

The accounts have been prepared on a historical cost basis, modified to include market valuation of marketable securities, gold and all other on-balance-sheet and off-balance-sheet assets and liabilities denominated in foreign currency. Transactions in financial assets and liabilities are reflected in the accounts on the basis of the date on which they are settled.

Gold, foreign currency assets and liabilities

Assets and liabilities denominated in foreign currency are converted into euro at the

exchange rate prevailing on the balance sheet date. Income and expenses are converted at the exchange rate prevailing at the time of the transaction. The revaluation of foreign exchange assets and liabilities is performed on a currency-by-currency basis, including on-balance-sheet and off-balance-sheet instruments.

Revaluation to the market price for assets and liabilities denominated in foreign currency is treated separately from the exchange rate revaluation.

No distinction is made between the price and currency revaluation differences for gold. Instead, a single gold valuation is accounted for on the basis of the price in euro per fine ounce of gold, which is derived from the exchange rate of the euro against the US dollar on 29 December 2000.

Securities

All marketable debt securities and similar assets are valued at the mid-market prices prevailing at the balance sheet date. For the year ending on 31 December 2000, mid-market prices on 29 December 2000 were used. Non-marketable securities are valued at cost.

Repurchase agreements

Repurchase agreements are recorded in the balance sheet as collateralised inward deposits. The balance sheet shows the deposits and the value of the securities used as collateral. Securities sold under this type of agreement remain on the balance sheet of the ECB and are treated as if they had

¹ The detailed accounting policies of the ECB are laid down in a Decision of the Governing Council of the ECB of 12 December 2000 (ECB/2000/16), which has been published in the Official Journal of the European Communities (OJ L 33, 2.2.2001).

remained part of the portfolio from which they were sold. Agreements involving securities denominated in foreign currency have no effect on the average cost of the currency position.

Reverse repurchase agreements are recorded as collateralised loans on the assets side of the balance sheet, for the value of the loan. Securities acquired under this type of agreement are not revalued.

Income recognition

Income and expenses are recognised in the period in which they are earned or incurred.

Realised gains and losses are taken to the profit and loss account. An average cost method is used on a daily basis to calculate the acquisition cost of individual items. In the event of an unrealised loss on any item at the year-end, the average cost of that item is reduced in line with the end-of-year exchange rate and/or market price.

Unrealised gains are not recognised as income, but are transferred directly to a revaluation account.

Unrealised losses are taken to the profit and loss account if they exceed previous revaluation gains registered in the corresponding revaluation account. Unrealised losses in any one security or currency or in gold are not netted against unrealised gains in other securities or currencies.

Premiums or discounts arising on purchased securities are calculated and presented as part of interest income and are amortised over the remaining life of the assets.

Off-balance-sheet instruments

Currency instruments, namely foreign exchange forward transactions, forward legs of foreign exchange swaps and other currency

instruments involving an exchange of one currency for another at a future date, are included in the net foreign currency position for the purpose of calculating foreign exchange gains and losses. Interest rate instruments are revalued on an item-by-item basis and treated in a similar manner to securities. For foreign exchange swaps, the forward position is revalued in conjunction with the spot position. Consequently, no net valuation differences arise since the currency received and the obligation to return it are both valued at the same market rate in euro. Profits and losses arising from off-balance-sheet instruments are recognised and treated in a similar manner to the profits and losses relating to on-balance-sheet instruments.

Post-balance-sheet events

Assets and liabilities are adjusted for events that occur between the annual balance sheet date and the date on which the Governing Council of the ECB approves the financial statements if such events materially affect the condition of assets and liabilities at the balance sheet date.

Intra-ESCB balances

Intra-ESCB transactions are cross-border transactions that occur between two EU central banks. These transactions are primarily processed via TARGET², and give rise to bilateral balances in accounts held between each of the central banks (participating NCBs, non-participating NCBs and the ECB) in or connected to TARGET.

With effect from 30 November 2000, all TARGET-related bilateral claims and liabilities between the EU NCBs and the ECB are netted daily at close of business by novating them to the ECB, leaving each NCB with a single net bilateral position vis-à-vis the ECB only. This position in the books of the ECB

² TARGET is the Trans-European Automated Real-time Gross settlement Express Transfer system (see also Chapter II).

represents the net claim or liability of each NCB against the rest of the ESCB.

Intra-ESCB balances of the participating NCBs with the ECB (except for the capital of the ECB and positions resulting from the transfer of foreign reserve assets to the ECB) are described as intra-Eurosystem claims or liabilities and are presented in the Balance Sheet of the ECB as a single net asset or liability position.

Treatment of tangible and intangible fixed assets

Tangible and intangible fixed assets are valued at cost less depreciation. Depreciation is calculated on a straight-line basis, beginning in the quarter after acquisition and continuing over the expected economic lifetime of the asset, namely:

- Computers, related hardware and software, and motor vehicles: four years;
- Equipment, furniture and plant in building: ten years.

Fixed assets costing less than €10,000 are written off in the year of purchase.

ECB's retirement plan

The ECB operates a defined contribution pension scheme. The assets of the plan, which exist solely for the purpose of providing benefits for members of the plan and their dependants,

are included in the other assets of the ECB and are identified separately. Valuation gains and losses arising on the assets of the pension fund are recognised as income and expenditure of the retirement plan in the year in which they arise. The benefits payable from the core benefit account, resulting from the contributions of the ECB, have minimum guarantees underpinning the defined contribution benefits.

Changes to the balance sheet format

The Governing Council of the ECB has decided to change the balance sheet format as from the end of 2000. Changes have also been made to the format of the ECB's Profit and Loss Account. The comparative figures shown for 1999 have been adjusted accordingly.

Other issues

Having regard to the role of the ECB as a central bank, the Executive Board of the ECB is of the opinion that the publication of a cash flow statement will not provide the readers of the financial statements with any additional relevant information.

In accordance with Article 27 of the Statute of the ESCB, and on the basis of a recommendation of the Governing Council of the ECB, the Council of the European Union approved the appointment of PricewaterhouseCoopers GmbH as the external auditors of the ECB.

Notes on the Balance Sheet

1 Gold and gold receivables

The ECB holds 24 million ounces of fine gold. No transactions in gold took place in 2000. The balance sheet movement is due to the quarterly revaluation process (see “Gold, foreign currency assets and liabilities” in the notes on accounting policies).

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

These claims consist of balances with foreign banks, loans denominated in foreign currency and investments in securities, denominated in US dollars and Japanese yen.

3 Claims on non-euro area residents and euro area credit institutions denominated in euro

Claims on non-euro residents consist of bank deposits and repurchase operations conducted in connection with the management of the ECB’s own funds. Similar repurchase operations conducted with euro area residents are shown under “Other claims on euro area credit institutions denominated in euro”.

4 Securities of euro area residents denominated in euro

These securities comprise marketable debt issued by specific euro area issuers with a high level of credit quality.

5 Intra-Eurosystem claims

This item consists mainly of the TARGET balances of the participating NCBs vis-à-vis the ECB (see “Intra-ESCB balances” in the notes on accounting policies).

	2000 €	1999 €
Due from participating central banks in respect of TARGET	59,010,910,157	7,697,803,922
Due to participating central banks in respect of TARGET	(45,930,059,415)	(9,418,628,635)
Net position	13,080,850,742	(1,720,824,713)

The significant change in this position compared with 1999 is principally due to the effect of purchases of euro against foreign currencies during the year, which were settled via TARGET.

6 Other assets

6.1 Tangible and intangible fixed assets

Net of cumulative depreciation totalling €43.2 million, tangible fixed assets comprised the following main items on 31 December 2000:

	Net book value as at 31 Dec. 2000 €	Net book value as at 31 Dec. 1999 €
Land and buildings	1,305,097	0
Computers	21,042,849	15,865,660
Equipment, furniture, plant in building and motor vehicles	4,852,047	5,955,720
Assets under construction	21,691,248	12,989,835
Other fixed assets	15,276,937	7,778,252
Total	64,168,178	42,589,467

The increase in fixed assets is primarily due to investment in the ECB’s new second site, the Eurotheum. Land and buildings relates to capitalised refurbishment costs at the Eurotower.

6.2 Other financial assets

The main components of this item are as follows:

- (a) The investment portfolios relating to the ECB pension fund, which are valued at €42.9 million (1999: €32.2 million). The assets held represent the investments of accumulated pension contributions by the ECB and the staff of the ECB as at 31 December 2000, and are managed by an external fund manager. The regular contributions of the ECB and members of the plan have been invested on a monthly basis. The assets of the plan are not fungible with other financial assets of the ECB, and net income thereon does not constitute income of the ECB, but is reinvested in the funds concerned, pending payment of benefits. The value of the assets held by the plan is based on a valuation by the external fund manager, using year-end market prices.
- (b) The ECB holds 3,000 shares in the Bank for International Settlements, which are included at the acquisition cost of €38.5 million.

6.3 Off-balance-sheet instrument revaluation differences

This accounting entry represents a revaluation loss on off-balance-sheet forward positions that arise from outstanding foreign exchange swap transactions. Since the corresponding on-balance-sheet spot positions are revalued at the same rate as the forward positions, no net valuation difference results overall (see “Off-balance-sheet instruments” in the notes on accounting policies).

6.4 Accruals and deferred expenditure

The principal component of this item is accrued interest on securities and other financial assets.

6.5 Sundry items

This position consists mainly of a claim against the German Federal Ministry of Finance in respect of recoverable value added and other indirect taxes paid. Such taxes are refundable under the terms of Article 3 of the Protocol concerning the Privileges and Immunities of the European Communities, which applies to the ECB by virtue of Article 40 of the Statute of the ESCB.

7 Liabilities to euro area credit institutions denominated in euro

This item consists of the counterpart of repurchase operations conducted with euro area credit institutions in connection with the investment of the ECB's own funds.

8 Liabilities to other euro area residents denominated in euro

This item comprises deposits by members of the Euro Banking Association (EBA), which are used in order to provide the ECB with collateral in respect of the EBA payments settled through the TARGET system.

9 Liabilities to non-euro area residents denominated in euro

These liabilities principally represent balances held at the ECB by non-Eurosystem NCBs arising from transactions processed via the TARGET system (see “Intra-ESCB balances” in the notes on accounting policies).

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

Liabilities arising from repurchase agreements in connection with the management of the foreign currency reserves of the ECB are shown under this heading.

11 Intra-Eurosystem liabilities

At the start of Stage Three of EMU, the NCBs of the participating countries transferred foreign reserve assets to the ECB in accordance with Article 30 of the Statute of the ESCB and a Decision of the Governing Council which gave effect to that Article. Amounts equivalent to €39.5 billion were transferred between 4 and 7 January 1999, in the form of gold, cash and securities.

	Capital key %	€
Nationale Bank van België/ Banque Nationale de Belgique	2.8658	1,432,900,000
Deutsche Bundesbank	24.4935	12,246,750,000
Banco de España	8.8935	4,446,750,000
Banque de France	16.8337	8,416,850,000
Central Bank of Ireland	0.8496	424,800,000
Banca d'Italia	14.8950	7,447,500,000
Banque centrale du Luxembourg	0.1492	74,600,000
De Nederlandsche Bank	4.2780	2,139,000,000
Oesterreichische Nationalbank	2.3594	1,179,700,000
Banco de Portugal	1.9232	961,600,000
Suomen Pankki	1.3970	698,500,000
Total	78.9379	39,468,950,000

The resulting claims of the NCBs are denominated in euro and are remunerated at the short-term refinancing rates of the Eurosystem, adjusted to reflect a zero return on the gold component (see "Notes on the profit and loss account", Note 1). During the first three years of Stage Three of EMU, and following a decision of the Governing Council, these claims are subject to a waiver in the event that the ECB has insufficient net income and reserves to cover unrealised losses caused by falls in the exchange rates relating to the foreign reserve assets held. Any amounts to be waived may not reduce the liability to below 80% of its original value. As at 31 December 2000, no waiver of claims had been invoked.

12 Other liabilities

This item consists mainly of interest due to the NCBs in respect of their claims relating to the foreign reserves transferred (see Note 11). The ECB's liabilities in respect of the pension fund of €42.9 million (1999: €32.2 million) and other accruals are also shown under this item.

13 Provisions

Taking into account the ECB's large exposure to exchange rate and interest rate risk, and the current size of its revaluation reserves, it was deemed appropriate to establish a special provision against these risks amounting to €2,600 million. The provision will be used to fund future realised and unrealised losses, in particular valuation losses not covered by the revaluation accounts. The continuing requirement for this provision will be reviewed on an annual basis.

The remaining balance consists of administrative provisions relating to expenditure on goods and services.

14 Revaluation accounts

These accounts represent revaluation reserves arising from unrealised gains on assets and liabilities.

	2000 €	1999 €
Gold	1,120,787,564	1,036,876,277
Foreign currency	6,228,835,267	5,821,397,453
Securities	623,004,033	2,265,980
Total	7,972,626,864	6,860,539,710

15 Capital and reserves

The fully paid-up subscriptions of the euro area NCBs to the capital of the ECB of €5 billion amount to a total of €3,946,895,000, as shown below:

	Capital key %	€
Nationale Bank van België/ Banque Nationale de Belgique	2.8658	143,290,000
Deutsche Bundesbank	24.4935	1,224,675,000
Banco de España	8.8935	444,675,000
Banque de France	16.8337	841,685,000
Central Bank of Ireland	0.8496	42,480,000
Banca d'Italia	14.8950	744,750,000
Banque centrale du Luxembourg	0.1492	7,460,000
De Nederlandsche Bank	4.2780	213,900,000
Oesterreichische Nationalbank	2.3594	117,970,000
Banco de Portugal	1.9232	96,160,000
Suomen Pankki	1.3970	69,850,000
Total	78.9379	3,946,895,000

The non-euro area NCBs' contributions, which represent 5% of the amount which would be payable if these countries were to participate in Monetary Union, amount to a total of €52,655,250 as shown below:

	Capital key %	€
Danmarks Nationalbank	1.6709	4,177,250
Bank of Greece	2.0564	5,141,000
Sveriges Riksbank	2.6537	6,634,250
Bank of England	14.6811	36,702,750
Total	21.0621	52,655,250

These amounts represent contributions to cover the operational costs incurred by the ECB in connection with tasks performed for the non-euro area NCBs. The non-euro area NCBs are not required to pay up any capital subscriptions beyond the amounts already decided until such time as they join the Eurosystem. The non-participating NCBs are not entitled to receive any share of the distributable profits of the ECB, nor are they liable to fund any losses of the ECB.

16 Post-balance-sheet events

Based on Council Decision (2000/427/EC) of 19 June 2000 in accordance with Article 122(2) of the Treaty on the adoption by Greece of the single currency on 1 January 2001, and in accordance with Article 49.1 of the Statute of the ESCB and the legal acts adopted by the Governing Council on 16 November 2000³, the Bank of Greece transferred to the ECB as at 1 January 2001 an amount of €97,679,000, representing the remaining 95% of its capital subscription and, between 2 and 5 January 2001, in accordance with Article 30.1 of the Statute of the ESCB, foreign reserve assets with a total value equivalent to €1,278,260,161. The total amount transferred was determined by multiplying the euro value, at the exchange rates prevailing on 29 December 2000, of the foreign reserve assets already transferred to the ECB by the ratio between the number of shares subscribed by the Bank of Greece and the number of shares already paid up by the other NCBs without a derogation. These foreign reserve assets comprised amounts of gold, US dollars and Japanese yen in the same proportions as the amounts transferred at the beginning of 1999 by the other participating NCBs. The currency component was transferred in the form of cash and securities.

³ The Decision of the ECB of 16 November 2000 providing for the paying up of capital and the contribution to the reserves and provisions of the ECB by the Bank of Greece, and for the initial transfer of foreign reserve assets to the ECB by the Bank of Greece and related matters (ECB/2000/14) with the annexed Guideline of the ECB of 3 November 1998, as amended by the ECB Guideline of 16 November 2000 on the composition, valuation and modalities for the initial transfer of foreign reserve assets, and the denomination and remuneration of equivalent claims. (ECB/2000/15), OJ L 336, 30.12.2000, pp. 110-117; Agreement of 16 November 2000 between the ECB and the Bank of Greece regarding the claim credited to the Bank of Greece by the ECB under Article 30.3 of the Statute of the ESCB and related matters, OJ L 336, 30.12.2000, pp. 122-123.

The Bank of Greece was credited with claims in respect of the paid-up capital and foreign reserve assets equivalent to the amounts transferred. These claims are to be treated in an identical manner to the existing claims of the other participating NCBs (see note 11).

17 Off-balance-sheet items

Unmatured foreign exchange swap contract liabilities with a value of €2,886 million remained outstanding as at 31 December 2000.

No material contingent liabilities were outstanding as at 31 December 2000.

Notes on the Profit and Loss Account

1 Net interest income

This item includes interest income, net of interest expense, in respect of the assets and liabilities denominated in foreign currency and net interest income on balances arising from TARGET and in respect of assets and liabilities denominated in euro. The remuneration paid to NCBs on their claims on the ECB in respect of the foreign reserve assets transferred at the beginning of 1999 is disclosed separately.

Interest income realised in connection with the disposal of certain securities is now presented under the net interest income caption of the Profit and Loss Account. In order to allow for a comparison, the 1999 figures have been modified accordingly.

The increase in net income compared with 1999 is primarily due to higher net interest income from foreign reserves and remuneration due to the ECB on balances resulting from TARGET transactions. This has been partially offset by higher remuneration paid to the NCBs in respect of their claims relating to the foreign reserve assets transferred, due to increases in the short-term refinancing rates of the Eurosystem (see note 11 on the Balance Sheet of the ECB).

2 Realised gains/losses arising from financial operations

Substantial realised gains arose due to the sales of foreign currency by the ECB during the course of intervention operations in September and November, and further as a result of the disposals of foreign currency income earned since the beginning of 1999. This item also contains net realised gains arising from the disposal of securities, as a result of normal portfolio management and of the liquidation of portfolios prior to intervention.

3 Write-downs in financial assets and positions

General increases in security prices in the latter part of 2000 resulted in very limited write-downs in the acquisition cost of securities shown in the balance sheet to their market value as at 31 December 2000.

4 Net income from fees and commissions

This item consists of the following income and expenses. Income arose from penalties imposed on credit institutions for non-compliance with the minimum reserve requirements.

	2000 €	1999 €
Income from fees and commissions	1,296,112	593,902
Expenses relating to fees and commissions	(622,614)	(361,702)
Net income from fees and commissions	673,498	232,200

5 Other income

Other miscellaneous income during the year arose principally from the transfer of unused administrative provisions to the Profit and Loss Account.

6 Staff costs

Salaries and allowances of €67 million (1999: €52.3 million) and employer's contributions to the ECB's pension fund and to health and accident insurance are included under this heading. The emoluments of the Executive Board of the ECB amounted to a total of €1.8 million. No pensions were paid to former members of the Executive Board or their dependants during the year. Salaries and allowances of staff, including the emoluments

of holders of senior management positions, are modelled in essence on, and are comparable with, the remuneration scheme of the European Communities.

On the last working day of 2000 the ECB employed 941 staff, of whom 72 held managerial positions. The average number of staff employed by the ECB in 2000 was 823 compared with 648 in 1999. 259 additional staff were employed during the period, and 50 members of staff left the service of the ECB.

7 ECB's retirement plan

In accordance with the rules of the ECB plan, a triennial full actuarial valuation is required. The latest actuarial valuation was carried out as at 31 December 1999, using the Projected Unit Credit Method, subject to minimum liabilities equal to cash lump sums that would be payable to members on termination of service.

The pension cost relating to the plan is assessed in accordance with the advice of a

qualified actuary. The total pension cost to the ECB including a provision for disability and post-retirement benefits was €13.1 million (1999: €8.1 million). This includes a provision for pensions to members of the Executive Board of €0.6 million (1999: €1.8 million). The required future service contribution rate by the ECB is 16.5% of pensionable earnings of all staff.

8 Administrative expenses

These cover all other current expenses relating to rental of premises, maintenance of premises, goods and equipment of a non-capital nature, professional fees and other services and supplies, together with staff-related expenses including recruitment, relocation, installation, training and resettlement.

The increase in administrative expenditure is primarily due to additional operational costs associated with the ECB's main site, the Eurotower, and higher consultancy fees, especially in connection with the preparation of the Euro 2002 Information Campaign.

President and Governing Council
of the European Central Bank

Frankfurt am Main

We have audited the accompanying financial statements of the European Central Bank as at 31 December 2000. The European Central Bank's Executive Board is responsible for the preparation of the accounts. It is our responsibility to form an independent opinion on these accounts based on our audit, and to report our opinion to you.

We conducted our audit in accordance with International Standards of Auditing. An audit includes examinations, on a test basis, of evidence relevant to the amounts and disclosures in the accounts. It also includes an assessment of the significant estimates and judgements made in the preparation of the accounts, and of whether the accounting policies are appropriate to the European Central Bank's circumstances and adequately disclosed.

In our opinion, the financial statements, which have been prepared under accounting policies set out in the first part of the notes on the accounts of the European Central Bank, give a true and fair view of the financial position of the European Central Bank at 31 December 2000 and the results of its operations for the year then ended.

Frankfurt am Main, 14 March 2001

PricewaterhouseCoopers

Gesellschaft mit beschränkter Haftung
Wirtschaftsprüfungsgesellschaft

[signed]
(Wagener)
Wirtschaftsprüfer

[signed]
(Kern)
Wirtschaftsprüfer

Note on profit distribution

This note does not form a part of the financial statements of the ECB for the year 2000. It is published in the Annual Report for information purposes.

Profit distribution

Article 33 of the Statute of the ESCB states that the net profit of the ECB shall be transferred in the following order:

- An amount to be determined by the Governing Council, which may not exceed 20% of the net profit, shall be transferred to the general reserve fund subject to a limit equal to 100% of the capital;
- The remaining net profit shall be distributed to the shareholders of the ECB in proportion to their paid-up shares.

In accordance with this Article, the Governing Council decided on 29 March 2001

to transfer an amount of €398 million to the general reserve fund with the remaining balance being distributable to the participating national central banks in proportion to their paid-up capital.

Non-participating national central banks are not entitled to receive any share of the distributable profits.

	2000 €	1999 €
Profit/loss for the year	1,990,121,750	(247,281,223)
Withdrawals from/allocated to general reserve fund	(398,024,350)	27,540,513
Transfer from monetary income pooled	0	35,160,676
Direct charge on NCBs	0	184,580,034
Distributable profits	1,592,097,400	0
Distribution to NCBs	(1,592,097,400)	
Total	0	0

Consolidated Balance Sheet of the Eurosystem as at 31 December 2000

(EUR millions)

Assets	Balance as at 31 December 2000	Balance as at 31 December 1999
1 Gold and gold receivables	117,073	116,610
2 Claims on non-euro area residents denominated in foreign currency		
2.1 Receivables from the IMF	26,738	29,842
2.2 Balances with banks and security investments, external loans and other external assets	232,087	225,040
	258,825	254,882
3 Claims on euro area residents denominated in foreign currency	15,786	14,385
4 Claims on non-euro area residents denominated in euro		
4.1 Balances with banks, security investments and loans	3,750	6,050
4.2 Claims arising from the credit facility under ERM II	0	0
	3,750	6,050
5 Lending to euro area credit institutions related to monetary policy operations denominated in euro		
5.1 Main refinancing operations	222,988	161,987
5.2 Longer-term refinancing operations	45,000	74,996
5.3 Fine-tuning reverse operations	0	0
5.4 Structural reverse operations	0	0
5.5 Marginal lending facility	608	11,429
5.6 Credits related to margin calls	53	404
	268,648	248,815
6 Other claims on euro area credit institutions denominated in euro	578	1,842
7 Securities of euro area residents denominated in euro	26,071	23,521
8 General government debt denominated in euro	57,671	59,180
9 Other assets	87,559	81,567
Total assets	835,961	806,853

Due to rounding, totals/sub-totals may not add up.

Liabilities	Balance as at 31 December 2000	Balance as at 31 December 1999
1 Banknotes in circulation	371,370	374,964
2 Liabilities to euro area credit institutions related to monetary policy operations denominated in euro		
2.1 Current accounts (covering the minimum reserve system)	124,402	114,672
2.2 Deposit facility	240	2,618
2.3 Fixed-term deposits	0	0
2.4 Fine-tuning reverse operations	0	0
2.5 Deposits related to margin calls	0	10
	124,642	117,301
3 Other liabilities to euro area credit institutions denominated in euro	305	283
4 Debt certificates issued	3,784	7,876
5 Liabilities to other euro area residents denominated in euro		
5.1 General government	53,353	56,470
5.2 Other liabilities	3,694	5,292
	57,047	61,762
6 Liabilities to non-euro area residents denominated in euro	10,824	9,048
7 Liabilities to euro area residents denominated in foreign currency	806	927
8 Liabilities to non-euro area residents denominated in foreign currency		
8.1 Deposits, balances and other liabilities	12,414	11,904
8.2 Liabilities arising from the credit facility under ERM II	0	0
	12,414	11,904
9 Counterpart of special drawing rights allocated by the IMF	6,702	6,534
10 Other liabilities	72,215	54,222
11 Revaluation accounts	117,986	106,782
12 Capital and reserves	57,866	55,249
Total liabilities	835,961	806,853

Annexes

Glossary

Accession countries: there are currently 13 countries in central and eastern Europe and in the Mediterranean which are recognised by the **European Council** as candidates for accession to the European Union (EU). At present, the following 12 countries have formally started accession negotiations: Bulgaria, Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, the Slovak Republic and Slovenia. Following a decision by the European Council in December 1999 Turkey also became an official candidate for accession, but the conditions to be fulfilled before the start of negotiations have yet to be met. When referring to accession countries, the Annual Report refers to those 12 countries with which the European Council has decided to start formal negotiations for EU membership.

Benchmark: in relation to investments, a benchmark is a reference portfolio or index constructed on the basis of the objectives for the liquidity and risk of as well as the return on the investments. The benchmark serves as a basis for comparison of the performance of the actual portfolio. In the context of the foreign reserve management of the **European Central Bank (ECB)**, the strategic benchmark is a reference portfolio reflecting the long-term risk/return preferences of the ECB. Its characteristics are amended only in exceptional circumstances. The tactical benchmark reflects the risk/return preferences of the ECB with a time horizon of a few months, based on prevailing market conditions. It is reviewed on a monthly basis.

Bilateral procedure: a procedure whereby the central bank deals directly with one or only a few **counterparties**, without making use of tender procedures. Bilateral procedures include operations executed through stock exchanges or market agents.

Central securities depository (CSD): an entity which holds securities and which enables securities transactions to be processed by book entry. Physical securities may be immobilised by the depository or securities may be dematerialised (i.e. so that they exist only as electronic records). In addition to the safekeeping and administration of securities (e.g. services for issuance and redemption), a central securities depository may perform clearing and settlement functions.

Collateral: assets pledged as a guarantee for the repayment of the short-term liquidity loans which **credit institutions** receive from the central banks, as well as assets sold to central banks by credit institutions as part of **repurchase operations**.

Consolidated MFI balance sheet: the consolidated balance sheet of the **Monetary Financial Institution (MFI)** sector is obtained by netting out inter-MFI positions (e.g. inter-MFI loans and deposits of money market funds with MFIs) on the aggregated MFI balance sheet. It provides information on the MFI sector's assets and liabilities vis-à-vis residents of the **euro area** not belonging to this sector (i.e. **general government** and other euro area residents) and vis-à-vis non-euro area residents. The consolidated balance sheet is the main statistical source for the calculation of **monetary aggregates** and it provides the basis for the regular analysis of the counterparts of **M3**.

Convergence programmes: see **stability programmes**.

Copenhagen criteria: the overall criteria which applicant countries have to meet as a prerequisite for becoming members of the European Union were defined in general terms by the Copenhagen **European Council** in June 1993. The Copenhagen criteria require (i) the stability of institutions guaranteeing democracy, the rule of law, human rights, and the respect for and protection of minorities; (ii) the existence of a functioning market economy as well as the capacity

to cope with competitive pressure and market forces within the EU; and (iii) the ability to take on the obligations of membership, including adherence to the aims of political unification as well as **Economic and Monetary Union (EMU)**.

Correspondent banking: an arrangement whereby one bank provides payment services and other services to another bank. Payments through correspondents are usually executed through reciprocal accounts (nostro and loro accounts), to which standing credit lines may be attached. Correspondent banking services are primarily provided across international boundaries, but are also known as agency relationships in some domestic contexts. A loro account is the term used by a correspondent to describe an account held on behalf of a foreign bank; the foreign bank would regard this account as its nostro account.

Correspondent central banking model (CCBM): a model established by the **European System of Central Banks (ESCB)** with the aim of enabling **counterparties** to transfer eligible assets as **collateral** in a cross-border context. In the CCBM, national central banks act as custodians for one another. This means that each national central bank has a securities account in its securities administration for each of the other national central banks (and for the **European Central Bank (ECB)**).

Council of Ministers: see **EU Council**.

Counterparty: the opposite party in a financial transaction (e.g. any transaction with the central bank).

Credit institution: an institution covered by the definition in Article 1 (1) of Directive 2000/12/EC of the European Parliament and of the Council of 20 March 2000 relating to the taking up and pursuit of the business of credit institutions. According to this definition, a credit institution is (a) an undertaking whose business is to receive deposits or other repayable funds from the public and to grant credits for its own account, or (b) an electronic money institution within the meaning of Directive 2000/46/EC of the European Parliament and of the Council of 18 September 2000 on the taking up, pursuit and prudential supervision of the business of electronic money institutions.

Credit to euro area residents: a broad measure of the financing of non-**Monetary Financial Institution (MFI)** euro area residents (including **general government** and the private sector) provided by the MFI sector. It is defined as including loans and MFI holdings of securities. The latter include shares, other equity and debt securities, including money market paper issued by non-MFI euro area residents. As securities can be seen as an alternative source of funds to loans, and as some loans can be securitised, this definition provides more accurate information on the total amount of financing provided by the MFI sector to the economy than a narrow definition comprising loans only.

Currency in circulation: currency in circulation includes both banknotes and coins in circulation that are commonly used to make payments. It includes banknotes issued by the **Eurosystem** and by other **Monetary Financial Institutions (MFIs)** in the **euro area** (in Ireland and Luxembourg) as well as the coins issued by some national central banks of the Eurosystem and by the central government. Currency in circulation as included in **M3** is a net concept, i.e. it refers only to banknotes and coins in circulation that are held outside the MFI sector (as shown on the **consolidated MFI balance sheet**, implying that currency issued but held by MFIs – “vault cash” – has been subtracted). Currency in circulation does not include a central bank’s stock of own banknotes (as they are not issued), nor commemorative coins that are not commonly used to make payments.

Debt ratio: the subject of one of the fiscal convergence criteria laid down in Article 104 (2) of the **Treaty**. It is defined as the ratio of government debt to gross domestic product at current market prices, while government debt is defined in Protocol No. 20 (on the excessive deficit procedure) as the total gross debt at nominal value outstanding at the end of the year and consolidated between and within the sectors of **general government**. General government is as defined in the **European System of Accounts 1995 (ESA 95)**.

Deficit-debt adjustment: the difference between the government deficit and the change in government debt. Among other reasons, this may arise due to changes in the amount of financial assets held by the government, to a change in government debt held by other government sub-sectors or to statistical adjustments.

Deficit ratio: the subject of one of the fiscal convergence criteria named in Article 104 (2) of the **Treaty**. It is defined as the ratio of the planned or actual government deficit to gross domestic product at current market prices, while the government deficit is defined in Protocol No. 20 (on the excessive deficit procedure) as net borrowing of the **general government**. General government is as defined in the **European System of Accounts 1995 (ESA 95)**.

Delivery versus payment (DVP) system or delivery against payment system: a mechanism in a **securities settlement system (SSS)** which ensures that the final transfer of one asset occurs if, and only if, the final transfer of another asset or other assets occurs. Assets could include securities and/or other financial instruments.

Deposit facility: a **standing facility** of the **Eurosystem** which **counterparties** may use to make **overnight deposits** at a national central bank and which are remunerated at a pre-specified interest rate.

Deposits redeemable at notice: this category consists of saving deposits for which the holder has to respect a fixed period of notice before being able to withdraw the funds. In some cases there is the possibility of withdrawing a certain fixed amount in a specified period or of earlier withdrawal subject to the payment of a penalty. Deposits redeemable at a period of notice of up to three months belong to **M2** (and hence to **M3**), while those with a longer period of notice belong to the (non-monetary) longer-term financial liabilities of the **Monetary Financial Institution (MFI)** sector.

Deposits with agreed maturity: this instrument category consists mainly of time deposits with a given maturity that, depending on national practices, may be either not convertible prior to maturity or convertible only subject to a penalty. It also encompasses some non-marketable debt instruments, such as non-marketable (retail) certificates of deposit. Deposits with an agreed maturity of up to two years are included in **M2** (and hence in **M3**), while those with an agreed maturity of over two years are included in the (non-monetary) longer-term financial liabilities of the **Monetary Financial Institution (MFI)** sector.

ECOFIN: see **EU Council**.

Economic and Financial Committee: a consultative Community body set up at the start of Stage Three, when the Monetary Committee was dissolved. The Member States, the **European Commission** and the **European Central Bank (ECB)** each appoint no more than two members of the Committee. The two members appointed by the Member States are selected respectively from among senior officials from the national administrations and the national central banks. Article 114 (2) of the **Treaty** contains a list of the tasks of the Economic and Financial

Committee, which include reviewing the economic and financial situation of the Member States and of the Community.

Economic and Monetary Union (EMU): the **Treaty** describes the process of achieving Economic and Monetary Union in the European Union in three stages. Stage One of EMU started in July 1990 and ended on 31 December 1993; it was mainly characterised by the dismantling of all internal barriers to the free movement of capital within the European Union. Stage Two of EMU began on 1 January 1994. It provided for, inter alia, the establishment of the **European Monetary Institute (EMI)**, the prohibition of financing of the public sector by the central banks, the prohibition of privileged access to financial institutions by the public sector and the avoidance of excessive government deficits. Stage Three started on 1 January 1999 with the transfer of monetary competence to the **Eurosystem** and the introduction of the **euro**.

ECU (European Currency Unit): the ECU was a basket currency made up of the sum of fixed amounts of 12 of the 15 currencies of the EU Member States. The value of the ECU was calculated as a weighted average of the value of its component currencies. The ECU was replaced by the **euro** on a one-for-one basis on 1 January 1999.

Effective (nominal/real) exchange rates: nominal effective exchange rates consist of a weighted average of various bilateral exchange rates. Real effective exchange rates are nominal effective exchange rates deflated by a weighted average of foreign, relative to domestic, prices or costs. They are thus measures of price and cost competitiveness. The nominal effective exchange rate of the **euro** calculated by the **European Central Bank (ECB)** is a geometric weighted average of the exchange rates of the euro against the currencies of 13 trading partners of the **euro area**. The weightings are based on trade in manufactured goods with the trading partners in the period from 1995 to 1997 and take into account third market effects. The real effective exchange rate for the euro is calculated using consumer price indices (the **Harmonised Index of Consumer Prices (HICP)** for the euro area and other EU Member States).

Electronic money (e-money): an electronic store of monetary value on a technical device that may be widely used for making payments to undertakings other than the issuer without necessarily involving bank accounts in the transaction, but acting as a prepaid bearer instrument (see also **multi-purpose prepaid card**).

EMU: see **Economic and Monetary Union**.

EONIA (euro overnight index average): a measure of the effective interest rate prevailing in the **euro** interbank overnight market. It is computed as a weighted average of the interest rates on unsecured overnight contracts on deposits denominated in euro, as reported by a panel of contributing banks.

ERM II (exchange rate mechanism II): the exchange rate arrangement which provides the framework for exchange rate policy co-operation between the **euro area** and EU Member States not participating in the euro area from the start of Stage Three of **Economic and Monetary Union (EMU)**. Membership of the mechanism is voluntary. Nevertheless, Member States with a derogation can be expected to join the mechanism. Currently, the Danish krone participates in ERM II with a fluctuation band around the central rate against the **euro** of $\pm 2.25\%$. Prior to the adoption of the euro by Greece on 1 January 2001, the Greek drachma participated in ERM II with a fluctuation band of $\pm 15\%$. Foreign exchange intervention and financing at the margins of the standard or narrower fluctuation bands are, in principle, automatic and unlimited, with very short-term financing available. The **European Central Bank (ECB)** and the participating

non-euro area national central banks could, however, suspend automatic intervention if this were to conflict with their primary objective of maintaining **price stability**.

EU Council: an institution of the European Community. It is made up of representatives of the governments of the Member States, normally the ministers responsible for the matters under consideration (therefore often referred to as the Council of Ministers). The EU Council meeting in the composition of the ministers of finance and economy is often referred to as the **ECOFIN Council**. In addition, the EU Council may meet in the composition of the Heads of State or Government (see also **European Council**).

EURIBOR (euro interbank offered rate): the rate at which a prime bank is willing to lend funds in **euro** to another prime bank. The EURIBOR is computed daily for interbank deposits with a maturity of one week and one to 12 months as the average of the daily offer rates of a representative panel of prime banks, rounded to three decimal places.

Euro: the name of the European currency adopted by the **European Council** at its meeting in Madrid on 15 and 16 December 1995 and used instead of the term **ECU (European Currency Unit)** employed in the **Treaty**.

Euro area: the area encompassing those Member States in which the **euro** has been adopted as the single currency in accordance with the **Treaty** and in which a single monetary policy is conducted under the responsibility of the **Governing Council** of the **European Central Bank (ECB)**. In 2000 the euro area comprised Belgium, Germany, Spain, France, Ireland, Italy, Luxembourg, the Netherlands, Austria, Portugal and Finland. Greece joined the euro area on 1 January 2001, thus raising the number of countries in the euro area to 12.

Euro Banking Association (EBA): an organisation intended to be a forum for exploring and debating all issues of interest to its members and, in particular, matters pertaining to the use of the **euro** and the settlement of transactions in euro. The EBA established a clearing company (ABE Clearing, Société par Actions Simplifiée à capital variable) for the purpose of managing the Euro Clearing System as from 1 January 1999. The Euro Clearing System (Euro 1) is the successor to the ECU Clearing and Settlement System.

Euro central rate: the official exchange rate of **ERM II** member currencies vis-à-vis the **euro**, around which the ERM II fluctuation margins are defined.

Eurogroup: informal grouping bringing together those members of the **ECOFIN Council** who represent the Member States of the **euro area**. It meets on a regular basis (usually prior to meetings of the ECOFIN Council) to discuss issues connected with the euro area Member States' shared responsibilities for the single currency. The **European Commission** and, when appropriate, the **European Central Bank (ECB)** are invited to take part in these meetings.

European Central Bank (ECB): the ECB lies at the centre of the **European System of Central Banks (ESCB)** and the **Eurosystem** and has legal personality under Community law. It ensures that the tasks conferred upon the Eurosystem and the ESCB are implemented either by its own activities pursuant to the Statute of the European System of Central Banks and of the European Central Bank or through the national central banks.

European Commission (Commission of the European Communities): the institution of the European Community which ensures the application of the provisions of the **Treaty**. The Commission develops Community policies, proposes Community legislation and exercises powers in specific areas. In the area of economic policy, the Commission recommends broad guidelines for economic policies in the Community and reports to the **EU Council** on economic developments and policies. It monitors public finances within the framework of multilateral surveillance and submits reports to the Council. It consists of 20 members and includes two nationals each from Germany, Spain, France, Italy and the United Kingdom, and one from each of the other Member States.

European Council: provides the European Union with the necessary impetus for its development and defines the general political guidelines thereof. It brings together the Heads of State or Government of the Member States and the President of the **European Commission** (see also **EU Council**).

European Monetary Institute (EMI): a temporary institution established at the start of Stage Two of **Economic and Monetary Union (EMU)** on 1 January 1994. The two main tasks of the EMI were to strengthen central bank co-operation and monetary policy co-ordination and to make the preparations required for the establishment of the **European System of Central Banks (ESCB)**, for the conduct of the single monetary policy and for the creation of a single currency in Stage Three. It went into liquidation following the establishment of the **European Central Bank (ECB)** on 1 June 1998.

European Parliament: consists of 626 representatives of the citizens of the Member States. It is a part of the legislative process, although with different prerogatives according to the procedures through which EU law is to be enacted. In the framework of **Economic and Monetary Union (EMU)**, the Parliament has mainly consultative powers. However, the **Treaty** establishes certain procedures for the democratic accountability of the **European Central Bank (ECB)** to the Parliament (presentation of the annual report, general debate on the monetary policy, hearings before the competent parliamentary committees).

European System of Accounts 1995 (ESA 95): a system of uniform statistical definitions and classifications aimed at achieving a harmonised quantitative description of the economies of the Member States. The ESA 95 is the Community's version of the world System of National Accounts 1993 (SNA 93). The ESA 95 is a new version of the European system, implementation of which began in the course of 1999 in accordance with Council Regulation (EC) No. 2223/96.

European System of Central Banks (ESCB): is composed of the **European Central Bank (ECB)** and the national central banks of all 15 Member States, i.e. it includes, in addition to the members of the **Eurosystem**, the national central banks of the Member States which did not adopt the **euro** at the start of Stage Three of **Economic and Monetary Union (EMU)**. The ESCB is governed by the **Governing Council** and the **Executive Board** of the ECB, and, as a third decision-making body of the ECB, by the **General Council**.

Eurostat: the Statistical Office of the European Communities, Eurostat is part of the **European Commission** and is responsible for the production of Community statistics.

EURO STOXX: STOXX Limited (www.stoxx.com) publishes the Dow Jones STOXX indices which measure stock price developments in Europe as a whole. The Dow Jones EURO STOXX index is one member of this index family. This index aggregates the prices of a broad range of stocks from those countries belonging to the **euro area**. Furthermore, three types of sector index

(economic and market sectors as well as industry groups) are available for the Dow Jones EURO STOXX index.

Eurosystem: comprises the **European Central Bank (ECB)** and the national central banks of the Member States which have adopted the **euro** in Stage Three of **Economic and Monetary Union (EMU)** (see also **euro area**). There are currently 12 national central banks in the Eurosystem. The Eurosystem is governed by the **Governing Council** and the **Executive Board** of the ECB.

Eurosystem's foreign exchange liquidity position: this comprises the **Eurosystem's international reserves** and the **Eurosystem's** other foreign currency claims and liabilities, including positions vis-à-vis **euro area** residents such as, for instance, foreign exchange deposits placed with banking institutions resident in the euro area.

Eurosystem's international reserves: the reserve assets of the **euro area** consist of the **Eurosystem's** reserve assets, i.e. the reserve assets of the **European Central Bank (ECB)**, and the reserve assets held by the national central banks of the participating Member States. Reserve assets must be under the effective control of the relevant monetary authority, whether the ECB or the national central bank of one of the participating Member States, and refer to highly liquid, marketable and creditworthy foreign (non-**euro**) currency-denominated claims on non-euro area residents, plus gold, special drawing rights and the reserve positions in the International Monetary Fund of the participating national central banks.

Executive Board: one of the decision-making bodies of the **European Central Bank (ECB)**. It comprises the President and the Vice-President of the ECB and four other members appointed by common accord by the Heads of State or Government of the Member States which have adopted the **euro**.

Fine-tuning operation: a non-regular **open market operation** executed by the **Eurosystem** mainly in order to deal with unexpected liquidity fluctuations in the market.

Foreign exchange swap: two simultaneous spot and forward transactions of one currency against another. The **Eurosystem** may execute open market monetary policy operations in the form of foreign exchange swaps where the national central banks (or the **European Central Bank (ECB)**) buy or sell **euro** spot against a foreign currency and at the same time sell or buy it back in a forward transaction.

Frontloading: the distribution of **euro** banknotes and/or coins to **credit institutions** prior to 2002.

Funds transfer system (FTS): a formal arrangement, based on private contract or statute law, with multiple membership, common rules and standardised arrangements, for the transmission and settlement of money obligations arising between the members.

General Council: one of the governing bodies of the **European Central Bank (ECB)**. It comprises the President and the Vice-President of the ECB and the governors of all 15 EU national central banks.

General government: as defined in the **European System of Accounts 1995 (ESA 95)**, consists of central, state and local government and social security funds.

Governing Council: one of the governing bodies of the **European Central Bank (ECB)**. It comprises all the members of the **Executive Board** of the ECB and the governors of the national central banks of the Member States which have adopted the **euro**.

Harmonised Index of Consumer Prices (HICP): the HICP is the measure of prices used by the **Governing Council** for the purpose of assessing **price stability**. The HICP was developed by the **European Commission (Eurostat)** in close liaison with the national statistical institutes and the **European Monetary Institute (EMI)**, and later the **European Central Bank (ECB)**, in order to fulfil the **Treaty** requirement for a consumer price index constructed on a comparable basis, taking into account differences in national definitions.

Implied interest rate volatility: a measure of expected volatility in future short and long-term interest rates, which can be extracted from options prices. Given the observed market price of an option, the implied volatility can be extracted using a standard options pricing formula which explicitly depends on, inter alia, the expected volatility of the underlying asset price during the period until the option expires. The underlying assets can be futures contracts on short-term interest rates, such as the three-month **EURIBOR**, or on long-term bonds such as ten-year German Bunds. Given appropriate assumptions, the implied volatility may be interpreted as the market's expectation of volatility during the remaining life of the option.

Interbank funds transfer system (IFTS): a **funds transfer system** in which most (or all) direct participants are **credit institutions**.

Interlinking mechanism: one of the components of the **TARGET** system. The term is used to designate the infrastructures and procedures which link domestic **RTGS systems** in order to process cross-border payments within TARGET.

Key ECB interest rates: the ECB interest rates which determine the stance of the monetary policy of the **European Central Bank (ECB)**. At present, the key ECB interest rates are the **minimum bid rate** on the **main refinancing operations**, the interest rate on the **marginal lending facility** and the interest rate on the **deposit facility**. Prior to the decision to conduct the main refinancing operations as variable rate tenders, the rate on fixed rate tenders had played the role of "key rate". This role is currently performed by the minimum bid rate on the main refinancing operations of the ECB.

Large-value payments: payments, generally of very large amounts, which are mainly exchanged between banks or between participants in the financial markets and usually require urgent and timely settlement.

Links between securities settlement systems: the procedures and arrangements between two **securities settlement systems** for the cross-border transfer of securities through a book-entry process.

Longer-term refinancing operation: a regular **open market operation** executed by the **Eurosystem** in the form of a **reverse transaction**. Longer-term refinancing operations are executed through monthly **standard tenders** and have a maturity of three months.

Loss-sharing rule (or agreement): an agreement between participants in a transfer system or a clearing house arrangement regarding the allocation of any loss arising when one or more participants fail to fulfil their obligations; the agreement stipulates how the loss will be shared among the parties concerned in the event of its being activated.

Lump-sum allowance: a fixed amount which an institution may deduct in the calculation of its **reserve requirement** within the minimum reserve framework of the **Eurosystem**.

M1, M2, M3: see **monetary aggregates**.

Main refinancing operation: a regular **open market operation** executed by the **Eurosystem** in the form of a **reverse transaction**. Main refinancing operations are conducted through weekly **standard tenders** and have a maturity of two weeks.

Maintenance period: the period over which compliance with **reserve requirements** is calculated. The maintenance period for **Eurosystem** minimum reserves is one month, starting on the 24th calendar day of each month and ending on the 23rd calendar day of the following month.

Marginal lending facility: a **standing facility** of the **Eurosystem** which **counterparties** may use to receive overnight credit from a national central bank against a pre-specified interest rate.

Minimum bid rate: the lower limit to the interest rates at which **counterparties** may submit bids in variable rate tenders. As a **key ECB interest rate** it plays, at present, the role previously covered by the rate in fixed rate tenders.

Monetary aggregates: a monetary aggregate can be defined as the sum of **currency in circulation** plus outstanding amounts of certain liabilities of financial institutions that have a high degree of “moneyness” (or liquidity in a broad sense). The narrow monetary aggregate **M1** has been defined by the **Eurosystem** as currency in circulation plus **euro area** residents’ (other than central government) holdings of **overnight deposits** with euro area money-issuing institutions. The monetary aggregate **M2** comprises M1 plus **deposits with agreed maturity** of up to two years and **deposits redeemable at notice** of up to three months. The broad monetary aggregate **M3** includes M2 plus **repurchase agreements**, money market fund shares/units and money market paper and debt securities with a maturity of up to two years. The **Governing Council** has announced a reference value for the growth of M3 (see also **reference value for monetary growth**).

Monetary Financial Institutions (MFIs): financial institutions which form the money-issuing sector of the **euro area**. These include central banks, resident **credit institutions** as defined in Community law and all other resident financial institutions whose business is to receive deposits and/or close substitutes for deposits from entities other than MFIs and, for their own account (at least in economic terms), to grant credit and/or invest in securities. The latter group consists predominantly of money market funds. At the end of 2000, there were 9,096 MFIs in the euro area (the **European Central Bank (ECB)**, 11 national central banks, 7,476 credit institutions, 1,600 money market funds and 8 other financial institutions).

Multi-purpose prepaid card: a stored value card which can be used for a wide range of payment purposes and which has the potential to be used on a national or international scale, but which may sometimes be restricted to a certain area. A reloadable multi-purpose prepaid card is also known as an electronic purse (see also **electronic money (e-money)**).

Net international investment position (i.i.p.) (or net external asset or liability position): the statistical statement of the value and composition of the stock of an economy’s financial assets or financial claims vis-à-vis the rest of the world, less an economy’s financial liabilities to the rest of the world.

Net settlement system (NSS): a funds transfer system, the settlement operations of which are completed on a bilateral or multilateral net basis.

Open market operation: an operation executed on the initiative of the central bank in the financial markets involving one of the following transactions: (i) buying or selling assets outright (spot or forward); (ii) buying or selling assets under a **repurchase agreement**; (iii) lending or borrowing against underlying assets as **collateral**; (iv) the issuance of central bank debt certificates; (v) the acceptance of fixed-term deposits; or (vi) **foreign exchange swaps** between domestic and foreign currencies.

Option: an option is a financial instrument which gives the owner the right, but not the obligation, to buy or sell a specific underlying asset (e.g. a bond or a stock) at a predetermined price (the strike or exercise price) at or up to a certain future date (the exercise or maturity date). A call option gives the holder the right to purchase the underlying asset at an agreed exercise price, whereas a put option gives the holder the right to sell it at an agreed exercise price.

Outright transaction: a transaction whereby assets are bought or sold up to their maturity (spot or forward).

Overnight deposits: this instrument category comprises mainly those sight/demand deposits which are fully transferable (by cheque or similar instrument). It also includes non-transferable deposits that are convertible on demand or by close of business the following day.

Payment versus payment (PVP): a mechanism in a foreign exchange settlement system which ensures that a final transfer of one currency occurs if, and only if, a final transfer of the other currency or currencies takes place.

Price stability: the maintenance of price stability is the primary objective of the **European Central Bank (ECB)**. The **Governing Council** has published a quantitative definition of price stability in order to give clear guidance to expectations of future price developments. The Governing Council defines price stability as a year-on-year increase in the **Harmonised Index of Consumer Prices (HICP)** for the **euro area** of below 2%. Reflecting the need for monetary policy to have a forward-looking, medium-term orientation, price stability according to this definition is to be maintained over the medium term. The definition delineates an upper boundary for the rate of measured inflation and, at the same time, the use of the word “increase” signals that deflation, i.e. prolonged declines in the level of the HICP, would not be deemed consistent with price stability.

Primary balance: government net borrowing or net lending excluding interest payments on consolidated government liabilities.

Quick tender: the tender procedure used by the **Eurosystem** for **fine-tuning operations**. Quick tenders are executed within a time frame of one hour and are restricted to a limited set of **counterparties**.

Realignment: a change in the central parity of a currency participating in an exchange rate system with a fixed but adjustable peg. In **ERM II** a realignment consists of a change in the **euro central rate**.

Re-denomination of securities: the denomination of a security is the currency in which the par value of the security is expressed (in most cases, the face value of a certificate). Re-denomination

refers to a procedure through which the original denomination of a security, issued in a national currency, is changed into **euro** at the irrevocably fixed conversion rate.

Reference value for monetary growth: the **Governing Council** assigns money a prominent role in the conduct of its policy, implying that **monetary aggregates** and their counterparts are thoroughly analysed regarding their information content for future price developments. This is signalled by the announcement of a reference value for the growth rate of the monetary aggregate **M3**. The reference value is derived in a manner which is consistent with and serves the achievement of the Governing Council's definition of **price stability** on the basis of medium-term assumptions regarding trend real GDP growth and the trend in the velocity of circulation of M3. Substantial or prolonged deviations of M3 growth from the reference value would, under normal circumstances, signal risks to price stability over the medium term. However, the concept of the reference value does not entail a commitment on the part of the Governing Council to correct mechanistically deviations of M3 growth from the reference value.

Reference value for the fiscal position: Treaty Protocol No. 20 on the excessive deficit procedure sets explicit reference values for the **general government deficit ratio** (3% of GDP) and the **debt ratio** (60% of GDP) (see also **Stability and Growth Pact**).

Remote access (to an IFTS): the facility enabling a **credit institution** established in one country ("home country") to become a direct participant in an **interbank funds transfer system (IFTS)** established in another country ("host country") and, for that purpose, to have a settlement account in its own name with the central bank in the host country without necessarily having established a branch in that country.

Repurchase agreement: an arrangement whereby an asset is sold while the seller simultaneously obtains the right and obligation to repurchase it at a specific price on a future date or on demand. Such an agreement is similar to collateralised borrowing, with the exception that ownership of the securities is not retained by the seller. The **Eurosystem** uses repurchase agreements with a fixed maturity in its **reverse transactions**. Repurchase transactions are included in **M3** in cases where the seller is a **Monetary Financial Institution (MFI)** and the counterparty is a non-MFI resident in the **euro area**. According to the Regulation of the ECB concerning the consolidated balance sheet of the MFI sector (ECB/1998/16), **repurchase operations (repos)** are classified as deposit liabilities since they are not marketable.

Repurchase operation (repo): a liquidity-providing **reverse transaction** based on a **repurchase agreement**.

Reserve base: the sum of the balance sheet items (in particular liabilities) which constitute the basis for calculating the **reserve requirement** of a **credit institution**.

Reserve ratio: the ratio defined by the central bank for each category of eligible balance sheet item included in the **reserve base**. The ratios are used to calculate **reserve requirements**.

Reserve requirement: the requirement for institutions to hold minimum reserves with the central bank. In the minimum reserve framework of the **Eurosystem**, the reserve requirement of a **credit institution** is calculated by multiplying the **reserve ratio** for each category of item in the **reserve base** with the amount of those items on the institution's balance sheet. In addition, institutions are allowed to deduct a **lump-sum allowance** from their reserve requirement.

Reverse transaction: an operation whereby the central bank buys or sells assets under a **repurchase agreement** or conducts credit operations against **collateral**.

RTGS (real-time gross settlement) system: a settlement system in which processing and settlement take place on an order-by-order basis (without netting) in real time (continuously). See also **TARGET**.

Securities settlement system (SSS): a system which permits the transfer of securities either free of payment or against payment.

Settlement agent: an institution that manages the settlement process (e.g. the determination of settlement positions, monitoring the exchange of payments, etc.) for transfer systems or other arrangements that require settlement.

Settlement risk: a general term used to designate the risk that settlement in a transfer system will not take place as expected. This risk may comprise both credit and liquidity risk.

Stability and Growth Pact: consists of two **EU Council** Regulations on the strengthening of the surveillance of budgetary positions and the surveillance and co-ordination of economic policies and on speeding up and clarifying the implementation of the excessive deficit procedure, and of a **European Council** Resolution on the Stability and Growth Pact adopted at the Amsterdam summit on 17 June 1997. It is intended to serve as a means of safeguarding sound government finances in Stage Three of **Economic and Monetary Union (EMU)** in order to strengthen the conditions for **price stability** and for strong sustainable growth conducive to employment creation. More specifically, budgetary positions close to balance or in surplus are required as the medium-term objective for Member States, which would allow them to deal with normal cyclical fluctuations while keeping the government deficit below the reference value of 3% of GDP. In accordance with the Stability and Growth Pact, countries participating in EMU will report **stability programmes**, while non-participating countries will continue to provide convergence programmes.

Stability programmes: medium-term government plans and assumptions provided by participating Member States regarding the development of key economic variables towards the achievement of the medium-term objective of a budgetary position close to balance or in surplus as referred to in the **Stability and Growth Pact**. Regarding budgetary positions, measures to consolidate fiscal balances as well as underlying economic scenarios are highlighted. Stability programmes must be updated annually. They are examined by the **European Commission** and the **Economic and Financial Committee**. Their reports serve as the basis for an assessment by the **ECOFIN** Council, focusing, in particular, on whether the medium-term budgetary objective in the programme provides for an adequate safety margin to ensure the avoidance of an excessive deficit. Countries not participating in the **euro area** must submit annual convergence programmes, in accordance with the Stability and Growth Pact.

Standard tender: a tender procedure used by the **Eurosystem** in its regular **open market operations**. Standard tenders are carried out within a time frame of 24 hours. All **counterparties** fulfilling the general eligibility criteria are entitled to submit bids in standard tenders.

Standing facility: a central bank facility available to **counterparties** on their own initiative. The **Eurosystem** offers two overnight standing facilities: the **marginal lending facility** and the **deposit facility**.

Sub-frontloading: the distribution of **euro** banknotes and/or coins by **credit institutions** to certain target groups (e.g. retailers, cash-in-transit companies, the cash-operated machine industry and the general public) prior to 2002.

TARGET (Trans-European Automated Real-time Gross settlement Express Transfer system): a payment system composed of one **RTGS system** in each of the 15 EU Member States and the ECB payment mechanism. The domestic RTGS systems and the ECB payment mechanism are interconnected according to common procedures (**Interlinking mechanism**) to allow cross-border transfers throughout the EU to move from one system to another.

Treaty: refers to the Treaty establishing the European Community. The Treaty was signed in Rome on 25 March 1957 and entered into force on 1 January 1958. It established the European Economic Community (EEC), which is now the European Community (EC), and is often referred to as the “Treaty of Rome”. The Treaty on European Union (which is often referred to as the “Maastricht Treaty”) was signed on 7 February 1992 and entered into force on 1 November 1993. The Treaty on European Union amended the Treaty establishing the European Community and established the European Union. The “Treaty of Amsterdam”, which was signed in Amsterdam on 2 October 1997 and entered into force on 1 May 1999, amended both the Treaty establishing the European Community and the Treaty on European Union. Equally, the “Treaty of Nice”, which concluded the 2000 Intergovernmental Conference and was signed on 26 February 2001, will further amend the Treaty establishing the European Community and the Treaty on European Union, once it is ratified and enters into force.

UMTS (Universal Mobile Telecommunications System): system for “third generation” mobile telecommunication. Licences for frequencies for mobile telecommunication are being sold or awarded by EU governments to telecommunications companies. Following a **Eurostat** recommendation, the proceeds from the sale of these licences are to be registered in the government accounts as the sale of a non-financial asset, thus improving government budgetary balances. However, these proceeds are only one-off in nature and do not, therefore, lead to a lasting improvement of budgetary balances. Government debt should, in principle, fall to a permanently lower level because of the UMTS proceeds.

Monetary policy chronology

4 January 2000

The ECB announces that on 5 January 2000 the Eurosystem will conduct a liquidity-absorbing fine-tuning operation with same-day settlement. This measure aims at restoring normal liquidity conditions in the money market after the successful transition to the year 2000.

5 January 2000

The Governing Council of the ECB decides that the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility will remain unchanged at 3.0%, 4.0% and 2.0% respectively.

15 January 2000

At the request of the Greek authorities, the ministers of the euro area Member States, the ECB and the ministers and central bank governors of Denmark and Greece decide, following a common procedure, to revalue the central rate of the Greek drachma in the exchange rate mechanism (ERM II) by 3½%, with effect from 17 January 2000.

20 January 2000

The Governing Council of the ECB decides that the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility will remain unchanged at 3.0%, 4.0% and 2.0% respectively.

It also announces that the Eurosystem intends to allot an amount of €20 billion for each of the longer-term refinancing operations to be conducted in the first half of 2000. This amount takes into consideration the expected liquidity needs of the banking system of the euro area in the first half of 2000 and the desire of the Eurosystem to continue to provide the bulk of its refinancing of the

financial sector through its main refinancing operations.

3 February 2000

The Governing Council of the ECB decides to raise the interest rate on the main refinancing operations of the Eurosystem by 0.25 percentage point to 3.25%, starting from the operation to be settled on 9 February 2000. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 4.25% and 2.25% respectively, both with effect from 4 February 2000.

17 February, 2 March 2000

The Governing Council of the ECB decides that the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility will remain unchanged at 3.25%, 4.25% and 2.25% respectively.

16 March 2000

The Governing Council of the ECB decides to raise the interest rate on the main refinancing operations of the Eurosystem by 0.25 percentage point to 3.5%, starting from the operation to be settled on 22 March 2000. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 4.5% and 2.5% respectively, with effect from 17 March 2000.

30 March, 13 April 2000

The Governing Council of the ECB decides that the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility will remain unchanged at 3.5%, 4.5% and 2.5% respectively.

27 April 2000

The Governing Council of the ECB decides to raise the interest rate on the main refinancing operations of the Eurosystem by 0.25 percentage point to 3.75%, starting from the operation to be settled on 4 May 2000. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 4.75% and 2.75% respectively, both with effect from 28 April 2000.

11 May, 25 May 2000

The Governing Council of the ECB decides that the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility will remain unchanged at 3.75%, 4.75% and 2.75% respectively.

8 June 2000

The Governing Council of the ECB decides to raise the interest rate on the main refinancing operations of the Eurosystem by 0.50 percentage point to 4.25% and to apply this in the two operations (which will be conducted as fixed rate tenders) to be settled on 15 and 21 June 2000. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 0.50 percentage point, to 5.25% and 3.25% respectively, both with effect from 9 June 2000.

It also announces that, starting from the operation to be settled on 28 June 2000, the main refinancing operations of the Eurosystem will be conducted as variable rate tenders, applying the multiple rate auction procedure. The Governing Council decides to set a minimum bid rate for these operations equal to 4.25%. The switch to variable rate tenders in the main refinancing operations is not intended as a further change in the monetary policy stance of the Eurosystem, but as a response to the severe overbidding which has developed in the

context of the current fixed rate tender procedure.

19 June 2000

In accordance with Article 122 (2) of the Treaty establishing the European Community, the ECOFIN Council decides that Greece fulfils the necessary conditions for the adoption of the single currency on the basis of the criteria set out in Article 121 (1) and abrogates the derogation of Greece with effect from 1 January 2001. The ECOFIN Council took its decision, taking account of the reports of the European Commission and the ECB on the progress made in the fulfilment by Greece and Sweden of their obligations regarding the achievement of Economic and Monetary Union, after consulting the European Parliament, and after a discussion in the EU Council meeting in the composition of Heads of State or Government.

The ECOFIN Council, acting with the unanimity of the Member States of the European Community without a derogation and the Member State concerned, upon a proposal from the European Commission and after consultation of the ECB, also adopts the irrevocable conversion rate between the Greek drachma and the euro, with effect from 1 January 2001. Following the determination of the euro conversion rate of the Greek drachma (set equal to its then prevailing central rate against the euro in the exchange rate mechanism, ERM II), the ECB and the Bank of Greece announce that they will monitor the convergence of the market exchange rate of the Greek drachma against the euro towards its euro conversion rate, which should be completed at the latest by 29 December 2000.

21 June 2000

The Governing Council of the ECB decides that the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 5.25% and 3.25% respectively.

The Governing Council announces that, for the longer-term refinancing operations to be conducted in the second half of 2000, the Eurosystem intends to allot an amount of €15 billion per operation. This amount takes into consideration the expected liquidity needs of the banking system of the euro area in the second half of 2000 and the desire of the Eurosystem to continue to provide the bulk of its refinancing of the financial sector through its main refinancing operations.

6 July, 20 July, 3 August 2000

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.25%, 5.25% and 3.25% respectively.

31 August 2000

The Governing Council of the ECB decides to raise the minimum bid rate on the main refinancing operations of the Eurosystem by 0.25 percentage point to 4.50%, with effect from the operation to be settled on 6 September 2000. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 5.50% and 3.50% respectively, both with effect from 1 September.

14 September 2000

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.50%, 5.50% and 3.50% respectively.

5 October 2000

The Governing Council of the ECB decides to raise the minimum bid rate on the main

refinancing operations of the Eurosystem by 0.25 percentage point to 4.75%, with effect from the operation to be settled on 11 October 2000. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 5.75% and 3.75% respectively, both with effect from 6 October.

19 October, 2 November, 16 November, 30 November 2000

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.75%, 5.75% and 3.75% respectively.

14 December 2000

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.75%, 5.75% and 3.75% respectively.

In addition, it decides to reconfirm the existing reference value for monetary growth, namely an annual growth rate of 4½% for the broad aggregate M3. The Governing Council confirms that it will undertake the next review of the reference value in December 2001.

1 January 2001

The euro is adopted by Greece. As a result, the Bank of Greece becomes a full member of the Eurosystem, with the same rights and obligations as the 11 national central banks of the EU Member States which had adopted the euro in 1999.

4 January 2001

The Governing Council of the ECB decides that the minimum bid rate for the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.75%, 5.75% and 3.75% respectively.

In addition, it decides on an allotment amount of €20 billion per operation for the longer-term refinancing operations to be conducted in 2001. This amount takes into consideration the expected liquidity needs of the euro area banking system in 2001 and the desire of the Eurosystem to continue to provide the bulk of refinancing of the financial sector through

its main refinancing operations. The Governing Council announces that it may adjust the allotment amount in the course of the year in the event of unexpected developments in liquidity needs.

18 January, 1 February, 15 February, 1 March, 15 March 2001

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.75%, 5.75% and 3.75% respectively.

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"Annual Report 1999", April 2000.

"Annual Report 2000", May 2001.

Convergence Report

"Convergence Report 2000", May 2000.

Monthly Bulletin

Articles published from January 1999 onwards:

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"The stability-oriented monetary policy strategy of the Eurosystem", January 1999.

"Euro area monetary aggregates and their role in the Eurosystem's monetary policy strategy", February 1999.

"The role of short-term economic indicators in the analysis of price developments in the euro area", April 1999.

"Banking in the euro area: structural features and trends", April 1999.

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Information brochures

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“The euro: integrating financial services”, August 2000.

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“The European Central Bank”, April 2001.

“The euro banknotes and coins”, May 2001.

