



EUROPEAN CENTRAL BANK

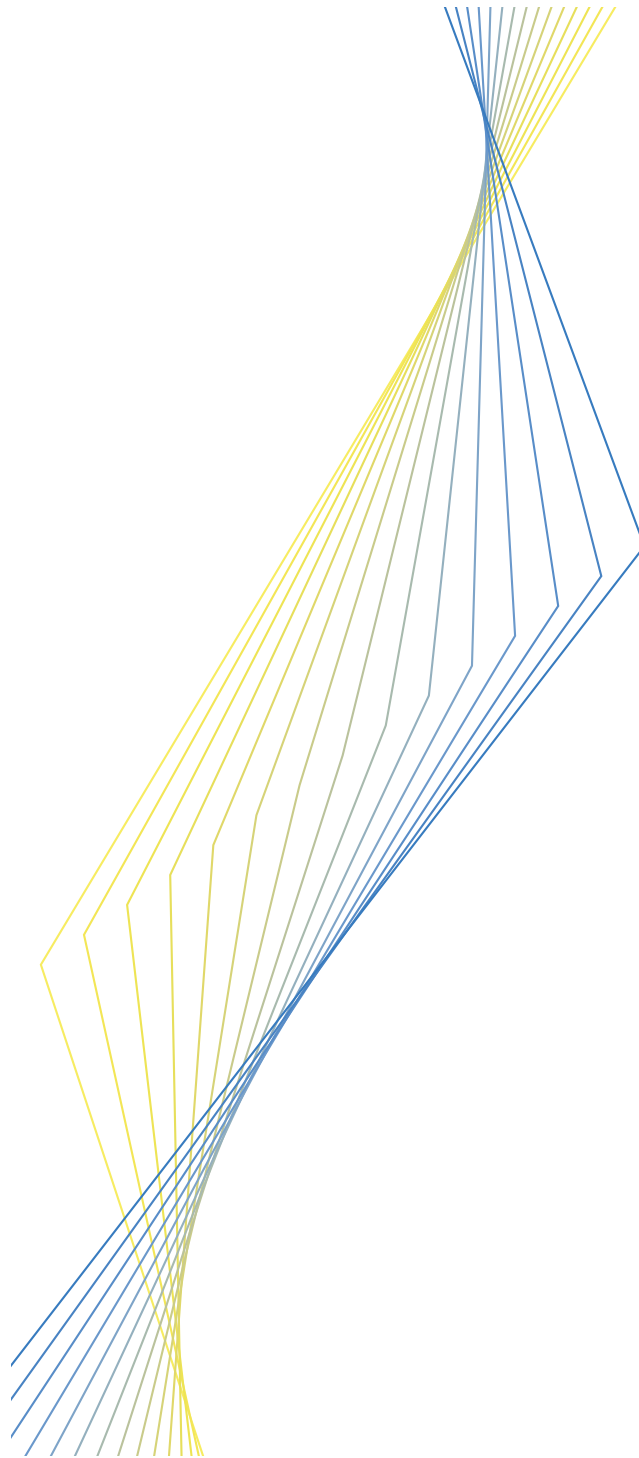
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ANNUAL REPORT

1998



EUROPEAN CENTRAL BANK



**ANNUAL
REPORT**

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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 Organisation
IMF	International Monetary Fund
MFIs	Monetary Financial Institutions
NCBs	national central banks
OECD	Organisation for Economic Co-operation and Development
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.

**The decision-making bodies
of the ECB**

The Governing Council



Back row (left to right): L. Á. Rojo, A. Verplaetse, A. Fazio, Y. Mersch, A. J. de Sousa, M. Vanhala, K. Liebscher, N. Wellink, J.-C. Trichet, M. O'Connell, H. Tietmeyer
 Front row (left to right): E. Domingo Solans, O. Issing, C. Noyer, W. F. Duisenberg, S. Hämäläinen, T. Padoa-Schioppa

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Christian Noyer	<i>Vice-President of the ECB</i>
Eugenio Domingo Solans	<i>Member of the Executive Board of the ECB</i>
Antonio Fazio	<i>Governor of the Banca d'Italia</i>
Sirkka Hämäläinen	<i>Member of the Executive Board of the ECB</i>
Otmar Issing	<i>Member of the Executive Board of the ECB</i>
Klaus Liebscher	<i>Governor of the Oesterreichische Nationalbank</i>
Yves Mersch	<i>Director General of the Banque centrale du Luxembourg</i>
Maurice O'Connell	<i>Governor of the Central Bank of Ireland</i>
Tommaso Padoa-Schioppa	<i>Member of the Executive Board of the ECB</i>
Luis Ángel Rojo	<i>Governor of the Banco de España</i>
António José Fernandes de Sousa	<i>Governor of the Banco de Portugal</i>
Hans Tietmeyer	<i>President of the Deutsche Bundesbank</i>
Jean-Claude Trichet	<i>Governor of the Banque de France</i>
Matti Vanhala	<i>Governor of Suomen Pankki</i>
Alfons Verplaetse	<i>Governor of the Nationale Bank van België/</i>
Guy Quaden	<i>Banque Nationale de Belgique</i>
Nout Wellink	<i>President of De Nederlandsche Bank</i>

The Executive Board



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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

The General Council



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Willem F. Duisenberg	<i>President of the ECB</i>
Christian Noyer	<i>Vice-President of the ECB</i>
Urban Bäckström	<i>Governor of Sveriges Riksbank</i>
Antonio Fazio	<i>Governor of the Banca d'Italia</i>
Edward A. J. George	<i>Governor of the Bank of England</i>
Klaus Liebscher	<i>Governor of the Oesterreichische Nationalbank</i>
Yves Mersch	<i>Director General of the Banque centrale du Luxembourg</i>
Bodil Nyboe Andersen	<i>Governor of Danmarks Nationalbank</i>
Maurice O'Connell	<i>Governor of the Central Bank of Ireland</i>
Lucas D. Papademos	<i>Governor of the Bank of Greece</i>
Luis Ángel Rojo	<i>Governor of the Banco de España</i>
António José Fernandes de Sousa	<i>Governor of the Banco de Portugal</i>
Hans Tietmeyer	<i>President of the Deutsche Bundesbank</i>
Jean-Claude Trichet	<i>Governor of the Banque de France</i>
Matti Vanhala	<i>Governor of Suomen Pankki</i>
Alfons Verplaetse	<i>Governor of the Nationale Bank van België/</i>
Guy Quaden	<i>Banque Nationale de Belgique</i>
Nout Wellink	<i>Governor of De Nederlandsche Bank</i>
	<i>until 28 February 1999</i>
	<i>as from 1 March 1999</i>

Foreword



This Annual Report, which is the first one to be published by the ECB, provides a record of the developments in the economic environment for monetary policy in 1998, both for the euro area and for the non-euro area Member States, and the steps taken to finalise the operational framework for Monetary Union. The Report also covers the first few weeks of 1999 after the start of Stage Three of EMU. I should like to emphasise the fact that the smooth changeover to the euro crowned the preparatory work conducted by the EMI and the NCBs. At the start of Stage Three a fully fledged Eurosystem was operational in technical and organisational terms. I should like to express my great appreciation for the work performed by the management and the staff of the EMI and the ECB as well as the NCBs for their outstanding contribution to this work.

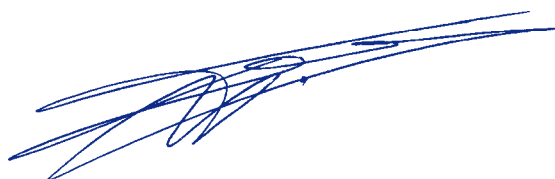
At the beginning of May 1998 the EU Council – meeting in the composition of the Heads of State or Government – unanimously decided that 11 Member States, namely Belgium, Germany, Spain, France, Ireland, Italy, Luxembourg, the Netherlands, Austria, Portugal and Finland, fulfilled the necessary conditions for the adoption of the single currency on 1 January 1999. One month later the European Central Bank (ECB) was established, which took over the tasks of the European Monetary Institute (EMI). Thereafter, preparations for the start of Stage Three of Economic and Monetary Union (EMU) intensified and were finalised. During this process, the Governing Council of the ECB endorsed the stability-oriented monetary policy strategy of the Eurosystem, i.e. the ECB and the national central banks (NCBs) of the 11 Member States which adopted the euro at the start of Stage Three. This strategy provides a definition for price stability as the primary objective of the single monetary policy of the Eurosystem and is based on two pillars, namely a prominent role for money and a broadly based assessment of the outlook for price developments and the risks to price stability, using financial and other economic indicators.

The Eurosystem has assumed responsibility for the single monetary policy at a time when inflation rates are compatible with price stability and when prospects for the maintenance of price stability in the euro area are favourable. Interest rates are historically low and this situation has been brought about by convergence to price stability, exchange rate stability and improving fiscal positions. In this respect, the necessary conditions for sustained economic growth are in place. However, it would appear that economic expansion in the euro area is being adversely affected by the unfolding weaknesses and uncertainties in the external environment. In order to translate the favourable domestic environment into more investment, higher output growth and lower unemployment, it is important not to undermine the confidence achieved by previous convergence efforts and the successful monetary policy. Priority needs to be given to removing the structural impediments to a higher level of economic activity and of employment in the European Union. These structural rigidities relate in particular to European labour markets, the performance of which is unsatisfactory – as is evidenced by the slow process of job creation

and very gradual decrease in unemployment. In addition, confidence needs to be supported by the realisation – as quickly as possible – of budgetary positions close to balance or in surplus. This will allow the Member States both to deal with normal cyclical fluctuations without undue risk of incurring excessive deficits and to put the government debt ratio on a declining path at a satisfactory pace.

This will also be necessary to address the longer-term challenges associated with the ageing of the population. The start of Monetary Union was a success; the aim now should be to consolidate the foundations for a stable euro and with that to create the necessary, although not sufficient, conditions for a resumption of output and employment growth.

Frankfurt am Main, April 1999



Willem F. Duisenberg



Executive summary

The Annual Report 1998 is the first Annual Report to be published by the European Central Bank (ECB). It nevertheless also covers the activities of the European Monetary Institute (EMI), which in practice ceased to exist on 1 June 1998, when the ECB was established, but which was not liquidated until the end of 1998. The cut-off date for the data included in this Report was 10 March 1999.

I Economic developments in the European Union

Macroeconomic environment influenced by adverse external developments

In 1998 the increase in the HICP in the euro area remained in line with the definition of price stability adopted by the Governing Council of the ECB in October 1998; it decreased to 1.1% for the year as a whole, from 1.6% in 1997. The deceleration in the overall index was mainly caused by the fall in energy prices. The year-on-year increase in goods prices was 0.6% and that in services prices 2.0%. The pace of economic activity in the euro area in 1998 as a whole was characterised by a continuation of the economic expansion. However, the expansion appeared to be increasingly fragile in the face of the unfolding weaknesses and uncertainties of the external environment. As the year progressed, doubts about the prospects for sustained area-wide growth increased, leading not only to some downward revisions to expectations of growth for 1998 as a whole, but also to lower projections for growth in 1999.

Overall, real GDP growth in the euro area is estimated to have increased by 3.0% in 1998, slightly above the rate of growth of 2.5% achieved in the previous year. This reflects a somewhat higher rate of output growth in the first half of 1998 (approximately 3.4% compared with the same period a year earlier), whereas in the second half of the year the annual rate of growth fell to around 2.6%. Underlying the performance of real GDP growth in 1998 was a significant shift in favour of domestic demand and a negative contribution to growth from net exports. One main factor was private consumption, which is estimated to have risen by around 3.0%, the highest rate of growth since the early 1990s and a significant improvement

compared with the previous few years. It is likely that this development was supported by an increase in real household incomes. In particular, income growth was underpinned by net employment growth, and a further decline in consumer price increases led to a stronger rise in real incomes. Gross capital formation is estimated to have increased by 4.2% in 1998. The contribution to growth from gross fixed capital formation was significantly higher than in 1997. Even stronger investment growth might have been expected given the positive fundamentals, particularly lower short-term and long-term interest rates, with the evidence suggesting higher profit margins, stable intra-euro area exchange rates, lower inflation and a comparatively high level of capacity utilisation. Government consumption for the euro area as a whole remained subdued during 1998, while its contribution to real GDP growth was close to zero.

The recovery in employment, which began in spring 1997, strengthened throughout 1998. By contrast with the sluggish developments observed in the years following the downswing of 1993, employment grew by more than 1% in 1998. In the course of the first three quarters of 1998 more jobs were created in the euro area than had been created between early 1994, when employment had levelled out, and the end of 1997. As a result of the strengthening of net job creation the unemployment rate in the euro area has been declining continuously, albeit at a very gradual pace, since October 1997. The standardised rate of unemployment, as estimated by Eurostat, decreased from 11.7%, the peak level in 1997, to 10.7% in December 1998. In January 1999 there was a further slight decline in area-wide unemployment, to 10.6%. While this

represents the lowest level of area-wide unemployment over the past five years, it remains high by historical standards as well as in comparison with the levels recorded in other major economies outside the euro area, such as the United States, Japan and the United Kingdom. A predominant view has emerged that unemployment in Europe is, to a large extent, structural in nature.

Government budgetary positions improved further in 1998, albeit at a rather slow pace, leaving budgets highly imbalanced on average in the euro area. According to the latest available data provided by Eurostat, the average deficit-to-GDP ratio in the euro area stood at 2.1%, compared with 2.5% in 1997. Government debt ratios in the euro area on average remain at a very high level, thereby substantially limiting the budgetary room for manoeuvre in many Member States. The average ratio declined by 0.8 percentage point in 1998 to 73.8%.

In the euro area the average level of 10-year bond yields dropped by almost 150 basis points during 1998 to reach a level of 3.95% by the end of the year. At the beginning of 1998 the deviation between the highest and lowest 10-year government bond yields stood at an already very low level of just under 40 basis points. Following the announcement at the beginning of May 1998 of the selection of those countries that would adopt the single currency as from 1 January 1999, the remaining long-term interest rate differentials among the participating Member States narrowed further.

Monetary policy focused on the future euro area

During 1998 the focus of monetary policies in the euro area Member States gradually shifted from a national to a euro area perspective. At the beginning of May 1998 diverse levels of short-term interest rates existed within the euro area. One group of countries (Belgium/Luxembourg, Germany, France, the Netherlands, Austria and Finland)

had closely aligned monetary policies and a relatively low level of short-term interest rates. In four other countries (Spain, Ireland, Italy and Portugal) short-term interest rates were significantly above those of the first group. In the remainder of 1998 monetary policy stances thus had to be adjusted and a common level of short-term interest rates suitable for the maintenance of price stability in the euro area had to be found. The path of monetary policies and the exchange rate developments within the ERM during 1998 were very much shaped by the decision taken during the weekend of 2-3 May 1998, when the countries that were to adopt the euro were selected. On that occasion, the bilateral exchange rates to be used in determining the euro conversion rates were pre-announced to be the ERM bilateral central rates for the participating currencies. The pre-announcement helped to stabilise the ERM for the remainder of the year by reducing uncertainties regarding the changeover to the single currency. Periods of significant turbulence in international financial markets, in particular over the summer, did not disturb ERM exchange rates, which remained closely aligned with their expected paths. These developments suggested that a high degree of confidence in the successful creation of the euro existed among market participants.

Against a favourable outlook for price stability in the euro area, with moderate monetary growth, exchange rate stability and indications of a weakening of economic growth in the second half of the year, the convergence process took place through gradual reductions in official interest rates in the second group of countries towards the lowest levels prevailing in the euro area. This convergence process accelerated in the last few months of 1998 and was finally completed in December 1998, when all the national central banks (NCBs) adopting the single monetary policy lowered their key central bank interest rates in a co-ordinated move. This joint reduction was to be seen as a de facto decision on the level of interest rates with which the Eurosystem would start Stage

Three of EMU. This decision reflected a consensus within the Governing Council on the basis of a common assessment of the economic, monetary and financial situation in the euro area, in accordance with the stability-oriented monetary policy strategy of the Eurosystem, which was adopted in October 1998. Overall, and reflecting the process of convergence of official interest rates, the average euro area money market interest rate at the three-month maturity fell by around 70 basis points from the beginning of 1998 to the end of November 1998 and by a further 30 basis points in December 1998, reaching 3.25% at the end of the year.

The main elements of the stability-oriented monetary policy strategy of the Eurosystem are the following. The primary objective of monetary policy, namely price stability, is defined as “a year-on-year increase in the HICP for the euro area of below 2%”. This objective is maintained using a strategy based on two “pillars”. The first pillar is a prominent role for money, reflected in the announcement of a reference value for the growth of a broad monetary aggregate. The first reference value has been set at an annual growth rate of 4½% for M3. The second pillar is a broadly based assessment of the outlook for price developments and the risks to price stability in the euro area. This assessment is made using a wide range of economic indicators.

2 Preparatory work for Stage Three and the changeover to the euro

Monetary policy framework

In the first half of 1998 work continued at the EMI to complete the Eurosystem’s operational framework for the implementation of monetary policy. In September 1998 the ECB published a report entitled “The single monetary policy in Stage Three: General documentation on ESCB monetary policy instruments and procedures” which defined the elements of the Eurosystem’s monetary policy framework. It

Against this background, the Governing Council announced the first interest rates for the monetary policy instruments of the Eurosystem on 22 December 1998. The interest rate applicable to the first main refinancing operation, offered in the form of a fixed rate tender, was set at a level of 3.0%. At its subsequent meetings until the cut-off date for this Report, on each occasion having taken into consideration the latest available monetary, financial and other economic data, the Governing Council confirmed that forthcoming main refinancing operations would be conducted at a fixed rate of 3.0%.

Price stability also the goal in the non-euro area EU countries

It should, in general, be noted that while Denmark, Greece, Sweden and the United Kingdom conduct their monetary policies under different institutional and operational frameworks, the ultimate goal of monetary policy in all four countries is price stability; in all four countries price increases measured by the HICP decreased during 1998 and, with the exception of Greece, were below 2%. Furthermore, official interest rates were reduced in all four countries. Nevertheless, in Greece the official interest rate remained significantly higher (12.0% at the end of February 1999) compared with the three other countries, whose interest rates lay in a range of 3.15-5.5%.

comprises a minimum reserve system, open market operations and standing facilities.

The bulk of the implementation work in the field of monetary policy, including the testing of the systems and the preparation of the relevant legal documentation, was conducted by the NCBs. The work was initially co-ordinated by the EMI and its relevant Sub-Committees and subsequently co-ordinated and supervised by the ECB. Preparatory work on liquidity management

procedures was finalised in the course of 1998, including all procedures needed for internal Eurosystem communication and for the consolidation of the NCBs' balance sheets. Accurate information regarding the liquidity conditions in the euro area is published on every Eurosystem business day.

Introduction of the euro and foreign exchange rate policy framework

On 31 December 1998 the irrevocable euro exchange rates were established in a procedure involving the ECB, the NCBs, the European Commission and the EU Council. The euro came into existence at 0.00 hours on 1 January 1999.

In accordance with the Resolution adopted by the European Council at its meeting held in Amsterdam on 16 and 17 June 1997, from the start of Stage Three of EMU the European Monetary System/Exchange Rate Mechanism (EMS/ERM) was replaced by a new exchange rate mechanism (ERM II) which, on a voluntary basis, links the currencies of EU Member States outside the euro area to the euro.

As from 1 January 1999 two Member States outside the euro area – Denmark and Greece – have been taking part in ERM II. The Danish krone has been participating in ERM II with a $\pm 2.25\%$ fluctuation band and a central rate against the euro of DKK 7.46038, and the Greek drachma with the standard fluctuation band of $\pm 15\%$ and a central rate against the euro of GRD 353.109.

The preparation and testing of the infrastructure required for the conduct of foreign exchange intervention by the Eurosystem was finalised in the course of 1998. The infrastructure was developed in such a way as to enable the Eurosystem to execute foreign exchange intervention in both a decentralised and a centralised fashion. The NCBs transferred foreign reserve assets of an amount equivalent to about €39.5 billion to the ECB at the start of Stage Three. That

amount corresponds to the limit of €50 billion established by the Statute of the ESCB for the initial transfer of foreign reserve assets to the ECB, reduced in accordance with the share in the ESCB's capital of the NCBs of non-participating Member States.

Statistics

The statistical work conducted at the EMI/ECB in 1998 centred on implementation of the requirements established in July 1996, the focus of which was the compilation of comparable statistics covering the euro area as a whole.

The first monetary aggregates were published in December 1998. Backdata from 1980, together with other monetary and related data, have subsequently been published in the ECB Monthly Bulletin. The first balance of payments data to be published for the euro area, relating to January 1999, with backdata from 1995, follow further conceptual and practical work carried out in co-operation with the European Commission (Eurostat). The design of a system of financial accounts reached an advanced stage in 1998, although, as intended, the first results will not appear until later in 1999.

Following adoption in November 1998 of Council Regulation (EC) No. 2533/98 concerning the collection of statistical information by the European Central Bank, the Governing Council of the ECB adopted the necessary legal instruments to support reporting requirements. Essential features of the information systems infrastructure needed for statistical purposes were completed in 1998.

Payment systems

In the field of payment systems the "Third progress report on the TARGET project" released by the ECB in November 1998 provided further information concerning progress made since September 1997.

On schedule, on the morning of 4 January 1999 the ESCB successfully began operating the TARGET system, with more than 5,000 credit institutions participating directly in the system. From the very first week of its operation TARGET processed transactions of a value in excess of €1 trillion daily, more than one-third of which consisted of cross-border traffic.

In the field of securities settlement systems (SSSs) preparatory work focused on three main aspects: (1) the assessment of EU SSSs against standards to determine whether or not they qualified for use in the Eurosystem's credit operations; (2) the assessment of links between EU SSSs; and (3) the implementation of the correspondent central banking model (CCBM) for the cross-border use of collateral. The results of the assessment of the EU SSSs against certain standards are included in the ECB report entitled "Assessment of EU securities settlement systems against the standards for their use in ESCB credit operations", which was published in September 1998. The most important features of the CCBM were summarised in a brochure released in December 1998.

The development of the euro banknotes and the preparations for the cash changeover

The final designs and the technical specifications for the euro banknotes were approved by the EMI Council in February 1998. Production of the pilot series was ready to start in September 1998. The aim was to check the compliance of the origination materials with the specifications and to establish a preliminary basis for a quality management system. The Governing Council agreed that the participating NCBs could release their printing orders on the assumption of a production volume of 13 billion euro banknotes.

To ensure substitutability of the national currency units between 1999 and 2002 each participating NCB or its authorised agent has

been offering to exchange the banknotes of other participating countries for national banknotes and coins at the official conversion rate since 1 January 1999 in at least one location.

Information and communications systems

In the information and communications systems field the key achievements of 1998 included the end of the implementation phase of the ESCB's systems for operational purposes as well as, in the second half of the year, the overall testing exercise of all ESCB-wide systems and procedures. Likewise numerous systems for the ECB itself have been set up or expanded to accommodate both the increasing size and the change in the nature and purpose of the organisation. From mid-1998 the ECB – in co-operation with the NCBs for ESCB-related matters – has gradually been increasing its focus on Year 2000 compliance issues with a view to ensuring that all critical ECB and ESCB systems are compliant.

Banking supervision and financial stability

The preparatory work in the field of banking supervision and financial stability confirmed and elaborated the common understanding reached by the EMI Council. The final common understanding, as endorsed by the Governing Council, identifies the effective interaction between the Eurosystem and the national supervisory authorities as the main objective of Article 105 (5) of the Treaty, which obliges the Eurosystem to contribute to the smooth conduct of policies pursued by the national authorities responsible for the prudential supervision of credit institutions and for maintaining the stability of the financial system. Two main contributions of the Eurosystem can be identified in this context, the first of which is the promotion of co-operation among supervisory authorities, and the second is the possible provision to them of confidential information on individual credit institutions

and markets obtained in the course of the Eurosystem's basic activities. Moreover, Article 25.1 of the Statute of the ESCB – which is applicable to all EU Member States – provides for a specific advisory function of the ECB in the field of Community legislation on banking supervision and financial stability. In addition, the ECB provides advice on draft Community and national legislation on banking supervision and financial stability under the conditions laid down in Article 105 (4) of the Treaty and in the related Council Decision of 29 June 1998 (98/415/EC) (neither of which, incidentally, applies to the United Kingdom).

Co-operation with other institutions

Representation of the Eurosystem in the performance of its basic tasks is decided by the Governing Council of the ECB and varies, depending on the institutions or fora concerned. Informal arrangements with certain institutions (e.g. the OECD and the IMF) had already been reached in the context of the EMI. Since the ECB's establishment on 1 June 1998 its European and international representation has been developed further. The most relevant arrangements were in place at the start of Stage Three on 1 January 1999. In the European context, the close co-operation already existing with other institutions of the European Union has been further consolidated, in particular with the European Parliament, the EU Council, the Euro-11 group, the European Commission and the Monetary Committee. At the international level the ECB is represented at the IMF and at the OECD, in the meetings of the G7 and G10 Ministers and Governors and in the meetings of the G10 Governors and their Committees organised under the auspices of the BIS. In a bilateral context, relations are being developed with non-EU central banks.

Legal issues

Member States were obliged, in accordance with Article 108 of the Treaty, to eliminate incompatibilities between their national legislation – including the statutes of their NCBs – on the one hand and the Treaty and the Statute of the ESCB on the other, by the date of the establishment of the ESCB at the latest. In its Convergence Report, published in March 1998, the EMI concluded that, with the exception of Denmark (the legislation of which did not require adaptation) and the United Kingdom (which is exempt from the obligations laid down in Article 108 of the Treaty), a legislative process was taking place throughout the European Union that was intended to prepare the NCBs for Stage Three of EMU. This process was effectively completed before the Council of the European Union (EU Council), meeting in the composition of the Heads of State or Government, convened on 1 May 1998 to adopt the decisions foreseen in Article 109j (4) of the Treaty.

The preparatory work for Stage Three included a considerable legal component which extended to virtually all areas in which such work was being undertaken. The ECB participated actively in the preparation of Community legal acts relevant to the introduction of the euro. In particular, it contributed, through ECB Recommendations, to the adoption of secondary legislation of EU institutions in the preparation of Stage Three. In parallel with this, the ECB fulfilled its obligation to prepare the legal framework, both operational and institutional, of the ESCB. In this context, the ECB employed the entire set of legal acts which it is empowered to use under Articles 14.3 and 34 of the Statute of the ESCB. In addition, the institutional establishment of the ECB and of the ESCB has involved the preparation and adoption of a variety of legal acts and instruments, such as the Headquarters Agreement with the ECB's host state and Rules of Procedure.

Internal audit activities

Internal audit activities are twofold: purely internal and ESCB-related. The ECB's Directorate Internal Audit is involved not only in reviewing the reliability and integrity of financial information, in particular with regard to that which is provided in the financial statements, but also in reviewing and examining the security of information systems under development or already in operation. ESCB common infrastructures are reviewed within the framework of EU-wide co-operation among the ESCB's Internal Audit functions, which are co-ordinated within the Internal Auditors Committee (IAC). The scope of the activities of the IAC was progressively extended during 1998.

Changeover to the euro

The transition to the euro by the banking and financial sectors of the participating Member States in only three and a half days after the irrevocable fixing of the euro conversion rates was deemed to be a remarkable success. The smooth migration of all electronic systems and procedures attested to the quality of the preparatory work carried out in earlier months and years, both by the banking and financial industry and by the central banking community. It also reflected the intensive preparatory work

carried out during 1998 under the guidance of the EMI and, later, the ECB.

Information activities

The aims of the ESCB's external communication policy are to foster the transparency and clarity of its policy objectives, to inform the public about its tasks and actions, thereby enhancing its effectiveness, credibility and efficiency, and to contribute to the accountability of the Eurosystem. The ECB communicates information to the public by a variety of means, including press releases, press conferences – which are held in accordance with a fixed schedule following the first Governing Council meeting of each month – and speeches by members of the Governing Council and various publications. Since January 1999 the ECB has produced a Monthly Bulletin, which is intended to be one of the ECB's main tools for analysing economic developments in the euro area and explaining the single monetary policy of the Eurosystem. Furthermore, the statistical part of this Monthly Bulletin is one of the key sources of euro area statistics. The ECB's Annual Report and the Monthly Bulletin (as well as many other publications) are produced in all 11 official EU languages and made widely available throughout the euro area and beyond on the ECB's Web site (<http://www.ecb.int>) and on the Web sites of the NCBs.

3 Other ESCB activities

Oversight of the ECU Clearing and Settlement System

During 1998 the activity of the Euro Banking Association (EBA) focused mainly on the preparatory work for the Euro Clearing System (Euro I) run by the newly created EBA Clearing Company. Euro I started clearing and settlement operations on 4 January 1999, with the ECB acting as the settlement agent and holder of a liquidity pool for Euro I.

Electronic money

In August 1998 the ECB published the "Report on electronic money". The Report addresses the reasons why the issuance of electronic money should be regulated and states the minimum requirements for electronic money issuers and desirable objectives. In particular, the Report confirms the views expressed by the EMI in 1994, according to which issuers of electronic money should be credit institutions. It also indicates why electronic money should be redeemable.

Administration of EMS mechanisms and Community loans

Under Article 109l (2) of the Treaty, the ECB took over the tasks of the EMI related to the administration of the mechanisms of the European Monetary System (EMS) – the Very Short-Term Financing (VSTF) mechanism, the Short-Term Monetary Support mechanism, the creation of ECUs for the purpose of implementing the EMS Agreement and the administration of borrowing and lending operations concluded by the Community under the Medium-Term Financial Assistance mechanism. In accordance with Article 23.2 of the EMI Statute and Article 20 of the EMS Agreement, the mechanism for the creation of ECUs against gold and US dollars was unwound by the first day of the third stage of EMU. As provided for in Article 23.3 of the EMI Statute, any existing claims and liabilities arising from the VSTF mechanism and from the Short-Term Monetary Support mechanism were settled by the first day of the third stage of EMU.

Co-operation in the field of banking supervision and financial stability

In the context of the task of the Eurosystem to contribute to the smooth conduct of the policies pursued by the competent authorities relating to the prudential supervision of credit institutions and financial stability, a number of issues have been analysed with the assistance of the Banking Supervision Committee. In most cases the outcome of these analyses has been made available to other international supervisory fora. The analyses covered the possible effects of Monetary Union on the EU banking systems, the EU banking systems' exposures towards emerging countries in financial crisis, methods for carrying out macro-prudential analysis aimed at the early identification of potential systemic weaknesses in the banking sector, and a stock-taking of formalised supervisory

risk assessment systems used by certain EU national supervisory authorities, with the aim of identifying, at an early stage, potentially fragile credit institutions.

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 EU Council or the responsible national authorities, as appropriate, on any proposed Community or national legislation within the ECB's field of competence. The limits and conditions of consultations on draft legislation by national authorities for the EMI were set out in Council Decision 93/717/EEC of 22 November 1993, which also applied to the ECB under Article 109l (2) in conjunction with Article 109f (6) of the Treaty. As from 1 January 1999 the ECB is consulted under Council Decision 98/415/EC of 29 June 1998, which contains provisions similar to those of Council Decision 93/717/EEC of 22 November 1993. A total of 64 requests for the opinion of the EMI/ECB were received in 1998.

Monitoring of compliance with the prohibition on monetary financing and on privileged access

The ECB has the task of monitoring the compliance of NCBs with the prohibitions referred to in Articles 104 and 104a of the Treaty and the related Council Regulations (EC) Nos. 3603/93 and 3604/93. These provisions relate to the prohibition on providing monetary financing to governments and on taking measures, not based on prudential considerations, which establish privileged access by governments to financial institutions. In 1998 the NCBs of all Member States continued to respect the Treaty requirements and the above-mentioned Council Regulations (EC).

4 The European System of Central Banks and the Eurosystem

Organisation of the ESCB and the Eurosystem

The ESCB is composed of the ECB and the 15 NCBs. The NCBs of the Member States which are not participating in the euro area are, however, members of the ESCB with a special status: while they are allowed to conduct their respective national monetary policies, they do not take part in the decision-making regarding the single monetary policy for the euro area and the implementation of such decisions. It is for this reason that the Governing Council of the ECB decided, for the sake of transparency and easy reference, to make a distinction between the ESCB and the "Eurosystem", the latter being composed of the ECB and the 11 fully participating NCBs, as long as there are Member States which have not yet adopted the euro.

The ESCB is 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

with a derogation. 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 forming the Eurosystem. The Executive Board comprises the President, the Vice-President and four other members, all chosen from among persons of recognised standing and professional experience in monetary or banking matters. The General Council comprises the President and the Vice-President and the governors of all 15 NCBs. In addition, a number of Committees composed of experts from the NCBs and the ECB have been established.

Liquidation of the European Monetary Institute (EMI)

In accordance with Article 109I of the Treaty, the EMI went into liquidation on the establishment of the ECB. The financial aspects of the liquidation of the EMI are described in detail in the notes to the annual accounts of the ECB.



Chapter I

Economic developments in the European Union

I External macroeconomic conditions

Growing uncertainties in the international environment

Over the course of 1998 the global macroeconomic environment was characterised by high volatility in financial markets and considerable swings in investor confidence. In the earlier part of the year the dominating factor continued to be the financial and economic consequences of the 1997 financial crisis in Asia, which caused a protracted recession in the economies concerned. Nevertheless, financial and exchange market tensions in Asia appeared to subside and spillover effects on the rest of the world were for some time regarded as limited. In August 1998, however, the crisis in Russia sparked a new round of financial turmoil. This led to a significant worsening of global economic and financial conditions, compounded by the further deepening of the recession in many Asian economies and the crisis in Japan. As a result, world-wide growth in production and trade declined significantly. Capital market volatility, in particular, increased substantially, triggered by a greater preference for less risky and more liquid assets (the so-called “flight to quality” effect), which led to sudden and significant asset price changes.

Towards the end of 1998 the spiral of bad news from the global economy seemed to have moderated. Policy responses in several countries helped to restore more orderly conditions in financial markets. Central banks in the main industrial countries reduced interest rates; in Japan measures were announced to address the banking sector problem and to stimulate further aggregate demand, and in emerging economies the policy environment generally improved. Meanwhile, in the United States robust output growth continued and inflationary pressure remained subdued, while in some Asian crisis countries evidence emerged that the crisis may have bottomed out. Supported by these positive developments, international financial markets recovered towards the end of 1998.

However, indicators of world-wide financial and economic conditions remained mixed, and the risks associated with global activity and world trade continued to be predominantly on the downside. At the beginning of 1999 the currency crisis in Brazil contributed to renewed uncertainty about the outlook for the world economy.

Against the background of a slowdown in world demand, 1998 saw considerable weakness in commodity markets. Oil prices fell by 30.7% on average in 1998, to reach a 50-year inflation-adjusted low of around USD 9.8 per barrel in December. The trend in oil prices reflected, in addition to weak demand, mild winter weather and less stringent control of oil production by OPEC countries. In early 1999 oil prices recovered slightly, to USD 10.5 per barrel at the end of February. Non-energy raw materials prices fell by 13.7% in 1998 compared with their average level in 1997 according to the HWWA index. This trend reflected falls in a broad range of primary commodities and occurred mostly during the summer period. In January and February this index fell further.

Considering the major economic regions of the world, in the United States robust real output growth, low unemployment and low inflation characterised economic developments during 1998, notwithstanding financial and economic strains at the global level. Output growth reached a peak of 6.1% in the fourth quarter of 1998 at annualised rates, resulting in 3.9% for the overall rate of GDP growth for the year. In parallel, the unemployment rate fell during the course of the year to 4.3%, the lowest level recorded for almost four decades. Although the deepening of the recession in many emerging countries during the second half of 1998 had an adverse impact on US exports and profits of US firms abroad, exceptionally strong domestic demand compensated for the slowdown in world trade. The combination of weak foreign and strong domestic demand led to a gradual widening of the trade deficit,

which, together with the deterioration in the US investment income balance, led to a sharp rise in the current account deficit to USD 61 billion in the third quarter of the year. With regard to price developments, consumer price inflation declined further in the course of 1998 to 1.6% year-on-year in December 1998, in particular reflecting declining energy prices. Following the Russian crisis and the subsequent turmoil in financial markets, the Federal Reserve cut the Federal funds rate from 5.5% in September to 4.75% in November. These measures were seen as easing the strains apparent in the financial system and as sustaining output growth. Owing mainly to buoyant tax revenue collection, the federal fiscal budget recorded a surplus of 0.8% of GDP in the fiscal year 1998.

In Japan economic conditions continued to deteriorate in 1998. Around the turn of the year 1997/98 the economy had moved into recession. During the course of 1998 output fell further, mainly as a result of sluggish private demand. Fixed business investment continued to decline, partly because of financial constraints, and diminishing consumer confidence hampered a recovery of private consumption. Recorded unemployment was 4.3% in December 1998, and the total amount of liabilities of bankrupt companies reached its highest post-war level. Against this background the Japanese Government implemented two fiscal stimulus packages: one in April, of JPY 16.7 trillion (3.3% of GDP), followed by a second package of JPY 24.2 trillion (4.8% of GDP) in November. Mainly as a result of the increase in public investment, the economic deterioration has gradually moderated recently. During the year the problems of the financial sector worsened further as bad loans estimates turned out to be higher than expected and the solvency of many financial institutions deteriorated. In the latter part of the year two long-term credit banks were nationalised. In response to these developments, in October the Government introduced major banking recapitalisation plans, which provided for the injection of

public funds of JPY 60 trillion in total (12% of GDP). In addition, the Bank of Japan lowered further the target for the overnight call rate to around 0.25% in September 1998 and to 0.15% in February 1999, while injecting substantial liquidity into the system. Consumer prices declined in some months of 1998, but the change in the CPI remained slightly positive for the year as a whole.

Of the other Asian economies, many experienced a severe recession in 1998 as a result of the financial and economic crisis. Output is estimated to have declined in Hong Kong, Korea, Malaysia and Thailand between 5% and 8% for 1998 as a whole. The sharp fall in demand is one of the reasons why, despite significant currency depreciations, inflation remained in single digits for all these economies. In Indonesia the adjustment was much more severe, with a decline in real output estimated at 15%; on the other hand, China managed to weather the effects of the crisis in the rest of Asia to a large extent and its economy grew by around 7% in 1998, only slightly below the 8% growth recorded the year before.

The performance of transition countries was mixed in 1998. Although during the first half of the year the initial impact of the crisis in confidence in emerging markets was severe across the region, the economies of a number of countries have shown resilience. Key indicators of investor confidence, such as bond spreads, show that investors have become more selective. In Russia the general lack of investor confidence in emerging markets was compounded by the difficulties the Government had in controlling the fiscal deficit and in implementing the fiscal measures agreed upon with the IMF during the summer. This in turn eroded investor confidence in the prospects of achieving a stable macroeconomic environment. Triggered by the "flight to quality" effect after the Asian crisis, an increasing number of foreign and resident investors decided to liquidate their investments in Russia, also as a result of rising concern about the level of Russia's external debt. Russia had to give up its exchange rate

peg, introduced a 90-day moratorium on all principal repayments for external debt of corporations and banks and announced the conversion of short-term government debt. As a result, domestic financial markets collapsed and the banking system came under severe strain. By contrast with Russia and Ukraine, which was forced to renegotiate its domestic debt, in Hungary and Poland financial markets were stable, reflecting a credible market-oriented policy environment and good macroeconomic performance. In the second half of 1998, following the crisis in Russia, financial market volatility increased in many countries of the region.

In Latin America the unstable global financial situation had an adverse effect on the investment climate and caused interest rates to rise. The effect was particularly severe in Brazil, where the exchange rate regime (a crawling peg) was subject to intense pressure, also fuelled by growing fiscal imbalances and expectations of low growth. An IMF aid package conditional on some fiscal adjustments was initially well received by markets, but subsequent doubts about the ability of the Brazilian authorities to pass the necessary legislation to comply with the package generated additional pressure and led to the decision to let the real float in January 1999. While the contagion effect of the Brazilian crisis in the area has been limited thus far, the overall macroeconomic situation in the region has suffered from the increased aversion of foreign investors to investing in emerging market economies.

Developments in foreign exchange markets

While the prospective EMU currencies converged smoothly to their pre-announced conversion rates, global foreign exchange markets experienced relatively high volatility

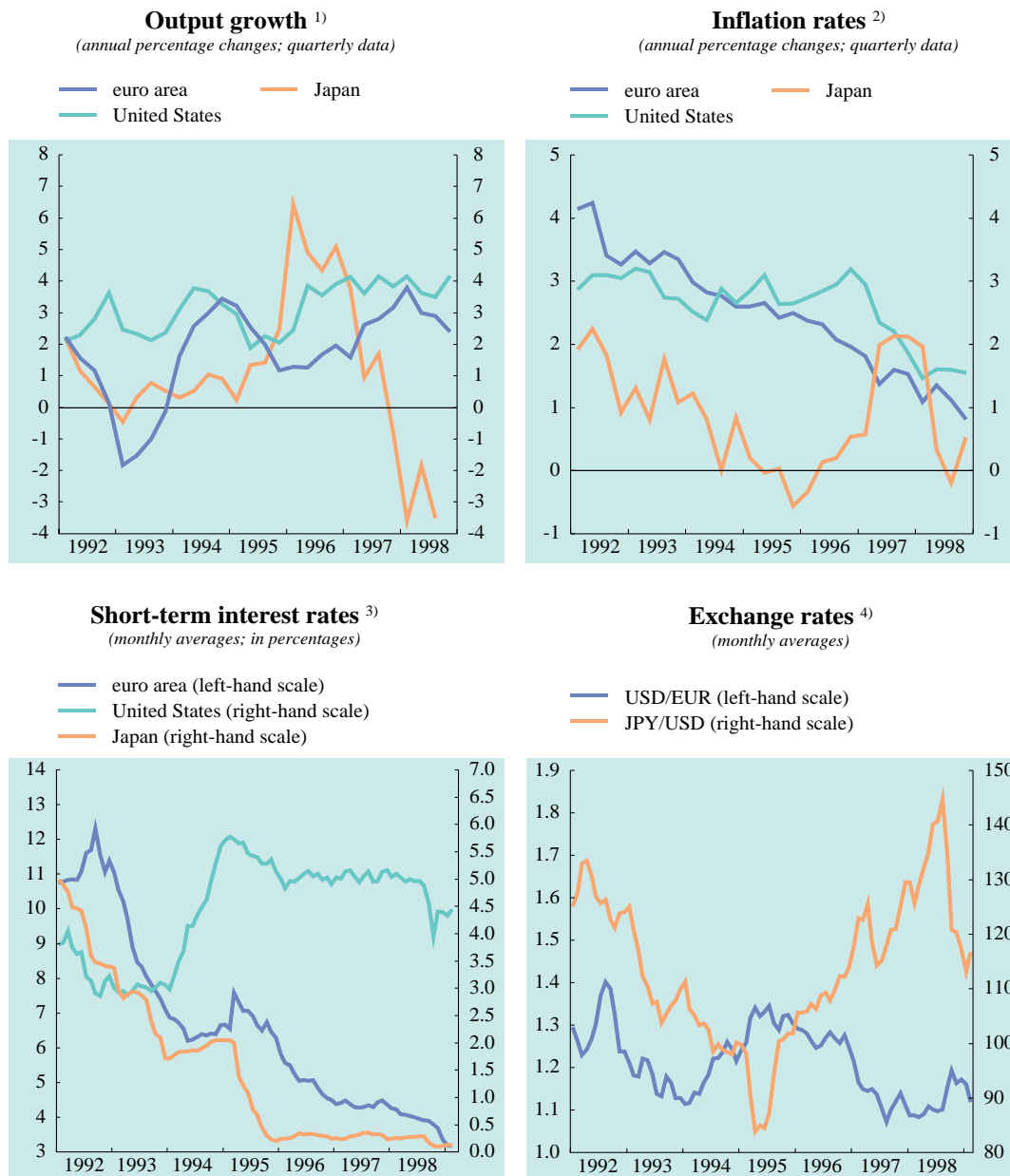
during 1998, reflecting the financial crises in many emerging markets. Most importantly, with regard to the US dollar, the ECU – the performance of which may be seen as broadly summarising the developments of currencies which subsequently formed the euro – strengthened during the second and third quarters of 1998. This strengthening was connected with expected spillovers from the emerging markets crisis into the US economy and with an easing of monetary policy in the United States. The ECU reached almost USD 1.20 on average in October. However, these developments were partly reversed towards the end of the year, when the US economy continued to display robust growth and the crisis in global financial markets began to ease. The last ECU/USD exchange rate recorded in 1998 was USD 1.17 per ECU, and on 10 March 1999 the euro was quoted at USD 1.10.

Against the Japanese yen, the ECU strengthened gradually by about 10% during the first three quarters of 1998 amid the deepening recession in Japan. In the fourth quarter, however, the ECU weakened rapidly, triggered by technical factors such as the unwinding of short trading positions of yen against dollars and the end of specific trading by hedge funds, agreements on bank restructuring and the largest fiscal stimulus package in Japan's history in November. As a result, the ECU had depreciated to a level of JPY 132.80 per ECU by the end of December 1998, about 16% below its peak of August 1998. In early 1999 the euro mostly traded in a range of JPY 126 to JPY 134.

Overall, in nominal effective terms, the ECU appreciated by 3.3% between December 1997 and December 1998, and by 2.7% in real terms. As this upward movement reflected a partial recovery of the decline observed in 1997, the ECU remained somewhat below the levels observed on average in the 1990s.

Chart I

Main developments in major industrialised economies



Sources: National data, Eurostat and ECB calculations.

1) Eurostat data are used for the euro area; for the United States and Japan national data are used.

2) Euro area data up to December 1995 are estimates for the HICP based on national CPI data; HICP data are used from 1996.

3) Euro area data are ECB calculations and are averages of national three-month interbank rates.

4) Up to 1999 the USD/EUR line shows USD/ECU data.

This downward trend was caused mainly by the ongoing steep decline in energy prices throughout 1998 but also, in the second half of the year, by a decline in the rate of increase of unprocessed food prices. The consumer price of energy, which in 1998 as a whole decreased by around 2½% compared with a year earlier, stood 4.8% lower in December than a year earlier. This reflects the fact that oil prices have tended to fall since early 1997, and in particular from the fourth quarter of 1997, mainly as a result of expectations of lower world demand due to the crises in Asia and, subsequently, also in other parts of the world. As a consequence, a measure of consumer prices excluding these more volatile items (HICP excluding seasonal food and energy) has remained stable at 1.2-1.5% since the second quarter of 1997. Assuming only limited scope for a sustained further fall in energy prices below the levels reached at the end of 1998, the decline of the annual rate of increase of the headline HICP to a level of below 1% towards the end of 1998

may be viewed as being of a “one-off” nature, and one which would be reversed if the world market prices of these products were to stabilise or recover.

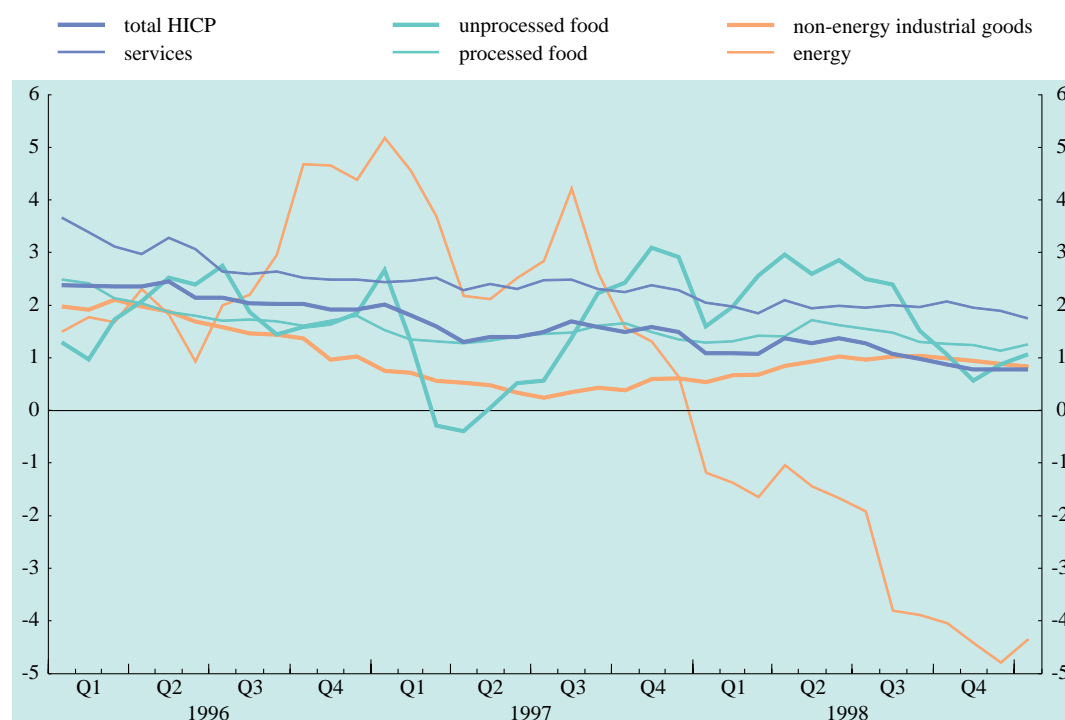
In addition to oil prices, other external factors have contributed to the further decline in consumer price increases in the euro area in 1998. The weakening in world market non-oil commodity prices, the appreciation of the effective exchange rate of the euro area and developments in the emerging countries have all contributed to lower import prices, with a downward influence on consumer goods prices.

The pattern of broad stability in consumer prices also reflects wage developments in 1998. Wage increases remained low in the first three quarters of 1998, at around 1% year-on-year, down from 2.6% in 1997, reflecting the absence of wage pressures in most countries of the euro area, although there have been recent signs of an

Chart 2

Breakdown of HICP inflation in the euro area by components

(annual percentage changes; monthly data)



Source: Eurostat.

Note: For further information on the data used, see Table 1.

acceleration in a few countries. The modest growth in wages combined with a relatively high productivity growth rate resulted in an average decline in unit labour costs in the first three quarters of 1998 of about 1¼%. Profit margins are expected to have improved in 1998 given that the prices of inputs to production, such as energy and commodities prices, unit labour costs and the cost of capital (long and short-term interest rates) fell, while consumer prices continued to increase, albeit at a very slow pace.

Overall, the modest rate of increase in the headline HICP in 1998 appears to reflect an environment which is characterised by decreasing import prices and low domestic inflationary pressures, while allowing for some widening of profit margins in the euro area economy as a whole. Given the uncertainties resulting from developments in the world economy, this pattern of price stability and, for the time being, low cost pressures can be seen as a counterbalancing factor which tends to support output and employment growth in the euro area (see below).

2.2 Output, demand and labour markets

Continued economic expansion

The pace of economic activity in the euro area in 1998 as a whole was characterised by a continuation of the economic expansion which followed the temporary slowdown in 1995-96. However, the expansion appeared to be increasingly fragile in the face of the unfolding weaknesses and uncertainties in the external environment. As the year progressed, doubts about the prospects for sustained area-wide growth increased, leading not only to some downward revision to expectations of growth for the year as a whole, but also to lower projections for growth in 1999. Overall, real GDP in the euro area is estimated to have increased by 3.0% in 1998, slightly above the rate of growth achieved in the previous year of 2.5% (see Table 2). This reflects a somewhat higher rate of output growth in the first half of 1998, when area-wide real GDP growth reached approximately 3.4% compared with the same period a year earlier. In the second

Table 2

Composition of real GDP growth in the euro area

(percentage changes, unless otherwise indicated; seasonally adjusted)

	Annual rates ¹⁾								Quarterly rates ²⁾				
	1996	1997	1998	1997 Q4	1998 Q1	1998 Q2	1998 Q3	1998 Q4	1997 Q4	1998 Q1	1998 Q2	1998 Q3	1998 Q4
Real gross domestic product <i>of which:</i>	1.6	2.5	3.0	3.2	3.8	3.0	2.9	2.4	0.7	0.9	0.6	0.7	0.2
Domestic demand	1.1	1.9	3.4	2.5	3.9	3.2	3.4	3.1	0.9	1.5	0.4	0.5	0.7
Private consumption	1.9	1.4	3.0	2.0	2.8	2.5	3.4	3.4	0.8	1.0	0.5	1.0	0.9
Government consumption	1.7	0.3	0.4	-0.7	0.3	0.6	0.2	0.6	-1.3	1.5	0.3	-0.4	-0.9
Gross fixed capital formation	0.4	2.1	4.2	2.8	5.7	3.2	4.3	3.5	1.3	1.8	-0.6	1.8	0.5
Changes in inventories ³⁾	-0.4	0.5	0.5	0.7	0.9	0.8	0.3	0.1	0.3	0.3	0.1	-0.4	0.1
Net exports ³⁾	0.4	0.7	-0.2	0.7	0.0	-0.1	-0.4	-0.6	-0.2	-0.6	0.2	0.2	-0.4
Exports ⁴⁾	4.4	10.3	6.0	11.6	11.0	7.7	4.2	1.8	0.9	0.1	1.9	1.2	-1.4
Imports ⁴⁾	3.3	9.0	7.3	10.2	11.8	8.6	5.7	3.7	1.7	1.8	1.4	0.7	-0.3

Sources: Eurostat and ECB calculations.

1) Annual rates: Percentage change over the same period a year earlier.

2) Quarterly rates: Percentage change over the previous quarter.

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

4) Exports and imports cover goods and services and include internal cross-border trade in 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.

half of 1998 the annual rate of growth fell to around 2.6%.

The latest available estimates of real GDP growth from Eurostat for the individual quarters of 1998 suggest weaker growth in the second quarter – 0.6%, compared with 0.9% in the first quarter of 1998 – while real growth is estimated to have been stronger again in the third quarter at 0.7%, which is close to the average of the first two quarters. Differences in the number of working days associated with the timing of Easter partly determined this quarterly pattern, as did factors such as the VAT increase in Germany at the beginning of April and unusually mild weather in the first quarter. The area-wide impact of calendar effects on activity is difficult to estimate precisely at the current juncture, and further improvements on the methodological side are desirable. Provisional estimates of fourth-quarter growth, which showed a substantial slowdown, were also influenced by calendar effects. Real GDP is estimated to have risen by only 0.2% in the final quarter of 1998.

Domestic demand replaces net exports

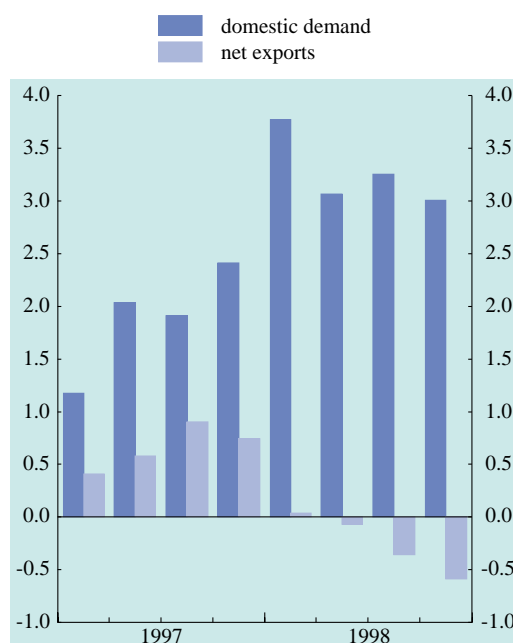
Underlying the performance of real GDP growth in 1998 was a significant shift in favour of domestic demand in the euro area and a negative contribution to growth from net exports (see Charts 3a and 3b). While net exports measured on a year-on-year basis declined sharply during the course of the year, domestic demand maintained a robust pace.

For 1998 as a whole, the contribution to annual growth from net exports is estimated to be slightly negative, at -0.2%, compared with a contribution of 0.7% in 1997. It fell sharply from 0.7% in the fourth quarter of 1997 to 0% in the first quarter of 1998, and was increasingly negative in the following quarters. In the fourth quarter of 1998 the contribution was -0.6%. This sharp decline in net exports was primarily accounted for by the deterioration in the global situation

Chart 3a

Contributions to annual real GDP growth

(annual percentage point contributions; seasonally adjusted)

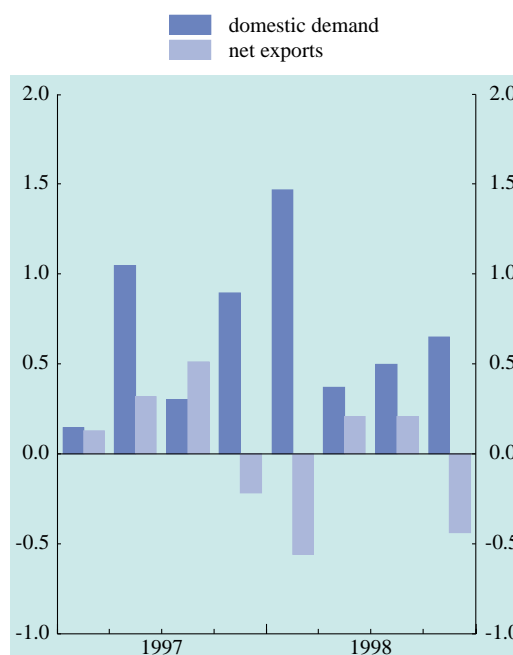


Sources: Eurostat and ECB calculations.

Chart 3b

Contributions to quarterly real GDP growth

(quarterly percentage point contributions; seasonally adjusted)



Sources: Eurostat and ECB calculations.

(see Section I above), which led to a deceleration in export growth that was not matched by the slowdown in imports. However, measured on a quarter-on-quarter basis, net exports are estimated to have made a small positive contribution to growth in the second and third quarters, following a negative contribution in the previous two quarters, while in the fourth quarter of 1998 the contribution from net exports was again negative, at -0.4%.

As regards the increase in domestic demand, it remained broadly robust throughout the year, and stronger than in 1997, thus helping to sustain overall growth. One main factor was private consumption, which maintained a stable growth rate throughout the year, while the household saving ratio may also have declined somewhat in 1998. For 1998 as a whole, private consumption is estimated to have risen by around 3.0%, the highest rate of growth since the early 1990s and a significant improvement compared with the previous few years. It is likely that this development was supported by an increase in real household incomes. In particular, income growth was underpinned by net employment growth. In addition, a further decline in consumer price increases led to a stronger rise in real incomes. While it is generally considered that wealth effects are of limited significance for the euro area, and 1998 witnessed substantial volatility in equity markets, it cannot be entirely ruled out that share price increases may also have played a role. Consumer confidence in the euro area continued to improve throughout the year, extending the rise in confidence for a second successive year and helping to underpin private consumption. By the end of 1998 the consumer confidence indicator had risen to match the highest level achieved in 1990. Other indicators of consumer demand, such as retail sales and retail confidence, also pointed to robust growth during 1998, suggesting that higher consumer confidence was feeding through to household expenditure.

Gross capital formation is estimated to have increased by 4.2% in 1998. The contribution to growth from gross fixed capital formation was significantly higher than in 1997. Even stronger investment growth might have been expected given the positive fundamentals, particularly lower short-term and long-term interest rates, with the evidence suggesting higher profit margins, stable intra-euro area exchange rates, lower inflation and a comparatively high level of capacity utilisation. However, the gradual deterioration of prospects (especially for exports) may have induced an additional degree of caution in firms' investment plans. A further factor may have been the build-up of stocks during the course of the year. Changes in inventories appear to have made a significant contribution to total GDP growth for the second consecutive year, although this may be seen partly as a result of statistical discrepancies, pointing to upward revisions to final domestic demand components of growth in the future. To the extent that inventories did rise, this was likely to have been partly involuntary, as the decline in orders, particularly for exports, was rather rapid and started in the first half of the year. However, the decrease in raw materials prices and low interest rates may have combined to reduce the cost of building up inventories.

Finally, government consumption for the euro area as a whole also remained subdued during 1998, while its contribution to real GDP growth was close to zero.

Industrial production loses momentum

Evidence of a slowdown in economic activity during 1998 was seen from spring onwards in the behaviour of industrial production and industrial confidence. According to data from Eurostat, actual industrial production, excluding construction, is estimated to have risen by around 4¼% for the year as a whole, but slowed from a year-on-year rate of over 6% in the first quarter of 1998 to around 2% by the fourth quarter of the year (see Table 3). The slowdown in manufacturing

Table 3**Industrial production in the euro area***(annual percentage changes; working day adjusted)*

	1996	1997	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998
				Q1	Q2	Q3	Q4	July	Aug.	Sep.	Oct.	Nov.	Dec.
Industrial production excluding construction	0.0	4.1	4.2	6.3	4.5	4.0	2.0	4.3	4.6	3.3	3.3	2.8	-0.2
of which:													
Manufacturing	-0.2	4.8	4.6	7.4	5.1	4.3	2.0	4.7	5.0	3.5	3.6	2.5	-0.4
by main industrial groupings:													
Intermediate goods	-0.6	5.4	3.9	7.3	4.4	3.4	0.7	3.7	3.9	2.6	1.8	2.0	-1.9
Capital goods	1.7	4.2	7.3	9.4	7.0	7.2	5.8	8.1	7.8	5.9	8.2	5.6	3.9
Consumer goods	-0.5	2.0	3.1	3.7	3.6	3.4	1.6	3.4	4.0	3.0	3.2	2.0	-0.5
Durables	0.0	1.8	6.7	8.2	7.0	7.1	4.8	6.4	9.2	6.6	8.4	4.6	0.7
Non-durables	-0.8	2.2	1.4	1.4	2.3	1.9	-0.1	2.5	2.3	1.0	0.5	0.5	-1.3
Construction	-2.6	-1.0	-0.2	3.4	0.6	-0.5	-3.7	0.6	0.5	-2.3	-2.9	-3.4	-5.2

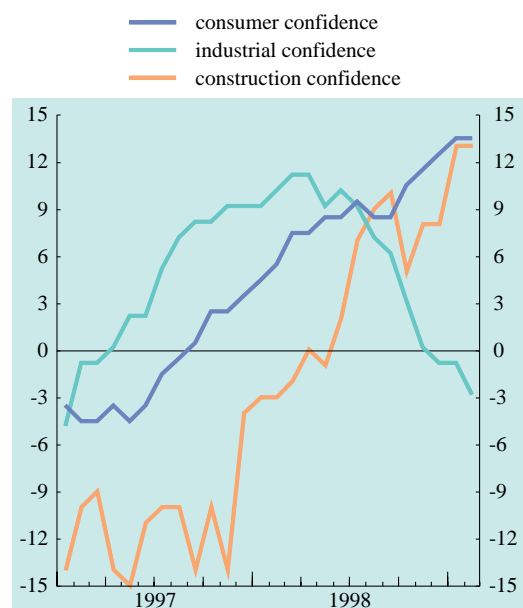
Source: Eurostat.

production in the course of 1998 was even more pronounced. The strongest growth for 1998 as a whole was observed in the capital goods industry, at around 7¼%, followed by the intermediate goods sector, at just below 4%. Production of capital goods was higher in 1998 than in the preceding year, but showed signs of weakening towards the end of the year. The increase in intermediate goods production was lower than in 1997, and production appeared to peak in the first few months of the year.

Production of consumer goods also rose, by around 3% for the year as a whole, but within this category there was a significant difference between the durable and non-durable goods sectors. Production in the former increased by over 6½% in 1998, following several years of more subdued activity. Durables tend to be more cyclically sensitive and demand for these products may have benefited more from the growth in real incomes over this period. In addition, low interest rates probably also supported the stronger rise in output in the durables sector. Certainly, survey results from the European Commission Consumer Surveys confirmed the positive climate of opinion as regards the purchase of durables. The rise in output in the non-durable goods sector, however, was much more limited in 1998, rising by only 1½% overall, and annual

growth is estimated to have turned slightly negative in the fourth quarter.

The slowdown in industrial production was matched by a sharp turnaround in industrial confidence (see Chart 4). After reaching a peak in the spring which was close to that

Chart 4**Confidence indicators for the euro area***(percentage balances; monthly data; mean-adjusted)*

Source: European Commission Business and Consumer Surveys. Note: Data shown are calculated as deviations from the average over the period since January 1989.

achieved in the late 1980s and in 1994, there was a progressive decline during the remainder of the year which left the indicator slightly below its long-term average. A further signal of weaker manufacturing activity was recorded by estimates of capacity utilisation, which fell back towards the end of the year, to below 82½% in the fourth quarter, while remaining above its average over the period since 1985.

There were some positive indications regarding the construction sector in early 1998. This followed several years of prolonged weakness associated with a widespread problem of excess supply generated in the late 1980s and early 1990s in some countries and a normalisation of construction activity in Germany after high investment in the eastern part of the country following unification. Construction activity was particularly strong in the first quarter of the year, also supported by milder weather than is normally experienced at the start of

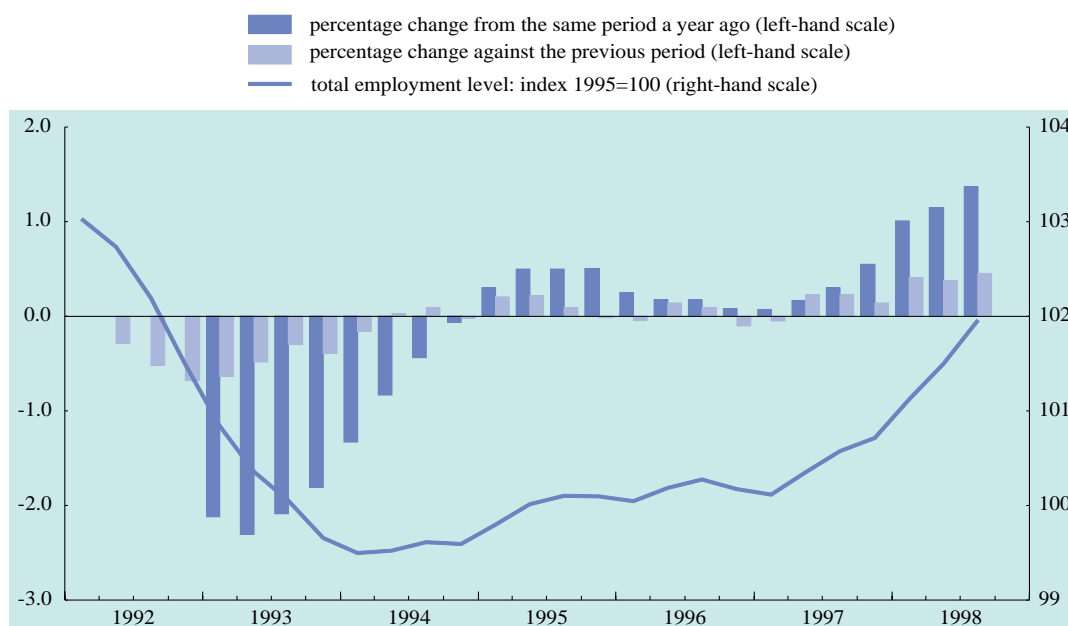
the year (and which contrasted markedly with the exceptionally cold weather in the same period in 1997), but it lost pace in the second half of 1998 and is estimated to have declined by around 1% for the year as a whole. Construction confidence improved during most of the year, and remained at a relatively high level in the final quarter.

Overall, 1998 was characterised by a negative impact of global developments on net exports and manufacturing activity, while domestic demand by and large remained unaffected. This pattern is also reflected in the contrasting development of industrial and consumer confidence during the year, based on the survey evidence from the European Commission. The correlation between the two confidence indicators in the past has been relatively high and major deviations between the two series have typically been rare. To some extent, the divergence in 1998 could perhaps be explained by the effect on industrial confidence of the deterioration in

Chart 5

Total employment in the euro area

(quarterly data; seasonally adjusted)



Sources: National data and ECB calculations.

Note: Data on total employment are based on national indicators which are not fully comparable. Belgium and Ireland are excluded.

the external environment, as a sizable percentage of industrial production is destined for export. By contrast, domestic economic conditions remained positive and net employment creation and real income growth were among the factors supporting consumer confidence. In this regard it may be noted that, on the one hand, industrial activity accounts for less than one-third of overall GDP in the euro area, and a slowdown in this sector therefore only partly feeds through to the performance of overall activity. The services sector appears to have been influenced predominantly by domestic factors which have been more supportive of growth. On the other hand, however, persistent weakness in industrial activity could eventually have a negative effect on consumer confidence, if the prospect of continued increases in employment and income were to be called into question.

Strengthening of employment growth

The recovery in employment which began in spring 1997 strengthened throughout 1998 (see Chart 5). As signs of a weakening in economic activity appeared later in the year, growth of total employment, measured quarter-on-quarter, probably declined somewhat in the fourth quarter, according to national data available. By contrast with the sluggish developments observed in the years following the downturn in 1993, employment grew by more than 1% in 1998. In the course

of the first three quarters of 1998 more jobs were created in the euro area than had been created between early 1994 – when employment had levelled out – and the end of 1997.

The recent slowdown in activity appears to have had some influence on employment growth in the exposed sectors of the euro area economy. In manufacturing, quarter-on-quarter net job creation was particularly strong in the first half of 1998, but decelerated significantly in the third quarter. As total employment growth did not show a slowdown over the same period, employment growth in the rest of the economy appears to have accelerated slightly. This mainly reflects performance in the sectors less exposed to external developments, notably the services sector and the public sector. Furthermore, in some Member States the continuing expansion of job creation measures within the framework of labour market policy played an important role.

Gradual decline in unemployment

As a result of the strengthening of net job creation, the unemployment rate in the euro area has been declining continuously – albeit at a very gradual pace – since October 1997 (see Table 4). As a result, the standardised rate of unemployment, as estimated by Eurostat, decreased from 11.7%, the peak level in 1997, to 10.7% in December 1998. In

Table 4

Unemployment in the euro area

(seasonally adjusted)

	Level and rates									Annual changes				
	1996	1997	1998	1997	1998	1998	1998	1998	1998	1997	1998	1998	1998	1998
				Q4	Q1	Q2	Q3	Q4	Q4	Q1	Q2	Q3	Q4	
Level (in millions)	14.8	14.9	14.2	14.8	14.5	14.3	14.1	13.8	0.0	-0.4	-0.7	-0.9	-1.0	
Rates (% of labour force)														
Total	11.6	11.6	10.9	11.5	11.2	11.0	10.9	10.7	0.0	-0.1	-0.3	-0.5	-0.8	
Under 25 years	23.9	23.2	21.4	22.6	21.9	21.6	21.1	20.9	-0.9	-1.4	-1.6	-2.1	-2.5	
25 years and over	9.8	10.0	9.5	9.9	9.7	9.5	9.4	9.3	0.3	0.2	0.0	-0.2	-0.4	

Source: Eurostat.

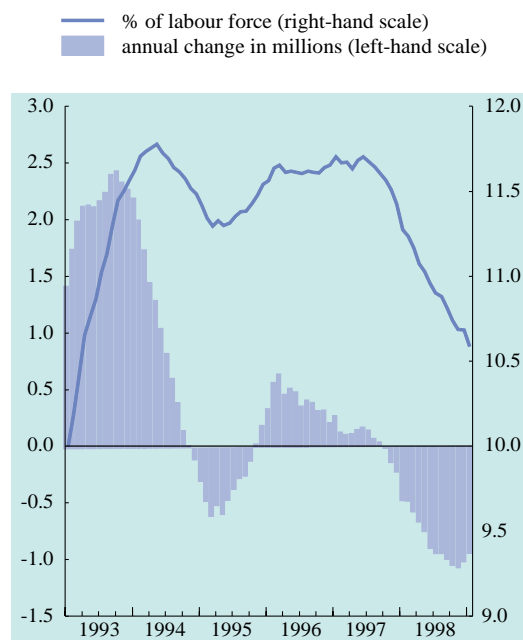
Note: Figures calculated in accordance with ILO recommendations.

January 1999 there was a further slight decline in area-wide unemployment, to 10.6%. While this represents the lowest level of euro area unemployment over the past five years, it remains high by historical standards as well as in comparison with the rates recorded in other major economies outside the euro area, such as the United States, Japan and the United Kingdom. The decline in the euro area unemployment rate appears to have been particularly moderate in view of the fact that in 1998 the increase in employment has exceeded the trend growth of the labour force. This suggests that, apart from the trend in population growth, the perception of better employment prospects may have encouraged inactive people to enter or to return to the labour market.

The improvement in the labour market situation was also noticeable in the absolute level of unemployment, as the number of jobless fell (according to Eurostat) by more than 950,000 in the year to December 1998, which constitutes a decrease of 6½%. This improvement was observed in almost all the euro area countries, including those in which unemployment had already reached a low level. The decline in unemployment was twice

Chart 6
Unemployment in the euro area

(monthly data; seasonally adjusted)



Source: Eurostat.

as high for young people as for those over 25 years of age. However, the rate of youth unemployment was still double the rate for the over-25s at the end of 1998.

Box I

Unemployment and economic policy

Unemployment, although falling, remains the most serious problem in the euro area

The reduction of unemployment is the major challenge currently facing euro area Member States. This is a crucial issue, requiring both a serious examination of the underlying causes and careful consideration of the most effective methods for achieving a significant and sustained decline in unemployment from the present unacceptably high level. This is also reflected in the formulation of the European Employment Strategy. While an elaborate and detailed review of the unemployment problem in the euro area is beyond the scope of this Report, some key aspects of this issue are highlighted below.

In the course of 1998 euro area unemployment fell by almost one million, from a rate of 11.5% at the end of 1997 to 10.7% in December 1998. However, despite this decline, unemployment remains unacceptably high at almost 14 million. The recent decline needs to be viewed against the background of a significant long-term upward trend. Net employment growth, although relatively strong in recent quarters, has, over a longer period of time, been insufficient to bring about a significant and lasting reduction in unemployment. In this regard, it is important to address the causes of unemployment and the role that economic policies can play in helping to reduce it. Extensive analysis has been carried out in recent years, at both the national and the international level. Comparisons have also been drawn with the experience of other countries, such as the United States, whose record in terms of unemployment has been significantly better than that of the euro area.

Euro area unemployment is largely of a structural nature

A predominant view has emerged, on the basis both of analyses carried out by international bodies and of academic research, that unemployment in Europe is, to a large extent, of a structural nature and is caused by factors of an institutional and regulatory character. A number of structural causes underlying the relatively high level of unemployment have been identified with regard to both labour supply and labour demand; these may be summarised as follows. On the part of potential job seekers, generous unemployment and other benefits, as well as the length of time for which these can be claimed, are perceived as acting as a disincentive to search actively for employment or to accept a job offer. The effectively high marginal tax rates and social security contributions that are the norm in many European countries are considered to be further disincentives to take up work, particularly for those in lower income brackets. Moreover, longer spells of unemployment are associated with a loss of skills and, as a consequence, with a severe reduction in re-employment prospects. On the part of employers, high statutory social security contributions have been identified as a significant non-wage cost factor. Moreover, disincentives are also related to the levels of minimum wages, which compare unfavourably with the labour productivity of, in particular, young people and the less skilled. Strict employment protection regulations, which effectively impose large lay-off costs on employers, are pinpointed as additional factors which give rise to employment disincentives.

A further factor to which reference is often made in the interplay of labour demand and supply is that industrial relations are not generally organised in a way that allows wage formation to reflect productivity development. More generally, a smoother and more timely adaptation of qualifications and/or wages to changing skill requirements is needed in view of technological developments and increased global competition. In conjunction with higher levels of education, training and retraining, this would also increase labour mobility, thereby contributing to filling vacancies that coexist with high unemployment in some sectors and regions. It is often asserted that existing wage rigidities are reinforced by strict regulations on working hours. More flexible employment contracts would help to accommodate firm-specific needs while, at the same time, enabling the labour force to move towards the most productive areas. At the same time, the attainment of higher rates of labour force participation in a number of countries is still hampered by regulations and disincentives concerning, inter alia, part-time employment. It is important to emphasise that the coexistence of a variety of structural rigidities tends to lead to a mutual reinforcing of these rigidities.

The role of economic policy

Against this background, the problem of unemployment in the euro area should be addressed by tackling the underlying impediments to employment growth. These reforms should, preferably, be of a comprehensive nature. A number of countries have already started addressing these issues. Their experience has demonstrated that implementing these reforms is a lengthy process and it takes considerable time for the impact on unemployment to become evident. Hence any delay in bringing forward structural reforms is counterproductive. Indeed, those European countries which are at an advanced stage of implementing wide-ranging reform policies have been successful in reducing their structural unemployment. This points to the appropriateness of such an approach and suggests that there are examples that could be followed by other countries. Fiscal policy geared to budgetary consolidation might also help to improve the efficiency of these reforms and thereby stimulate employment creation. This would appear to be the case, in particular, if fiscal consolidation were to focus primarily on curbing expenditure rather than increasing the tax burden.

The best contribution monetary policy can make to fostering economic growth and reducing unemployment in the medium and long term is to maintain price stability in the euro area in a credible and lasting manner. Maintaining price stability will yield a number of important benefits for employment creation. The various market mechanisms, supported by structural reform, can be expected to be most effective when the signals sent by the relative price mechanism are not distorted or obscured by changes in the general price level. Moreover, inflation risk premia in long-term interest rates are minimised in an environment of price stability, thereby helping to reduce the cost of financing productive investment and supporting the long-term growth potential of the euro area economy, which is necessary to foster employment over the medium term. Maintaining price stability also avoids the significant costs incurred when inflation or deflation exacerbates the distortions created by tax and benefits systems.

As embodied in the monetary policy strategy adopted by the Eurosystem, monetary policy reacts in a forward-looking way to changes in the outlook for price stability. It thereby takes full account of the overall situation in demand, supply and the labour markets in the euro area. Indeed, in the current context of low inflationary pressure, accompanied by downward revisions of expected real GDP growth and slow progress in reducing rates of unemployment, interest rates have reached record lows. Monetary and financial conditions are therefore no impediment to a recovery of economic activity. However, directing monetary policy towards actively stimulating demand over the short term, while potentially leading to some immediate positive effects on employment, cannot be expected to have any lasting effect. Such a policy would put price stability in jeopardy and generate inflationary expectations. In this way it would undermine the credibility of monetary policy and tend to lead to higher long-term interest rates. This would, in the long term, reduce the level of employment to below that which would have prevailed without any monetary policy activism. Thus, the ultimate impact on employment would be counterproductive.

Conclusions

Currently high and, seen over a time span of several decades, steadily increasing levels of unemployment are the major challenge to economic policy in the euro area. Economic policy can influence whether the increases in unemployment which occur during economic downturns are subsequently reversed, and whether a general turnaround in the long-term trend of unemployment in the euro area can be achieved. However, given the largely structural nature of unemployment in the euro area, the introduction of structural reforms to labour and product markets is the key to achieving low unemployment. Fiscal policies can help this process by focusing on curbing expenditure growth rather than increasing the tax burden. Monetary policy can make an important contribution through the achievement and maintenance of price stability and a stable macroeconomic environment.

2.3 Fiscal developments

Slowdown in fiscal consolidation

Government budgetary positions improved further in 1998, albeit at a rather slow pace, leaving budgets highly imbalanced on average in the euro area. According to the latest available data provided by Eurostat, the average deficit-to-GDP ratio in the euro area stood at 2.1%, compared with 2.5% in 1997 (see Table 5). This decline in the deficit ratio compares with a cumulative decline of 2.3 percentage points in 1996 and 1997. Government deficits are distributed unequally among euro area countries, with larger countries – which, on account of their relative weight, largely determine the fiscal stance in the euro area – tending to show higher deficits in relation to GDP, thereby continuing to restrict fiscal policy flexibility. Five countries had deficit ratios of above 2% in 1998; the ratio in France and Italy being above 2.5% and in Germany, Austria and Portugal between 2% and 2.5%. Of the remaining countries, Belgium and Spain recorded deficits

of between 1% and 2% of GDP, while the deficit ratio of the Netherlands was just below 1%. Ireland, Luxembourg and Finland had budgetary surpluses. The greatest improvement in budgetary positions in 1998 was observed in Ireland and Finland, where government balances were improved by more than 1 percentage point of GDP. In Belgium, Germany and Spain deficits declined by between 0.5 and 1 percentage point, while only marginally declining deficit ratios (by 0.1 or 0.2 percentage point) were recorded in France and Portugal. In Austria the deficit-to-GDP ratio increased in 1998, and in Luxembourg the budgetary surplus declined.

Government debt ratios in the euro area on average remain at a very high level, thereby substantially limiting the budgetary room for manoeuvre in many Member States. The average debt ratio declined by 0.8 percentage point in 1998 to 73.8%, after having fallen marginally in 1997 for the first time since 1991, i.e. since comparable data for the euro area have been available. Hence the debt ratio in the euro area still by far exceeds the 60%

reference value laid down in the Treaty. In 1998 the debt ratio was above 60% in six countries, of which Belgium and Italy had the highest debt ratios, amounting to 117.3% and 118.7% respectively. In the remaining five countries debt ratios stood between 50% and 60% of GDP, with the exception of Luxembourg, which recorded a debt ratio of 6.7%. In 1998 debt ratios declined in almost all euro area countries, with the exception of France and Luxembourg. The largest absolute reductions in debt ratios were observed in Ireland and Belgium.

Fiscal positions largely driven by strong economic activity and declining interest rates

To a large extent budgetary developments in 1998 were driven by factors beyond the direct control of the fiscal authorities, while policy-makers did not appear to have taken an active role in improving the underlying financial positions of general governments. In particular, budgetary positions benefited from stronger economic growth and lower interest rates than in previous years. However, savings in interest spending were used by

Table 5
Fiscal positions in the euro area

(as a percentage of GDP)

General government surplus (+) or deficit (-)

	1995	1996	1997	1998 ¹⁾
Euro area	-4.8	-4.1	-2.5	-2.1
Belgium	-4.0	-3.1	-1.9	-1.3
Germany	-3.3	-3.4	-2.7	-2.1
Spain	-7.1	-4.5	-2.6	-1.8
France	-4.9	-4.1	-3.0	-2.9
Ireland	-2.1	-0.3	+1.1	+2.3
Italy	-7.7	-6.6	-2.7	-2.7
Luxembourg	+1.8	+2.8	+2.9	+2.1
Netherlands	-4.0	-2.0	-0.9	-0.9
Austria	-5.1	-3.7	-1.9	-2.1
Portugal	-5.7	-3.3	-2.5	-2.3
Finland	-4.6	-3.1	-1.2	+1.0

Source: Eurostat.

Note: Euro area aggregates for deficit and GDP are converted into ECU at yearly average exchange rates.

1) Estimation.

General government gross debt

	1995	1996	1997	1998 ¹⁾
Euro area	73.4	75.0	74.6	73.8
Belgium	132.2	128.0	123.4	117.3
Germany	58.3	60.8	61.5	61.0
Spain	64.2	68.6	67.5	65.6
France	52.8	55.7	58.1	58.5
Ireland	78.9	69.4	61.3	52.1
Italy	125.3	124.6	122.4	118.7
Luxembourg	5.8	6.3	6.4	6.7
Netherlands	79.0	77.0	71.2	67.7
Austria	69.4	69.8	64.3	63.1
Portugal	65.9	64.9	61.7	57.8
Finland	58.1	57.8	54.9	49.6

Source: Eurostat.

Note: Euro area aggregates for debt are converted into ECU at end-year exchange rates.

1) Estimation.

governments to cut tax revenues, while progress in reducing primary expenditure was very limited, with the consequence that the primary surplus ratio in the euro area as a whole deteriorated by 0.2 percentage point in 1998 after this indicator had improved over a number of years. Of the euro area countries, Ireland, Italy and Portugal benefited most from lowered interest payments in terms of reducing overall deficits.

Budgetary developments in 1998 were also partly determined by the unwinding of temporary measures on government deficits. Such measures have favourable effects in one year only, improve the budgetary situation at the expense of future budgets or have mere presentational effects. Hence, by their very nature, they do not contribute to fiscal sustainability. To degrees which varied between 0.1 and 1 percentage point of GDP from one country to another, such measures had reduced Member States' general government deficit ratios in 1997. Hence, in order simply to maintain the budgetary positions achieved in 1997, let alone to reach more ambitious targets, a number of countries had to take further corrective action in 1998. In other words, fiscal consolidation efforts taken in 1998 did not fully translate into deficit reduction as a result of the necessary compensation for the temporary measures taken in 1997. From the evidence available, it would appear that further temporary measures played only a minor role in budgetary developments in 1998.

With regard to the evolution of individual items in governments' budgets, the small decrease in the overall deficit in 1998 was achieved by a reduction in the government expenditure ratio (mainly due to the fall in the interest payments ratio) which was strong enough to outpace a decline in government revenue as a share of GDP. In 1996 and 1997 deficit reduction had partly relied on increasing government revenue. In this sense, the general fiscal consolidation strategy pursued in 1998 can be considered as appropriate, although too modest in

magnitude. The reduction in the expenditure ratio in 1998 was not strong enough to permit a rapid decline in government deficits within the euro area. Moreover, although declining, government revenue remained very high. Consideration of the structure of government revenue shows that taxes have represented an increasing share of total revenue in recent years, whereas the share of social security contributions in government revenue has fallen. The share of public investment in GDP has remained relatively stable at a comparatively low level. At the same time, public investment expenditure was marginally higher than overall general government deficits.

With regard to the evolution of government debt, deficit-debt adjustments have played a non-negligible role in reducing debt ratios in the euro area, as was already the case in 1997. Such adjustments reflect various financial transactions that leave the deficit ratio unaffected but have an impact on government debt levels. They occur, in particular, in the case of privatisation, a course of action which has been pursued by most euro area governments in recent years. Debt developments in 1998 also benefited to a considerable extent from lower interest spending, while – as mentioned above – the favourable effect of primary surpluses lost some of the momentum gained in 1997. In addition, in the recent past the composition of government debt has been shifting more towards medium and long-term financing instruments.

Medium-term fiscal plans without sufficient safety margins

Fiscal plans for 1999 and for the medium term signal a slowdown in previous efforts to further consolidate public finances and create better conditions for prolonged economic growth and permanent job creation. This becomes apparent when considering 1999 government budgets and medium-term fiscal strategies as laid down in the Member States' stability programmes, which have been

submitted to the European Commission in accordance with the Stability and Growth Pact. Most countries are still far from attaining the target set out in the Stability and Growth Pact of achieving budgetary positions “close to balance or in surplus” over the medium term. The means of achieving this target and the time frame in which to do so differ from one country to

another owing to significant differences in starting positions and in expected macroeconomic scenarios. The projected fiscal effort in some countries could be regarded as being unambitious in the light of the favourable forecasts for real growth and interest rates. More generally, further consolidation efforts have been postponed (see Box 2).

Box 2

Medium-term budgetary objectives of the Stability and Growth Pact and the policy strategies of Member States

According to the Stability and Growth Pact adopted by the Council of the European Union in 1997, Member States are committed “to adhere to the medium-term objective of budgetary positions close to balance or in surplus”. This objective is considered appropriate “to allow Member States to deal with normal cyclical fluctuations while keeping the government deficit within the 3% of GDP reference value”. For the purpose of multilateral surveillance, Member States are obliged to submit to the Council of the European Union and the European Commission stability programmes (in the case of euro area countries) or convergence programmes (for non-participating Member States) which present the information needed to assess the envisaged budgetary adjustments aimed at reaching the close to balance or surplus position.

Macroeconomic assumptions and fiscal targets enshrined in Member States’ stability programmes

Country	Real GDP growth				Government balance ratio (% of GDP)				Debt ratio (% of GDP)			
	1999	2000	2001	2002	1999	2000	2001	2002	1999	2000	2001	2002
Belgium	2.4	2.3	2.3	2.3	-1.3	-1.0	-0.7	-0.3	114.5	112.2	109.6	106.8
Germany	2		2½		-2	-2	-1½	-1	61	61	60½	59½
Spain	3.8		3.3		-1.6	-1.0	-0.4	0.1	66.4	64.3	61.9	59.3
France	2.7		3.0		-2.3			-0.8	58.7			57.1
Ireland	6.7	6.4	5.8	-	1.7	1.4	1.6	-	52	47	43	-
Italy	2.5	2.8	2.9	-	-2.0	-1.5	-1.0	-	114.6	110.9	107.0	-
Luxembourg	3.4		3.7		1.1	1.2	1.3	1.7	- ¹⁾	- ¹⁾	- ¹⁾	- ¹⁾
Netherlands	2.9	2¼ (1999-2002)			-1.3	-	-	-1.1	66.4	-	-	64½
Austria	2.8	2.6	2.1	2.2	-2.0	-1.7	-1.5	-1.4	63.5	62.2	61.2	60.0
Portugal	3.5	3.5	3.2	3.3	-2.0	-1.5	-1.2	-0.8	56.8	55.8	54.7	53.2
Finland	4.0	2.7	2.6	2.6	2.4	2.2	2.1	2.3	48.5	46.4	44.8	43.2

1) According to Luxembourg’s stability programme, general government debt, which in total represented 6.7% of GDP in 1998, will not increase in the forecasting period.

Euro area Member States’ stability programmes, submitted in late 1998 or early 1999, are aimed at further consolidating general government budgetary positions. However, the envisaged progress in bringing down government deficits and debt levels varies significantly from one country to another and reveals rather unambitious fiscal targets for some countries (see the table above). A number of governments have already achieved balanced budgets or even surpluses and intend to maintain or further improve such positions (i.e. Ireland, Luxembourg and Finland), thereby also allowing debt ratios to fall rapidly or remain at a low level. All other euro area Member States, with the exception of Belgium and Spain, are currently aiming to achieve medium-term deficits of about 1% or higher. Moreover, stability programmes are often based on the assumption of buoyant economic activity over the medium term. The ECOFIN Council concluded that the medium-term objectives of the stability programmes provide a safety margin which allows Member States, in

the event of a normal cyclical downturn, to let automatic stabilisers work without large risk of exceeding the 3% reference value. In this sense, the Council considers the medium-term budgetary situation in the stability programmes to be in line with the requirements of the Stability and Growth Pact. Nevertheless, in the event of a severe or prolonged growth slowdown, government deficits in some countries could easily approach or even breach the 3% deficit limit. Hence, as cyclically adjusted deficits in the euro area as a whole are still high, no sufficient safety margin has as yet been provided for in order to let automatic stabilisers operate fully in a more severe growth slowdown without running the risk of quickly breaching the 3% reference value.

In addition, from a forward-looking perspective, the medium-term target in most stability programmes appears to be rather a minimum requirement for budgetary solvency. It does not envisage procedures to cope fully with the unfunded liabilities implicit in current public pension and health care schemes, nor does it provide for additional budgetary flexibility to address the longer-term structural problems of public finances, in particular the need to reduce high debt ratios at a satisfactory pace.

In the event of a severe or prolonged growth slowdown, government deficits in a number of countries could easily approach or even breach the 3% deficit limit, because current fiscal plans do not incorporate a sufficient safety margin to let automatic stabilisers work fully without the risk of budgetary positions becoming excessively imbalanced. This is all the more important because government debt remains far too high and debt ratios have only started to decline recently, with no sign of the downward movement being rapid. Hence they continue to impose strong pressure on public finances as interest payments absorb a significant share of government revenue. In addition, government budgets and, in particular, unfunded public pension and health care schemes will be confronted with the serious financial consequences of ageing populations over the medium term in almost all euro area countries. For these reasons, budget plans should not only be tailored so as to safeguard public finances against the financial consequences of potential future recessions, but should also build up schemes to cope fully with the implicit future liabilities accumulated within the government sector.

2.4 Foreign trade

Conflicting events marked the international environment that influenced euro area countries' foreign trade during 1998. As mentioned in Section I, the global

macroeconomic environment worsened as a result of declining demand and output in most Asian countries. In the first half of the year these effects were offset by the sustained economic growth in the euro area's main trading partners and the substantial weakening of oil and commodity prices, which helped to dampen import prices. However, in the second half of 1998 the rate of growth of exports in the euro area slowed significantly.

The only data available on overall balance of payments developments for the euro area by the cut-off date (10 March 1999) were trade data produced by Eurostat, based on gross data for exports and imports of goods between the euro area and the rest of the world, excluding intra-euro area transactions (see Table 6 and Chapter II, Section 3.1, on balance of payments statistics).

Over recent years the euro area trade balance with the rest of the world has shown a slightly rising surplus, from 0.9% of GDP in 1995 to 1.7% of GDP in 1997. However, from mid-1998 onwards the worsening in the global economy had a delayed impact on the trade balance of the euro area. In particular, after the first quarter of 1998, euro area export growth was increasingly affected by the global economic environment. Some of the impact may also have been related to the appreciation of euro area currencies. Meanwhile, import volumes increased owing to strong domestic demand and weak foreign

Table 6**Trade in goods of the euro area***(exports (f.o.b.); imports (c.i.f.))*

	1995	1996	1997	1997	1998	1998	1998	1998	1998	1998	1998	1998	1998
				Q4	Q1	Q2	Q3	June	July	Aug.	Sep.	Oct.	Nov.
Exports													
ECU billions	622.5	669.7	761.8	206.5	194.0	203.9	194.3	70.0	72.6	56.2	65.6	68.7	66.0
Annual percentage changes	.	7.6	13.8	13.4	13.9	6.4	0.4	6.5	4.2	1.3	-4.1	-6.2	-0.4
Imports													
ECU billions	562.7	593.9	672.5	180.2	180.5	178.7	169.1	61.6	58.9	49.7	60.4	61.4	59.5
Annual percentage changes	.	5.5	13.2	14.1	14.2	6.6	1.5	10.7	4.3	1.3	-0.9	-3.3	2.7
Trade balance													
ECU billions	59.7	75.8	89.3	26.3	13.4	25.2	25.2	8.4	13.6	6.4	5.2	7.2	6.5
ECU billions, cumulative ¹⁾	59.7	75.8	89.3	89.3	13.4	38.6	63.8	38.6	52.2	58.7	63.8	71.1	77.6

Source: Eurostat.

1) In the year to date. Figures may not add up due to rounding.

prices, but the growth in the total value of imports declined sharply owing to reduced commodity prices.

Over the first 11 months of the year the cumulative surplus in the trade balance reached ECU 77.6 billion, ECU 3.5 billion lower than in the corresponding period in 1997. The value of imports increased by 5.8%,

reaching ECU 649.3 billion for the first 11 months of 1998. For the same period the value of exports, at ECU 726.8 billion, was 4.6% higher in comparison with the first 11 months of 1997. This contrasts sharply with the stronger growth rates seen for imports and exports in early 1998. According to the above figures, the trade balance as a percentage of GDP is expected to have

Table 7**Exports and imports by product of the euro area***(annual percentage changes; exports (f.o.b.); imports (c.i.f.))*

	1996	1997	1997	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998
			Q4	Q1	Q2	Q3	June	July	Aug.	Sep.	Oct.	Nov.	
Exports													
Total		7.6	13.8	13.4	13.9	6.4	0.4	6.5	4.2	1.3	-4.1	-6.2	-0.4
Food, drink and tobacco		4.0	8.1	8.0	10.1	5.0	-2.2	7.1	3.9	0.4	-9.9	-18.1	.
Raw materials		-5.6	18.4	17.1	8.7	-4.4	-6.7	-3.0	-3.1	-3.7	-12.5	-17.2	.
Energy		16.4	10.7	5.6	-6.4	-8.4	-15.2	0.4	-10.2	-15.7	-19.9	-24.2	.
Chemicals		7.0	16.1	17.8	17.8	7.4	0.6	7.4	3.7	-1.9	-0.3	-10.7	.
Other manufactured articles		6.3	11.1	11.4	11.9	4.3	-1.9	3.3	2.6	-1.1	-7.2	-10.9	.
Machinery and transport equipment		8.2	16.4	15.7	17.6	10.1	4.4	10.2	7.4	6.6	-0.5	-3.3	.
Others		31.2	4.5	-2.4	-7.5	-12.6	-17.6	-14.6	-17.0	-17.7	-18.2	69.5	.
Imports													
Total		5.5	13.2	14.1	14.2	6.6	1.5	10.7	4.3	1.3	-0.9	-3.3	2.7
Food, drink and tobacco		1.4	5.9	10.7	12.0	-0.1	0.2	4.7	1.4	1.3	-2.0	-15.5	.
Raw materials		-8.4	13.0	17.0	13.0	1.0	-3.7	7.7	3.0	-2.2	-11.3	-11.3	.
Energy		18.9	9.6	-3.3	-16.2	-14.7	-27.0	-18.4	-25.4	-30.8	-24.7	-34.4	.
Chemicals		3.1	14.6	16.9	21.2	8.1	7.2	11.2	12.7	7.1	2.1	-5.4	.
Other manufactured articles		1.5	12.6	15.4	15.6	8.2	2.7	11.5	7.1	3.7	-2.1	-4.5	.
Machinery and transport equipment		7.9	18.6	23.6	26.0	15.5	11.0	20.4	12.7	13.3	7.9	7.6	.
Others		19.1	-1.1	-7.0	-1.3	-1.7	-4.3	18.7	-11.4	-11.0	11.5	44.1	.

Source: Eurostat.

Note: The commodity breakdown is in accordance with the SITC Rev. 3.

declined by 0.1-0.2 percentage point of GDP in 1998.

These broad trends in trade flows are also discernible when exports and imports are broken down by product (for which data up to October 1998 are available, see Table 7). In particular, the rate of growth of exports declined across all major categories. With regard to the value of imports in the third quarter, negative growth rates were recorded mainly in raw materials and energy owing to decreasing world market prices for such products.

2.5 Bond and stock markets

Long-term bond yields decline further

Long-term government bond yields in industrialised countries declined to historically low levels in the course of 1998. These global developments reflected the continuation of a trend which has been evident in bond markets since 1990 (see Box 3). In the euro area the average level of 10-year government bond yields dropped by almost 150 basis points during 1998 to reach a level of 3.95% by the end of the year. In the United States 10-year government bond yields declined by almost 120 basis points to 4.70% over the same period. As a consequence, the differential between US 10-year government bond yields and comparable yields in the euro area widened to 75 basis points by the end of the year. Developments in Japan differed slightly, with 10-year bond yields declining for most of 1998, eventually by more than 100 basis points, to reach unprecedented levels of below 1% before rising markedly towards the very end of the year. This sharp increase left 10-year bond yields in Japan at slightly above end-1997 levels by the end of 1998.

Further declines in global rates of inflation appeared to play a key role in the declines in long-term interest rates, while successive bouts of exceptional volatility in global financial markets tended to accelerate this

process. The turbulence intensified in the summer months, with concerns about economic conditions in emerging market economies such as countries in Asia, Russia and countries in Latin America. With the debt moratorium and effective default in Russia, as well as a devaluation of the rouble in August, the turbulence intensified and spilled over to the financial markets of industrialised countries.

Against this background, over the summer months the assessment by international financial market participants regarding risk appeared to shift quite dramatically. This was reflected in a generalised “flight to quality” from emerging markets to the bond markets of industrialised countries, favouring highly liquid benchmarks. In addition, in industrialised countries a “flight to safety” was observed from assets with relatively higher risk, such as equities, to bonds. A particular feature of this phenomenon was a significant widening of corporate bond interest rate spreads vis-à-vis government bonds with comparable maturities in the United States. This, in turn, led to concerns regarding the possibility of the emergence of a “credit crunch” in the United States. In contrast, in the euro area, given the differences in financial market structure, there was little discernible evidence of such concerns.

The aforementioned developments in emerging markets appear to have had an impact on global financial markets via two distinct channels that tended to reinforce one another. First, although developments may have partly reflected the influence of “safe-haven” flows, they also seemed to lead to a downward reassessment of the prospects for global economic growth. The expectation of slower global growth coupled with the associated decline in commodity prices also appeared to lead to a downward reassessment of the global inflation outlook by financial markets. A second factor was increased concern about the vulnerability of the global financial system to developments in individual financial markets or the difficulties of some large financial institutions.

Box 3

Accounting for the decline in long-term bond yields to historically low levels

By the end of 1998 long-term bond yields in industrialised countries had reached levels that in many cases were historically unprecedented. The average level of 10-year bond yields in the euro area was the lowest recorded since the late 1940s, with yields in some individual countries reaching exceptionally low levels. In the United States 10-year government bond yields reached levels that had not been seen since before the mid-1960s. The most extreme case was Japan, where 10-year yields temporarily reached levels of below 1% during 1998.

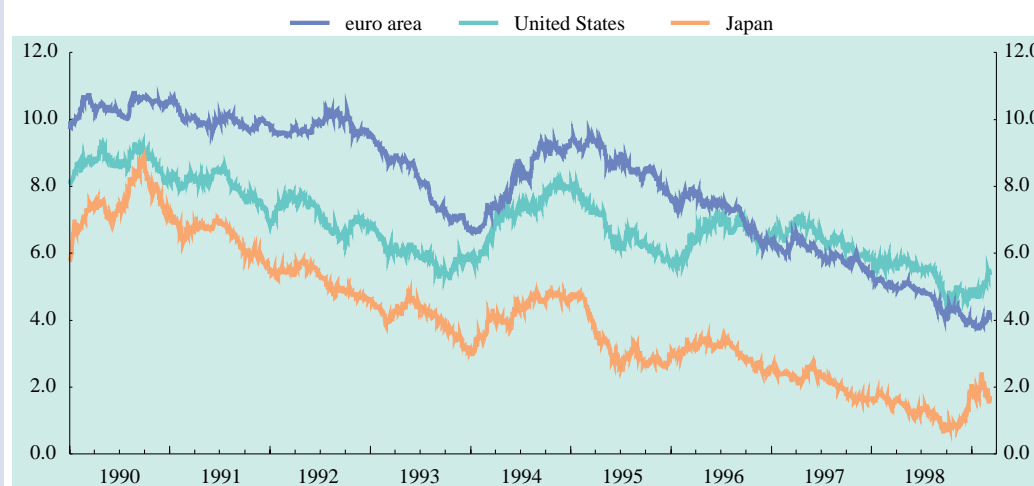
These developments in global bond markets reflect the continuation of a trend that has been common to industrialised countries since 1990, with the exception of a brief interruption during 1994 when international bond markets endured a period of turbulence. Long-term nominal interest rates represent expectations of the real interest rate (including risk premia) and inflation expectations. Among these factors, the key influence on this longer-term global decline in bond yields has been the simultaneous decline in global rates of inflation, as well as an associated decline in longer-term inflation expectations reflecting, in particular, increased worldwide confidence in the ability of monetary policy to deliver low and stable rates of inflation in the longer term.

In line with the decline in long-term nominal interest rates, real interest rates – although they are difficult to measure – have also fallen. First, the enhanced price stability orientation of monetary policy may have contributed to a reduction in the risk premia associated with the inflation variability that tends to be embedded in long-term real rates of interest. Since inflation variability tends to be high when the level of inflation is high, the global decline in inflation may have been coupled with a general decline in inflation uncertainty. Second, declines in general government deficit and debt-to-GDP ratios, that have reduced the demand of the public sector on global capital markets, also played an important role. Furthermore, these improvements in fiscal positions may also have contributed to declines in risk premia related to concerns about longer-term sustainability. An additional factor in the euro area has been the gradual disappearance of exchange risk premia, which has facilitated a convergence of real long-term interest rates towards the levels of those countries with the lowest yields.

After mid-1997, when concerns about the economic situation in some Asian countries initially emerged, declines in nominal long-term interest rates tended to accelerate and it seemed that the bond markets of industrialised countries had benefited from safe-haven flows. A similar pattern was also observed during the turbulence in the international financial markets in autumn 1998. These developments would tend to suggest that while the low levels of long-term bond yields in industrialised countries primarily reflect structural factors, the possibility of a temporary shift of international capital cannot be excluded.

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

(percentages per annum; daily data)



Sources: ECB and BIS.

Note: Long-term government bond yields refer to 10-year bonds or the closest available bond maturity.

Towards the end of the autumn of 1998 financial market expectations of cuts in the key central bank interest rates in both the United States and the euro area countries heightened. The subsequent cuts in interest rates in these economies also facilitated further declines in long-term bond yields.

After mid-October 1998 the turbulence in the financial markets gradually began to subside. The catalyst for this turnaround seemed to be the agreement on reform packages in Brazil and Japan and the reaction of the monetary authorities in the United States to perceived risks for financial stability. Despite some reversal in the trend of bond yields in many industrialised countries towards the end of the year, yields continued to decline in the euro area. These developments would tend to reinforce the view that longer-term expectations for inflation dropped throughout 1998, particularly in the euro area.

In January 1999 long-term bond yields in the euro area dropped further to levels of well below 4%. This development was supported by an international portfolio reallocation in favour of euro-denominated securities once the changeover was seen to have progressed smoothly. During February 1999, however, long-term bond yields in the euro area edged upwards, primarily reflecting a spillover from the United States. Nonetheless, during the month the differential between euro area and US long-term interest rates widened further.

Long-term interest rate differentials remain stable in the euro area

At the beginning of 1998 the deviation between the highest and lowest 10-year government bond yields in the euro area stood at an already very low level of just under 40 basis points. Following the announcement in May 1998 of the selection of those countries that would adopt the single currency from 1 January 1999, remaining long-term interest rate differentials among the participating countries narrowed further. This

development reflected in part the progress towards the closing of short-term interest rate differentials as well as the elimination of intra-euro area exchange risk premia. The volatility in global financial markets did not, however, significantly affect long-term interest rate differentials within the euro area. Although a temporary “flight to liquid benchmarks” in the autumn months led to a widening of long-term interest rate differentials, this development was later quickly reversed.

The relative stability of low long-term interest rate differentials during this period was a notable development, since long-term interest rate differentials within the euro area have often widened in the past, sometimes by significant amounts, in times of turbulence in the international financial markets. The relative resilience of long-term interest rate differentials during this period highlights the beneficial influence of the EMU process on financial stability within the euro area. The remaining deviation between the highest and lowest long-term interest rates within a relatively tight range of below 20 basis points in early 1999 appears to be, to a large extent, a reflection of differences in the size, depth, liquidity and structure of national government bond markets.

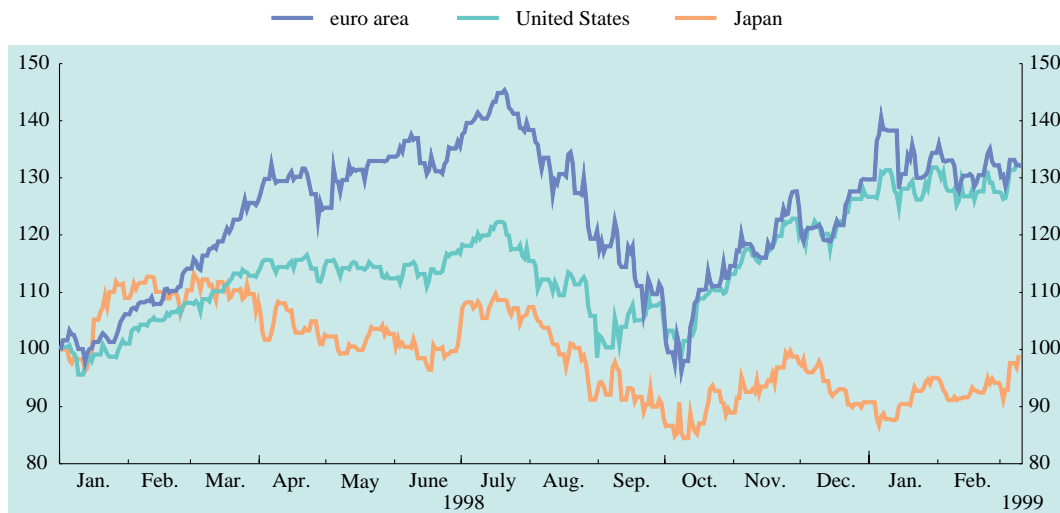
Despite turbulence, global stock markets show overall increases

Stock markets in most industrialised countries experienced a high degree of volatility during 1998. During the first half of the year significant increases were observed. The largest increases were seen in the euro area, where, by mid-July 1998, the broad Dow Jones EURO STOXX index was almost 45% above end-1997 levels. By mid-July in the United States the Standard and Poor's 500 index was more than 20% above end-1997 levels, while in Japan an increase of almost 10% in the Nikkei 225 index was observed over the same period. As a consequence, by mid-1998 key stock market valuation indicators such as price-earnings ratios reached historically high levels across most

Chart 7

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

(1 January 1998=100; daily data)



Sources: Reuters for the euro area; BIS for the United States and Japan.

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.

of the industrialised countries. Similarly, corporate dividend yields reached historically low levels. Although the increases in price-earnings ratios may, in part, have reflected the simultaneous declines observed in global long-term interest rates, the departure of valuation measures from levels that were more typical of historical experience appeared to lead, during the summer, to heightened concerns about the medium-term sustainability of international stock price levels.

Following the outbreak of turbulence in the financial markets of emerging economies, there was a "flight to safety" from stock markets to government bond markets across the industrialised countries. This phenomenon was reflected in a particularly large decline in the broad Dow Jones EURO STOXX index of almost 35% between mid-July and early October 1998. In the United States stock prices dropped by almost 20% from a peak in mid-July to a trough in early October, while a decline of almost 25% was observed in Japan. Although equity market corrections are a periodic feature of all major economies, declines of such magnitude across a majority

of industrialised countries have been relatively uncommon. A key factor in this development may have been perceptions that the high stock price levels observed in mid-1998 were not sustainable and hence vulnerable to sharp changes in earnings expectations and equity risk premia. Concerns about emerging economies seemed to lead to a deterioration in both of these factors. A notable feature of the declines in stock markets was a sharp downgrading of bank and financial stock prices across all major markets.

However, sentiment in global financial markets changed once again during the last quarter of 1998, with stock prices showing a significant recovery after the first week of October 1998. Taking 8 October 1998 as the turning-point in global stock markets, the increase in the euro area broad Dow Jones EURO STOXX index was around 35% from that day until end-December 1998. Meanwhile, in the United States the Standard and Poor's 500 index showed an increase of about 28% over the same period, while the recovery in Japan was less robust, with the Nikkei 225 index increasing by just over 6% over the period from 8 October 1998 to

end-December 1998. These developments left euro area stock prices below the peaks of mid-July, although they stood significantly higher than their end-1997 levels. By the end of the year stock prices in the United States had risen above their previous peak levels. By contrast, Japanese stock prices demonstrated a year-on-year decline.

At the very beginning of 1999 sharp increases in euro area stock prices were observed which mainly reflected international portfolio reallocation in favour of euro-denominated securities. These increases were later reversed owing to a further bout of volatility in global financial markets that reflected market uncertainties about the economic and financial situation in Brazil. These uncertainties also provoked similar declines in the United States and Japan. During February 1999, mainly reflecting global stock market spillovers and the upturn in domestic long-term bond yields, stock prices in the euro area were subject to some volatility, although they remained above end-1998 levels.

Issuance of ECU bonds increases and ECU spreads close

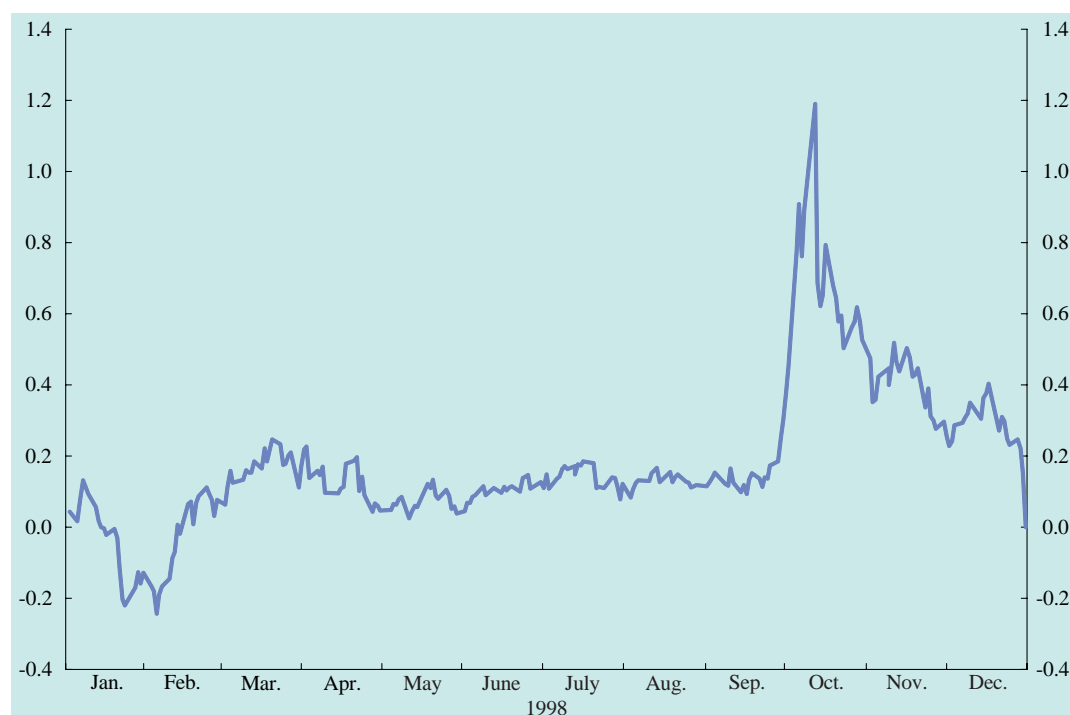
The outstanding amount of bonds denominated in ECU increased in the course of 1998, as it had in 1997, after having decreased over the period from 1993 to 1996. The turnover in the ECU bond markets, when measured on the basis of trades settled in one of the two international securities depositories of the euro area (Cedel Bank and Euroclear), also increased markedly in the course of 1998. These developments, which occurred largely in the second half of 1998, were related to the fact that the ECU was increasingly seen by some market participants as a useful conduit into euro-denominated bonds at the beginning of the third stage of EMU, reflecting the expected one-for-one conversion to the euro of the theoretical ECU.

The spread between market and theoretical (or "basket") ECU exchange rates, which had been narrowing gradually since early 1996

Chart 8

Difference between market and theoretical ECU exchange rates

(in percentages; daily data)



Sources: Reuters and ECB.

and had reached positive values at the end of 1997, remained at values of between zero and +20 basis points during most of 1998. The spread became negative, however, for a short period between mid-January and mid-February 1998, reaching a level of -25 basis points. At the beginning of October, during an episode of financial market instability, the ECU spread widened sharply, reaching +120 basis points at its peak on 12 October. The increase in the ECU spread appeared to be related to technical factors such as the unwinding, in particular by some hedge funds, of short positions in the market ECU. These short positions were sometimes associated with long positions in the basket ECU, resulting in a strategy aimed at profiting from the expected narrowing of the spread in the run-up to the start of the third stage of EMU on 1 January 1999. As tensions eased, however, the spread decreased gradually, falling below 50 basis points at the end of October. Thereafter it continued to follow a declining trend until the exchange rates of the market and basket ECU, as expected, became equal at the end of 1998.

2.6 National monetary policies during 1998

Monetary policy focused on the future euro area

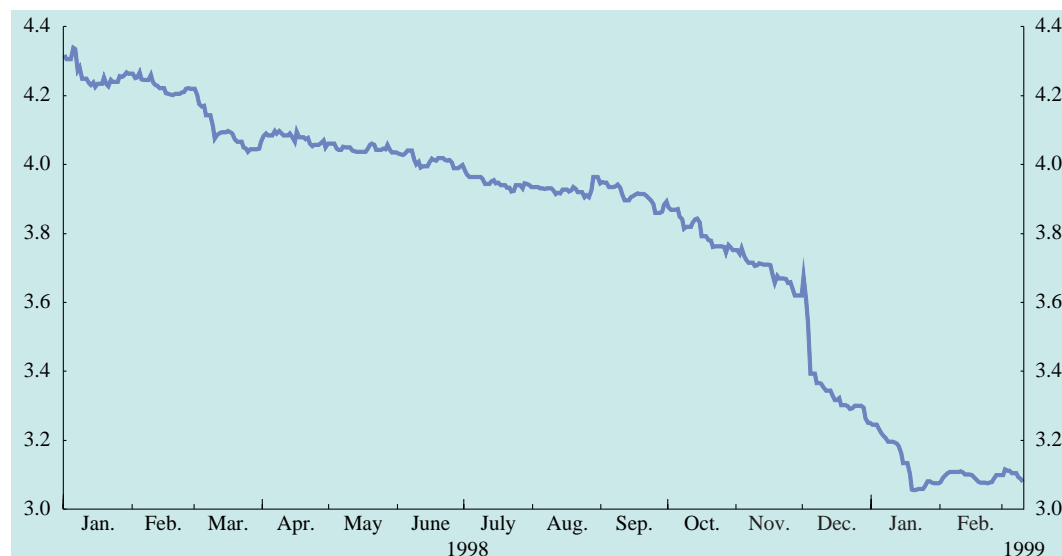
During 1998 the focus of monetary policies in euro area Member States gradually shifted from a national to a euro area perspective. This was necessary since the existence of significant lags in the transmission of monetary policy implied that decisions taken at the individual country level increasingly influenced the conditions for price stability in Stage Three of EMU. In addition, the need for the convergence of short-term interest rates at the end of Stage Two required close co-operation between euro area NCBs in the context of the Governing Council of the ECB in order to reach a common position concerning the appropriate starting level of interest rates for the euro area as a whole in Stage Three.

At the beginning of May 1998, when the decision on the participating countries was taken, diverse levels of short-term interest

Chart 9

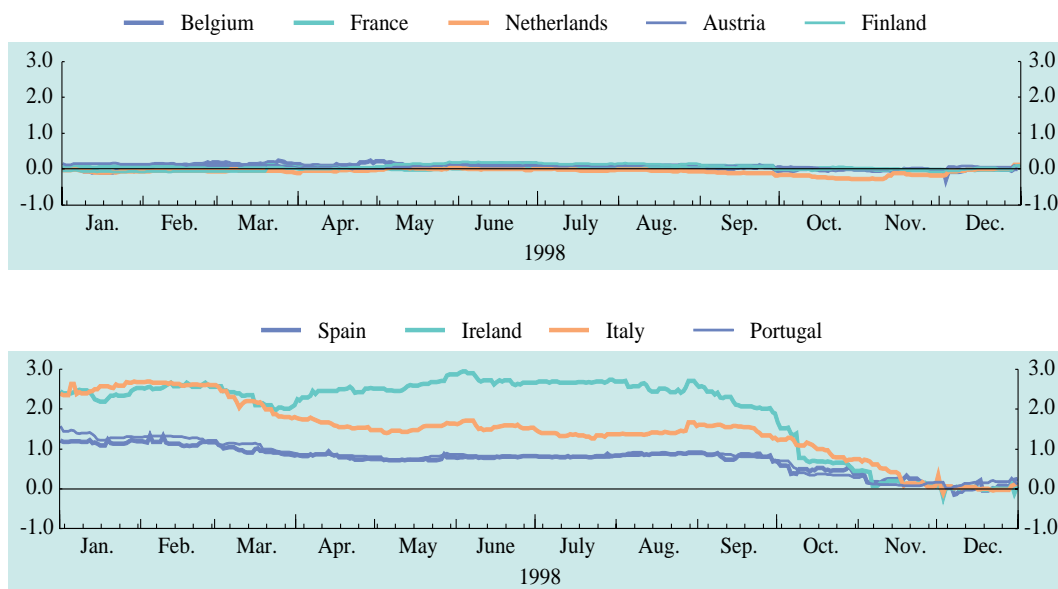
Three-month interest rate in the euro area

(percentages per annum; daily data)



Source: ECB.

Note: Euro area average of national three-month interbank rates until 29 December 1998; three-month EURIBOR from 30 December 1998 onwards.

Chart 10**Short-term interest rate differentials against Germany***(in percentage points; daily data)**Source: National data.**Note: Short-term interest rates refer to three-month maturity.*

rates existed within the euro area. One group of countries (Belgium/Luxembourg, Germany, France, the Netherlands, Austria and Finland) had closely aligned monetary policies and a relatively low level of short-term interest rates. In four other countries (Spain, Ireland, Italy and Portugal) short-term interest rates were significantly above those of the first group. In the remainder of 1998 monetary policy stances thus had to be adjusted and a common level of short-term interest rates had to be found which was suitable for the maintenance of price stability in the euro area.

Against a favourable outlook for price stability in the euro area, with moderate monetary growth, exchange rate stability and indications of a weakening of economic growth in the second half of the year, the convergence process took place through gradual reductions in official interest rates in the second group of countries towards the lowest levels in the euro area (see Chart 10). This convergence process accelerated in the last few months of 1998 and was finally completed in December 1998, when all the NCBS

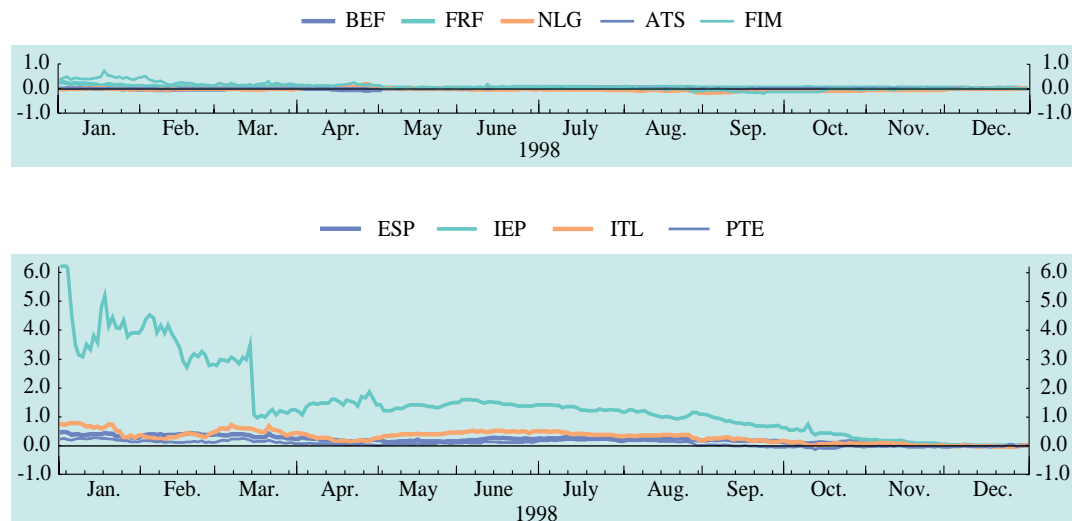
participating in the single monetary policy as from the start of Stage Three lowered their key central bank interest rates in a co-ordinated move. This decision reflected a consensus within the Governing Council of the ECB on the basis of a common assessment of the economic, monetary and financial situation in the euro area. The joint reduction in interest rates was to be seen as a de facto decision on the level of interest rates with which the Eurosystem would start Stage Three.

The path of monetary policies and the exchange rate developments within the ERM during 1998 were very much shaped by the decision taken during the weekend of 2-3 May 1998, when the countries that were to adopt the euro as the single currency as from 1 January 1999 were selected. On that occasion, the bilateral exchange rates to be used in determining the euro conversion rates were pre-announced to be the ERM bilateral central rates for the participating currencies. The pre-announcement implied that forward exchange rates rapidly converged towards the pre-announced bilateral exchange rates. This,

Chart 11

Exchange rate deviations from ERM bilateral central rates against the Deutsche Mark

(in percentages; daily data)



Source: National data.

in turn, resulted in a mechanical relation between the path of convergence of spot exchange rates to central rates and the path along which money market interest rate differentials narrowed.

The pre-announcement helped to stabilise the ERM for the remainder of the year by reducing uncertainties regarding the changeover to the single currency. Periods of significant turbulence in international financial markets, in particular over the summer, did not disturb ERM exchange rates, which remained closely aligned with their expected paths. These developments suggested that a high degree of confidence in the successful creation of the euro existed among market participants. Overall, and reflecting the process of convergence of official interest rates described above, the euro area average of money market interest rates at the three-month maturity fell by around 70 basis points from the beginning of 1998 to the end of November 1998 and by a further 30 basis points in December 1998, reaching 3.25% at the end of the year (see Chart 9).

The following two sections describe in more detail the monetary policies pursued by the

NCBs of the euro area Member States in the course of 1998.

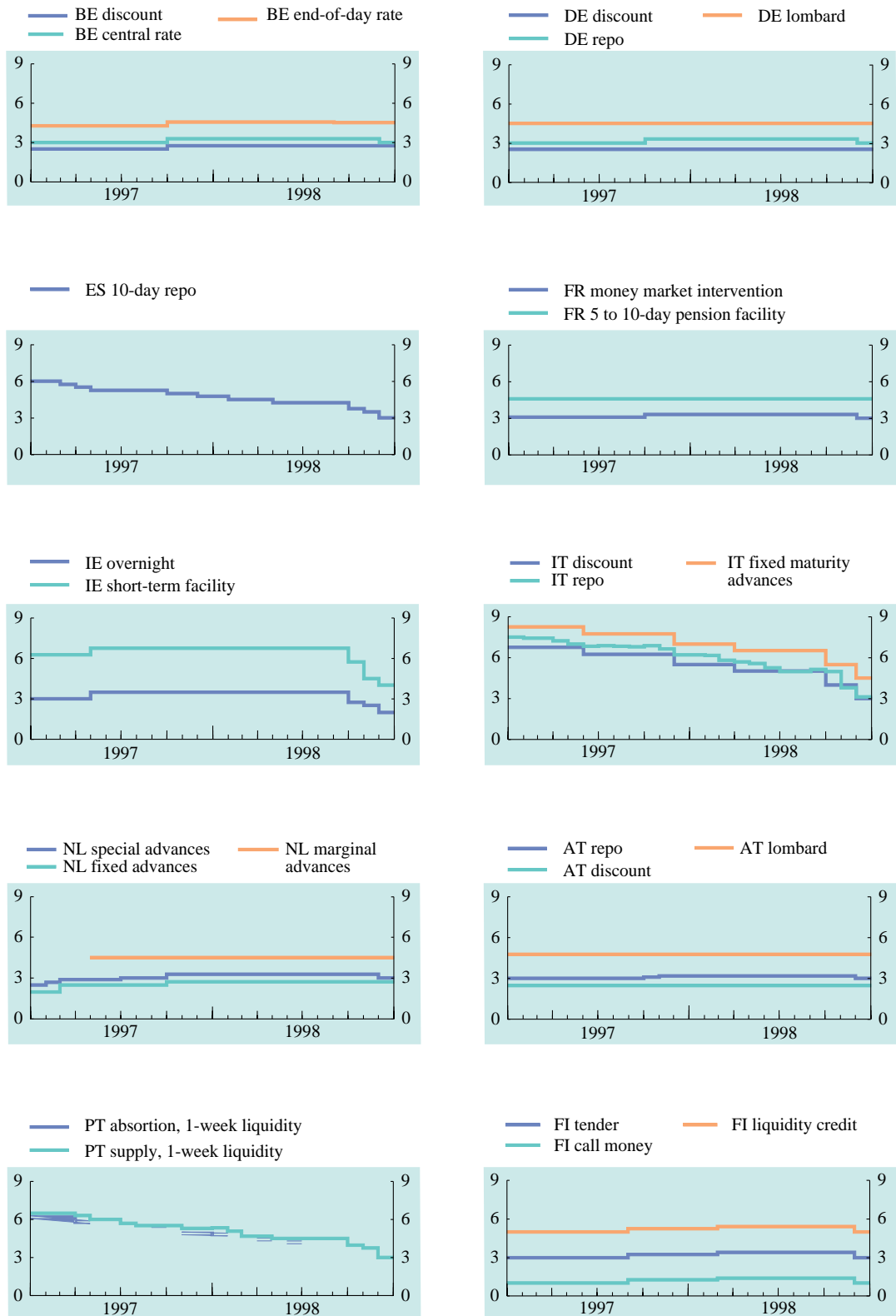
Closely aligned policies in seven countries during 1998

The Deutsche Bundesbank kept its key interest rates stable for most of 1998. Until December 1998 the securities repurchase rate stood at 3.3%, the level to which it had been raised in October 1997, while the lombard rate and the discount rate stood at 4.5% and 2.5% respectively, having remained unchanged since April 1996 (see Chart 12). In December 1997 the Bundesbank confirmed its two-year monetary target of around 5% per annum, reducing the target corridor for the annual rate of M3 growth in the fourth quarter of 1998 to 3-6% from 3.5-6.5% in the previous year. At the same time the Bundesbank explained that following the selection of the countries adopting the single currency as from 1 January 1999, monetary policy would have to widen its focus to take greater account of the monetary policy situation in the whole of the euro area. During most of 1998 M3 growth moved continuously within the target corridor. In

Chart 12

Official and key interest rates

(end-of-month data; in percentages)



Source: National data.

the last quarter of 1998 M3 grew by 5.6% compared with the average level in the fourth quarter of 1997, and by an annual rate of 5.1% compared with the final quarter of 1996. Therefore, both the monetary target for 1998 and that for the two-year period 1997-98 were met. On 3 December 1998 the Bundesbank cut its securities repurchase rate to 3% as part of the co-ordinated move of the euro area NCBs which was deemed appropriate in view of the outlook for price stability in the euro area as a whole.

The Monetary Policy Council of the Banque de France decided to carry over its monetary policy guidelines for 1997 unchanged into 1998, with the aim of maintaining price stability – defined as CPI growth not exceeding 2% – in 1998 and in the medium term. Monetary policy continued to be defined in terms of two intermediate objectives: first, a stable external value of the French franc against the group of the most credible ERM currencies; and, second, a 5% target for the growth of the money supply (in terms of narrow and broad monetary aggregates). The French franc remained very stable throughout 1998, trading close to its central rates within the ERM. For most of the period up to October the growth of M3 was slightly below 5%, decreasing to 2.7% in December 1998, compared with 2.0% at the end of 1997. In December 1998 the monetary aggregates M1 and M2 grew by 3.1% and 4.3% respectively, compared with 6.5% and 7.8% in December 1997.

The NCBs of Belgium, the Netherlands and Austria continued to focus on the stability of the exchange rates of their national currencies vis-à-vis the Deutsche Mark in the ERM. The currencies of all three countries showed a high degree of stability within the ERM, with forward and spot exchange rates remaining close to German levels throughout the year (see Chart 11).

Suomen Pankki continued to target an annual increase in the indicator of underlying inflation of around 2% in the context of the Finnish markka's participation in the ERM.

Against a background of strong economic growth and signs of upward pressures on prices, Suomen Pankki increased its tender rate by 15 basis points to 3.4% on 19 March 1998. Later, in the context of exchange rate stability within the ERM and despite economic activity continuing at a strong pace, inflationary pressures gradually receded in Finland, with the 12-month increase in the indicator of underlying inflation reaching 0.4% in December 1998. On 3 December 1998 the tender rate was reduced by 40 basis points to 3% in the context of the co-ordinated move by all euro area NCBs.

Smooth convergence towards low interest rate levels in Spain, Ireland, Italy and Portugal

The Banco de España defined a target for CPI inflation of close to 2% in 1998. During the year the 12-month growth rate of the CPI moved in line with this target. Developments in prices were particularly subdued from September 1998 onwards, with CPI inflation reaching 1.4% in December 1998. Furthermore, the exchange rate of the Spanish peseta remained relatively stable throughout the year, steadily converging to the pre-announced rates. This context allowed the Banco de España gradually to lower its 10-day repurchase rate from 4.75% at the beginning of the year to 3% on 3 December 1998, with the main adjustment occurring towards the end of the year.

In Ireland monetary policy was geared towards ensuring a smooth transition towards Monetary Union. Rapid economic growth implied the maintenance of significant short-term interest rate differentials against the euro area countries with the lowest interest rates in 1998. Reflecting the strength of the Irish pound in the ERM, the Irish pound's central rate was revalued by 3% in March 1998 to a level consistent with economic fundamentals and with sustained convergence. This notwithstanding, until late 1998 the persistence of sizable short-term interest rate differentials vis-à-vis other euro

area countries supported a strong Irish pound within the ERM, thus contributing to containing inflationary pressures in Ireland (see Charts 10 and 11). The convergence of Irish money market interest rates took place mainly in the autumn of 1998. The Central Bank of Ireland first reduced its repurchase rate by 125 basis points to 4.94% with effect from 12 October 1998. On 9 November 1998 it reduced this rate by another 125 basis points and on 3 December 1998 a further reduction of 69 basis points to 3% with effect from 4 December 1998 was announced.

In 1998 the Banca d'Italia followed a policy aimed at price stability, based on a broad range of indicators and a reference value for broad money growth of 5%, in order to foster the completion of the convergence process and continued exchange rate stability vis-à-vis participating currencies. In the context of rapid monetary expansion and increases in prices and labour costs of above the euro area average, the Banca d'Italia gradually lowered official interest rates over the year, first reducing its discount rate by 50 basis points on 22 April 1998. Further cuts in interest rates occurred in the fourth quarter of the year, with reductions in the discount rate of 100 basis points at the end of October 1998, 50 basis points on 3 December 1998 and, finally, a further 50 basis points on 23 December 1998 to 3% (see Chart 12).

The Banco de Portugal was able to achieve its policy objective of keeping the exchange rate of the Portuguese escudo broadly stable in the ERM during 1998. Against the background of Portuguese inflation rates of above the euro area average, the narrowing of short-term interest rate differentials vis-à-vis the euro area countries with the lowest short-term interest rates occurred mainly in the second half of the year. The repurchase rate was reduced, in several steps, from 5.3% at the beginning of the year to 3% on 3 December 1998.

2.7 The monetary policy of the Eurosystem

At the start of Stage Three of EMU the Eurosystem – comprising the ECB and the NCBs of the 11 Member States which adopted the euro on 1 January 1999 – assumed the task of conducting the single monetary policy for the euro area as a whole. With a unified monetary policy, policy decisions must be made in a manner that reflects conditions across the euro area in its entirety, rather than specific regional or national developments. As described in Section 2.6, the changeover of monetary policies to Stage Three has been smooth, reflecting the close co-operation during Stage Two and the euro area perspective already adopted by participating NCBs in 1998.

In order to guide market expectations in the resulting new institutional environment, the Governing Council of the ECB has announced a stability-oriented monetary policy strategy. This section first describes this strategy and then turns to the monetary policy decisions which were taken in the first few weeks of 1999 on the basis of this strategy.

The stability-oriented monetary policy strategy of the Eurosystem

On 13 October 1998 the Governing Council announced the main elements of the stability-oriented monetary policy strategy of the Eurosystem, which will guide monetary policy decisions in Stage Three of EMU. In subsequent speeches and statements, the President of the ECB and other members of the Governing Council have elaborated on the details of the strategy. In its first Monthly Bulletin (January 1999) the ECB published a detailed article describing the strategy.

The Eurosystem's monetary policy strategy consists of three main elements: the publication of a quantitative definition of the primary objective of monetary policy, namely price stability, and the two "pillars" of the strategy used to maintain this objective.

These pillars are a prominent role for money, as signalled by the announcement of a quantitative reference value for the growth of a broad monetary aggregate, and a broadly based assessment of the outlook for price developments and risks to price stability in the euro area as a whole.

The quantitative definition of price stability

Publishing a quantitative definition of price stability serves two purposes. First, it gives clear guidance to market expectations of future price developments. Second, it gives the public a measure for assessing the success of the single monetary policy, thereby strengthening the accountability of the Eurosystem.

The Governing Council has defined price stability as “a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2%”. Price stability according to this definition “is to be maintained over the medium term”. The phrase “below 2%” clearly delineates the upper boundary for the rate of measured inflation in the HICP that is consistent with price stability. At the same time, the use of the word “increase” in the definition clearly signals that deflation, i.e. prolonged declines in the level of the HICP index, would also not be deemed consistent with price stability.

Among economists in academic, financial and central banking circles, there is broad consensus that various forms of so-called “measurement bias” can exist in consumer price indices (CPIs). These biases arise mainly from changing spending patterns and quality improvements in those goods and services included in the basket used to define a specific price index. Such biases cannot always be fully corrected in the construction of price indices. The measurement bias typically causes CPIs to overstate slightly the “true” rate of inflation. By only referring to “increases”, without specifying an explicit lower boundary for inflation rates consistent with price stability, the announced definition

of price stability allows both for the possible existence of measurement bias in the HICP for the euro area and for uncertainty regarding its magnitude.

The chosen definition identifies the HICP as the price index that should be used in the assessment of whether price stability has been achieved. The use of the HICP is consistent with the public’s focus on consumer prices in its assessment of developments in the price level. In addition, the HICP is harmonised across the countries participating in Monetary Union. Focusing on the HICP for the euro area guarantees the adoption of an area-wide perspective in monetary policy-making.

The statement that “price stability is to be maintained over the medium term” reflects the need for monetary policy to have a forward-looking, medium-term orientation. It also acknowledges the existence of short-term volatility in prices, resulting from non-monetary shocks to the price level, such as indirect tax changes or variations in commodity prices, that cannot be controlled by monetary policy. As the Eurosystem cannot be held responsible for these short-term shocks to the price level, assessing the performance of the single monetary policy over the medium term ensures genuine and meaningful accountability for the Eurosystem.

The Eurosystem’s definition of price stability is in line with the definitions used by most NCBs in the euro area prior to the transition to Monetary Union, ensuring an important element of continuity with their successful monetary policy strategies.

The two pillars of the strategy

The reference value – a prominent role for money

To maintain price stability according to its definition, the Governing Council has adopted a strategy that assigns a prominent role to money, in recognition of the monetary origins of inflation over the longer term. Money constitutes a natural, firm and reliable

“nominal anchor” for monetary policy aiming at the preservation of price stability. To signal the prominent role assigned to money, the Governing Council has announced a quantitative reference value for monetary growth as one pillar of the overall stability-oriented strategy. The reference value is intended to help the Governing Council to analyse and present the information contained in the monetary aggregates in a manner that offers a coherent and credible guide for monetary policy.

The quantitative reference value for monetary growth was derived in a manner that is consistent with – and serves the maintenance of – price stability. Consequently, substantial or prolonged deviations of monetary growth from the reference value would, under normal circumstances, signal risks to price stability over the medium term.

The reference value is designed to help maintain price stability over the medium term. Therefore, in the first instance, a deviation of monetary growth from the reference value will prompt further analysis to identify and interpret the economic disturbance that caused the deviation. If this analysis suggests that the disturbance identified indeed points to a threat to price stability, monetary policy would respond in a manner appropriate to counter this risk. Thus, interest rates will not be changed “mechanistically” in response to such deviations or attempt to return monetary growth to the reference value over the short term. For this reason, the reference value is different from a target that the central bank intends to meet at a specific point in time and against which it wishes to be held accountable.

The relationship between actual monetary growth and the reference value is being analysed regularly and thoroughly by the Governing Council. This assessment is based on the three-month moving average of the 12-month growth rate of money. Using this approach ensures that erratic monthly outturns in the data do not unduly distort the information contained in the monetary

aggregate, thereby reinforcing the medium-term orientation of the reference value. The results of this analysis and its impact on monetary policy decisions are explained to the public. Through this process, monetary policy decision-making is being made clearer and more transparent.

The Governing Council has chosen to announce a reference value for a broad monetary aggregate (M3). This aggregate includes not only currency in circulation and shorter-term bank deposits, but also both the shares/units issued by money market funds (MMFs) and the money market paper and short-term debt securities issued by Monetary Financial Institutions (MFIs).

On 1 December 1998 the Governing Council announced its reference value for M3 growth. The reference value for monetary growth has been derived using the well-known relationship between money, on the one hand, and prices, real gross domestic product (GDP) and the velocity of circulation, on the other. In view of the medium-term orientation of monetary policy, it was deemed appropriate to base the derivation of the reference value on the following medium-term assumptions:

- price stability must be maintained, in accordance with the Eurosystem’s definition, so that year-on-year increases in the HICP for the euro area are below 2%;
- the medium-term trend of real GDP growth lies in the range of 2-2½% per annum; and
- over the medium term the decline in the velocity of circulation of M3 is in the approximate range of ½-1% per annum.

In setting the reference value for monetary growth, the Governing Council emphasised that the Eurosystem’s published definition of price stability limits increases in the HICP for the euro area to *below* 2%. Furthermore, the Governing Council took the view that the actual trend decline in velocity is likely to lie

somewhat below the upper boundary of its ½-1% range. Taking account of these two factors, the Governing Council decided to set the first reference value for M3 growth at 4½% per annum. The Governing Council intends to review this reference value in December 1999.

The presentation of monetary analysis to the public will naturally focus on developments in the “key” broad monetary aggregate M3 in relation to the published reference value for monetary growth. Nevertheless, developments in other monetary aggregates, which are in fact components of M3, and in the counterparts of the key aggregate in the consolidated MFI balance sheet are also being thoroughly assessed on an ongoing basis by the Eurosystem. Such analysis provides useful background information that helps in the assessment of developments in M3. In its February 1999 Monthly Bulletin the ECB published a detailed article on the definition of the euro area monetary aggregates and their role in the monetary policy strategy of the Eurosystem.

A broadly based assessment of the outlook for price developments

Although the monetary data contain information vital to guide monetary policy-making, on their own they do not constitute a complete summary of all the information about the economy required to set an appropriate monetary policy for the maintenance of price stability. Therefore, in parallel with the analysis of M3 growth in relation to the reference value, a broadly based assessment of the outlook for price developments and the risks to price stability in the euro area plays a major role in the strategy of the Eurosystem. This assessment is being made using a wide range of economic indicators.

This wide range of indicators includes many variables that have leading indicator properties for future price developments. These variables include, inter alia, wages, exchange rates, bond prices and the yield

curve, various measures of real activity, fiscal policy indicators, price and cost indices and business and consumer confidence surveys. Obviously, it will also be useful to look at inflation forecasts derived using all these variables when assessing whether the monetary policy stance is appropriate. In this regard, the Eurosystem will evaluate the full range of inflation forecasts produced by international organisations, other authorities, market participants, etc., and will also produce its own internal assessment of the future inflation outlook.

The Eurosystem’s stability-oriented monetary policy strategy guides the Governing Council’s monetary policy decisions in Stage Three of EMU. This strategy will ensure that price stability over the medium term is maintained in a credible and lasting manner throughout the euro area. This is the best contribution that the single monetary policy can make to raising the living standards of Europe’s citizens.

The conduct of monetary policy in the first few weeks of Stage Three

As from the start of Stage Three, the Eurosystem conducts open market operations, offers standing facilities and requires credit institutions to hold minimum reserves on accounts with the NCBs in order to achieve its monetary policy objective (see Chapter II, Section I, for a discussion of the completion of the monetary policy framework during 1998). Among the open market operations, the “main refinancing operation”, i.e. a weekly tender with a two-week maturity, is the main vehicle for steering short-term market interest rates, providing liquidity to the banking system and signalling the monetary policy stance. In addition, the Eurosystem conducts monthly “longer-term refinancing operations” with a maturity of three months, which are normally not intended to send policy signals to the market. The Eurosystem offers two standing facilities: the marginal lending facility and the deposit facility, which aim, respectively, at providing

and absorbing overnight liquidity to credit institutions. The interest rates on the two standing facilities provide a general signal regarding monetary policy intentions over the medium term and constitute a corridor for the overnight market interest rate. Finally, the Eurosystem's minimum reserve system fulfils the functions of enhancing the demand for central bank money as well as smoothing interest rate developments over the short term.

On 22 December 1998 the Governing Council announced the first interest rates for the monetary policy operations of the Eurosystem. The interest rate applicable to the first main refinancing operation, offered in the form of a fixed rate tender for settlement on 7 January 1999, was set at a level of 3.0%. In addition, the interest rate for the marginal lending facility was set at a level of 4.5% and the interest rate for the deposit facility at a level of 2.0% at the start of Stage Three (i.e. 1 January 1999). However, as a transitional measure, between 4 and 21 January 1999 the interest rate for the marginal lending facility was set at a level of 3.25% and the interest rate for the deposit facility at a level of 2.75% (see Chart 13). The

latter measure was mainly of a technical nature, aimed at helping credit institutions to adapt to the functioning of the integrated euro area money market.

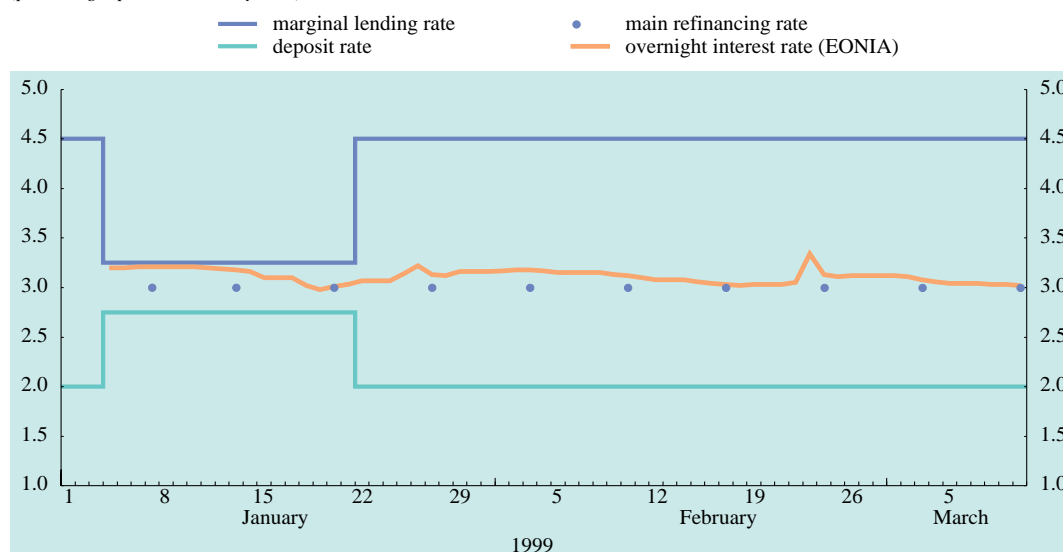
The decision on the level of the interest rate on the main refinancing operations took into consideration the co-ordinated reduction of key central bank interest rates in the euro area of 3 December 1998. As explained by the ECB on 3 December, the joint reduction had to be seen as a de facto decision on the level of interest rates with which the Eurosystem would start Stage Three and was intended to be maintained for the foreseeable future. Indeed, at its subsequent meetings, on each occasion having taken into consideration the latest available monetary, financial and other economic data against the background of its stability-oriented monetary policy strategy, the Governing Council confirmed that forthcoming main refinancing operations would be conducted at a fixed rate of 3.0%.

These decisions were backed by the fact that developments in the broad monetary aggregate M3 were not signalling significant risks for price stability. At an annual growth rate of around 4.5%, the evolution of M3

Chart 13

ECB interest rates and the overnight market interest rate

(percentages per annum; daily data)



Source: ECB.

towards the end of 1998 was relatively smooth. The three-month moving average of the 12-month growth rate of M3, covering the months from October to December 1998, stood at 4.6%, which was very close to the Eurosystem's reference rate. From a longer-term perspective, data available showed that M3 grew at an annual rate of between 3.5% and 5% during 1997 and 1998 (see Chart 14). This development was broadly compatible with price stability and sustainable economic growth in the euro area. A relatively high growth rate of M1 was, however, observed during 1998 mainly as a result of the pronounced fall in interest rates and inflation expectations in several euro area countries. In addition, this development was probably influenced by the role of overnight deposits as a buffer stock in situations of portfolio reallocation, as investors in the euro area may have preferred to adopt a cautious approach in view of the remaining uncertainties related to the changeover to the euro. The relatively fast pace of lending to the private sector, equal to 8.2% in December 1998, indicated that episodes of

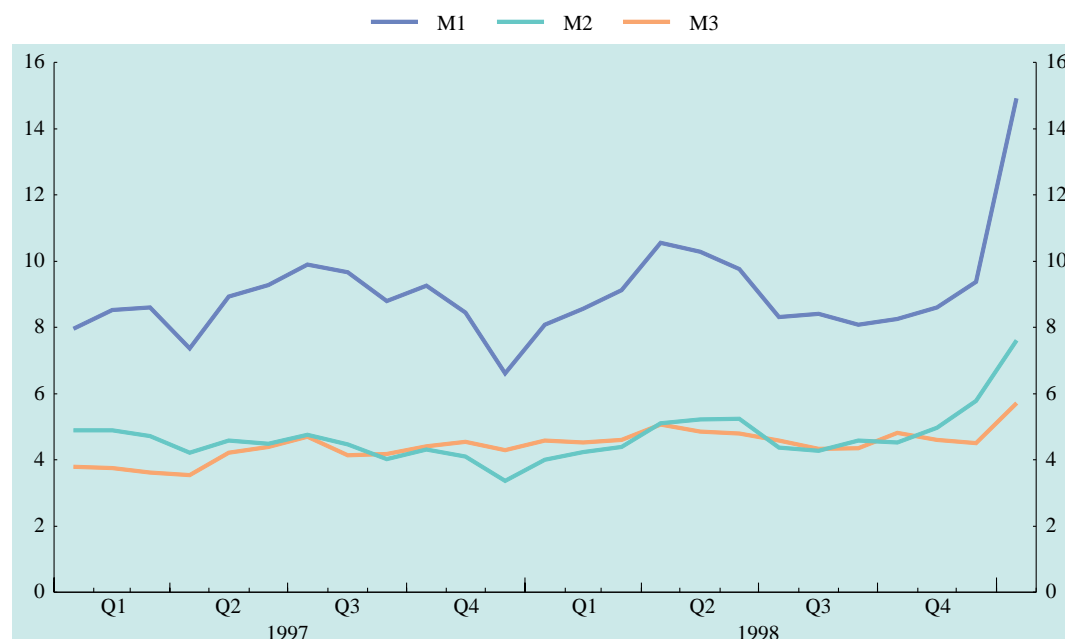
credit crunch were not detectable in the euro area during 1998. The monetary data for January 1999 which were released in early March 1999 showed a substantial further increase in overnight deposits. While this put some upward pressure on monetary aggregates, the three-month moving average of the 12-month growth rate of M3 in the period from November 1998 to January 1999 remained close to the reference value of 4½%. Against this background, and in view of the uncertainty relating to the special factors associated with the move to Stage Three and the introduction of the euro, the acceleration of M3 was not considered to be a signal of future inflationary pressures.

With regard to the outlook for price developments and risks to price stability, various other indicators confirmed the assessment made on the basis of developments in monetary data. The fall in long-term nominal interest rates following the co-ordinated reduction of central bank rates on 3 December 1998 and the downward shift of the yield curve were seen as a sign that

Chart 14

Monetary aggregates in the euro area

(annual percentage changes)



Source: ECB.

markets were anticipating a continuation of the environment of price stability. The outlook for the real economy of the euro area was very much influenced by the uncertainties surrounding the evolution of the world economy in 1999. The overall picture was, however, somewhat mixed. Several indicators, in particular the fall in industrial confidence, pointed in the direction of a slowdown in economic activity. By contrast, other indicators, such as consumer confidence and retail sales, indicated that domestic demand was still strong.

The level of 3.0% for the main refinancing rate at the start of Stage Three resulted in a three-month money market rate at a level of around 3.1% in early 1999. This level is very low by historical standards. Even in those countries with the best track records in terms of price stability over the past few decades, rates have hardly ever been lower than this. In Germany, for example, the average nominal short-term interest rate, measured by the three-month interbank rate, over the past four decades was 6%, with rates of below 3% not having been observed since February 1962. In real terms, i.e. considering the level of the short-term interest rates deflated by HICP inflation, the levels reached were also very low, standing at approximately 2.3% in early March 1999. By comparison, the euro area level of real three-month interest rates was equal to an average of 4.5% during the 1990s and the German average over this period was 3.2%.

The transitional measure to narrow the corridor between the rates of the deposit facility and the marginal lending facility between 4 and 21 January 1999 contributed to the smooth start of the euro area integrated money market at a time when market participants were faced with the challenge of having to adapt to the new environment. The developments during the first few weeks of operation of the euro money market indicated that the integration of the national money markets of the euro

area countries was proceeding rapidly. An essential element in the integration process was the TARGET system, which allows cross-border payments to be processed safely and in real time. As a consequence, cross-country dispersion of overnight rates was relatively small as of the first days of Stage Three, indicating that market participants made efficient use of arbitrage opportunities across markets. In view of the satisfactory experience of the first few weeks and taking into account that continuing to maintain the narrow corridor for too long would have been likely to hamper the development of the euro area money market in the longer term, the Governing Council discontinued the application of the narrow corridor with effect from 22 January 1999. After the widening of the band defined by the two standing facilities, the spread between overnight rates on national markets remained stable and the recourse to the standing facilities contracted sharply.

The Eurosystem's refinancing operations during the first weeks of 1999 contributed to smoothing the developments in the money market. The allotments effectuated through the main refinancing operations in the first weeks of Stage Three provided an endowment of liquidity exceeding the expected reserve requirements. This was seen as a means of coping with the relatively high degree of initial uncertainty about the true reserve requirements of credit institutions in the first maintenance period. Indeed, the reserve requirement for the first maintenance period had to be based on banks' balance sheet data for 1 January 1999. These data, however, became known to the Eurosystem only in late January 1999. While the attitude of market participants in the first few days of 1999 was very cautious, resulting in an overnight rate which was only slightly below the temporary marginal lending rate of 3.25%, increasing certainty about liquidity needs at the start of Stage Three and an easing of market conditions allowed the overnight rate to come closer to the Eurosystem's main refinancing rate.

3 Economic developments in non-euro area EU countries

In this section, economic developments in the four non-euro area EU countries are reviewed on a country-by-country basis. It may, in general, be noted that while these countries conduct their monetary policies under different institutional and operational frameworks, the ultimate goal of monetary policy in all of them is to maintain price stability. The Eurosystem and the national central banks (NCBs) of the non-participating EU countries co-operate closely in the context of the General Council with a view to contributing to the maintenance of price stability in the EU as a whole. In this context, the 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 four NCBs not participating in the single monetary policy.

3.1 Denmark

In Denmark real GDP increased by 2.8% in 1998, somewhat below the growth rates of above 3% achieved from the middle of 1993 until 1997. As in recent years, output growth was supported by strong private consumption and investment, while the contribution to growth from net exports was negative. Compared with most euro area countries, Denmark occupies a relatively advanced position in the business cycle. During 1998 the Danish economy operated close to full capacity utilisation and under tight labour market conditions; the unemployment rate was 4.6% in December, the lowest rate in almost 20 years. Despite government action to stimulate labour supply, real wage increases in 1998 were above productivity growth. Combined with a strengthening of the nominal effective exchange rate, this led to a loss of competitiveness. The current account deteriorated and moved into deficit in 1998 for the first time in the 1990s.

Tight capacity and high rates of wage increases have so far had only little impact on

consumer prices. HICP inflation was quite close to the euro area average in 1998, following a downward trend in the course of the year, and stabilised at 1.1% in the last quarter. The modest rate of inflation is associated with the compression of profit margins, lower energy prices and a weak development in prices of transport and some meat products.

The current wage acceleration and the pressures coming from the strong expansion of domestic demand pose a challenge to the maintenance of price stability. To counteract these pressures fiscal policy has been following a restrictive stance. After the substantial fiscal consolidation in the 1993-97 period (when the budget balance moved from a deficit of 2.8% of GDP to a surplus of 0.4% of GDP) a new fiscal austerity package, which lowered tax deductions for interest payments and increased indirect taxes, was introduced in June 1998. In 1998 the budget surplus rose to 0.8% of GDP as a result of a strong decline in the total expenditure-to-GDP ratio which was only partially offset by a decline in the current revenue-to-GDP ratio. The ratio of government debt to GDP declined by 5.5 percentage points to 58.1%.

The monetary policy strategy of Denmark's Nationalbank has remained unchanged following the introduction of the euro. Danish monetary policy is geared to stabilising the Danish krone vis-à-vis the euro as Denmark has been participating in the ERM II arrangement from 1 January 1999 with a narrow band of $\pm 2\frac{1}{4}\%$ around the euro central rate.

Throughout 1998 the Danish krone remained close to the central parity in the ERM. Nevertheless, there were occasions in 1998 when the currency came under pressure and Denmark's Nationalbank changed its interest rates and intervened to keep the currency stable. As a consequence, the three-month interest rate spread vis-à-vis the comparable German rate was relatively volatile during

Table 8**Macroeconomic indicators for Denmark***(annual percentage changes, unless otherwise indicated)*

	1992	1993	1994	1995	1996	1997	1998	1998 Q1	1998 Q2	1998 Q3	1998 Q4
Real GDP	1.3	0.8	5.8	3.0	3.3	3.1	2.8	4.0	1.1	3.4	.
<i>Contribution to real GDP growth: ¹⁾</i>											
Domestic demand including change in stocks	1.5	0.4	6.8	4.6	3.2	4.4	4.1	6.0	3.2	4.0	.
Net exports	-0.2	0.4	-1.0	-1.6	0.1	-1.3	-2.3	-2.0	-2.2	-0.6	.
HICP	-	-	-	-	2.1	1.9	1.3	1.6	1.4	1.2	1.1
Compensation per employee	4.2	2.3	3.5	3.4	3.0	3.8	3.3	4.2	0.7	4.5	.
ULC, whole economy	2.0	0.0	-2.5	1.7	1.0	2.8	2.9	2.2	2.0	3.5	.
Import prices	-1.3	-2.0	-0.1	-1.6	-0.9	4.0	-0.1	0.4	0.6	-1.2	.
Current plus new capital account (% of GDP)	2.8	3.4	1.8	1.1	1.7	0.5	-1.4	-1.0	-1.9	.	.
Total employment	-0.9	-1.5	-0.4	1.4	1.3	2.1	2.2	2.0	2.4	2.3	.
Unemployment rate (% of labour force)	9.2	10.1	8.2	7.2	6.8	5.6	5.1	5.5	5.2	5.1	4.7
Fiscal balance (% of GDP) ²⁾³⁾	-2.2	-2.8	-2.4	-2.4	-0.9	0.4	0.8	-	-	-	-
Consolidated gross debt (% of GDP) ²⁾	68.6	80.9	76.5	72.1	67.4	63.6	58.1	-	-	-	-
3-month interest rate (% per annum) ⁴⁾	11.5	10.9	6.2	6.1	3.9	3.7	4.1	3.8	4.1	4.3	4.3
10-year interest rate (% per annum) ⁴⁾	9.0	7.3	7.8	8.3	7.2	6.3	4.9	5.3	5.1	4.8	4.5
Exchange rate against the ECU ⁴⁾⁵⁾	7.81	7.59	7.54	7.33	7.36	7.48	7.50	7.53	7.52	7.50	7.44

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

1) Percentage points.

2) General government; consistent with the Maastricht Treaty definition.

3) Surplus (+) / deficit (-).

4) Average of period values.

5) Units of national currency per ECU.

1998, with high spreads during periods of international currency unrest (225 basis points at the height of the global tensions at end-September). The spread was around 90 basis points at the end of the year, but declined in the first two months of 1999 to a level of around 40 basis points. Considering the year as a whole, short-term interest rates as measured by the three-month money market rates rose by 20 basis points. The official (repo) rate was lowered in various steps in the last quarter of 1998 and in early 1999 and stood at 3.4% at the beginning of March 1999.

Long-term interest rates as measured by 10-year government bond yields followed the international decline in levels during 1998, but less markedly than the German 10-year rate. As a consequence, the spread widened slightly to 30 basis points at the end of February 1999.

3.2 Greece

In the recent past Greece has experienced a period of buoyant economic growth. The rate of growth of GDP was 3.2% in 1997 and increased to 3.7% in 1998. There was a marked strengthening in industrial production and construction in 1998. A strong expansion of investment (both public investment, linked to structural funds from the EU, and private investment) and rising exports were the two main factors underlying this growth performance. Consumption demand has decelerated owing to wage moderation combined with a slightly increasing tax burden and the negative terms-of-trade effect of the drachma's devaluation in early 1998. The registered unemployment rate remains high, at 9.9% on average in 1998. The trade deficit (partly distorted by unrecorded exports) is estimated to have remained broadly at the same high level as that recorded in 1997

Table 9**Macroeconomic indicators for Greece***(annual percentage changes, unless otherwise indicated)*

	1992	1993	1994	1995	1996	1997	1998	1998 Q1	1998 Q2	1998 Q3	1998 Q4
Real GDP	0.7	-1.6	2.0	2.1	2.4	3.2	3.7	-	-	-	-
<i>Contribution to real GDP growth:¹⁾</i>											
Domestic demand including change in stocks	-0.6	-1.0	1.3	4.2	3.1	3.7	3.6	-	-	-	-
Net exports	1.3	-0.6	0.7	-2.1	-0.8	-0.5	0.1	-	-	-	-
HICP	-	-	-	-	7.9	5.4	4.5	4.2	5.0	4.8	4.0
Compensation per employee	11.8	9.8	10.8	12.9	11.8	11.0	6.3	-	-	-	-
ULC, whole economy	12.6	12.7	10.7	11.6	10.6	7.1	2.8	-	-	-	-
Import prices	12.1	7.7	5.8	6.8	3.6	2.1	5.8	-	-	-	-
Current plus new capital account (% of GDP)	-2.1	-0.8	-0.1	-2.5	-3.7	-4.0	-3.4	-	-	-	-
Total employment	1.4	1.0	1.9	0.9	1.3	-0.5	0.2	-	-	-	-
Unemployment rate (% of labour force)	7.6	7.1	7.2	7.1	7.5	7.9	9.9	-	-	-	-
Fiscal balance (% of GDP) ²⁾³⁾	-12.8	-13.8	-10.0	-10.3	-7.5	-3.9	-2.4	-	-	-	-
Consolidated gross debt (% of GDP) ²⁾	98.8	111.6	109.3	110.1	112.2	109.4	106.5	-	-	-	-
3-month interest rate (% per annum) ⁴⁾	19.8	19.1	26.9	16.4	13.8	12.9	13.9	16.8	13.2	13.5	12.2
10-year interest rate (% per annum) ⁴⁾	-	-	-	-	-	9.9	8.5	10.4	7.9	7.8	7.8
Exchange rate against the ECU ⁴⁾⁵⁾	247	268	288	303	306	309	331	319	340	333	332

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

1) Percentage points.

2) General government; consistent with the Maastricht Treaty definition.

3) Surplus (+) / deficit (-).

4) Average of period values.

5) Units of national currency per ECU.

(at around 15% of GDP), as the positive effect of lower energy import prices has been compensated by the negative terms-of-trade effect of the devaluation of the drachma. However, the current account deficit is estimated to have declined from 4% of GDP in 1997 to 3.4% of GDP in 1998.

Despite robust growth, the HICP inflation rate continued its downward trend in 1998. While initially inflation increased – to peak at 5.1% in April 1998, mainly as a consequence of the devaluation of the drachma upon entry to the ERM in March – thereafter it resumed its downward course, declining almost continuously to reach 3.5% in January 1999. The main factor contributing to disinflation has been the deceleration of unit labour costs, underpinned by wage moderation (helped by declining inflationary expectations and by disinflationary pay settlements in both the private and the public sectors) and sustained

productivity growth. The inflationary impact of the devaluation was compensated to some extent by the decline in the price of seasonal food and the international price of oil. Underlying inflation, as measured by the HICP stripped of seasonal food and energy prices, while on a declining trend, was still running at 4.4% in January 1999.

A sizable fiscal consolidation took place in Greece between 1993 and 1997 as the budget deficit fell from 13.8% of GDP to 3.9% of GDP. In 1998 the budget deficit fell further to 2.4% as a result of both a decreasing total expenditure-to-GDP ratio and an increasing current revenue-to-GDP ratio. The stock of government debt declined by almost 3 percentage points to 106.5% of GDP in 1998.

Monetary policy is conducted with a view to attaining nominal convergence with the euro

area. According to the new legislation establishing the independence of the Bank of Greece (which came into effect in December 1997), the maintenance of price stability has been confirmed as the ultimate goal of monetary policy. The Bank of Greece aims to reduce inflation to below 2% by the end of 1999. The Greek drachma joined the ERM on 16 March 1998 and has been participating in ERM II since 1 January 1999, observing a $\pm 15\%$ fluctuation band around the euro central rate.

Since entering the ERM the exchange rate has played the role of an intermediate target. In the first few months of 1998 the drachma came under pressure owing to contagion from the Asian crisis. The drachma entered the ERM with a central parity against the ECU that represented a devaluation of 12.3% from prevailing market rates. Thereafter, the drachma has consistently been in the upper part of the ERM parity grid. It ended the year 8.2% above its central parity and traded at close to 9% above its central parity on average in February 1999. Upon ERM entry, short-term interest rates immediately declined and have been on a downward trend since then, with the exception of the second half of August when they peaked again due to the impact of the Russian crisis on financial markets. By the end of the year the spread vis-à-vis the comparable German rates was 8.7 percentage points, but had narrowed by some 150 basis points by the end of February 1999. The fixed tender rate for 14-day deposits stood at 12% at the end of February 1999.

Long-term interest rates followed a downward trend with fluctuations in the course of 1998, and the differential vis-à-vis German yields came down to around 320 basis points by the end of 1998 and was 210 basis points on average in February 1999.

3.3 Sweden

Swedish real GDP grew by 2.9% in 1998, accelerating from 1.8% in 1997. The driving force was a rapid acceleration in domestic

demand, while, after a number of years of export-led growth, the contribution to growth from external trade turned negative. Private consumption grew by 2.6%, while gross capital formation increased by 9.6%. Real import growth has been strong, reflecting strong domestic demand and subdued import prices, while export demand decelerated significantly in 1998 compared with 1997, mainly because of the Asian crisis. As a result, the current account surplus diminished somewhat in 1998, to 2.4% of GDP. As in most euro area countries, there was some weakening of business sentiment in the second half of the year, especially in the manufacturing sector, but the level of consumer confidence remained historically high. Since the autumn of 1997 a marked fall in unemployment has been recorded (to 7.5% at the end of the year), mainly due to government educational measures but also reflecting strong economic growth.

Consumer prices were not affected by the acceleration in output in 1998. The HICP rate of inflation decreased more or less continuously in 1998 to 0% in December (and was maintained at the same level in January 1999). The downward movement is mainly explained by falling prices for imported goods, moderate unit labour cost developments and sizable cuts in indirect taxes.

A substantial fiscal consolidation took place in Sweden between 1993 and 1997 as the budget deficit declined from 12.3% of GDP to 0.7% of GDP. In 1998 the budget balance recorded a surplus of 2% of GDP as a result of both a significant increase in the current revenue-to-GDP ratio and a decrease in the expenditure-to-GDP ratio. The government debt-to-GDP ratio declined by 1.6 percentage points to 75.1%.

On 25 November 1998 the Swedish Parliament approved new legislation reinforcing the independence of the central bank. The primary objective of monetary policy in Sweden is to achieve price stability. Sveriges Riksbank operates with a flexible exchange rate regime and conducts monetary

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

	1992	1993	1994	1995	1996	1997	1998	1998 Q1	1998 Q2	1998 Q3	1998 Q4
Real GDP	-1.4	-2.2	3.3	3.9	1.3	1.8	2.9	2.7	1.8	3.1	3.8
<i>Contribution to real GDP growth:¹⁾</i>											
Domestic demand including change in stocks	-1.8	-5.1	2.4	2.4	0.1	0.4	3.5	3.6	3.6	3.1	3.7
Net exports	0.4	2.9	0.9	1.5	1.2	1.4	-0.6	-0.9	-1.8	0.0	0.2
HICP	-	-	-	-	0.8	1.8	1.0	1.9	1.4	0.6	0.1
Compensation per employee	4.0	4.3	4.8	2.7	6.3	3.6	-	-	-	-	-
ULC, whole economy	-	-	-	-	-	-	-	-	-	-	-
Import prices	-2.2	14.5	3.5	4.6	-4.9	2.0	.	0.4	-3.6	-0.9	.
Current plus new capital account (% of GDP)	-3.4	-2.0	0.3	2.2	2.3	2.9	2.4	3.0	1.1	2.5	3.1
Total employment	-4.1	-5.5	-0.9	1.6	-0.6	-1.1	1.4	0.5	1.1	1.7	2.4
Unemployment rate (% of labour force)	5.6	9.1	9.4	8.8	9.6	9.9	8.2	8.7	8.6	8.1	7.5
Fiscal balance (% of GDP) ²⁾³⁾	-7.8	-12.3	-10.3	-6.9	-3.5	-0.7	2.0	-	-	-	-
Consolidated gross debt (% of GDP) ²⁾	67.1	76.0	79.3	77.6	76.7	76.7	75.1	-	-	-	-
3-month interest rate (% per annum) ⁴⁾	13.4	8.7	7.7	8.8	6.0	4.4	4.4	4.7	4.5	4.3	3.9
10-year interest rate (% per annum) ⁴⁾	10.0	8.5	9.7	10.2	8.0	6.6	5.0	5.5	5.1	4.8	4.5
Exchange rate against the ECU ⁴⁾⁵⁾	7.53	9.12	9.16	9.33	8.51	8.65	8.91	8.71	8.59	8.94	9.38

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

1) Percentage points.

2) General government; consistent with the Maastricht Treaty definition.

3) Surplus (+) / deficit (-).

4) Average of period values.

5) Units of national currency per ECU.

policy for an explicit inflation target. The inflation target is to achieve a CPI inflation rate of 2%, with a tolerance margin of ± 1 percentage point. Historically, inflation measured by the CPI index did not differ in Sweden, on average, from inflation measured by the HICP index. The actual rate of inflation, measured as the 12-month change in the CPI, fell during 1998 to reach -0.6% in December, standing at 0.4% on average for the year as a whole, and was thus well below the target.

Short-term interest rates have been on a declining trend, reflecting a five-stage cut in the official (repo) rate of 120 basis points to 3.15% in February 1999. The Swedish krona started to depreciate over the summer in the wake of international market unrest, and at the end of 1998 had depreciated by approximately 8% vis-à-vis the ECU, compared with a year earlier. In the first two

months of 1999 it appreciated by around 5.5% vis-à-vis the euro.

Long-term interest rates fell by 1.8 percentage points in the course of 1998 to 4.2% on average in December. The interest rate differential vis-à-vis Germany amounted to around 40 basis points at the end of 1998, and to 30 basis points on average in February 1999.

3.4 United Kingdom

In the United Kingdom, real GDP growth slowed to 2.3% in 1998 from 3.5% in 1997. The slowdown in output in the course of the year was due to a marked deterioration in net exports and a slight weakening of domestic demand. Business confidence indicators deteriorated throughout the year, with a particularly marked decline in the

Table 11
Macroeconomic indicators for the United Kingdom

(annual percentage changes, unless otherwise indicated)

	1992	1993	1994	1995	1996	1997	1998	1998 Q1	1998 Q2	1998 Q3	1998 Q4
Real GDP	0.1	2.3	4.4	2.8	2.6	3.5	2.3	3.2	2.7	2.0	1.3
<i>Contribution to real GDP growth:¹⁾</i>											
Domestic demand including change in stocks	0.8	2.2	3.5	1.8	3.1	3.8	3.9	4.8	4.0	3.9	3.4
Net exports	-0.8	0.1	0.9	1.0	-0.5	-0.3	-1.6	-1.6	-1.3	-1.9	-2.0
HICP	-	-	-	-	2.5	1.8	1.5	1.5	1.8	1.4	1.4
Compensation per employee	6.1	3.4	4.0	3.3	3.9	4.4	.	4.9	5.1	.	.
ULC, whole economy	3.4	0.5	-0.5	1.7	2.0	3.3	.	3.1	.	.	.
Import prices	-0.0	8.5	3.1	6.1	0.2	-6.8	-5.7	-6.8	-5.2	-5.9	-6.1
Current plus new capital account (% of GDP)	-1.7	-1.7	-0.2	-0.5	-0.1	0.8	.	-0.6	-0.7	1.2	.
Total employment	-2.8	-0.7	0.9	1.7	1.9	1.7	.	1.9	0.9	0.9	.
Unemployment rate (% of labour force)	10.1	10.5	9.6	8.7	8.2	7.0	6.3	6.5	6.3	6.3	6.2
Fiscal balance (% of GDP) ²⁾³⁾	-6.2	-7.9	-6.8	-5.7	-4.4	-1.9	0.6	-	-	-	-
Consolidated gross debt (% of GDP) ²⁾	41.8	48.5	50.5	53.0	53.6	52.1	49.4	-	-	-	-
3-month interest rate (% per annum) ⁴⁾	9.6	5.9	5.5	6.7	6.0	6.8	7.3	7.5	7.5	7.6	6.8
10-year interest rate (% per annum) ⁴⁾	9.1	7.5	8.2	8.3	7.9	7.1	5.6	6.1	5.9	5.6	4.8
Exchange rate against the ECU ⁴⁾⁵⁾	0.74	0.78	0.78	0.83	0.81	0.69	0.68	0.66	0.67	0.68	0.70

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

1) Percentage points.

2) General government; consistent with the Maastricht Treaty definition.

3) Surplus (+) / deficit (-).

4) Average of period values.

5) Units of national currency per ECU.

autumn. The slowdown was initially most evident in the manufacturing sector, reflecting the strength of sterling and the deceleration in world trade due to the Asian crisis. However, the services sector, which had remained comparatively robust (reflecting the strength of domestic demand), also began to show clear signs of a slowdown in the latter half of 1998. Unemployment, at 6.2% in November 1998, was at its lowest level since 1980. The current account deteriorated significantly in the first half of 1998, reflecting the appreciation of sterling, but this was partly offset by a large surplus recorded in the third quarter.

HICP inflation fell slightly during 1998, stabilising at 1.4% in the last two quarters of the year. However, reflecting the pressure from the tight labour market, domestically generated inflationary pressures were much

stronger. The inflation rate for the services sector was significantly higher (by about 3.5 percentage points on average) than the goods inflation rate. Goods price increases were held down by the steep declines in import prices following the rise in sterling in 1997 and early 1998.

A sizable fiscal consolidation took place between 1993 and 1997 as the budget deficit declined from 7.9% of GDP to 1.9% of GDP. In 1998 there was a further improvement in the public finances and the budget balance recorded a surplus of 0.6% of GDP. This was mainly due to an increase in the current revenue-to-GDP ratio and, to a lesser extent, to reductions in the public expenditure-to-GDP ratio for all main categories of spending. The government gross debt-to-GDP ratio declined by 2.7 percentage points to 49.4% in 1998.

The monetary policy objective of the Bank of England is to achieve an inflation target which is defined in terms of the Retail Price Index excluding mortgage interest payments (RPIX), of 2.5% per annum. Historically, inflation as measured by the RPIX index has been, on average, around half a percentage point higher than when measured by the HICP index. RPIX inflation remained close to the target in 1998. Official interest rates began the year at 7.25%, were increased to 7.5% in June, remained constant during the third quarter, and have been cut five times since then, to stand at 5.5% in February 1999, against the background of deteriorating growth

prospects and an easing of inflationary pressures. Following a very substantial rise of 15% in 1997, sterling appreciated further against the ECU during the first half of 1998, but depreciated in the second half of the year. In early 1999 it appreciated somewhat against the euro.

Long-term interest rates fell steadily throughout 1998 in absolute terms and relative to comparable rates in major euro area economies. The 10-year spread vis-à-vis German yields was around 50 basis points on average in February 1999, compared with around 100 basis points at the start of 1998.

Box 4

Procedures for the decision on the fulfilment of the necessary conditions for the adoption of the euro by non-euro area Member States in Stage Three

In March 1998 the EMI submitted a report to the EU Council “on the progress made in the fulfilment by the Member States of their obligations regarding the achievement of Economic and Monetary Union”. This report was produced in accordance with the requirement of Article 109j (1) of the Treaty establishing the European Community. The same mandate was given to the European Commission, and the two reports were submitted to the EU Council in parallel, forming a starting-point for the procedure in accordance with Article 109j (2) and (4) which led to the selection of 11 Member States to participate in Economic and Monetary Union from the start of Stage Three.

Denmark, in accordance with the terms of Protocol No. 12 of the Treaty, gave notification that it would not participate in Stage Three of Economic and Monetary Union. The United Kingdom, in accordance with the terms of Protocol No. 11, also notified the EU Council that it did not intend to move to the third stage in 1999. As a result, neither Member State has adopted the euro. Greece and Sweden are both Member States with a derogation, having been judged by the Council not to have fulfilled the necessary conditions for the adoption of the single currency on 1 January 1999. The Greek Government has announced its aim to join the euro area by 2001.

Article 109j (1) of the Treaty establishes the criteria to be used for an examination of the fulfilment by the non-euro area Member States of their obligations regarding their participation in Economic and Monetary Union. In particular, with regard to economic convergence, the reports of the ECB and the European Commission shall examine the achievement of a high degree of sustainable convergence by reference to the following four criteria:

- the achievement of a high degree of price stability;
- the sustainability of the government financial position;
- the observance of the normal fluctuation margins provided for by the exchange rate mechanism;
- the durability of convergence achieved by the Member State and of its participation in the exchange rate mechanism of the European Monetary System being reflected in the long-term interest rate levels.

In addition, with regard to legal convergence, these reports shall include an examination of the compatibility between each Member State’s national legislation, including the statutes of its national central bank, and Articles 107 and 108 of the Treaty and the Statute of the ESCB.

In terms of the procedure to be followed for the decision on the fulfilment of the necessary conditions for the adoption of the euro, according to Article 109k (2): “At least once every two years, or at the request of a Member State with a derogation, the Commission and the ECB shall report to the Council in accordance with the procedure laid down in Article 109j (1). After consulting the European Parliament and after discussion in the Council, meeting in the composition of the Heads of State or Government, the Council shall, acting by a qualified majority on a proposal from the Commission, decide which Member States with a derogation fulfil the necessary conditions on the basis of the criteria set out in Article 109j (1), and abrogate the derogations of the Member States concerned.”

With regard to Denmark and the United Kingdom, Protocols No. 12 and No. 11 of the Treaty respectively prescribe that the procedure mentioned above can only be initiated at their own request.

If, following the above examination and procedures, the status of “Member States with a derogation” is abrogated, Article 109l (5) of the Treaty provides for the fixing of the conversion rate at which the euro shall be substituted for the currency of the Member State concerned, and for the adoption of all other measures necessary for the rapid introduction of the euro in those Member States.



Chapter II

Preparatory work for Stage Three and the changeover to the euro

I Monetary policy framework

In the first half of 1998 work continued at the EMI to complete the Eurosystem's operational framework for the implementation of monetary policy. Following the publication by the EMI, in September 1997, of the report entitled "The single monetary policy in Stage Three: General documentation on ESCB monetary policy instruments and procedures", the ECB endorsed the content of that report in the summer of 1998 and developed it further, in close co-operation with the NCBs, by specifying additional provisions in a number of areas. As a result, in September 1998 the ECB published a new version of the report with the same title (the "General documentation").

The monetary policy framework of the Eurosystem comprises a minimum reserve system, open market operations and standing facilities as described below. In accordance with Article 12.1 of the Statute of the ESCB, the Governing Council of the ECB is responsible for the formulation of monetary policy, while the Executive Board is empowered to implement monetary policy according to the decisions and guidelines laid down by the Governing Council. To the extent deemed possible and appropriate, and with a view to ensuring operational efficiency, the ECB has recourse to the NCBs to carry out the operations which form part of the tasks of the ESCB. The Eurosystem's monetary policy operations are executed on equal terms and conditions in all participating Member States.

The most relevant new features of the version of the "General documentation" published by the ECB in September 1998, as compared with the earlier version published by the EMI, are the details of the eligibility criteria and risk control measures to be applied to assets eligible for the monetary policy operations of the Eurosystem, the specification of procedures to be applied for cross-border transactions in the context of the correspondent central banking model (CCBM), the establishment of the conditions for access to the deposit facility, the definition

of the features of the minimum reserve system and the definition of the calendar of tender operations for 1999. Finally, the "General documentation" presented specific provisions to be applied to the monetary policy instruments and procedures during the transition to Stage Three.

I.1 The minimum reserve system

On 7 July 1998 the Governing Council of the ECB decided that the ECB would require credit institutions established in euro area Member States to hold minimum reserves as from the start of Stage Three.

The minimum reserve system applied by the ECB is primarily intended to fulfil the following two monetary policy functions: the stabilisation of money market interest rates ("stabilisation function") and the enlargement of a structural liquidity shortage within the banking system ("enlargement function"). As regards the stabilisation function, the introduction of an averaging provision (implying that reserve requirements have to be fulfilled on average over a monthly maintenance period and not on a daily basis) enhances the flexibility of the credit institutions' day-to-day liquidity management, allowing them to exploit short-term arbitrage opportunities in the money market. In this way, the averaging provision can be expected to contribute to a stabilisation of the overnight interest rate over the course of the maintenance period. This, in turn, reduces the need for central bank fine-tuning intervention in the market and thus allows the Eurosystem to extract valuable information from market developments. With regard to the enlargement function, a sufficiently large structural liquidity shortage within the banking system enhances the ability of the Eurosystem to operate efficiently as a supplier of liquidity.

The minimum reserve system applied by the ECB can be characterised by the following

main elements. First, the reserve requirement applies to all credit institutions (as defined in Article 1 of the First Banking Co-ordination Directive) which are established in the euro area. Second, the reserve requirement of each individual credit institution is calculated by applying a reserve ratio, which has been set at 2%, to its liabilities in the form of overnight deposits, deposits with an agreed maturity or period of notice of up to two years, debt securities issued with an agreed maturity of up to two years and money market paper. However, liabilities vis-à-vis institutions established in the euro area and liabilities vis-à-vis the Eurosystem are not subject to reserve requirements. If a credit institution cannot provide evidence of its liabilities in the form of debt securities with an agreed maturity of up to two years and money market paper vis-à-vis other institutions subject to minimum reserve requirements, this institution is allowed to apply a standardised deduction, which was set at 10% at the start of Stage Three, to the aforementioned liabilities. In order to determine the final reserve requirement, each credit institution is allowed to deduct a lump-sum allowance of €100,000 from the resulting amount. Third, a credit institution complies with its obligations under the minimum reserve system if its average daily reserve holdings, as computed over a reserve maintenance period running from the 24th day of each month to the 23rd day of the following month,¹ is at least equal to its reserve requirement. Fourth, the required reserve holdings are remunerated at a level corresponding to the average interest rate over the maintenance period of the main refinancing operations of the Eurosystem (i.e. broadly in line with market conditions). Finally, a credit institution may apply to the NCB of the Member State in which it is resident for permission to hold all its minimum reserves indirectly, through an intermediary.

On 1 December 1998 the Governing Council adopted the ECB Regulation on the application of minimum reserves (ECB/1998/15). This Regulation lays down in

a legally binding form the features of the minimum reserve system applied by the ECB. The legal basis for this ECB Regulation is set out in Article 19 of the Statute of the ESCB and in the Council Regulation (EC) No. 2531/98 concerning the application of minimum reserves by the European Central Bank, which was adopted by the ECOFIN Council on 23 November 1998.

1.2 Open market operations and standing facilities

Open market operations are the main instrument used by the Eurosystem for the purposes of steering interest rates, managing the liquidity situation in the market and signalling the monetary policy stance. The majority of the Eurosystem's open market operations consist of reverse transactions against eligible collateral. The two main kinds of open market operation are the main refinancing operations (MROs), which have a maturity of two weeks and are conducted on a weekly basis, and the longer-term refinancing operations (LTROs), which have a maturity of three months and take place on a monthly basis. In addition, the Eurosystem may conduct fine-tuning open market operations through reverse transactions, outright purchases and sales of assets, the collection of deposits, or foreign exchange swaps. While the MRO and LTRO are conducted through standard tenders, fine-tuning operations can be performed either through quick tenders or through bilateral procedures involving a limited set of counterparties, except for outright operations which can be carried out only through bilateral transactions. Other available open market operations include structural operations which have a longer time horizon and a maturity which may or may not be standardised. They may include reverse transactions, outright purchases or sales of assets, or the issuance of ECB debt

¹ As a transitional provision, the first maintenance period of Stage Three started on 1 January 1999 and ended on 23 February 1999.

certificates. However, the ECB decided that, given the structural liquidity deficit prevailing in the euro area at the start of Stage Three, it would not issue debt certificates from the start of Stage Three.

With regard to the two standing facilities, counterparties can use the marginal lending facility to obtain overnight liquidity against eligible assets and the deposit facility to make overnight deposits with the Eurosystem. The two standing facilities are available to eligible counterparties at their own initiative and without any restrictions. Under normal circumstances the interest rates on the standing facilities form a corridor for the overnight market interest rate, with the marginal lending rate providing the ceiling and the deposit rate the floor.

1.3 Eligible counterparties and assets

The Eurosystem accepts a wide range of underlying assets for its credit operations. A distinction is made between two categories of eligible assets: tier one and tier two. Tier one consists of marketable debt instruments which fulfil the uniform, area-wide eligibility criteria established by the ECB, while tier two comprises other marketable and non-marketable debt instruments, equities and non-marketable financial assets, which take into account the differences between the national financial and banking systems, and for which eligibility criteria have been established by the NCBs, subject to the minimum eligibility criteria defined by the ECB. However, no distinction is made between the two tiers with regard to their eligibility for the various types of monetary policy operation of the Eurosystem (except for the fact that tier two assets are not normally used by the Eurosystem in outright transactions).

The list of eligible assets for the Eurosystem's credit operations was made available on the Internet in October 1998. The amount of marketable eligible assets outstanding at the start of Stage Three was slightly above €5,000 billion. Most of these outstanding assets

(98%) consisted of tier one collateral. Approximately 75% were government securities, 18% securities issued by credit institutions, 4% securities issued by the corporate sector, and the remainder securities issued by NCBs. Appropriate risk control measures are applied to protect the Eurosystem against the risk of financial loss. Risk control measures for tier one assets are harmonised across the euro area and include the following elements: initial margins, which take into account the length of time during which the Eurosystem is exposed to credit risk; specific valuation haircuts, which are differentiated according to the residual maturity and coupon structure of the debt instrument; and symmetric margin calls, which aim to ensure that the value of the underlying assets matches the requirements. The risk control measures for tier two assets are defined by the NCB that has included the asset in its tier two list, subject to the approval of the ECB. They are at least as stringent as the risk control measures applied to tier one assets.

A list of counterparties eligible for the monetary policy operations of the Eurosystem has been established on the basis of common eligibility criteria. It includes all those institutions that are subject to minimum reserve requirements. These institutions are, in principle, eligible to access open market operations based on the standard tender procedures and the two standing facilities. In addition, eligible counterparties to the Eurosystem's monetary policy operations have to satisfy certain prudential and operational requirements, i.e. they must be financially sound, subject to prudential supervision, and satisfy the operational criteria for participation in monetary policy operations. The list of institutions subject to minimum reserve requirements, which covers all credit institutions established in the euro area, comprises more than 8,000 institutions. This list was made available on the Internet in October 1998. More than 4,000 of these credit institutions have access to the two standing facilities of the Eurosystem, while almost 3,000 have access to the refinancing

operations. At the start of Stage Three no credit institution was exempt from the minimum reserve requirements.

1.4 Preparatory work for the implementation of monetary policy instruments

Given the decentralised approach adopted for the implementation of the monetary policy of the Eurosystem, the bulk of the implementation work in this field, including the testing of the systems and the preparation of the relevant legal documentation, was conducted by the NCBs. The work was initially co-ordinated by the EMI and its relevant Sub-Committees and subsequently co-ordinated and supervised by the ECB.

The testing process for all procedures included preliminary testing of individual systems and, thereafter, a period of overall testing of the systems and procedures of the Eurosystem. The latter started at the beginning of July 1998. Its aim was, in particular, to test the interconnections between the multiplicity of systems and procedures that were considered critical to the performance of the Eurosystem's operations. The overall testing consisted of three phases, the first of which involved testing the normal systems and procedures for specific Eurosystem activities within individual business areas, including monetary policy, foreign exchange policy, payment systems, the back office and accounting. The second phase, which started in September 1998, focused on the testing of contingency procedures, while the third phase, which started in October, represented a general "dress rehearsal" for all Eurosystem processes critical to the conduct of monetary policy. The three phases were carried out under the management of the Steering Committee for the Overall Testing (SCOT). The whole process made considerable demands on staff resources, both at the NCBs and at the EMI/ECB, and was completed successfully.

The preparation of the relevant national legal documentation was finalised by the NCBs under the ECB's supervision, which was, in essence, aimed at ensuring that a level playing-field in this regard would be in place throughout the euro area.

As regards liquidity management procedures, preparatory work was finalised in the course of 1998, including all procedures needed for internal Eurosystem communication and for the consolidation of the NCBs' balance sheets in order to produce the Eurosystem's balance sheet and update the relevant forecasts on a daily basis. To guide credit institutions in their reserve management, the Governing Council also decided that accurate information regarding the liquidity conditions in the euro area – including the aggregate current account holdings of euro area credit institutions, the aggregate use of the standing facilities on the preceding Eurosystem business day and the aggregate minimum reserve requirement for the current maintenance period of euro area credit institutions – would be published by 9.30 a.m. on every Eurosystem business day.

1.5 Domestic asset and liability management

While monetary policy decisions are taken centrally, the management of domestic assets and liabilities is effected by the NCBs on their own responsibility, irrespective of whether they act on their own account, as fiscal agents, on behalf of their customers or for their staff. Such management may include transactions with securities, deposit taking, the transfer of profits to the respective government or administrative expenditures. To ensure that operations in domestic assets and liabilities do not undermine the single monetary policy by creating unwarranted liquidity and signalling effects, any financial operations in domestic assets and liabilities by the NCBs which are not carried out for monetary policy purposes are subject to internal ECB rules.

2 Foreign exchange rate policy framework

2.1 The euro conversion rates

In accordance with the decision taken by the European Council at its meeting in Luxembourg in December 1997, on 3 May 1998, following the decision adopted by the Council of the European Union (EU Council), meeting in the composition of the Heads of State or Government, on the Member States which would participate in the euro area from the start of Stage Three, a Joint Communiqué on the procedure to be used to determine the irrevocable conversion rates for the euro at the end of Stage Two was issued by the ministers and central bank governors of those EU Member States which would participate in the euro area, the European Commission and the EMI, as the forerunner of the ECB.

The form of the pre-announcement – a joint political declaration endorsed by all the authorities involved – was chosen owing to the Treaty requirement that the formal adoption of

the irrevocable conversion rates for the euro should take place on 1 January 1999. In addition, since the ECU should be converted into the euro at a 1:1 rate, and since some of the ECU component currencies (the Danish krone, the Greek drachma and the pound sterling) would not participate in the euro area from the outset, it was not possible to announce the irrevocable euro conversion rates for the participating currencies. Hence the decision was taken to pre-announce the bilateral rates (equal to the ERM central rates) of the currencies participating in the euro area that would be used on 31 December 1998 to determine the irrevocable euro exchange rates.

On 31 December 1998 the irrevocable euro exchange rates were established in the context of the regular daily concertation procedure, as had been clarified in the pre-announcement (see Box 5 for a description of the process followed for the adoption of the euro conversion rates).

Box 5

The procedure followed for the computation and adoption of the irrevocable euro conversion rates

Joint Information Notice by the European Commission and the European Central Bank on the detailed computation of the irrevocable conversion rates for the euro issued on 11 March 1999

The irrevocable conversion rates for the euro were adopted by the EU Council on a proposal from the Commission and after consultation of the European Central Bank (ECB) on 31 December 1998 and entered into force together with the substitution of the euro for the national currencies on 1 January 1999. The ministers of the Member States adopting the euro as their single currency, the governors of the central banks of these Member States, the European Commission and the European Monetary Institute/European Central Bank issued two joint communiqués on the determination and the adoption of the irrevocable conversion rates for the euro, dated 3 May and 26 September 1998 respectively. The European Commission and the European Central Bank hereby provide the details of the computation of these conversion rates.

Calculation of the exchange rates of the official ECU on 31 December 1998

On 31 December 1998 the final official ECU exchange rates were calculated and adopted by the EU Council as the irrevocable conversion rates for the euro on the first day of Stage Three, i.e. on 1 January 1999. This was done by using the regular daily concertation procedure, which continues to be used in Stage Three for quoting the euro reference exchange rates.

Three steps can be identified

Step 1: Determination of the EU currencies' concertation exchange rates against the US dollar

A teleconference was initiated at 11.00 a.m. (C.E.T.), in which the EU central banks, including those whose currencies were not components of the ECU basket, provided each other with the US dollar exchange rate for

their respective currencies. These exchange rates were recorded as discrete values lying within the market bid-ask spreads prevailing at the time of the teleconference. The central banks of the Member States adopting the euro as their single currency were prepared to use, if needed, appropriate market techniques to ensure that, at the time of the teleconference on 31 December 1998, the market exchange rates would be consistent with the ERM bilateral central rates.

The Joint Communiqué of last May had already mentioned the possibility that, owing to rounding, the implicit bilateral rates which could be derived from the euro conversion rates would not necessarily correspond, up to the last (sixth) significant figure, to the pre-announced ERM bilateral central rates. In order to minimise such inconsistencies, the exchange rates of the participating currencies vis-à-vis the US dollar were quoted with a high degree of precision. First, and in line with the regular concertation procedure, one euro area currency, namely the Deutsche Mark, was quoted against the US dollar according to prevailing market conventions (to 5 significant digits). Then, the US dollar exchange rates for the other euro area currencies were determined by multiplying their pre-announced ERM bilateral central rates against the Deutsche Mark by the DEM/USD exchange rate.¹ The exchange rates of the 11 euro area currencies so calculated had 11 significant digits, all of which were retained for maximum accuracy. Since the ERM bilateral central rates were lying within the market bid-ask spreads for the participating currencies prevailing at the time of the teleconference on 31 December 1998, equality between the market and the pre-announced exchange rates was ensured and the likelihood of rounding errors was minimised.

The next two steps had formed part of the usual procedure for the daily calculation of ECU rates since the creation of the basket in 1979.

Step 2: Calculation of the exchange rate of the official ECU against the US dollar

The US dollar rates recorded by the EU central banks were thereafter communicated by the Banque Nationale de Belgique/Nationale Bank van België to the European Commission, where they were used to calculate the exchange rates of the official ECU. The USD/ECU exchange rate (expressed as ECU 1 = USD x) was obtained by summing the US dollar equivalents of national currency amounts that composed the ECU.

Step 3: Calculation of the exchange rates of the official ECU against the EU currencies participating in the euro area

The official ECU exchange rates of the EU currencies were calculated by the Commission by multiplying the non-rounded value of the USD/ECU exchange rate by their respective exchange rates vis-à-vis the US dollar. The resulting ECU exchange rates (i.e. units of currency per ECU) were rounded to the sixth significant digit. This calculation was performed for all EU currencies, not only those which were components of the ECU basket. The Commission also calculated, as usual, the ECU rates for a number of non-EU currencies. The ECU rates of 31 December 1998 were published in the Official Journal of the European Communities (Part C).

For the participating currencies, these rates were then proposed as the irrevocable euro conversion rates.

The table below illustrates the calculation of the official ECU exchange rates vis-à-vis all EU currencies on 31 December 1998.

¹ For example: $BEF/USD = (BEF/DEM)_{CR} * DEM/USD$, with $(BEF/DEM)_{CR}$ being the pre-announced ERM central rate between the DEM and the BEF. This applies for all participating currencies except the Irish pound, for which, in order to adhere to the market convention, the inverse exchange rate was used. The same convention applies to the GBP.

Calculation of the ECU exchange rates on 31 December 1998

Currency	Amount of national currency units in the ECU basket (a)	Exchange rate vis-à-vis the US dollar on 31 Dec. 1998 (b)	Equivalent in US dollars of national currency amount (c) = (a) ÷ (b)	ECU exchange rates (d) = (USD/ECU) x (b)
DEM	0.6242	1.6763000000	0.3723677	1.95583
BEF	3.301	34.574525650	0.0954749	40.3399
LUF	0.13	34.574525650	0.0037600	40.3399
NLG	0.2198	1.8887542620	0.1163730	2.20371
DKK	0.1976	6.3842	0.0309514	7.44878
GRD	1.44	282.57	0.0050961	329.689
ITL	151.8	1659.5403526	0.0914711	1936.27
ESP	6.885	142.60652886	0.0482797	166.386
PTE	1.393	171.82913150	0.0081069	200.482
FRF	1.332	5.6220755180	0.2369232	6.55957
GBP @	0.08784	1.6539	0.1452786	0.705455
IEP @	0.008552	1.4814687984	0.0126695	0.787564
		USD/ECU # =	1.1667521	
FIM		5.0959687630		5.94573
ATS		11.793642176		13.7603
SEK		8.1320		9.48803

@ The exchange rate in column (b) for the pound sterling and the Irish pound is the number of US dollars per currency unit rather than the number of currency units per dollar. Column (c) is therefore calculated for each of these two currencies by multiplying the value in column (a) by that in column (b); and column (d) by dividing the US dollar equivalent of the ECU (i.e. USD/ECU) by the rate in column (b).

The USD/ECU rate is shown after rounding to the 7th decimal place, whereas a higher degree of accuracy is used for computational purposes.

2.2 Agreement on the new exchange rate mechanism (ERM II)

In accordance with the Resolution adopted by the European Council at its meeting held in Amsterdam on 16 and 17 June 1997, the European Monetary System/exchange rate mechanism (EMS/ERM), which played a key role in the progress towards EMU, was replaced by a new exchange rate mechanism (ERM II) from the start of Stage Three. This new mechanism links the currencies of Member States outside the euro area to the euro. The operating procedures of this new exchange rate mechanism are laid down in an Agreement between the ECB and the NCBs of the Member States outside the euro area (Central Bank Agreement) which was signed by the President of the ECB and the four non-euro area NCB governors on 1 September 1998. This Agreement replaces, with effect from 1 January 1999, the

Agreement of 13 March 1979 – as amended by the Instrument of 10 June 1985 and the Instrument of 10 November 1987 – laying down the operating procedures of the EMS/ERM.

Participation in ERM II is voluntary for all the Member States outside the euro area. Nevertheless, Member States with a derogation can be expected to join the mechanism. It is regarded as a continuation of EMS/ERM membership and a prelude to the possible future participation of a Member State in Stage Three of EMU. Sustainable convergence of economic performance and policies in participating non-euro area Member States by reference to the euro area, in particular in the field of price stability, is one of the main objectives of ERM II. Such convergence is considered to be a prerequisite for sustainable exchange rate stability, while such stability is, in turn,

conducive to greater convergence. The convergence-oriented nature of ERM II is reflected not only in the central role assigned to the euro, but also in the possibility of closer exchange rate co-operation with the ECB, subject to progress in economic convergence towards the euro area.

The new mechanism is based on central rates against the euro with a standard fluctuation band of $\pm 15\%$ or narrower fluctuation bands, depending on progress towards convergence, around the central rates. 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 ECB and the participating non-euro area NCBs could, however, suspend automatic intervention if this were to conflict with their primary objective of maintaining price stability. The new exchange rate mechanism does not include the Short-Term Monetary Support mechanism and the swap operations (creation of official ECUs against US dollar and gold reserve assets) as provided for by the EMS/ERM. These two mechanisms were unwound by the last day of Stage Two, as described in Chapter III, Section 4.1.

In September 1998 two Member States outside the euro area – Denmark and Greece – expressed their intention to join the new mechanism as from 1 January 1999. In order to stabilise market expectations and achieve a smooth transition to the new mechanism, the intention of the Danish and Greek Governments to carry on from the EMS/ERM to ERM II was pre-announced at

the informal ECOFIN Council meeting on 26 September 1998. This pre-announcement also included notification of the fluctuation bands to be used for the Danish krone (a narrower band of $\pm 2.25\%$) and the Greek drachma (the standard band of $\pm 15\%$).

In accordance with the European Council Resolution on the new exchange rate mechanism, the decisions on the terms of the participation of the Danish krone and the Greek drachma in ERM II, i.e. the central rates of these currencies against the euro and the width of their fluctuation bands, were taken on 31 December 1998 by the ministers of the euro area Member States, the ECB and the ministers and central bank governors of Denmark and Greece, following a common procedure involving the European Commission and after consultation of the Monetary Committee. The Danish krone has been participating in ERM II with a $\pm 2.25\%$ fluctuation band and a central rate against the euro of DKK 7.46038, and the Greek drachma with the standard fluctuation band of $\pm 15\%$ and a central rate against the euro of GRD 353.109 since 1 January 1999.

Further to this decision, the ECB, Danmarks Nationalbank and the Bank of Greece, in accordance with Article 1.2 of the Central Bank Agreement of 1 September 1998, established, by common accord, the following bilateral upper and lower rates between the euro and their respective currencies for compulsory intervention in ERM II. The existing arrangements are summarised in the table below.

Table 12
Euro central rates and compulsory intervention rates for currencies of the countries participating in ERM II

in force as from 1 January 1999

Country and currency		EUR 1 =
DENMARK:	Upper rate	7.62824
	Central rate	7.46038
	Lower rate	7.29252
GREECE:	Upper rate	406.075
	Central rate	353.109
	Lower rate	300.143

2.3 Foreign exchange intervention and the management of the ECB's foreign reserve assets

The preparation and testing of the infrastructure required for the conduct of foreign exchange intervention by the Eurosystem was finalised in the course of 1998. The infrastructure was developed in such a way as to enable the Eurosystem to execute foreign exchange intervention in both a decentralised and a centralised manner, both in the context of ERM II and against other EU and non-EU currencies.

With regard to the ECB's foreign reserve management, a detailed methodological framework was finalised for the management of the reserves. The finalisation and testing of the IT systems support needed by the ECB for its decision-making process also took place in the course of the year. This technical infrastructure is used to convey the ECB's decisions to the NCBs, which are in charge of carrying out portfolio management operations in accordance with these instructions. Decisions transmitted by the ECB include the setting of the operational objectives in terms of currency distribution, interest rate risk, credit risk and liquidity requirements. A list of counterparties eligible for foreign exchange operations by the Eurosystem was selected and the relevant legal documentation required for foreign reserve management was prepared.

2.4 Initial transfer of foreign reserve assets from the NCBs to the ECB

In accordance with Article 30.1 of the Statute of the ESCB, the euro area NCBs transferred foreign reserve assets of an amount equivalent to €39.5 billion to the ECB at the start of Stage Three. That amount corresponds to the limit of €50 billion established by the Statute of the ESCB for the initial transfer of foreign reserve assets to the ECB, reduced in accordance with the share in the ESCB's capital of the

non-participating Member States. 85% of the amount transferred consists of foreign currency reserves, while 15% is gold. Article 30.4 of the Statute of the ESCB provides for the possibility for the ECB to make further calls on the NCBs' foreign reserve assets beyond the limit set in Article 30.1.

2.5 The NCBs' and Member States' operations with their foreign reserve assets

The foreign reserve assets not transferred to the ECB at the start of Stage Three are held and managed by the NCBs. In order to ensure consistency with the euro area's single monetary and foreign exchange policies, and in accordance with Article 31.3 of the Statute of the ESCB, the ECB will monitor and co-ordinate market transactions conducted with those assets. A similar monitoring framework has been prepared for transactions executed by euro area Member States with their foreign exchange working balances held outside the Eurosystem. Along the same lines, an agreement has been established between the ECB and the European Commission.

2.6 The euro reference exchange rates

The ECB adopted the relevant conventions with regard to the procedures for the computation and publication of the reference exchange rates for the euro. According to these conventions, no euro area official fixing procedure involving the ESCB, i.e. the ECB and the NCBs, has been set up. However, given the need for the daily publication of reference exchange rates, the ECB decided to compute and publish reference exchange rates for the euro on a daily basis for a number of currencies. The reference rates are based on the regular daily concertation procedure between central banks, which normally takes place at 2.15 p.m. (C.E.T.), and are published via electronic market information providers shortly after the

procedure is completed. Only one reference rate per currency is published (i.e. the mid rate), using the method $\text{€1} = x$ foreign currency units. As a general rule, amounts

are given to five significant figures. Euro area NCBs are free to publish more comprehensive lists of euro reference rates under a co-ordinated procedure.

3. Statistics

3.1 Implementation of the statistical requirements for Stage Three

The statistical requirements for the conduct of the single monetary policy and foreign exchange operations were set out in the document entitled “Statistical requirements for Stage Three of Monetary Union (Implementation package)”, which was made available to banking associations and others involved in statistical preparations for Stage Three by the EMI in July 1996. The requirements covered a wide range of statistics in the areas of money and banking, balance of payments, financial accounts, prices and costs, government finance, and a range of other macroeconomic data. The focus was placed on statistics covering the future euro area as a whole. It was necessary for the data to be sufficiently harmonised to permit meaningful aggregation and, where relevant, in a form which would allow consolidation at the euro area level. The Governing Council of the ECB formally approved the “Implementation package” on 1 September 1998. The statistical work conducted at the EMI/ECB in 1998 was mainly concerned with the implementation of these requirements.

Money and banking statistics

In the field of money and banking statistics, the first balance sheets for the Monetary Financial Institutions (MFI) sector in the euro area to have been drawn up on the agreed new basis – relating to end-June 1998 and subsequent month-ends – were submitted by the NCBs of the participating Member States during the summer of 1998. Data going back to September 1997, compiled in such a way as to conform as closely as possible to the agreed new basis, became available soon afterwards. In order to assist the policy preparations for Stage Three, the NCBs prepared estimations for periods prior to September 1997 and, in most cases, supplied best estimates for a range of monetary aggregates for earlier years. These data

included approximations for missing items and their quality improved during the second half of the year. The first consolidated MFI balance sheets and monetary aggregates were published in December 1998, shortly after the Governing Council had chosen the precise definition of broad money (M3) to provide the reference value for monetary policy purposes. The regular monthly publication of MFI balance sheets and monetary aggregates began with the publication of end-November 1998 data on 30 December 1998. Since January 1999 detailed information, together with data on interest rates (including retail interest rates), has been published in the ECB Monthly Bulletin. More detailed quarterly monetary and related data for end-December 1998 were released in April 1999.

The monthly MFI balance sheet returns also provide the information necessary to calculate the minimum reserves which credit institutions in the euro area must hold. Since the form of minimum reserves was not decided until July 1998, by which time the first MFI balance sheets were already in preparation, some modifications, which were necessary to ensure full compliance with the minimum reserve system, were introduced on a voluntary basis until end-1999. The “List of MFIs” itself, which now indicates which institutions are subject to minimum reserves, was first published in September 1997, with an addendum in December 1997, and was further improved during 1998 in terms of its consistency and presentation. It has been available on the ECB’s Web site since October 1998 and is updated on a monthly basis.

The task of developing statistics in the money and banking area is not yet complete. Interest rate and securities market statistics need to be developed further; the ECB has yet to carry out work on statistics relating to those financial intermediaries (other than insurance companies and pension funds) which are not MFIs. Further work on derivatives statistics is also necessary.

Balance of payments statistics

In accordance with the provisions of the implementation package, the first balance of payments data in which transactions with residents outside the euro area are recorded as such relate to January 1999 and were released in April 1999, together with estimates going back to 1995. In 1998 much attention was paid to analysing bilateral cross-border flows within the future euro area. The analysis has provided a further insight into ways of improving the geographical allocation of transactions, which will lead to more reliable data for the area as a whole. Moreover, while the implementation in national statistics of the IMF Balance of Payments Manual (5th edition) had almost been completed by the end of 1998, several conceptual and practical issues still had to be resolved during the course of the year. These included derivatives transactions, certain aspects of direct and portfolio investment, the recording of investment income on an accruals basis, rather than on a cash basis, and the concept and measurement of official reserves in the context of Monetary Union.

In the area of balance of payments statistics the ECB shares responsibility at the EU level with the European Commission (Eurostat). Conceptual work and practical planning have therefore been carried out in close co-operation with Eurostat. While the monthly balance of payments statistics will be the responsibility of the ECB alone, the intention is to publish fuller quarterly and annual statistics jointly.

Further conceptual and practical work was also carried out in 1998 on the international investment position. The first statement of the external assets and liabilities of the euro area as a whole will be compiled as at end-1998 on a net basis for the first year, again as foreseen in the implementation package.

Financial accounts

The implementation package stated a need for quarterly financial accounts statistics,

showing both transactions and balance sheets for the euro area as a whole, to complement monetary analysis and policy research. The design of such a system, which was intended to provide relatively full, though incomplete, quarterly accounts, reached an advanced stage in 1998, although it will not be possible to compile tables until the detailed quarterly money and banking and balance of payments statistics, as well as other relevant information, become available in the course of 1999. This work is being carried out in close co-operation with the European Commission (Eurostat) within the framework of the ESA 95, the implementation of which begins in 1999.

Other economic and financial statistics

The implementation package also presented a requirement for a wide range of other economic statistics, for which the European Commission (Eurostat) is responsible at the EU level. Price statistics relate directly to the primary objective of the ESCB's policy, the maintenance of price stability. Considerable effort has gone into producing the Harmonised Index of Consumer Prices (HICP), originally for the purpose of assessing economic convergence. Although some further improvements to coverage and comparability have yet to be made, the HICP is the most appropriate means of measuring prices for the purposes of the ESCB's definition of price stability. The availability of better government finance statistics (in terms of comparability, a level of detail greater than that required by Protocol No. 5 on the excessive deficit procedure attached to the Treaty, and frequency) is highly desirable for the purpose of assessing fiscal policy. With regard to their usefulness as information contributing to the conduct of monetary policy, the quality of other economic statistics relating to the euro area, including price and cost statistics other than the HICP, remains uneven, despite many improvements during 1998. The implementation of the ESA 95 from April 1999 and of Council Regulation (EC) No. 1165/98 of 19 May 1998 concerning

short-term statistics, enacted with the strong support of the ECB, will improve the quality of the information available in this key area.

3.2 Statistics relating to non-participating Member States

Statistics relating to the four Member States outside the euro area are carefully monitored by the ECB owing to their close economic and financial links with the euro area, not least through the operation of the exchange rate mechanism (ERM II). It is also important for these Member States to remain in close contact with the development of statistical needs in the euro area in view of their prospective participation in Monetary Union. Thus, although the statistical requirements differ somewhat in their case and although legal instruments adopted by the Governing Council (see below) do not apply to them, the non-participating Member States have, for the most part, implemented the ECB's statistical requirements and are supplying data, whenever possible, on the same basis as the participating NCBs.

3.3 Legal aspects

Council Regulation (EC) No. 2533/98 concerning the collection of statistical information by the European Central Bank was adopted in November 1998. This Regulation completes the framework for the ECB's statistical activities as required for the purpose of enabling the ESCB to carry out its functions, in terms of defining the reporting population, specifying a confidentiality regime and making provision for enforcement. Shortly after the enactment of the above-mentioned EU Council Regulation, the Governing Council adopted several legal instruments which lend substance to reporting requirements in the areas of money and banking, balance of payments and international investment position statistics.

3.4 Information systems infrastructure

A project to provide the means for electronic data to be exchanged within the ESCB was successfully completed in spring 1998. The message format used, GESMES/CB, seems likely to become the international standard for the transmission of economic and financial data in the form of time series.

More comprehensive statistical information can be obtained from the ECB's Web site.

4 Payment systems

4.1 The TARGET system

In 1998 intensive work continued on the implementation of the TARGET (Trans-European Automated Real-time Gross settlement Express Transfer) system.

In July 1998 the ECB published two documents on the TARGET system. The first, the TARGET brochure, provides general information about TARGET in all 11 official EU languages. The second, entitled "The TARGET service level", is a document which provides the European banking community with a description of the service level offered to TARGET customers. The ECB has also devoted a special section of its Web site (<http://www.ecb.int>) to TARGET, with the intention of making the latest information available on a regular basis.

The "Third progress report on the TARGET project" was released by the ECB in November 1998 with the objective of providing information concerning the progress made on the TARGET project since the publication of the previous TARGET progress report in September 1997. The Report covers the following issues in particular: (1) access to euro RTGS systems linked to TARGET; (2) operating times; (3) the provision of intraday credit; (4) pricing policies; (5) bank-to-bank charges for customer payments; (6) intraday liquidity management in euro; (7) transparency during the changeover period; (8) return payments; (9) central bank correspondent banking relations; (10) progress made in the technical implementation of TARGET; and (11) the legal framework for TARGET.

The price structure for cross-border TARGET payments was established by the Governing Council of the ECB in June 1998. The fee to be charged by the sending NCB/ECB for cross-border payments effected via TARGET between direct participants is based on the number of transactions, according to the following degressive scale:

€1.75 for each of the first 100 transactions per month; €1.00 for each of the next 900 transactions per month; and €0.80 for each subsequent transaction in excess of 1,000 per month.

The Governing Council of the ECB decided in July 1998 to grant access to TARGET to NCBs and participants in RTGS systems operating in euro but located in non-euro area Member States. This decision was an innovation in the banking world since no central bank had previously granted access to settlement facilities to institutions located outside its currency jurisdiction.

To ensure the availability of intraday liquidity in their euro RTGS system, non-euro area NCBs have had to make arrangements to ensure that, under normal circumstances, they have a deposit with the Eurosystem before 8 a.m. ECB time (C.E.T.) each day. This deposit is of an amount of €3 billion for the Bank of England and €1 billion each for the Bank of Greece, Danmarks Nationalbank and Sveriges Riksbank. Overnight deposits held by the non-euro area NCBs with the Eurosystem will be remunerated at the ESCB's deposit facility rate up to the aforementioned amounts.

Participation in TARGET has been designed in such a way as to give the ECB assurance that non-euro area participants will always be in a position to reimburse intraday credit by the due time, thus avoiding any need for overnight central bank credit in euro. The maximum amount of intraday credit granted to a non-euro area participant is €1 billion.

With regard to the TARGET operating times, in September 1998 the ECB published, in the form of a press release, a calendar of TARGET operating days for 1999. In addition to Saturdays and Sundays, in 1999 TARGET was originally scheduled to be closed only on the two public holidays that are common to all EU countries: Christmas Day and New Year's Day. However, in order to enable

banks to deal with the Year 2000 changeover, the Governing Council decided that TARGET should also be closed on 31 December 1999. TARGET will be open in all EU countries on all the other days of the year. The ECB will inform the financial community should any changes be made to the calendar of TARGET operating days after 1999.

As regards the technical implementation of the TARGET system, 1998 was mainly devoted to testing. All the NCBs and the ECB moved on 1 July 1998, as scheduled, to the penultimate test phase known as simulation testing. The aim of the simulation phase was to test operations in a technical environment which resembled the “production” environment as closely as possible, integrating operational staff and operational infrastructures. Credit institutions were invited to participate in end-to-end simulation testing on specified dates. In the volume testing in November 1998 almost 100,000 test payments were processed during the normal business hours of TARGET. The final test period – “migration to production” – took place in November and December 1998. TARGET testing was designed and conducted to ensure that the technical specifications were implemented correctly and to enable the TARGET service level – as published in July 1998 – to be met.

At 7 a.m. ECB time (C.E.T.) on Monday, 4 January 1999, after a smooth conversion to the euro, the ESCB successfully began operating the TARGET system, with more than 5,000 credit institutions participating directly in the system. TARGET immediately started contributing to the integration of the euro money market and made possible the consolidation of the treasury management of institutions with different activity centres throughout Europe. There were some teething troubles, mainly because several RTGS participants experienced difficulties in adapting to the TARGET rules. However, most of these problems had limited business implications in TARGET. TARGET handled more cross-border payments than anticipated. From the very first week of its

operation TARGET processed transactions of a value in excess of €1 trillion daily, of which €340 billion was cross-border traffic.

4.2 Securities settlement systems

In 1998 preparatory work for Stage Three of EMU in the field of securities settlement systems (SSSs) focused on: (1) the assessment of EU SSSs against certain standards for their use in the Eurosystem’s credit operations; (2) the assessment of links between EU SSSs; and (3) the ongoing implementation of the correspondent central banking model (CCBM) for the cross-border use of collateral.

Assessment of EU SSSs against the standards for their use in the Eurosystem’s credit operations

After publication of a report on “Standards for the use of EU securities settlement systems in ESCB credit operations” in January 1998, work concentrated on assessing the EU SSSs against these standards in order to determine whether or not they qualified for use by the Eurosystem in monetary policy and intraday credit operations. A key objective of the assessment was to allow careful analysis to be carried out, with the aim of ascertaining whether there were any risks to which the Eurosystem would be exposed in using these systems in the context of its credit operations.

The subsequent report (“Assessment of EU securities settlement systems against the standards for their use in ESCB credit operations”), which was published in September 1998, gave the results of the assessment and clarified the manner in which the systems had been analysed and assessed against the standards.

The assessment covered 29 EU SSSs, all of which were found to be eligible for use from the start of Stage Three of EMU, although at the time of the assessment, in July 1998, not

all SSSs complied fully with all the standards. Most were in the process of implementing changes in order to ensure full compliance from the start of Stage Three. At present, additional steps to comply with the standards are still being taken. Therefore, the use of most SSSs as from the start of Stage Three is subject to certain conditions. In future the eligibility of SSSs will be subject to periodic reviews to take into consideration developments and changes in the systems and market needs.

Assessment of links between EU SSSs

A link between SSSs can be defined as the technical, legal and organisational arrangements established between different SSSs in order to transfer securities from one system to another. The use of links can facilitate the cross-border use of eligible collateral for the Eurosystem's monetary policy and intraday credit operations. The aim of the assessment is to analyse the risks that are specific to links, such as potential conflicts of law resulting from the applicability of different legal systems, in order to ensure the safe and efficient transfer of securities on a cross-border basis.

Thus far the ECB has focused only on those direct links which (1) would facilitate the cross-border use of eligible collateral in its monetary policy and intraday credit operations; (2) have been established between those SSSs which were assessed by the Eurosystem as being eligible for use in the Eurosystem's monetary policy and intraday credit operations; and (3) were operational as from 4 January 1999 at the latest. Other links will be assessed in 1999. All links will be monitored and periodically reviewed.

Implementation of the correspondent central banking model

The correspondent central banking model (CCBM) was originally established as an interim means of facilitating the cross-border

use of collateral in the Eurosystem's monetary policy and intraday credit operations.

The most important characteristics of the CCBM have been summarised in a brochure that was made available to the public in December 1998. In the CCBM each NCB may act as a correspondent bank (for the delivery of securities) at the request of any other NCB. Thus, when a Eurosystem counterparty (in country A) wishes to obtain credit from its home NCB (NCB A) using collateral held in another country (country B), the counterparty will arrange for the collateral to be transferred to a specified securities account of the NCB of country A with the NCB of country B. Once confirmation of the final, irrevocable delivery of the collateral has been received by NCB A, the latter will release the credit to the counterparty.

The CCBM is open for instructions from counterparties from 9 a.m. to 4 p.m. ECB time (C.E.T.) in order to cover the normal time frame in which regular open market operations are carried out by the Eurosystem. In very exceptional circumstances the closing time may be delayed, if that is deemed necessary by the ECB for monetary policy purposes or for the smooth closing of TARGET.

The fee to be charged by the home NCB to a counterparty for each cross-border transfer has been set at €5. This fee only covers the costs of the correspondent NCB and does not include local fees that are charged separately by the home NCB.

In drawing up the list of assets eligible for use in the monetary policy operations of the Eurosystem, it was also decided to include assets in various countries which are of particular importance for their national financial markets and banking systems, the tier two assets. In some countries these eligible assets also include non-marketable assets, such as private bank claims, bills of exchange and non-marketable bonds. Owing

to the specific characteristics of these non-marketable assets, two methods have been developed to enable their mobilisation through the CCBM. The first method was developed for the mobilisation of certain French non-marketable tier two assets and implies the transfer of property to the correspondent NCB for its own account. The second method was developed for certain non-marketable German, Austrian, Spanish and Dutch tier two assets and implies the transfer of property or a pledge in favour of the home NCB.

In addition, the Governing Council decided on 7 September 1998 that certain assets from non-euro area Member States may be used as collateral to obtain intraday credit in euro for payment systems purposes, subject to the approval of the Governing Council. This collateral can be mobilised by euro area counterparties through the CCBM.

Although the CCBM was originally designed as an interim solution, it may continue to operate, in particular for non-marketable assets which cannot be transferred across borders by alternative means.

4.3 Other payment arrangements

Oversight of the preparatory work for Stage Three of the EBA Euro Clearing and Settlement System

During 1998 the ECB followed closely the preparatory work conducted by the Euro Banking Association (EBA) on its Euro Clearing System (Euro I) for Stage Three of EMU, in order to ensure that Euro I complied with the safety standards laid down in the 1990 G10 Report on Interbank Netting Schemes (the Lamfalussy standards).

In particular, the ECB monitored the design and implementation of the liquidity, collateral and loss-sharing arrangements, the setting-up of operational procedures for the settlement process in both normal and emergency

circumstances and, from the technical viewpoint, the implementation of the hardware and software changes required for the new system.

Euro I began operating on 4 January 1999, with the ECB acting as the settlement agent and holder of a liquidity pool for Euro I.

The EMI Council also envisaged that NCBs would be able to offer settlement services to the EBA Clearing Company, should they wish to do so. Only the Banque de France has indicated its intention to open a local settlement account for the EBA.

Other large-value systems

In compliance with the policy line endorsed by the Committee of Governors of the Central Banks of the Member States of the European Economic Community in 1993, whereby large-value net settlement systems should meet the Lamfalussy standards and settle at the central bank, the NCBs of the countries in which large-value settlement systems are in place also assessed these systems in the light of the Lamfalussy standards. The four systems assessed were: Euro Access Frankfurt (EAF) in Germany; Servicio Español de Pagos Interbancarios (SEPI) in Spain; Système Net Protégé (SNP) in France and Pankkien On-line Pikasiirrot ja Sekit-järjestelmä (POPS) in Finland. The assessment was co-ordinated and reviewed by the ECB. On the basis of the overall satisfactory outcome of this assessment, the Governing Council agreed that all four systems mentioned above (as well as Euro I) complied with the Lamfalussy standards and could operate in euro as from 4 January 1999.

Policy statement of the ECB on payment and settlement systems located outside the euro area

In November 1998 the ECB published a policy statement on euro payment and settlement systems located outside the euro area. In line

with the G10 Report on Interbank Netting Schemes, the statement underlined the fact that, as in any other monetary system, central bank money in euro can only be provided by the central banks that belong to the euro area. Moreover, the Governing Council invited all central banks outside the euro area to contact the ECB whenever they become aware of a planned settlement arrangement

in euro, be it domestic, cross-border or multi-currency in nature. The policy statement makes it clear that the arrangement by which non-euro area NCBs can offer limited intraday liquidity in euro to their participants, subject to the binding conditions set out in an agreement with the NCBs concerned, should be seen as a very specific exception to the rule.

5 The development of the euro banknotes and the preparations for the cash changeover

5.1 Origination and procurement (February to September 1998)

The final designs and the technical specifications for the euro banknotes were approved by the EMI Council in February 1998. Intensive work then began to convert the detailed draft designs into the origination material. The final dies, films and files were exchanged between printing works to enable printing plates to be manufactured from a single origination source. Production of the pilot series was ready to start in September 1998. In parallel with this, negotiations were held with the suppliers of raw materials and security devices to ensure that the ECB was not only able to guarantee continuous sources of supply, but that it would also be able to avoid becoming tied to any single supplier. The Governing Council of the ECB formally decided that the euro banknotes would not bear any national symbols.

5.2 Pilot series (September 1998 to February 1999)

The printing of the pilot series involved producing several million banknotes under normal operating conditions. The aim was to check the compliance of the origination materials with the current specifications and to establish a preliminary basis for a quality management system.

According to the decision of the Governing Council, each NCB will be responsible for procuring its own launch stocks. In other words, each participating NCB is free to decide where its national supply of euro banknotes will be printed. There will be no centrally organised pooling, although NCBs are, of course, free to enter into their own bilateral or multilateral pooling arrangements if this facilitates their production work.

The Governing Council agreed that the participating NCBs could release their printing orders on the assumption of a

production volume of 13 billion euro banknotes, this figure being subject to annual review. These banknotes represent an amount of around €600 billion.

5.3 Protecting the euro banknotes against counterfeiting

Given that the euro banknotes can be expected to be widely used, since they will circulate not only in the euro area Member States but also in many other countries, it can also be assumed that counterfeiters will take a great interest in them. The Governing Council has therefore decided on measures which will be taken in order to prevent counterfeiting, to monitor any counterfeiting activities and to assist the law enforcement authorities in bringing counterfeiters to justice.

First, the euro banknotes will be protected against counterfeiting by means of the incorporation of effective security features. In this context, "effective" means that, on the one hand, counterfeiters should find the euro banknotes difficult to reproduce and, on the other, counterfeits should be easily identifiable by different users, for example cashiers, the general public and banknote-accepting machines.

The euro banknotes will be equipped with a wide range of advanced security features. These features include the following:

- visually recognisable features which can be identified easily by the public, such as watermarks, security threads, intaglio printing with tactile properties and foil elements;
- visually recognisable features which can be checked using simple devices, such as UV fluorescent features and microletters; and
- covert machine-readable features which can be checked both in banknote-

accepting machines and in banknote-sorting machines.

The second area of the ECB's activity in respect of anti-counterfeiting measures relates to publicity, information and educating the public.

Third, the Governing Council has decided to establish a database to store the technical and statistical data in respect of counterfeit euro banknotes and coins. The relevant data will be made available to all 15 EU NCBs and to the respective law enforcement bodies involved in combating counterfeiting. As an important part of the envisaged information system on euro banknote counterfeits, it has also been decided to set up a central ESCB counterfeit analysis centre, which will carry out a technical analysis of euro banknote counterfeits, classify them, and feed the relevant technical data into the database.

5.4 The logistics of the changeover to the euro banknotes and coins in 2002

With a view to ensuring that the changeover to the euro banknotes and coins starting at the beginning of 2002 takes place both smoothly and successfully, the logistics of the 2002 cash changeover clearly need to be determined well in advance to enable all those concerned to start the necessary preparations in good time. In practice, the actual speed of the cash changeover will depend not only on the behaviour of the general public, but also on the capacity of the various parties involved and the existing infrastructure. The organisation of the changeover is the responsibility of the Member States. In addition, the situation in the individual Member States varies with regard to several issues concerning the currency in circulation and the logistical infrastructure of the cash supply (e.g. the value of banknotes and coins in circulation in relation to GDP, the extent of the respective NCB's branch network, the density of the network of automated teller machines (ATMs) dispensing

cash and the capacity to convert them quickly to the euro).

Taking account of these differences between Member States, while respecting potentially varying political preferences, the EU Council established a maximum time span for the dual currency period, which may be shortened by national law, rather than stipulating a uniform approach.¹

In order to ensure a smooth cash changeover to the euro, the following two principles should be applied:

- the changeover must be relatively simple and user-friendly to ensure its transparency for all citizens throughout the euro area; and
- the changeover must proceed in a cost-effective manner and aim at avoiding distortions of competition.

In the light of these two principles, it has been decided that the NCBs should harmonise some aspects of the cash changeover within the euro area. With regard to the early distribution of the euro banknotes and coins, the Governing Council holds the view that the possibility of frontloading euro banknotes and coins to the general public is ruled out by Articles 10 and 11 of Council Regulation (EC) No. 974/98 on the introduction of the euro, since it would have the same effect as issuing or putting them into circulation. However, the Governing Council has endorsed the view that frontloading euro banknotes and coins to credit institutions, security carriers and other organisations (e.g. retailers and vending companies) could be considered legally viable if, and only if, legal or contractual arrangements could be implemented in each national legal system to ensure that the euro banknotes and coins would not be put into circulation prior to 1 January 2002.

¹ Article 15 (1) of Council Regulation (EC) No. 974/98 of 3 May 1998 on the introduction of the euro states: "Banknotes and coins denominated in a national currency unit (...) shall remain legal tender within their territorial limits until six months after the end of the transitional period at the latest; this period may be shortened by national law."

Since frontloading to certain target groups will be necessary in order for the cash changeover to run smoothly as from 1 January 2002, the Governing Council takes the view that the NCBs should not debit the commercial banks for the frontloaded banknotes and coins before 1 January 2002. Furthermore, this debiting should not distort competition. Accordingly, the principle of common debiting has been approved. However, a decision has yet to be taken on the exact debiting model to be used.

5.5 Implementation of Article 52 of the Statute of the ESCB

To ensure substitutability of the national currency units between 1999 and 2002, the exchange of banknotes denominated in the national currencies of the countries

participating in EMU is governed by Article 52 of the Statute of the ESCB.²

Since 1 January 1999, in accordance with a decision of the Governing Council, each participating NCB or its authorised agent has been offering, at one location at least, to exchange the banknotes of other participating countries for national banknotes and coins at the official conversion rate. The NCBs may limit the number and/or the total value of banknotes that they are prepared to accept for any given transaction or on any one day.

It is recommended that the NCBs should repatriate the banknotes of other participating countries. To this end, they may repatriate the banknotes themselves, appoint an agent to perform this repatriation service on their behalf or use existing commercial repatriation channels.

2 Article 52 of the Statute of the ESCB states: "Following the irrevocable fixing of exchange rates, the Governing Council shall take the necessary measures to ensure that banknotes denominated in currencies with irrevocably fixed exchange rates are exchanged by the national central banks at their respective par values."

6 Information and communications systems

6.1 ESCB systems

Preparation of new systems

The conduct of a single monetary policy required the establishment of new IT infrastructural systems and a multitude of highly sophisticated software applications throughout the ESCB, i.e. both at the NCBs and at the ECB. This work was conducted in close collaboration with the NCBs, and was a process spanning almost the whole lifetime of the EMI. In particular, 1997 and 1998 saw the entire ESCB-wide infrastructure take shape, culminating in the final implementation of systems and technical and functional testing in 1998. For this purpose, a physical network and a versatile communications infrastructure, the ESCB-Net, was implemented in May 1998. The system for the exchange of statistical data, which enables the NCBs to report regularly to the ECB and the ECB to disseminate aggregate data, has been fully operational and functioning smoothly since spring 1998. In May 1998 three applications were implemented that enable the ESCB to carry out money market operations and foreign exchange interventions in a decentralised fashion. (A more detailed description of these systems was provided in the EMI's Annual Report 1997.) In July 1998 an application was delivered which supports the decentralised management of the ECB's foreign reserve assets and foreign exchange interventions and is also used for the management of the ECB's own funds. These new applications provide efficient means for safe and quick interaction between the ECB and the NCBs.

In the second half of 1998 all required ESCB primary and contingency systems as well as the associated business procedures were thoroughly tested in an ESCB-wide overall testing exercise in order to ensure that live ESCB operations made a smooth start on 4 January 1999. The conduct and conclusion of the six-month effective testing and training period were positive and any necessary minor changes and

adjustments to the IT systems were performed satisfactorily. The Teleconference System connecting the ECB and the 15 NCBs (as well as six other non-ESCB institutions), which was implemented in 1997, was used extensively in the latter part of 1998. In particular, it proved its worth as the key tool for exchanging urgent information in the final preparatory work for the start of Stage Three of EMU and during the overall testing; it will, if necessary, also play a role as a contingency tool for other systems. In addition, it was confirmed that the secure electronic mail system which operates between the ECB and the 15 NCBs would be able to function as an efficient contingency tool in the event of the failure of ESCB systems designed to exchange relatively high-volume data files.

In the field of banknotes, work has started within the ESCB to develop central databases for aspects of the future circulation of euro banknotes. A counterfeit currency database is being designed that will allow the ECB and the NCBs, in co-operation with national and European law enforcement authorities and mints, to combat the counterfeiting of banknotes and coins. A currency circulation database will also be developed.

The activities performed during the changeover weekend to change the base currency of existing systems to the euro or to start new systems in live operational conditions were conducted successfully. Similarly, the first months of experience of live operation generally proved to be successful and all the necessary IT systems were stable and functioned smoothly. The ECB, together with the NCBs, will continue to assess the functioning of the newly established ESCB-wide systems with the aim of optimising the performance of the systems and the relevant procedures.

Year 2000 activities

While the Year 2000 issue is a matter of very serious concern to the ECB, the fairly recent

establishment of the EMI in 1994 – and of the ECB on 1 June 1998 – has meant that the majority of ESCB and ECB systems are very new and their degree of Year 2000 compliance should be relatively high. In mid-1998 a group of representatives from the ECB and the NCBs was set up to analyse what action will need to be taken in order to reach an acceptable level of certainty that ESCB-wide systems and applications are Year 2000 compliant. The group established a methodology for the conduct of tests of the component parts of the ESCB-wide systems and applications and of the interfaces between the ECB and the NCBs. The individual testing of local ESCB system components will be followed by bilateral testing between the ECB and the NCBs to assess the ESCB-wide compliance of systems. Current planning should allow problems to be identified and any necessary changes to critical systems to be implemented and tested by the middle of 1999. Thereafter, in order to minimise any risks and complications, a moratorium will be placed on changes to critical ESCB-wide systems. Furthermore, in the course of 1999, all ECB business areas will prepare alternative procedures to continue the critical ESCB and ECB functions in case the technical systems are not available on the first business day of 2000.

6.2 ECB systems

The ECB's management of the liquidity situation in the euro area through monetary policy operations requires, *inter alia*, an analysis of various factors affecting the liquidity needs of the euro area banking sector. For this purpose, specific applications were developed in the first half of 1998 and tested within the overall testing in the second half of the year. In order to support the research work carried out at the ECB and to provide a basis for monetary policy strategies and decision-making, a statistical data bank was established. In addition, the ECB has initiated the setting-up of decision support tools to provide consolidated information from both internal sources and the markets. In the process of establishing a new Front

Office area, a tender was organised for the supply of a special trading telephone system and an additional digital voice recording facility. The system has been operational since November 1998. To allow secure and reliable communication with non-ESCB partners, a new general external communications infrastructure was implemented at the end of 1998. It will be used for any dedicated bilateral communications requirements.

The Web site which was set up for the EMI in 1997 was transformed into the ECB's Web site (<http://www.ecb.int>). It provides general access to information about the ECB, press releases, texts of recent speeches and reports published by the ECB. In future, various applications will reside on this infrastructure, including those which will make possible the timely dissemination of information and data of particular interest to the markets and the banking community. The first application, which went live in October 1998, was a set of databases containing the lists of those monetary financial institutions (MFIs) which are relevant for statistical purposes, eligible counterparties to ESCB operations and institutions subject to minimum reserves. Also available is the list of assets eligible for use as collateral in ESCB credit operations. Links to the Web sites of all 15 NCBs are available from the ECB's Web site.

During 1998 the growth of the ECB necessitated a substantial increase in the capacity of many internal systems. As a part of this process, many systems and standard applications were upgraded to meet the demands of modern data processing requirements and to provide ECB staff with the necessary tools to perform their tasks. In addition, during 1998 the ECB successfully completed the migration of its standard network operating systems to one single system. The EMI's local area network (LAN) infrastructure, as established in the early days of 1994, was migrated, following a tender procedure, to the new ECB LAN infrastructure, employing state-of-the-art technology.

7 Banking supervision and financial stability

The preparatory work in the field of banking supervision and financial stability presented specific features in comparison with that carried out in other areas, since it focused on the pursuit of a common understanding of the way in which the relevant provisions of the Treaty and the Statute of the ESCB should be implemented. In 1998 the common understanding reached by the EMI Council (described in the EMI's Annual Report 1997) was confirmed and expanded upon by the Governing Council of the ECB. The final common understanding is reviewed below.

Article 105 (5) of the Treaty obliges the Eurosystem to contribute to the smooth conduct of policies pursued by the national authorities responsible for the prudential supervision of credit institutions and the stability of the financial system. Given the close links between monetary policy and the prudential supervisory functions, as well as the assignment of the responsibility for monetary policy and other tasks to the Eurosystem, the main objective of the provision in question is identified as ensuring effective interaction between the Eurosystem and the national supervisory authorities. The practical details of this relationship are defined in a pragmatic manner. They will be further developed in the light of actual experience and the specific needs which emerge in Stage Three. Two main contributions on the part of the Eurosystem to the conduct of policies pursued by national supervisory authorities are identified.

First, the Eurosystem plays an active role in promoting co-operation among the national supervisory authorities, irrespective of the organisational model adopted in each country, as well as between those authorities and the Eurosystem, with a view to achieving a common understanding on relevant policy issues in prudential supervision and financial stability. This co-operation focuses mainly on issues of a macro-prudential nature which have a bearing on the stability of financial institutions and markets. Even though

Article 105 (5) of the Treaty applies only to participating countries, the co-operation, in general, involves all EU supervisory authorities. The co-operation relies on the assistance of the Banking Supervision Committee, which is composed of representatives of all EU NCBs and national supervisory authorities as well as of the ECB. This multilateral co-operation is expected to interact smoothly with the co-operation pursued within the other international banking supervisory fora (the Banking Advisory Committee and the Groupe de Contact at the EU level and the Basle Committee on Banking Supervision at the G10 level) through, inter alia, cross-participation in the respective meetings.

Second, on the basis of Article 12 of the First Banking Co-ordination Directive (77/780/EEC) concerning the flow of information between central banks and supervisory authorities, the Eurosystem may, where appropriate, provide supervisory authorities with confidential information on individual credit institutions and markets deriving from its activities in the fields of monetary policy, foreign exchange policy and payment systems, provided that this information is used exclusively for supervisory purposes. Conversely, banking supervisors may, where appropriate, provide the Eurosystem with supervisory information on individual institutions which could be useful for the Eurosystem in the performance of its basic tasks. In the area of the single monetary policy, a common understanding has been reached among banking supervisors on the basic features of the flow of supervisory information to the Eurosystem. First, banking supervisors are prepared to assist the Eurosystem in detecting any non-compliance by the counterparties to the single monetary policy with their obligations laid down in the Eurosystem's rules on monetary policy instruments and procedures, including minimum reserves. Ultimate responsibility for ensuring compliance, however, remains with the competent NCB. Second, in view of the

possible systemic implications, banking supervisors are prepared to inform the Eurosystem on a case-by-case basis (i.e. in the light of the specific features of each case) should a banking crisis arise. In the area of payment systems oversight, a common understanding among banking supervisors on the flow of information to NCBs acting as payment systems overseers has already been reached. Work to revise this agreement in the light of experience gathered is under way.

Article 25.1 of the Statute of the ESCB – which applies to all EU countries – provides for a specific advisory function to be carried out by the ECB in the field of Community legislation relating to the prudential supervision of credit institutions and the stability of the financial system. This function is optional in nature and refers to the scope and implementation of Community legislation in the above-mentioned fields. This function, which also includes advice on the possible need for new legislation, enables the ECB to contribute to the framework for the prudential supervision of credit institutions and financial stability at the Community and national levels.

Article 105 (4) of the Treaty (which applies to all EU countries with the exception of the United Kingdom) stipulates that the ECB shall

be consulted on draft Community and national legislative provisions falling within its fields of competence. The precise scope of this provision is laid down in the Council Decision of 29 June 1998 (98/415/EC) on the consultation of the ECB by national authorities. In accordance with that Decision, the authorities of the Member States shall consult the ECB on draft national legislation relating to financial institutions insofar as it has a material influence on the stability of financial institutions and markets, unless the exclusive purpose of the draft legislative provision is the transposition of Community Directives into national law. This function enables the ECB to provide further input into the Community and national legislative processes in respect of prudential supervision and financial stability.

Finally, Article 105 (6) of the Treaty – which applies to all EU countries – covers the possibility of specific tasks in the field of prudential supervision being conferred upon the ECB. The right of initiative in this area lies with the European Commission, while the ECB is involved in an advisory capacity and the decision is taken by the EU Council acting unanimously. However, it is felt that any transfer of supervisory powers from national authorities to the ECB is not justified at this stage.

8 Co-operation with other institutions

The Eurosystem is a new participant in the field of international and European economic, monetary and financial co-operation. Representation of the Eurosystem in the performance of its basic tasks is decided by the Governing Council of the ECB and varies, depending on the institutions or fora concerned. This external representation implies close co-ordination within the Eurosystem in order to formulate positions on issues pertaining to its basic tasks. Informal arrangements with certain institutions (e.g. the OECD and the IMF) had already been reached in the context of the EMI. As far as the ECB's international and European representation is concerned, formal and informal arrangements have been developed since the ECB's establishment on 1 June 1998. At the start of Stage Three on 1 January 1999, although not all such arrangements had yet been finalised, the most relevant ones were already in place.

8.1 European relations

In 1998 the EMI and, subsequently, the ECB further consolidated the already close co-operation existing with other institutions of the European Union.

EU Council

The completion of European legislation for the launch of the euro required close involvement of the ECB in the preparatory work carried out by the EU Council. A good example of this was the secondary legislation on minimum reserve requirements, statistics and sanctions, which was adopted on the basis of ECB Recommendations. In addition, regular exchanges of views continued to take place between the EU Council and the ECB, as provided for by the Treaty. The President of the ECOFIN Council attended meetings of the Governing Council of the ECB and the President of the ECB took part in meetings of the ECOFIN Council at which matters

relating to the objectives and tasks of the Eurosystem were addressed, such as the irrevocable fixing of the euro conversion rates. Moreover, the two informal meetings of the ECOFIN Council in York in March 1998 and in Vienna in September 1998 respectively provided an opportunity for a wide-ranging discussion between the EMI/ECB, the NCB governors and ECOFIN ministers on issues related to both international and European developments.

Euro-11 group

In line with the conclusions of the Presidency of the Luxembourg European Council in December 1997, the President of the ECB is also to be invited to attend meetings of the newly established informal Euro-11 group. This group, which brings together the Economics and Finance ministers of the 11 euro area Member States, the European Commission and, upon invitation, representatives of the ECB, is a forum for the discussion of issues connected with their respective responsibilities for the single currency.

European Parliament

The EMI/ECB also intensified its dialogue with the European Parliament. In addition to the hearings in the course of last year's procedure to appoint the President, the Vice-President and the other four members of the Executive Board of the ECB, an exchange of views took place on a number of other occasions, including the presentation of the EMI's Convergence Report to the European Parliament's Sub-Committee on Monetary Affairs, the subsequent presentation of the EMI's Annual Report 1997 at the plenary session and the start in autumn 1998 of regular hearings of the President of the ECB before the Sub-Committee on Monetary Affairs. In future these hearings will, as a rule, take place on a quarterly basis and are

intended to form the cornerstone of the dialogue between the ECB and the European Parliament. They reflect the ECB's readiness to be open and transparent in discharging its monetary policy functions. In addition, members of the EMI/ECB management and staff participated in other hearings of committees of the European Parliament on issues related to, inter alia, statistics and payment systems.

European Commission

Building upon the links already established over the past few years, the ECB has maintained close relationships with the European Commission. The competent member of the European Commission has been invited to attend the meetings of the Governing Council of the ECB in accordance with Article 109b (1) of the Treaty.

Monetary Committee

The Monetary Committee, in which the EMI/ECB participated as an observer, remained a key forum for the involvement of the ECB in the preparation of a broad range of issues for discussion and adoption by the EU Council. Activities ranged from technical subjects such as the minting of the euro coins and institutional issues such as the external representation of the European Union on EMU matters to a number of topics concerning the changeover to the euro and the multilateral surveillance exercise. With the start of Stage Three of EMU, the Monetary Committee was replaced by the Economic and Financial Committee, on which the ECB is now officially represented by two full members.

Other links

The ECB also maintained a number of links with other relevant European bodies. This applies, in particular, to its contribution to the work of both the Committee of National

Mint Directors and the Committee of Monetary, Financial and Balance of Payments Statistics.

8.2 International relations

In order to develop working relationships at both a multilateral and a bilateral level, arrangements for the ECB to be represented externally have been made with the following institutions and fora: (1) intergovernmental institutions, in particular the IMF and the OECD; (2) fora such as the G7 and the G10 Ministers and Governors (and Deputies); (3) the G10 Governors and Committees established under the aegis of the BIS; and (4) non-EU central banks.

ECB representation in intergovernmental institutions

The IMF, as the cornerstone of the international monetary system, plays a key role in the process of the multilateral and bilateral surveillance over macroeconomic policies and financial market stability. It was important for the ECB to be represented at the IMF from the start of Stage Three, given the respective mandates of both institutions. At the meeting of the IMF Executive Board on 21 December 1998 a decision was made to grant observer status to the ECB. The ECB observer has a standing invitation to attend all meetings of the IMF Executive Board regarding the Fund surveillance, under Article IV, over the monetary and exchange rate policies of the euro area, the Fund surveillance, under Article IV, over the policies of individual euro area Member States, the role of the euro in the international monetary system, the IMF World Economic Outlook, international capital market reports and world economic and market developments. Moreover, the ECB representative takes part, on a case-by-case basis, in meetings concerning items recognised by the ECB and the IMF to be of mutual interest for the performance of their respective mandates. In January 1999 the first

official IMF consultation discussion with the ECB took place on the monetary and exchange rate policies of the euro area in the context of Article IV consultations with the euro area countries. Furthermore, the President of the ECB participates in the meetings of the Interim Committee as an observer. In addition, practical arrangements have been made regarding the exchange of information and statistical data between the ECB and the IMF.

The OECD is another intergovernmental institution that addresses issues relating to the basic tasks entrusted to the Eurosystem. In 1998 the participation of EMI/ECB representatives in the relevant OECD meetings was based on informal arrangements made in 1994 between the OECD and the EMI. The ECB and the OECD are in the process of finalising a more formal arrangement, which will enable the ECB to contribute to the work of the OECD and to attend all its relevant meetings.

ECB representation in the meetings of the G7 and G10 Ministers and Governors (and Deputies)

At its meeting in Vienna on 11 and 12 December 1998 the European Council endorsed a "Report on the state of preparation for Stage Three of EMU, in particular the external representation of the Community". This report states that "regarding the ECB's participation in the G7 Finance Ministers' and Governors' Group, non-European partners have already accepted that the President of the ECB attends meetings of the Group for the discussions which relate to EMU, e.g. multilateral surveillance, exchange-rate issues, and for agreement of the relevant sections of the published Statement". Pending a final decision of the EU Council on the external representation of the Community, the ECB participates in the meetings of the G7 and

G10 Ministers and Governors (and Deputies) on the basis of informal arrangements.

ECB representation in meetings of the G10 Governors at the BIS

As regards central banking fora, the President of the ECB participates in the meetings of the G10 Governors, while ECB representatives also take part in the Committees set up under the aegis of the BIS, namely the Basle Committee on Banking Supervision, the Euro-currency Standing Committee (renamed as the Committee on the Global Financial System), the Committee on Payment and Settlement Systems and all groups established by these Committees.

Bilateral co-operation with foreign central banks

Contacts and working relationships with non-euro area central banks and other relevant organisations in mature, emerging market and transition economies have been developed. As regards the relationships with central banks in mature economies, the introduction of the euro on 1 January 1999 led the Eurosystem to review and adjust existing swap agreements between euro area NCBs, on the one hand, and the US Federal Reserve System and Norges Bank – Norway's central bank – on the other. More specifically, the Governing Council jointly agreed with the Federal Reserve System that the existing bilateral agreements of six euro area NCBs – namely the central banks of Belgium, Germany, France, Italy, the Netherlands and Austria – with the Federal Reserve System should be allowed to lapse. At the same time, the existing swap agreements between the euro area NCBs and Norges Bank were replaced by a new swap agreement between the ECB and Norges Bank amounting to €1,535 million, which came into effect on 1 January 1999.

9 Legal issues

9.1 Legal convergence

Member States were obliged, in accordance with Article 108 of the Treaty, to eliminate incompatibilities between their national legislation – including the statutes of their NCBs – on the one hand and the Treaty and the Statute of the ESCB on the other, by the date of the establishment of the ESCB at the latest. In March 1998 the EMI published its Convergence Report (as required under Article 109j (1) of the Treaty), which contained, inter alia, an assessment of the compatibility of such national legislation with the Treaty and the Statute of the ESCB.

This report distinguished between the statutes of the NCBs and other legislation which needed to be adapted in the light of the relevant provisions of the Treaty and of the Statute of the ESCB. With regard to the statutes of the NCBs, a distinction was made between adaptation in the area of central bank independence and other adaptations required to ensure the necessary degree of integration of the NCBs in the ESCB. As far as the adaptation of legislation other than the statutes of the NCBs was concerned, the EMI focused in particular on those laws with a direct bearing on the performance by an NCB of its ESCB-related tasks and laws in the monetary field, such as acts related to foreign exchange and coinage.

In its Convergence Report the EMI noted that all Member States except Denmark, the legislation of which did not require adaptation, had introduced, or were in an advanced stage of introducing, changes in the statutes of their NCBs, following the criteria laid down in the EMI's previous reports on this subject and in the EMI's Opinions in consultation procedures (see Chapter III, Section 6, and Table 13 below). The United Kingdom, which is exempt from the obligations under Article 108 of the Treaty, was in the process of introducing a new statute of the Bank of England which, while providing a greater level of operational

central bank independence, was not expressly intended to achieve the legal convergence required by the EMI for full compliance with the Treaty and the Statute of the ESCB. Pursuant to Article 109f (6) of the Treaty and Article 5.3 of its Statute, the EMI was consulted on all draft national legislation related to the adaptation of the statutes of the NCBs.

In its Convergence Report the EMI concluded that, with the above exceptions, a legislative process was taking place throughout the European Union that was intended to prepare the NCBs for Stage Three of EMU. This process was eventually completed before the Council of the European Union (EU Council), meeting in the composition of the Heads of State or Government, convened on 1 May 1998 to adopt the decisions foreseen in Article 109j (4) of the Treaty. The EMI also identified imperfections in national legislation which would not jeopardise the overall functioning of the ESCB at the start of Stage Three, but which would nevertheless need to be adapted in order to meet the requirements of the Treaty and the Statute of the ESCB for Stage Three. Legislation to that effect has meanwhile been adopted in France, Ireland, Luxembourg and Sweden, and the ECB was duly consulted on the corresponding drafts. The ECB will, through the consultation procedures addressed in Chapter III, Section 6, of this Annual Report, continue to monitor legislative developments in the Community and in individual Member States which fall within its field of competence.

9.2 Preparatory work for Stage Three of EMU

Article 4.2 of the EMI Statute required the EMI to specify the regulatory, organisational and logistical framework necessary for the ESCB to perform its tasks in Stage Three of EMU. Preparatory work for Stage Three included a considerable legal component which extended to virtually all areas in which such preparatory work was being undertaken.

The ECB participated actively in the preparation of Community legal acts relevant to the introduction of the euro. In particular, it contributed, through Recommendations, to the adoption of secondary legislation of EU institutions in the preparation of Stage Three. Such Recommendations were given on a variety of issues, such as minimum reserves, the ECB's power to impose sanctions, the collection of statistical information by the ECB, the limits and conditions for capital increases of the ECB, and the appointment of the external auditors of the ECB and the NCBs. The ECB also issued a Recommendation to EU institutions and to Member States on the legal protection of euro banknotes and coins.

In parallel with this, the ECB fulfilled its obligation to prepare the legal framework, both operational and institutional, of the ESCB. In this context, the ECB applied the entire set of legal acts which it is empowered to use under Articles 14.3 and 34 of the Statute of the ESCB. The ECB adopted two Regulations (one on minimum reserves and the other on the consolidated balance sheet of the Monetary Financial Institutions sector) and a number of Decisions, particularly in relation to the capital of the ECB. Furthermore, in view of, *inter alia*, the decentralised execution of ESCB tasks pursuant to Article 12.1, third paragraph, of the Statute of the ESCB, the ECB adopted a wide range of Guidelines and some Instructions under Article 14.3 of the Statute of the ESCB. Guidelines and Instructions adopted by the Governing Council and the Executive Board respectively are legal instruments addressed to, and binding on, the euro area NCBs and are intended to ensure the harmonised execution of the tasks of the ESCB across the euro area. To the extent that the substance of such legal acts also concerns the NCBs of those Member

States which have not yet adopted the euro, agreements mirroring the content of the legal acts were entered into between the ECB, the euro area NCBs and the non-euro area NCBs. This resulted, for example, in legal documentation relating to TARGET and to the correspondent central banking model (CCBM), which enables NCBs to accept collateral on a cross-border basis. The exchange rate co-operation between the euro area and the NCBs of the non-participating Member States was also organised by way of an ESCB Agreement laying down the operating procedures for ERM II. Finally, the ECB supported the standardisation of contractual documentation necessary for the smooth functioning of financial markets. In this context, standardised ESCB master agreements on repurchases and foreign exchange swaps, together with a master netting agreement, were developed, and contracts supporting the management of the ECB's foreign reserve assets were put in place with counterparties throughout the world.

In addition, the institutional establishment of the ECB and of the ESCB has involved the preparation and adoption of a variety of legal acts and instruments, such as the Headquarters Agreement with the ECB's host state, the Rules of Procedure of the ECB, the ECB Conditions of Employment and ancillary labour rules, and the regime applicable to accounting and reporting within the ESCB.

Table 13 shows the legal acts adopted by the ECB which have been published or will be published shortly in the Official Journal of the European Communities.

The ECB intends to publish all such legal acts in the 11 official languages of the Member States in a Compendium to be made available in the first quarter of every year.

Table 13**Legal acts and agreements**

No.	Date	Subject	Official Journal ref.
ECB/1998/1	9.6.1998	Decision of the European Central Bank on the method to be applied for determining the national central banks' percentage shares in the key for the capital of the European Central Bank	L 8, 14.1.1999
ECB/1998/2	9.6.1998	Decision of the European Central Bank laying down the measures necessary for the paying-up of the capital of the European Central Bank	L 8, 14.1.1999
ECB/1998/3	19.6.1998	Recommendation of the European Central Bank to the Council of the European Union on the external auditor of the European Central Bank	C 246, 6.8.1998
ECB/1998/4	9.6.1998	Decision of the European Central Bank on the adoption of the Conditions of Employment for staff of the European Central Bank	
ECB/1998/5	12.11.1998	Recommendation of the European Central Bank on the external auditors of the national central banks	C 411, 31.12.1998
ECB/1998/6	7.7.1998	Decision of the European Central Bank on the denominations, specifications, reproduction, exchange and withdrawal of euro banknotes	L 8, 14.1.1999
ECB/1998/7	7.7.1998	Recommendation of the European Central Bank regarding the adoption of certain measures to enhance the legal protection of euro banknotes and coins	C 11, 15.1.1999
ECB/1998/8	7.7.1998	Recommendation of the European Central Bank for a Council Regulation (EC) concerning the application of minimum reserves by the European Central Bank	C 246, 6.8.1998
ECB/1998/9	7.7.1998	Recommendation of the European Central Bank for a Council Regulation (EC) concerning the powers of the European Central Bank to impose sanctions	C 246, 6.8.1998
ECB/1998/10	7.7.1998	Recommendation of the European Central Bank for a Council Regulation (EC) concerning the collection of statistical information by the European Central Bank	C 246, 6.8.1998
ECB/1998/11	3.11.1998	Recommendation of the European Central Bank for a Council Regulation (EC) concerning the limits and conditions for capital increases of the European Central Bank	C 411, 31.12.1998
ECB/1998/12	3.11.1998	Decision of the European Central Bank concerning public access to documentation and the archives of the European Central Bank	
ECB/1998/13	1.12.1998	Decision of the European Central Bank on the national central banks' percentage shares in the key for the capital of the European Central Bank	
ECB/1998/14	1.12.1998	Decision of the European Central Bank laying down the measures necessary for the paying-up of the capital of the European Central Bank by the non-participating national central banks	
ECB/1998/15	1.12.1998	Regulation of the European Central Bank on the application of minimum reserves	L 356, 30.12.1998
ECB/1998/16	1.12.1998	Regulation of the European Central Bank concerning the consolidated balance sheet of the Monetary Financial Institutions sector	L 356, 30.12.1998

Table 13 cont'd

No.	Date	Subject	Official Journal ref.
ECB/1998/17	1.12.1998	Guideline of the European Central Bank on the statistical reporting requirements of the European Central Bank in the field of balance of payments and international investment position statistics	
	7.7.1998	Rules of Procedure of the European Central Bank	L338, 15.12.1998
	1.9.1998	Rules of Procedure of the General Council of the European Central Bank	
	1.9.1998	Agreement between the European Central Bank and the national central banks of the Member States outside the euro area laying down the operating procedures for an exchange rate mechanism in Stage Three of Economic and Monetary Union	C 345, 13.11.1998
	18.9.1998	Headquarters Agreement between the Government of the Federal Republic of Germany and the European Central Bank concerning the seat of the European Central Bank	

10 Internal audit activities

Under the provisions laid down in the Statute of the ESCB, the operational efficiency of the management of the ECB is examined by the European Court of Auditors. Furthermore, the books and accounts of the ECB are audited by independent external auditors.

In addition to these external controls, within the framework of its annual audit programme, the ECB's Directorate Internal Audit is involved in reviewing the reliability and integrity of financial information, in particular with regard to that which is provided in the financial statements.

1998 was unique in that two different sets of accounts were closed – the first relating to the liquidation of the EMI at the end of May 1998 and the second relating to the first set of financial statements drawn up for the newly established ECB in early 1999. During the

year the Directorate Internal Audit also focused on reviewing the security of information systems under development or already in operation.

In the context of the Internal Auditors Committee (IAC), which is the successor to the TARGET Audit Group (TAG) and is composed of representatives of the ECB and the NCBs' Internal Audit functions, audit programmes and audit standards are defined jointly and are used in a decentralised manner for the review of ESCB-wide common infrastructures. Although it was initially limited to one of the most critical systems, TARGET, this EU-wide co-operation among the ESCB's Internal Audit functions was progressively extended during 1998 to include other key ESCB systems, *inter alia*, the decentralised management of the ECB's foreign reserves.

II Changeover to the euro

The transition of the banking and financial community from the participating national currencies to the euro in only three and a half days after the irrevocable fixing of the euro conversion rates was deemed to be a remarkable success. The smooth migration of all electronic systems and procedures attested to the quality of the preparatory work carried out over recent months and years, both by the banking and financial industry and by the central banking community under the guidance initially of the EMI and then of the ECB.

In February and March 1998 the EMI Council discussed issues concerning the implementation of Article 109I (4) of the Treaty, which deals with the fixing of the irrevocable conversion rates of participating national currencies vis-à-vis the euro. In particular, the timing of the adoption of the conversion rates by the EU Council was discussed with a view to maximising the time available for the final adaptation of electronic systems and procedures. The EMI Council agreed finally that the irrevocable conversion rates should be fixed on 31 December 1998 and that, contrary to alternative proposals, markets should not be closed by national authorities on that day, with the exception of stock exchange markets and countries in which 31 December is a bank holiday. The reasons for this decision were the following: compliance with the letter of the Treaty; the request from a large proportion of the banking community that payment systems, in particular, should be operational at the end of the year; and to avert the risk of the emergence of a grey foreign exchange market for the euro outside the euro area on 31 December 1998, with potential implications for the continuity of contracts denominated in ECU and converted into euro.

The EMI Council and the Governing Council of the ECB were consulted by most euro area Member States in the course of 1998 on their national legislation related to the

changeover to the euro. In their Opinions, the EMI and the ECB focused on differences between the national legal frameworks, which could have impaired the singleness of the monetary policy of the euro area.

A significant number of the Eurosystem's activities were devoted to the preparations for the changeover weekend at the end of 1998. There were three main causes for concern:

- First, a major technical failure affecting either the Eurosystem or any of the components of the "core infrastructure" of the financial system in the euro area could have hampered the functioning of the operational arm of the monetary policy framework of the Eurosystem. This core infrastructure was deemed to include national central securities depositories, payment and securities settlement systems, stock exchanges, financial data providers and global custodians.
- Second, the exceptional concentration of operational risks (i.e. migration procedures) within a limited period of time (three and a half days) confronted the Eurosystem with potential systemic risks at the very start of Monetary Union. This concentration affected not only the core infrastructure, but also the whole financial system within and beyond the euro area (other Member States and major industrialised countries.)
- Third, the banking and financial community wanted to ensure that it would be informed promptly and in a secure manner of the irrevocable conversion rates, as adopted by the EU Council on 31 December 1998, thereby enabling it to start conversion operations immediately.

On 3 November 1998 the Governing Council approved the following three recommendations to the banking and financial community:

- “Banks and other financial operators are invited to set up in-house organisational arrangements to cope with possible unexpected events arising during the changeover weekend. In particular the institutions belonging to the ‘core infrastructure’ of the financial market (...) are also invited to consider, on their own responsibility, the means via which information on such events could be disseminated among market participants.
- Banks and other financial operators are invited to refrain from effecting market transactions and injecting new orders into their backup systems which would need to be settled on 4 January 1999 with a view to reducing the workload during the changeover weekend.
- The counterparties of the NCBs are invited to consider all possible solutions, which would allow them to be sufficiently liquid on 4 January 1999. Given the risk of technical failures with reference to the particularly cumbersome procedures for the redenomination of securities, the counterparties of the NCBs could consider – where this is technically possible – whether or not they would like to pre-deposit eligible securities with the NCBs before the end of the year, in order to create a buffer of collateral which could be used on 4 January 1999 in the event of an emergency.”

At the same time, the Governing Council decided to create an ad hoc Changeover Weekend Committee to act as a consultative body on changeover issues for the Eurosystem. This Committee identified a number of financial institutions (national central securities depositories, payment and securities settlement systems, stock exchanges, financial data providers and global custodians) as forming part of the core infrastructure which should report either to the ECB or to the NCBs on their plans for the changeover and on details of any incidents or unforeseen developments. A number of contingency measures to be implemented in

the event of a breakdown of the core infrastructure were discussed and prepared.

In order to follow developments prior to and during the changeover weekend, a network of “central communication points” was set up to gather and share information, both from within the Eurosystem as well as from outside. This monitoring procedure involved checking the timely implementation by the Eurosystem and the core infrastructure of 240 relevant conversion steps (“milestones”), which could potentially affect the smooth launch of the euro. Contact was established with the non-euro area NCBs, the central banks of the Concertation Group, the European Commission and a parallel network of institutions set up by the Banking Supervision Committee.

Credit institutions received prompt and secure information on the irrevocable conversion rates for the euro.¹ Immediately after their adoption by the EU Council, the ECB and the euro area NCBs helped to disseminate this information to the banking community via a wide range of information services such as Reuters and Telerate, as well as via the Internet and S.W.I.F.T.

On 3 January 1999 the ECB announced in a press release that “in the monitoring of conversion activities conducted by the ESCB during the changeover weekend no incidents have been reported that may impair the smooth start of the system. The ESCB considers this to be a sign of the quality of the preparatory work conducted over recent months and years by the central banking community and by private financial market operators”.

¹ See also Chapter II, Section 2.6.

12 Information activities

The aims of the ESCB's external communication policy are to foster the transparency and clarity of its policy objectives, to inform the public about its tasks and actions, thereby enhancing its effectiveness, credibility and efficiency, and to contribute to the accountability of the Eurosystem without disregarding the statutory provision relating to the confidentiality of the proceedings of the Governing Council of the ECB.

The ECB communicates information to the public by a variety of means, including press releases, press conferences and speeches by members of the Governing Council and various publications. Each of these is an important tool for explaining the single monetary policy of the Eurosystem. Since the establishment of the ECB, the President has held regular monthly press conferences to inform the general public via the media of the outcome of the deliberations of the Governing Council; from the start of Stage Three of EMU these have included an explanation of its monetary policy decisions. The President's introductory statement at these press conferences as well as press releases on relevant topics are published immediately after the meetings of the Governing Council. These introductory statements, press releases, speeches by Governing Council members and all other ECB publications are made available on the ECB's Web site (<http://www.ecb.int>) and/or on the Web sites of the NCBs (see the list of documents published by the ECB at the end of this Report).

In accordance with the Statute of the ESCB, the ECB "shall draw up and publish reports on the activities of the ESCB at least quarterly" (Article 15.1) and, in addition, "a consolidated financial statement of the ESCB shall be published each week" (Article 15.2). Since January 1999 the ECB has produced a Monthly Bulletin, which is intended to be one of the ECB's main tools for analysing economic developments in the euro area and

explaining the single monetary policy of the Eurosystem. Furthermore, the statistical part of this Monthly Bulletin is one of the key sources of euro area statistics. As is the case for the ECB's Annual Report, the Monthly Bulletin is produced in all 11 official EU languages and made widely available throughout the euro area and beyond. The same is true of many other publications.

In 1998 the ECB received 3,500 visitors and hosted 200 information sessions for both the public at large and special target groups (from academic circles, commercial and industrial associations, the banking community, research institutes and the media) from all over the world about the ECB, the euro and the single monetary policy. In this area, too, the NCBs played an important role in bringing the Eurosystem closer to the citizens of Europe.

Contributions to the media and speeches by members of the Governing Council have been additional vehicles for proactively explaining the single monetary policy of the Eurosystem to the public at large.

Members of the Governing Council and of the Executive Board and staff of the ECB and NCBs have participated in numerous conferences on ESCB-related topics organised by other EU and non-EU institutions.

Finally, in accordance with Article 109b (3) of the Treaty, the President and the other members of the Executive Board of the ECB, at their own initiative or upon request, may also be heard by the competent committees of the European Parliament. It has been agreed that the President of the ECB will appear before the European Parliament or its committees at least four times a year to present the activities of the ESCB and in order to facilitate a regular exchange of information and views (see also Chapter II, Section 8). In accordance with the provisions of national laws, some NCB governors may also be heard by the Parliament of their country.



Chapter III

Other ESCB activities

I Oversight of the ECU Clearing and Settlement System

The ECU Clearing and Settlement System (ECU Clearing) came under the oversight of the EMI by virtue of Article 109f (2), sixth indent, of the Treaty. Upon its establishment, the ECB took over the EMI's responsibility with regard to the oversight of the ECU Clearing.

During 1998 the activity of the Euro Banking Association (EBA) focused mainly on the preparatory work for the Euro Clearing System (Euro I) run by the newly created EBA Clearing Company, which started clearing and settlement operations on 4 January 1999 (see Chapter II, Section 4.3).

exceeding, on average, 6,200 payments per day and reaching an average daily turnover of ECU 55.2 billion.

The ECU Clearing functioned fairly smoothly during 1998, although some delays were registered in the completion of settlement on several days, caused by either technical problems or procedural flaws localised at one or more clearing banks.

The ECU Clearing ceased to operate on 31 December 1998.

Activities of the ECU Clearing and Settlement System in 1998

In 1998 both the number of transactions processed in the ECU Clearing and their value rose in comparison with 1997, slightly

2 Report on electronic money

In August 1998 the ECB published the "Report on electronic money", building on the analysis conducted under the aegis of the EMI. The Report addresses the reasons why the issuance of electronic money should be regulated and states the minimum requirements for electronic money issuers and desirable objectives. It also tackles the question of the status of the issuer of electronic money and the role of the oversight of payment and settlement systems and prudential supervision with regard to the minimum requirements.

At the present time electronic money is still in its infancy, but the possibility of an exponential growth, especially as a result of its use to effect payments for goods and services offered on the Internet and of the introduction of the euro (which makes cross-border transactions far easier), cannot be ruled out. Hence electronic money is likely to have significant implications for monetary policy in the future. A number of additional regulatory concerns, i.e. the safe and efficient functioning of payment systems and confidence in payment instruments, the protection of customers and merchants, the stability of financial markets and protection against criminal abuse and the level playing-field also have to be taken into account. Therefore, clear rules on the conditions under which electronic money can be issued need to be established. The ECB considers it essential that the following minimum requirements be fulfilled:

- issuers of electronic money must be subject to prudential supervision;
- the issuance must be subject to solid and transparent legal arrangements, technical security, protection against criminal abuse and monetary statistics reporting;
- issuers of electronic money must be legally obliged to redeem electronic money against central bank money at par at the request of the holder of the electronic money; and
- the possibility must exist for the ECB to impose reserve requirements on all issuers of electronic money.

The ECB has identified two further objectives, the pursuit of which it deems to be desirable: the interoperability of electronic money schemes and the adoption of adequate guarantee, insurance or loss-sharing schemes to protect the holders of electronic money.

Against this background, the ECB is of the opinion that the most straightforward solution would be to limit the issuance of electronic money to credit institutions, as this would avoid changing the existing institutional setting for monetary policy and banking business. The issuance of electronic money should be limited to "credit institutions as defined in Article I of the First Banking Co-ordination Directive", since Article 19.1 of the Statute of the ESCB allows the ECB to impose reserve requirements only on these institutions in Stage Three of EMU. For this reason, the ECB would see great merit in seeking an amendment to the First Banking Co-ordination Directive so as to extend its scope of application to cover those institutions issuing electronic money which do not fall within the current definition of a "credit institution".

These considerations have been largely taken into account in the European Commission's proposals for Directives on the taking-up, the pursuit and the prudential supervision of the business of electronic money institutions and amending Directive 77/780/EEC on the co-ordination of laws, regulations and administrative provisions relating to the taking-up and pursuit of the business of credit institutions, which were published on 15 October 1998. In its formal opinion of 18 January 1999 on these draft Directives the ECB addressed the following major issues:

- all issuers of electronic money should be legally obliged to redeem electronic money at par value. From the monetary policy point of view, the redeemability requirement is, inter alia, necessary in order to preserve the unit-of-account function of money, to maintain price

stability by avoiding unconstrained issuance of electronic money, and to safeguard the controllability of liquidity conditions and short-term interest rates set by the ESCB. By contrast with the proposal of the European Commission, electronic money holders should have the possibility of exchanging their electronic

money against cash or a bank transfer at all times; and

- the business activities open to credit institutions which choose the limited authorisation to operate as electronic money institutions (ELMI) are too broad and the risks related to these are not addressed to an adequate extent.

3 Other payment system activities

Since the variety and structure of payment systems differ from one country to another, the availability of comprehensive information is essential. For the EU countries, this information has been made available in "Payment systems in the European Union" (the "Blue Book"), which is a descriptive guide to the payment and settlement systems in the 15 Member States, published by the EMI in April 1996. Statistical addenda, incorporating figures for 1995, 1996 and 1997, were published in January 1997, January 1998 and January 1999 respectively.

For the ECB, it is essential for similar information to be made available on candidate

EU Member States. The 11 countries which started the process towards accession in March 1998¹ accepted the ECB's invitation to set up a project to produce a description of their payment and securities settlement systems in line with those of the EU countries included in the Blue Book. The intention of the ECB is to publish these descriptions, together with the related statistical data, in an Addendum to the Blue Book in the course of 1999.

¹ Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, the Slovak Republic, Slovenia and Cyprus.

4 Administration of EMS mechanisms and Community loans

Under Article 109I (2) of the Treaty the ECB took over the tasks of the EMI related to the administration of the mechanisms of the European Monetary System (EMS) – the Very Short-Term Financing (VSTF) mechanism, the Short-Term Monetary Support mechanism, the creation of ECUs for the purpose of implementing the EMS Agreement and the administration of borrowing and lending operations concluded by the Community under the Medium-Term Financial Assistance mechanism.

4.1 EMS mechanisms

The ECB carried out operations associated with the creation, utilisation and remuneration of official ECUs until the end of December 1998. Official ECUs were issued to the NCBs of the EU against the contribution of 20% of their gross gold holdings and US dollar reserves through revolving swaps. Contributions were compulsory for the EU NCBs participating in the exchange rate mechanism (ERM) and voluntary for the remaining EU NCBs. The swap operations were renewed every three months. This allowed the necessary adjustments to be made in order, first, to ensure that each EU NCB's contribution to the ECB continued to represent at least 20% of its gold and US dollar reserve holdings at the end of the month preceding the renewal date, and, second, to take account of changes in the price of gold and in the US dollar exchange rate vis-à-vis the official ECU.

In accordance with Article 23.2 of the EMI Statute and Article 20 of the EMS Agreement, the mechanism for the creation of ECUs against gold and US dollars was unwound by the first day of the third stage of EMU. As provided for in Article 23.3 of the EMI Statute, any existing claims and liabilities arising from the VSTF mechanism and from the Short-Term Monetary Support mechanism¹ were settled by the first day of the third stage of EMU.

The ECU mobilisation mechanism has not been activated since 1986. No use was made

of the VSTF mechanism in 1998, nor of the Short-Term Monetary Support mechanism. The latter has not been activated since 1974.

At the start of Stage Three of EMU the EMS was replaced by the new exchange rate mechanism referred to as ERM II (see Chapter II, Section 2.1).

4.2 Community loans

In accordance with Article 109I (2) of the Treaty and Article 11 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 Community under the Medium-Term Financial Assistance mechanism. The mechanism provides for loans to be granted by the European Commission on behalf of the Community to Member States which are experiencing or are seriously threatened by difficulties in their balance of payments (current or capital account). In order to fulfil its administrative function with regard to such loans, the ECB effects payments arising from these borrowing and lending operations. It verifies the maturity dates laid down in the borrowing and lending contracts for the payment of interest and repayment of the principal and reports to the European Commission on the operations carried out for the account of the EU.

In 1998 the ECB continued to receive from borrowers, namely Greece and Italy, and to pay to creditors vis-à-vis the Community the sums due in respect of capital, interest, commission and expenses on outstanding loans. Following the final repayment made by Greece in March 1998, no balance remained outstanding for Greece at the end of 1998. The following table shows the total of outstanding Community lending operations as at 31 December 1997 and 1998.

¹ As laid down in the EMS Agreement and the Agreement between central banks of the Member States of the European Economic Community of 9 February 1970, as amended.

Table 14**Outstanding Community loans***(as at year-end in millions)*

	Outstanding loans denominated in Deutsche Mark		Outstanding loans denominated in ECUs		Total outstanding loans expressed in ECUs	
	1997	1998	1997	1998	1997	1998
Greece	---	---	500	---	500	---
Italy	3,900	2,900	1,475	1,000	3,447	2,483
Total	3,900	2,900	1,975	1,000	3,947	2,483

Source: ECB.

5 Co-operation in the field of banking supervision and financial stability

In the context of the task of the Eurosystem to contribute to the smooth conduct of the policies pursued by the competent national authorities relating to the prudential supervision of credit institutions and financial stability, a number of issues have been analysed. This activity – performed with the assistance of the Banking Supervision Committee – has replaced the consultative task carried out by the EMI under Article 109f (2) of the Treaty. In most cases the outcome of these analyses has been made available to other international supervisory fora.

5.1 The impact of Monetary Union on the EU banking systems

In view of the start of Stage Three a survey has been carried out to review the possible effects of Monetary Union on the EU banking systems in the medium to long term and the ways in which EU banks are preparing themselves. In general, it should be noted that it is difficult to isolate the specific effects of Monetary Union on the banking sector from those deriving from other driving forces for change (e.g. technology). The basic finding of the survey – which was made available to the public – is that Monetary Union is likely to reinforce the already prevailing trends in the EU banking systems, such as the reduction of the existing excess capacity, the increasing pressure on banks' profitability, the growth of internationalisation and geographical diversification outside the euro area as well as the spread of mergers and acquisitions and a higher level of conglomeration.

Monetary Union will affect banking activities in various ways. The reduction in foreign exchange activities of those currencies replaced by the euro is the most obvious effect. Therefore, it is expected that banks will try to increase their money and securities market activities to even out lower revenues

from foreign exchange trading. The development of deep and liquid integrated money and capital markets could offer new opportunities but might, at the same time, reduce banking intermediation. The reduction of government debt owing to fiscal consolidation under Monetary Union might boost the issuance of private bonds and, possibly, the securities activities of banks. Retail deposit business might be affected to the extent that the establishment of a low interest rate environment would induce customers to seek alternative investments to deposits. Lending business might be favoured by the positive macroeconomic environment brought about by Monetary Union, but the further securitisation and disintermediation expected might have the opposite effect. Correspondent banking services might decrease owing to the centralisation of treasury functions by large firms. All in all, the final impact on banking activities will depend on the interaction of all the aforementioned factors and is therefore difficult to predict.

Monetary Union will require banks to reconsider their strategic orientation in order to be able to cope with the challenges posed by the single currency. This process is already under way. In particular, EU banks are developing three main types of strategic response: (1) improvements in services and procedures (such as the quality of services, staff and the IT infrastructure, and risk management and internal control systems); (2) changes in product ranges (such as the shift from operating services to consulting, the reconsideration of product ranges and the development of alternative sources of income, e.g. through geographical expansion); and (3) mergers, strategic alliances and co-operation agreements.

The recent wave of mergers and acquisitions in the EU banking sector clearly indicates that credit institutions are reconsidering their strategies. However, it may be difficult to

assess the extent to which this process has been triggered by Monetary Union since similar activities can be observed in other markets (e.g. in the United States). The comparatively low degree of concentration within the EU banking sector could provide room for further consolidation. Whereas most mergers and acquisitions in the EU have so far taken place at the domestic level, the possibility cannot be ruled out that some of them were intended to provide a basis for further cross-border expansion. The existence of excess capacity in some countries, the disintermediation process and the intensification of competition brought about by Monetary Union constitute factors encouraging further consolidation.

Monetary Union will also affect the features and magnitude of banking risks. The positive macroeconomic effects of Monetary Union are expected to mitigate credit risk in the euro area. However, in a context in which the development of deep and liquid markets can facilitate direct access by the best borrowers, the ensuing concentration of risky borrowers among banks could increase credit risk. While market risk within the euro area, especially with regard to foreign exchange and interest rate risk, is expected to be reduced significantly, the maturity transformation risk will persist. It also seems likely that banks will seek to replace part of their lost foreign exchange business by new or increased involvement in non-euro area markets, with the possibility of increased country risks. Legal and operational risks may increase in the short run for reasons linked to the conversion to the euro and the conduct of business in the new legal environment. These effects should, however, subside in the long term.

All in all, although in the short term the EU banking systems might be under pressure for a number of reasons (the adjustment process made necessary by Monetary Union, financial crises in emerging markets, the Year 2000 compliance problem, etc.), in the longer term the adaptation process should result in a stronger and fitter EU banking sector.

5.2 The EU banking systems and financial crises in emerging markets

The Asian financial crisis that erupted in the middle of 1997 continued to burden the international financial system in 1998. Moreover, a new wave of financial turbulence was triggered in August 1998, when the announcement by the Russian Government of a substantial devaluation of the rouble and a debt moratorium triggered a massive "capital flight" away from emerging markets world-wide. It also became apparent that the debt servicing problems of the most severely affected Asian countries (Thailand, Indonesia, South Korea, Malaysia and the Philippines) and Russia, amplified by these countries' worsening macroeconomic conditions, would take time to be resolved and would be likely to result in significant losses for international creditor banks. Against this background, a systematic monitoring of the EU banks' exposure towards the countries in financial crisis was carried out.

Over the past few years, owing to significant increases in lending, EU banks have become the largest group of international lenders to emerging or transition economies in Asia, Latin America and central and eastern Europe. Since the outbreak of the Asian crisis, the exposure of EU banks towards Asia has decreased significantly, partly reflecting credit write-offs, while exposure towards Russia and countries in Latin America continued to grow during the first half of 1998. On average, US banks have been less exposed than EU banks, and Japanese banks have largely withdrawn from international markets. A significant proportion of the exposure of EU banks towards emerging markets has been of a short-term nature and towards the local banking systems. In general, the EU banking systems were in a position to withstand possible losses deriving from the international crisis because most of the exposure was accounted for by large, strong institutions and the overall profitability of the EU banking systems had been positive over the past few years. The possible continuation or spread of

the international financial turbulence, however, continued to be a source of uncertainty and risks.

Several lessons have been learned from these events from a supervisory perspective. First, further convergence of the rules on country risk provisioning is considered desirable, but the obstacles to the pursuit of this objective are fully recognised (particularly the absence of harmonisation of accounting and taxation rules). Second, information on banks' country risks should be available to banking supervisors more frequently and in a more timely manner. Third, credit institutions should adopt, on a systematic basis, sound standards for credit risk management, particularly in periods of a rapid accumulation of exposure (as was the case in the emerging markets prior to the crises). Fourth, the present market risk management models should be further refined with particular regard to the techniques for examining banks' exposure in the event of extreme market movements. Recent experiences underline the importance of stress testing these models.

5.3 Macro-prudential analysis

Macro-prudential analysis addressing the soundness of banking systems is considered to be increasingly important in the light of past systemic banking problems and the recent financial crises in emerging markets. An early diagnosis of systemic weakness in the banking sector can substantially increase the likelihood and success of corrective policy action and lower the costs of financial instability problems. Macro-prudential analysis is of benefit not only to NCBs, but also to supervisory authorities as it can help supervisory resources to be allocated to areas that appear to involve growing risks and enable individual institutions that deviate from general industry-wide practices to be identified.

First, the preliminary work conducted in this area focused on methodological aspects, including the role of the various authorities

involved in the exercise. A key finding was that the analysis should be based on close co-operation between supervisory authorities and NCBs. Aggregated data collected by supervisory authorities (supervisory reporting) and data on the macroeconomic situation and the financial system collected by NCBs could be used. A number of indicators relevant to the soundness of the banking system can be identified from these data in a way that is not too formalised, whereas it has been recognised that econometric work in this area is still quite scarce, although currently expanding.

Second, the ways in which macro-prudential analysis of the stability of the EU banking systems could be carried out at the EU-wide level were investigated. The advantages of this exercise are manifold. An EU-wide analysis could, in the first instance, provide a useful input into the work of national supervisory authorities in assessing the market conditions in which the supervised institutions operate, especially those that are active on a cross-border basis. Second, the analysis would make it possible to better understand the EU banks' behaviour deriving from the common factors operating within the euro area (the single money market, common interest rates, etc.). Third, the analysis would permit a better assessment of the status of systemic risk, which will progressively assume a euro area dimension as financial markets in the euro area become more integrated.

Against this background, it was agreed that the first steps towards a macro-prudential analysis at the EU-wide level should be taken in 1999, with the co-operation of the EU supervisory authorities, the NCBs and the ECB.

5.4 Analysis of risk assessment systems

Work has continued in the area of the risk assessment systems that are used by banking supervisors to identify, at an early stage,

credit institutions which may be facing a heightened risk of failure. The work entailed the analysis of formalised risk assessment systems already in operation or in the process of being developed by the EU banking

supervisory authorities and the NCBs. This activity focused mainly on an exchange of information on the underlying principles and the functioning of the systems. This co-operation is expected to continue in 1999.

6 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 EU Council or the responsible national authorities, as appropriate, on any proposed Community or national legislation within the ECB's field of competence. The limits and conditions of consultations on draft legislation by national authorities for the EMI were set out in Council Decision 93/717/EEC of 22 November 1993, which also applied to the ECB under Article 109l (2) in conjunction with Article 109f (6) of the Treaty. Article 1 of this Decision states that: "The authorities of the Member States shall consult the EMI on any draft legislative provisions within its field of competence pursuant to Article 109f of the Treaty and in particular on:

- currency legislation, the status of the euro and means of payment;
- the status and powers of national central banks and the instruments of monetary policy;
- the collection, compilation and dissemination of monetary, financial, banking and balance of payments statistics;
- clearing and payment systems, in particular for cross-border transactions;
- rules applicable to financial institutions insofar as they influence the stability of financial institutions and markets."

As from 1 January 1999 the ECB is consulted under Council Decision 98/415/EC of 29 June 1998, which contains provisions similar to those of Council Decision 93/717/EEC of 22 November 1993.

A total of 64 requests for the opinion of the EMI/ECB were received in 1998. Of the ensuing consultations, 16 concerned proposed Community legal acts and 46 concerned draft national legislative provisions falling within the field of competence of the EMI/ECB.¹ Consultations concerning the adaptation of the statutes of NCBs to meet the requirements of the Treaty, as well as others on the introduction of and changeover to the euro, were particularly relevant. The benchmark adopted by the EMI/ECB for the assessment of the proposed legislation was its compatibility with the Treaty, the potential impact on the ESCB's arrangements for Stage Three of EMU and, where appropriate, the stability of financial institutions and markets. Box 6 below summarises the consultation procedures in which the EMI/ECB delivered opinions in 1998.

¹ One consultation (No. 20) was withdrawn as it duplicated consultation No. 10, and two consultations (Nos. 54 and 55) were combined as they covered the same issue.

Box 6

Consultation procedures in 1998

No.	Originator	Subject
1	Austria	Introduction of the euro
2	Austria	Introduction of the euro
3	Italy	Codified law on finance
4	Belgium	Protective measures for deposits and financial instruments
5	Spain	Statute of the Banco de España
6	Finland	Statute of Suomen Pankki
7	Italy	Statute of the Banca d'Italia
8	Belgium	Introduction of the euro
9	France	Issuance and putting into circulation of banknotes and coins in the overseas territories of Mayotte and Saint-Pierre-et-Miquelon and protection of payment and securities settlement systems
10	Denmark	Margin collateral in connection with the clearing and settlement of securities transactions
11	Portugal	Introduction of the euro

No.	Originator	Subject
12	France	Statute of the Banque de France
13	Italy	Statute of the Banca d'Italia
14	EU Council	Consultation of the ECB by national authorities on draft legislative provisions
15	EU Council	Statistical data to be used for the determination of the key for subscription of the capital of the ECB
16	EU Council	Conditions and procedure for applying the tax for the benefit of the European Communities
17	EU Council	Categories of officials and other servants of the European Communities to whom certain provisions of the Protocol on the Privileges and Immunities of the Communities apply
18	Ireland	Introduction of the euro
19	Netherlands	Redenomination of debt
21	Ireland	Investor compensation schemes
22	Belgium	Statute of the Nationale Bank van België/Banque Nationale de Belgique
23	Italy	Introduction of the euro
24	United Kingdom	Statute of the Bank of England
25	Sweden	Statute of Sveriges Riksbank
26	Sweden	Registration of financial instruments
27	EU Council	Appointment of the President, the Vice-President and the members of the Executive Board of the ECB
28	Belgium	Foreign payments of the Belgian-Luxembourg Economic Union and the current account of the Kingdom of Belgium
29	France	Operations of the Banque de France on the money market
30	France	Decision of the Monetary Policy Council of the Banque de France regarding the collection of statistical information from money market funds (MMFs)
31	Spain	Introduction of the euro
32	Germany	Changeover Regulation on the Frankfurt Interbank Offered Rate (FIBOR)
33	European Commission	Harmonised Index of Consumer Prices
34	EU Council	Harmonised Index of Consumer Prices
35	Italy	Ufficio Italiano dei Cambi – UIC (Italian Foreign Exchange Office)
36	Portugal	Introduction of the euro
37	EU Council	Exchange rate matters relating to the CFA franc and the Comorian franc
38	Netherlands	Statute of De Nederlandsche Bank
39	Luxembourg	Statute of the Banque centrale du Luxembourg and creation of a commission charged with surveillance of the financial sector
40	France	Negotiable debt instruments
41	Spain	Minimum reserves
42	Netherlands	Replacement of the Amsterdam Interbank Offered Rate (AIBOR) and the fixed advance rate of De Nederlandsche Bank
43	France	Decision by the Monetary Policy Council of the Banque de France on minimum reserves
44	European Commission	Denominations and technical specifications of the euro coins
45	Luxembourg	Recording of foreign payments and the establishment of the balance of payments
46	France	Savings and financial security
47	Portugal	Monetary policy instruments and procedures and minimum reserves
48	Luxembourg	Redenomination of the capital of commercial companies in euro and rounding
49	Finland	Clearing and settlement of securities transactions
50	Austria	Contribution to the international fund for the victims of National Socialism
51	Spain	Accession to various agreements with the International Monetary Fund
52	France	Council for Financial Markets
53	EU Council	Composition of the Economic and Financial Committee
54, 55	EU Council	Undertakings for collective investment in transferable securities (UCITS)
56	EU Council	The taking-up, pursuit and prudential supervision of the business of electronic money institutions and of credit institutions
57	European Commission	Exchange rate matters relating to the Cape Verde escudo
58	Austria	Banking Act
59	Austria	Base rates and reference interest rates
60	European Commission	Distance marketing of consumer financial services
61	EU Council	Conversion rates between the euro and the currencies of the Member States adopting the euro
62	France	Statute of the Banque de France
63	EU Council	Monetary relations of the Community with the Principality of Monaco, the Republic of San Marino and the Vatican City
64	EU Council	Monetary arrangements in the French territorial communities of Saint-Pierre-et-Miquelon and Mayotte

7 Monitoring of compliance with the prohibition on monetary financing and on privileged access

The ECB has the task of monitoring the compliance of NCBs with the prohibitions referred to in Articles 104 and 104a of the Treaty and the related Council Regulations (EC) Nos. 3603/93 and 3604/93. Article 104 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 104a prohibits measures, not based on prudential considerations, which establish privileged access by governments and Community institutions or bodies to financial institutions. During Stage Two of EMU this monitoring exercise was initiated by the EMI. As from 1 June 1998 the ECB continued to monitor the NCBs' fulfilment of

their obligations. The European Commission monitors Member States' compliance with the above provisions.

In 1998 the NCBs of all Member States continued to respect the Treaty requirements.

The ECB also monitors NCBs' secondary market purchases of public sector debt instruments. According to Council Regulation (EC) No. 3603/93, the acquisition of debt instruments of the public sector in the secondary market must not be used to circumvent the objective of Article 104 of the Treaty. The NCBs' purchases during 1998 were deemed to be in compliance with the Treaty.



Chapter IV

The European System of Central Banks and the Eurosystem

I Organisation of the ESCB and the Eurosystem

The ESCB is composed of the ECB and the 15 NCBs. The NCBs of the Member States which are not participating in the euro area are, however, members of the ESCB with a special status: while they are allowed to conduct their respective national monetary policies, they do not take part in the decision-making regarding the single monetary policy for the euro area and the implementation of such decisions. It is for this reason that the Governing Council of the ECB decided, for the sake of transparency and easy reference, to make a distinction between the ESCB and the “Eurosystem”, the latter being composed of the ECB and the 11 fully participating NCBs only, as long as there are Member States which have not yet adopted the euro.

In accordance with the Treaty establishing the European Community and the Statute of the European System of Central Banks and of the European Central Bank (which do not make a formal distinction between the ESCB and the Eurosystem), the *primary objective* of the ESCB is to maintain price stability. Without prejudice to this objective, it shall support the general economic policies in the Community and act in accordance with the principles of an open market economy.

The *basic tasks* to be carried out by the ESCB, i.e. the Eurosystem, are:

- to define and implement the monetary policy of the Community;
- to conduct foreign exchange operations;
- to hold and manage the official foreign reserves of the Member States; and
- to promote the smooth operation of payment systems.

The Treaty grants the ECB the exclusive right to authorise the issuance of banknotes within the Community. In addition, the ESCB contributes to the smooth conduct of policies pursued by the competent authorities relating to the prudential supervision of credit institutions and the stability of the financial system, while it also has an advisory role

vis-à-vis the Community and national authorities on matters which fall within its field of competence, particularly where Community or national legislation is concerned. Finally, in order to undertake the tasks of the ESCB, the ECB, assisted by the NCBs, shall collect the necessary statistical information either from the competent national authorities or directly from economic agents.

The ESCB is 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 with a derogation.

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 forming the Eurosystem. The main responsibilities of the Governing Council are:

- to adopt the guidelines and make the decisions necessary to ensure the performance of the tasks entrusted to the ESCB; and
- to formulate the monetary policy of the Community, 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.

The *Executive Board* comprises the President, the Vice-President and four other members, all chosen from among persons of recognised standing and professional experience in monetary or banking matters. They are appointed by common accord of the governments of the participating Member States at the level of the Heads of State or Government, on a recommendation from the EU Council after it has consulted the European Parliament and the Governing

Council of the ECB (the EMI Council was consulted on the initial appointments). 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; and
- to be responsible for the current business of the ECB.

The *General Council* comprises the President and the Vice-President and the governors of all the NCBs, i.e. of both participating and non-participating Member States. The General Council performs the tasks which the ECB took over from the EMI and which, owing to the derogation of one or more Member States, still have to be performed in the third stage. The General Council also contributes to particular activities of the ESCB, such as the ESCB's advisory functions (see Box 6 in Chapter III), the collection of statistical information, and the necessary preparations for irrevocably fixing the exchange rates against the euro of the currencies of the Member States with a derogation.

In accordance with Article 9 of the Rules of Procedure of the ECB, the Governing Council decided, in July 1998, to establish various ESCB Committees. These Committees are composed of experts from the NCBs and the ECB. They play an important role in the performance of the ESCB's tasks and in intra-ESCB co-operation. They provide expertise in their fields of competence and facilitate the decision-making process of the ESCB/ECB. At present there are 13 such Committees: the Accounting and Monetary Income Committee, the Banking Supervision Committee, the Banknote Committee, the Budget Committee, the External Communications Committee, the Information Technology Committee, the Internal Auditors

Committee, the International Relations Committee, the Legal Committee, the Market Operations Committee, the Monetary Policy Committee, the Payment and Settlement Systems Committee and the Statistics Committee.

The ESCB is an independent system. When performing ESCB-related tasks, neither the ECB, nor an NCB, nor any member of their decision-making bodies may seek or take instructions from Community institutions or bodies, from any government of a Member State or from any other body. The Community institutions and bodies and the governments of the Member States may not seek to influence the members of the decision-making bodies of the ECB or of the NCBs in the performance of their tasks. The Statute of the ESCB makes provision for the following measures to ensure security of tenure for NCB governors and members of the Executive Board:

- a minimum term of office for governors of five years;
- a non-renewable term of office for members of the Executive Board of eight years (it should be noted that the Statute of the ESCB provides for a system of staggered appointments to the first Executive Board for members other than the President in order to ensure continuity);
- removal from office is only possible in the event of incapacity or serious misconduct; and
- the European Court of Justice is competent to settle any disputes.

The capital of the ECB is €5,000 million. The NCBs are the sole subscribers to and holders of the capital of the ECB. The subscription of capital is based on a key established on the basis of the 15 Member States' respective shares in the GDP and population of the Community. At its first meeting on 9 June 1998 the Governing Council decided on the method to be applied for determining the NCBs' percentage shares in the key for the ECB's capital. The application of this method

has resulted in the shares of the 15 NCBs being determined with a level of precision of four decimal places. On the basis of the revised GDP statistical data which became available in November 1998, the ECB revised the capital key on 1 December 1998 with retroactive effect from 1 June 1998 (see the table below). Furthermore, the Governing Council took a decision on the measures necessary for the paying-up of the capital of the ECB. It was decided that the 11 Eurosystem NCBs would pay up their respective subscriptions to the ECB's capital in full according to the key established in the preceding decision and that they would do so by 1 June 1998. The General Council decided

that the NCBs of the four non-participating countries would pay up 5% of their respective subscriptions to the ECB's capital as a contribution to the operational costs of the ECB. As a result, the ECB is endowed with an initial capital of slightly under €4,000 million.

In addition, the Eurosystem NCBs were required to provide the ECB with *foreign reserve assets* other than the relevant Member States' currencies, euro, IMF reserve positions and special drawing rights, up to an amount equivalent to €50,000 million (see Chapter II, Section 2.3).

Table 15
National central banks' percentage shares in the key for the ECB's capital

Nationale Bank van België/Banque Nationale de Belgique	2.8658%
Danmarks Nationalbank	1.6709%
Deutsche Bundesbank	24.4935%
Bank of Greece	2.0564%
Banco de España	8.8935%
Banque de France	16.8337%
Central Bank of Ireland	0.8496%
Banca d'Italia	14.8950%
Banque centrale du Luxembourg	0.1492%
De Nederlandsche Bank	4.2780%
Oesterreichische Nationalbank	2.3594%
Banco de Portugal	1.9232%
Suomen Pankki	1.3970%
Sveriges Riksbank	2.6537%
Bank of England	14.6811%

2 Liquidation of the European Monetary Institute (EMI)

In accordance with Article 109l of the Treaty, the EMI went into liquidation on the establishment of the ECB.

The EMI was established on 1 January 1994 pursuant to Article 109f of the Treaty. The seat of the EMI was Frankfurt am Main.

The EMI's establishment marked the start of the second stage of EMU. Its objectives were to contribute to the realisation of the conditions necessary for the transition to the third stage of EMU.

The two main tasks of the EMI were:

- to strengthen central bank co-operation and monetary policy co-ordination with the aim of ensuring price stability; and
- to specify the regulatory, organisational and logistical framework necessary for the ESCB to perform its tasks in the third stage of EMU.

During the period of its operation – between January 1994 and May 1998 – the EMI, assisted

by the NCBs, carried out an extensive body of conceptual, detailed design and implementation work for the establishment of the ESCB. In publishing the report on “The single monetary policy in Stage Three – Specification of the operational framework” in January 1997, the EMI provided the public and the counterparties of the NCBs with comprehensive information of interest regarding the operational aspects of the single monetary policy. Further publications on specific aspects of the future activities of the Eurosystem followed in the subsequent months until the establishment of the ECB.

The EMI was liquidated by the ECB in accordance with the provisions of Article 23 of the EMI Statute and Decision No. 10 of the EMI Council dated 5 May 1998. The financial aspects of the liquidation of the EMI are described in detail in the notes to the annual accounts of the ECB; the final financial statements of the EMI are contained in an annex to the annual accounts of the ECB.



**Annual Accounts
of the ECB**

Balance Sheet as at 31 December 1998

Assets

€

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

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

343,047,340.57

2 Claims on non-euro area residents denominated in euro

Balances with banks, security investments and loans

3,739,796,108.14

3 Other assets

3.1 Tangible and intangible fixed assets

30,112,070.80

3.2 Other financial assets

25,276,952.50

3.3 Accruals, deferred expenditure and sundry items

4,011,722.99

59,400,746.29

Total assets

4,142,244,195.00

Memorandum item:

Forward claims denominated in euro

282,929,978.74

Liabilities	€
1 Intra-ESCB liabilities	0.00
2 Other liabilities	
2.1 Off-balance-sheet instruments: revaluation differences	725,321.32
2.2 Accruals and deferred income	4,172,760.15
2.3 Sundry items	78,550,580.38
	83,448,661.85
3 Provisions	31,006,791.48
4 Revaluation accounts	697,979.12
5 Capital and reserves	3,999,550,250.00
6 Profit for the year	27,540,512.55
Total liabilities	4,142,244,195.00
Memorandum item:	
Forward liabilities denominated in foreign currency	282,929,978.74

Profit and Loss Account of the ECB from 1 June to 31 December 1998

€

Interest income	97,851,703.59
Interest expenses	(2,683,980.29)
Net interest income	95,167,723.30
Realised gains/losses arising from financial operations	22,182,535.97
Write-downs on financial assets and positions	(22,249,604.19)
Net result of financial operations and write-downs	95,100,655.08
Other income	490,100.54
Total net income	95,590,755.62
Staff costs	(29,744,539.96)
Other administrative expenses	(30,229,686.41)
Depreciation of (in)tangible fixed assets	(8,076,016.70)
Profit for the year	27,540,512.55
Profit appropriation	
Profit for the year	27,540,512.55
Allocation to	
– general reserve fund	5,508,000.00
– retained profit carried forward	22,032,512.55

Frankfurt am Main, 18 March 1999

EUROPEAN CENTRAL BANK

Willem F. Duisenberg
President

I The establishment of the ECB

Pursuant to Article 4a of the Treaty establishing the European Community, the ECB was established on 1 June 1998. In accordance with Article 109l (2) of the Treaty, and pursuant to Article 23 of the EMI Statute, the EMI went into liquidation upon the establishment of the ECB. All assets and liabilities of the EMI then passed automatically to the ECB, which proceeded to liquidate the EMI in accordance with the procedures laid down in Decision 10/98 taken by the EMI Council at its meeting on 5 May 1998. The audited final financial statements of the EMI and the results of the liquidation are set out in the Annex to these Notes and constitute the main element of the ECB's opening balance sheet.

In accordance with the provisions of Article 28 of the Statute of the ESCB and its Decision of 9 June 1998 (ECB/1998/2), the Governing Council of the ECB determined the extent to which the ECB's subscribed capital of €5 billion had to be paid up by the national central banks of the Member States adopting the single currency ("euro area NCBs"). According to this Decision, the euro area NCBs forming part of the Eurosystem were required to pay up their subscriptions in full. With its Decision of 1 December 1998 (ECB/1998/14), the General Council of the ECB determined that, pursuant to Article 48 of the Statute of the ESCB, the non-euro area NCBs were to pay up 5% of their subscribed capital shares as a contribution to the operational costs of the ECB. All payments became due as at 1 June 1998.

The capital subscriptions are based on the key established in accordance with Article 29 of the Statute of the ESCB and laid down in Decision ECB/1998/1 of the Governing Council of 9 June 1998. An initial payment was made by the NCBs as at 1 June 1998 in the form of a transfer of their claims on the ECB relating to the repayment of contributions to the resources of the EMI, to the extent possible or necessary to meet the amounts falling due. Further payments in cash,

in various currencies, were made by the euro area NCBs on 1 July 1998 up to the full amounts calculated on the basis of a provisional capital key. Settlement of the final payments due was effected on 4 January 1999, in euro, taking into account: (a) a revision of the capital key of the ECB, as made in accordance with Decision ECB/1998/13 of the Governing Council on 1 December 1998, following the provision of final statistical information by the European Commission; (b) the distribution of the final loss of the EMI in accordance with the key for subscription to the resources of the EMI; and (c) interest due or payable on unsettled amounts for the period from 1 June 1998 to 4 January 1999.

During the period under review, and in accordance with Article 109l (1) of the Treaty, the ECB prepared for full operation as from the start of Stage Three of EMU on 1 January 1999. The activities of the ECB in 1998 were limited to the completion of the preparations undertaken by the EMI, together with the continuing administration of residual tasks taken over from the latter.

Between 4 and 7 January 1999, in accordance with the Decisions taken by the Governing Council pursuant to Article 30 of the Statute of the ESCB, the participating NCBs transferred foreign reserve assets to the ECB with a total value equivalent to €39.5 billion; of these assets, €30.2 billion were transferred in US dollars, €5.9 billion in gold, and €3.4 billion in Japanese yen. Each participating NCB transferred an amount of each of the three denominations of assets based on its share in the ECB's capital key. US dollars and Japanese yen were transferred in the form of securities and cash. The participating NCBs were credited with non-redeemable euro-denominated claims equivalent to their contributions. The ECB will remunerate these claims of the NCBs at a rate derived from the Eurosystem's main refinancing rate.

2 Accounting policies

The accounting policies of the ECB were defined by the Governing Council on 1 December 1998¹ and are consistent with the provisions of Article 26.4 of the Statute of the ESCB, which require a standardised approach to the rules for the accounting and reporting of operations of the Eurosystem. Although this Decision only came into force on 1 January 1999, since the harmonisation of accounting rules within the Eurosystem only applies from that date onwards, the accounts for 1998 have been drawn up in accordance with its provisions to the extent that they are applicable to the ECB's activities during that period. In other cases, the similar accounting policies of the EMI have been applied (see the Annex). Material differences arising from the limited variations between these accounting policies are described in the notes on the Balance Sheet and on the Profit and Loss Account. The Decision of the Governing Council also specifies the format and composition of the published Balance Sheet and Profit and Loss Account. The principal elements of the accounting policies, to the extent that they affect this financial statement, are summarised below.

During 1998 the accounts of the ECB were maintained in official ECUs. As at the close of business on 31 December 1998, all values were converted into euro at parity with the official ECU and the accounts, which also represent the opening balance sheet of the ECB on 1 January 1999, are shown in euro.

Although the ECB, as a body of the European Communities, is not subject to national laws and regulations on accounting practices, its accounting policies and those of the Eurosystem as a whole follow accounting principles harmonised by Community law and generally accepted international accounting standards, unless specific issues material to the operations of the Eurosystem require otherwise.

The accounts have been prepared on a "going concern" basis. Income and expenses are

recognised on an accruals basis. Transactions in financial assets are recorded in the books of the ECB using the cash (or "settlement") approach.

Current market rates and prices are used for valuing transactions. On-balance-sheet and off-balance-sheet financial assets and liabilities are revalued as at the year-end using mid-market rates and prices. Revaluation is performed on a code-by-code basis for securities, and on a currency-by-currency basis for items denominated in foreign exchange (including on-balance-sheet and off-balance-sheet items).

Tangible and intangible fixed assets are valued at cost less depreciation. Depreciation is calculated as follows on a straight-line basis, beginning in the quarter after acquisition, over the expected economic lifetime of an asset:

- Computers, related hardware and software, and motor vehicles: 4 years
- Equipment, furniture and plant in building: 10 years

Realised gains and realised losses are taken to the Profit and Loss Account. With the exception of the assets of the ECB's pension fund, unrealised gains arising from revaluation are not recognised as income, but are transferred directly to a revaluation account. Unrealised losses are taken to the Profit and Loss Account when exceeding previous revaluation gains registered in the corresponding revaluation account, and are not reversed in subsequent years against new unrealised gains. Unrealised losses in one security or currency are not netted against unrealised gains in other securities or currencies. Valuation gains and losses arising on assets of the pension fund are recognised as income in the year in which they arise.

¹ ECB Decision of 1 December 1998, a copy of which is available upon request (ECB/1998/INP23).

Premiums or discounts arising on issued and purchased securities are calculated and presented as part of interest income and are amortised over the remaining life of the securities.

the Governing Council,¹ the Council of the European Union approved the appointment of PricewaterhouseCoopers GmbH as the independent external auditors of the ECB.²

In accordance with Article 27 of the Statute of the ESCB, and on a Recommendation of

¹ ECB Recommendation of 19 June 1998 (ECB/1998/3).

² EU Council Decision of 20 July 1998 (98/481/EC).

3 Notes on the Balance Sheet

Assets

1. *Claims on non-euro area residents denominated in foreign currency*

This item consists almost entirely of six-month deposits in pounds sterling and Danish kroner, which matured on 5 January 1999, the date on which these holdings were sold. (The sterling holdings were sold forward during December; the results of these transactions appear as off-balance-sheet items.) The deposits were effected at the beginning of July, when a portion of the funds transferred in respect of payments of the capital of the ECB was converted into these currencies in order to hedge the ECB's exposure against foreign exchange risk on substantial holdings of cash in euro area currencies pending the determination of the irrevocable exchange rates of these currencies against the euro on 31 December 1998. This hedging operation was of an exceptional nature.

From 4 January 1999 this position in the balance sheet has included the cash and securities of an initial value of €33.6 billion, as transferred to the ECB by the NCBs as part of the transfer of foreign reserve assets.

2. *Claims on non-euro area residents denominated in euro*

This position may include current account and fixed-term deposits, day-to-day money, securities, and loans denominated in euro due from residents outside the euro area. The amounts shown under this item represent the investment of the bulk of the payments of capital subscriptions of the ECB received in 1998, together with other working balances. These funds were held in private ECUs and other national currencies of the euro area, mainly in the form of six-month deposits with the Bank for International Settlements maturing on 5 January 1999, pending the

conversion of these currencies into euro at the rates fixed on the afternoon of 31 December 1998. Interest on these deposits provided the ECB's principal source of income during 1998. No securities were held as at 31 December 1998 and no loans were made during the year.

3. *Other assets*

This item consists of the following major elements:

Tangible and intangible fixed assets

Net of cumulative depreciation totalling €18.6 million (including depreciation during the lifetime of the EMI), tangible and intangible fixed assets comprised the following main items on 31 December 1998:

	€
Computers and related hardware and software	12,510,812
Equipment, furniture, plant in building and motor vehicles	3,329,884
Assets under construction (premises refurbishment)	11,864,257
Other tangible assets	2,407,118
Total	30,112,071

Other financial assets

The principal item under this heading consists of the assets of the pension fund for ECB staff (€17.1 million). The assets represent the counterpart of accumulated pension contributions by the ECB invested as at 31 December 1998 and managed by an external funds manager on behalf of the ECB, to whom the corresponding funds were transferred in December 1998. The assets invested include funds arising from contributions made by and on behalf of staff of the EMI who have subsequently transferred to the ECB and have chosen to transfer their accumulated EMI benefits to the new scheme.

The assets of the fund are not fungible with other financial assets of the ECB. Net income on these assets does not constitute income of the ECB, but is reinvested in the funds concerned pending payment of benefits. The value of the assets held is based on the valuation by the funds manager using year-end market prices. Valuation gains and losses are recognised in the year in which they arise.

As at end-1998 "Other financial assets" included claims on certain NCBs totalling €8 million, in respect of additional capital subscriptions to be paid up as a consequence of the establishment of the definitive capital key of the ECB on 1 December 1998. These claims were settled on 4 January 1999.

Accruals, deferred expenditure and sundry items

The principal item is a claim against the German Federal Ministry of Finance in respect of recoverable value added and other indirect taxes paid on goods and services. Such taxes are refundable under the terms of Article 3 of the Protocol on the privileges and immunities of the European Communities, which applies to the ECB by virtue of Article 40 of the Statute of the ESCB.

Liabilities

1. Intra-ESCB liabilities

The item, which stood at nil at the end of 1998, relates to positions that will arise between the ECB and the euro area NCBs as from the start of Stage Three. Intra-ESCB balances arise principally as a result of cross-border payments via the TARGET system. In addition, this heading will include the liabilities of the ECB to the euro area NCBs in respect of the transfer of foreign exchange reserve assets (€39.5 billion), as described under asset item I above.

2. Other liabilities

The item includes the following main elements:

Off-balance-sheet instruments: revaluation differences

This item represents an adjustment for an unrealised valuation loss arising from the forward transactions mentioned above.

Accruals and deferred income

This item includes accrued expenditure and interest payable on financial transactions, in particular an amount of €2.2 million due to non-euro area NCBs in respect of the deferred settlement of their claims on the resources of the EMI.

Sundry items

This item, which is shown net of the figure carried forward for the final loss of the EMI pending settlement, includes residual liabilities of €89.4 million to the non-euro area NCBs in respect of the amounts of their contributions to the resources of the EMI, repayable after deduction of the contributions of those NCBs to the capital of the ECB and to their share of the EMI's final loss; and to certain euro area NCBs in respect of downward adjustments in their subscribed capital. These liabilities were settled on 4 January 1999.

Also included under this heading are amounts due to creditors and suppliers, and liabilities in respect of income tax deducted at source from ECB staff salaries pending its transfer to the European Communities.

3. Provisions

This item comprises provisions against accumulated pension liabilities of the ECB to its staff in connection with the ECB's pension scheme and sundry provisions relating to expenditure incurred, including unused provisions taken over from the EMI.

4. Revaluation accounts

This item shows an unrealised valuation gain on the deposit in Danish kroner. Valuation gains on euro area currencies following conversion to the euro have been treated as realised (see “Notes on the Profit and Loss Account”).

5. Capital and reserves

The fully paid-up subscriptions of euro area NCBs to the capital of the ECB of €5 billion amount to a total of €3,946,895,000 and break down as follows:

	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

The non-euro area NCBs' contributions, which are equal to 5% of their subscribed capital, amount to a total of €52,655,250, as follows:

	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

These amounts represent contributions to the operational costs incurred by the ECB in connection with tasks performed for 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. In the meantime these 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.

6. Profit for the year

See “Notes on the Profit and Loss Account”.

4 Notes on the Profit and Loss Account

Interest income

Income of €95.1 million was received, principally on the six-month deposits in which the bulk of the ECB's liquid assets were placed at the beginning of July. Further interest income of €2.5 million was received on interest-bearing current accounts in which working cash balances were held in order to meet the ECB's day-to-day liquidity requirements. Interest of €0.2 million was due on deferred payments of capital subscriptions from participating NCBs.

Interest expenses

These include interest due to non-participating NCBs on the deferred repayment of their net contributions to the resources of the EMI, after deduction of amounts used towards the payment of their capital subscriptions to the ECB, and accrued premium costs of forward sales of foreign currency.

Realised gains/losses arising from financial operations

The realised gain arose following the conversion into euro, at the irrevocable fixed rates against the euro, of assets and liabilities denominated in the national currencies of the euro area Member States.

Write-downs on financial assets and positions

An unrealised loss arose on the sterling position taken up as the major part of the hedge against holdings of national currencies of the euro area countries pending the fixing of the corresponding exchange rates against the euro.

Other income

Miscellaneous income under this heading arose mainly from the release of unused provisions taken over from the EMI.

Staff costs

This item includes salaries and allowances (€22.2 million), and employer's contributions to the ECB's pension fund and to health and accident insurance. The emoluments of the members of the Executive Board of the ECB amounted to a total of €1,019,436.00 for the period 1 June to 31 December 1998. Salaries and allowances of staff, including emoluments of holders of senior management positions, are modelled in essence on, and are comparable to, the remuneration scheme of the European Communities.

On the last working day of 1998 the ECB employed 534 staff, including 54 who held managerial positions. The average number of staff employed by the ECB in the period from 1 June to 31 December 1998 was 478, compared with 370 employed by the EMI from 1 January to 31 May 1998. 402 EMI staff transferred to the ECB on 1 June 1998; 375 of these subsequently accepted contracts with the ECB extending beyond the end of 1998. 151 additional staff had been recruited by the end of the year, 19 members of staff left the service during the period and the contracts of a further 10 staff terminated on 31 December 1998.

Other administrative expenses

These cover all other current expenses, viz. rental of premises, maintenance of premises and equipment, goods and equipment of a non-capital nature, professional fees and other services and supplies, together with the expenses involved in the recruitment, relocation, installation, training and resettlement of staff.

Depreciation of (in)tangible fixed assets

According to the ECB's accounting rules, expenditure on single items costing less than €10,000, excluding VAT, is written off within a year of acquisition. According to the accounting rules of the EMI, the lower value

limit for the capitalisation of tangible assets for more than one year was ECU 1,000. The ECB rule has been applied to the residual book values of tangible assets taken over from the EMI with an original purchase cost of below ECU 10,000. As a result, the remaining undepreciated book value of those assets, amounting to €4.3 million, has been written off. The depreciation on high value assets, of €2.7 million, includes depreciation on such assets taken over from the EMI and on assets acquired subsequently by the ECB.

Profit appropriation

Pursuant to Article 33.1 of the Statute of the ESCB, the net profit of the ECB shall be transferred in the following order:

- (a) 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;

- (b) the remaining net profit shall be distributed to the shareholders of the ECB in proportion to their paid-up shares.

For the purposes of the above, by virtue of Article 43.5 of the Statute of the ESCB, "shareholders" shall be read as "central banks of Member States without a derogation".

In accordance with these provisions, the Governing Council decided on 18 March 1999 to transfer an amount of €5,508,000.00 to the general reserve fund of the ECB. Taking account of the fact that the ECB would, as a consequence, be left with a very small general reserve for the first year of its full operational existence, the Governing Council further decided that the remaining net profit, amounting to €22,032,512.55, should be retained and carried forward as undistributed profit.

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 1998. The European Central Bank's Management 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 Section II 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 1998 and the results of its operations for the period 1 June to 31 December 1998.

Frankfurt am Main, 18 March 1999

PricewaterhouseCoopers
Gesellschaft mit beschränkter Haftung
Wirtschaftsprüfungsgesellschaft

[signed]
(Wagener)
Wirtschaftsprüfer

[signed]
(Kern)
Wirtschaftsprüfer

Annex: Final Accounts of the EMI

Balance sheet as at 31 May 1998

Assets	31 May 1998	31 December 1997
ECU		
<hr/>		
I EMS-related assets		
Holdings of gold	23,765,014,917	26,228,410,973
Holdings of US dollars	40,324,022,591	38,791,623,886
	<hr/>	<hr/>
	64,089,037,508	65,020,034,859
 II Other assets		
(1) Cash and bank sight accounts	7,589,966	24,164,570
(2) Time deposits	594,707,538	597,499,982
(3) Tangible assets	29,554,409	24,750,972
(4) Other assets	4,120,649	2,345,761
	<hr/>	<hr/>
	635,972,562	648,761,285
 Total assets (I and II)	<hr/>	<hr/>
	64,725,010,070	65,668,796,144
 Memorandum item:		
Forward claims in ECUs (from revolving quarterly swaps)	64,089,037,508	65,020,034,859

Liabilities	31 May 1998	31 December 1997
ECU		
I EMS-related liabilities		
ECUs issued to EU central banks	64,089,037,508	65,020,034,859
	<u>64,089,037,508</u>	<u>65,020,034,859</u>
II Other liabilities		
(1) Creditors and other liabilities	20,093,161	11,535,065
(2) Provision for pensions and similar obligations	7,396,966	6,130,620
(3) Other provisions	10,534,160	11,120,462
(4) Contributions from EU central banks (pursuant to Article 16.2 of the EMI Statute)	615,573,495	615,573,495
(5) General reserve fund	4,401,643	17,124,455
(6) Deficit for the year	(22,026,863)	(12,722,812)
	<u>635,972,562</u>	<u>648,761,285</u>
Total liabilities (I and II)	<u>64,725,010,070</u>	<u>65,668,796,144</u>
Memorandum item:		
Forward liabilities in gold and US dollars (from revolving quarterly swaps)	64,089,037,508	65,020,034,859

**Profit and Loss Account of the European Monetary Institute
for the period from 1 January to 31 May 1998**

	31 May 1998	ECU 1 January to 31 December 1997
Income		
Interest income	10,240,189	43,376,777
Total income	10,240,189	43,376,777
Expenses		
Staff costs	14,850,208	24,926,562
Other administrative expenses	19,009,671	28,613,295
Depreciation of tangible assets	2,729,127	3,012,512
Total expenses	36,589,006	56,552,369
Extraordinary income	1,248,614	916,447
Valuation gains realised at liquidation	3,073,340	0
Less: valuation loss	0	(463,667)
Deficit for the year	(22,026,863)	(12,722,812)
Allocation of deficit		
Offset against the general reserve fund	4,401,643	12,722,812
Contributions of EU central banks pursuant to Article 17.6 of the EMI Statute	17,625,220	
	22,026,863	12,722,812

Frankfurt am Main, 14 October 1998

EUROPEAN CENTRAL BANK

Willem F. Duisenberg
President

I The liquidation of the EMI

In accordance with Article 23 of its Statute, the EMI went into liquidation on the establishment of the ECB on 1 June 1998. The final financial statements of the EMI therefore represent the position as at close of business on 31 May 1998.

Also in accordance with Article 23 of its Statute, all assets and liabilities of the EMI passed automatically to the ECB on the latter's establishment and will be reflected in the ECB's financial statements for the year ended 31 December 1998, with the exception of EMS-related claims and liabilities, which will have been unwound by that date.

The procedure for liquidating the EMI was laid down in Decision No. 10/98 of the Council of the EMI on 5 May 1998. In accordance with

this procedure, the final operating loss of the EMI is offset against the contributions which the national central banks had made to the resources of the EMI under Article 16 of the Statute in 1994 and 1995.

On 4 January 1999, the ECB will repay to the national central banks their contributions made to the resources of the EMI under Article 16 of its Statute, less their respective shares of the final operating loss, and less amounts used by the national central banks to pay up their contributions to the subscribed capital of the ECB on 1 June 1998. Net amounts remaining due to the national central banks will be remunerated by the ECB for the period between its establishment and the date of the repayments. Repayment will be effected in euro, at parity with the ECU.

2 Accounting policies

The final accounts of the EMI have been drawn up in accordance with accounting principles established by the Council of the EMI pursuant to Article 17.3 of its Statute, and are expressed in official ECUs.

Although the EMI, as a body of the European Communities, was not subject to national laws and regulations on accounting practices, its accounting policies followed internationally accepted accounting principles, unless specific EMI issues required otherwise.

Notwithstanding the fact that these are the final statements of the EMI, the accounts have been prepared on a “going concern” basis, reflecting the automaticity of the transfer of its assets and liabilities to the ECB.

EMS-related assets and liabilities are shown at cost. Short-term discount securities are shown at cost plus accrued interest. Securities, other than short-term discount securities and financial fixed assets, are shown at year-end market value. Financial fixed assets are shown at acquisition cost less any provision for a permanent diminution in value. All other financial assets and liabilities are shown at nominal value.

Tangible assets are valued at cost less depreciation. Depreciation is calculated on a straight-line basis, beginning in the quarter

after acquisition, over the expected economic lifetime of an asset, namely:

- Equipment, furniture and plant in building: 10 years
- Computers, related hardware, software and vehicles: 4 years

Apart from EMS-related assets and liabilities, foreign currency translation of balance sheet items into ECUs is based on the official rates published by the European Commission applying at 31 May 1998 or, otherwise, on closing market rates for that date. Foreign currency transactions reflected in the Profit and Loss Account are valued at the average of daily official rates for the period 1 January 1998 to 31 May 1998.

Income and expenses are recognised on an accruals basis. Unrealised gains arising from the revaluation of assets vis-à-vis the purchase price are not normally recognised as income but taken into a revaluation account. For the purposes of the final statements, however, the Council of the EMI decided that any unrealised gains should be treated as income.

In accordance with Article 17.4 of the Statute, the Council of the EMI appointed C&L Deutsche Revision as independent external auditors of the EMI's final financial statements.

3 Notes on the Balance Sheet

1. EMS-related assets and liabilities

These items relate to the three-month revolving swaps of official ECUs created in exchange for EU central banks' contributions to the EMI of 20% of their gold and US dollar reserves. The respective assets and liabilities are shown in the EMI's books. The entries do not imply any interest payments or receipts by the EMI. Interest on official reserves swapped for ECUs continued to accrue to the underlying owners. Interest on ECU holdings arising out of swaps only became due where a central bank's holdings exceeded its forward ECU liabilities; in such cases, payments were covered by interest due from central banks whose forward liabilities in ECUs exceeded their holdings of ECUs. All swaps outstanding at 31 May 1998 will be wound up by 31 December 1998.

2. Other assets

Cash and bank sight accounts

Working cash balances were held on a current account in Deutsche Mark, in which currency almost all of the EMI's day-to-day transactions were payable. This account was used exclusively to deal with payments and receipts relating to the day-to-day administration of the EMI. Other cash balances were held on a one-day notice interest-bearing account in Deutsche Mark, on a two-day notice account in ECUs or were invested from time to time in Treasury bills of the Federal Republic of Germany. No such securities were held as at 31 May 1998.

Time deposits

ECU 597.2 million of the resources contributed by the EU central banks pursuant to Article 16.2 of the Statute of the EMI was placed in time deposits in January 1995 at a fixed term of three years to generate the income deemed necessary to cover the EMI's administrative expenses. These deposits, which constituted a financial fixed asset of

the EMI, matured on 30 December 1997. Part of the proceeds was converted into Deutsche Mark in January in order to provide a liquidity buffer which was invested in fixed deposits with terms of up to five months. The remainder of the proceeds was similarly invested in fixed deposits.

Tangible assets

Net of cumulative depreciation of ECU 10.5 million these comprised, at record date:

	ECU	
	1998	1997
Special installations	1,722,762	2,065,988
Plant in building	7,427,405	7,225,869
Other equipment	2,097,877	2,184,088
Computers and software	18,007,618	12,976,562
Other	298,747	298,465
Total	29,554,409	24,750,972

"Special installations" comprises the costs of special additions and enhancements to the standard fittings and capital plant and equipment within the EMI's premises in the Eurotower building in Frankfurt am Main required to meet its particular operational needs, to the extent that these costs were borne by the EMI. The ECB continues to occupy these premises. The asset values of computers and software increased substantially as the installation of ECB and ESCB systems progressed.

Other assets

This item principally includes a claim against the German Federal Ministry of Finance in respect of recoverable value added and other indirect taxes paid on goods and services. Such taxes are refundable under the terms of Article 3 of the Protocol on the privileges and immunities of the European Communities, which also applied to the EMI by virtue of Article 21 of its Statute.

3. Other liabilities

Creditors and other liabilities

This item principally comprises payments due to suppliers, together with performance payments due to EMI staff, income tax deducted at source from salaries pending payover to the European Communities, and accumulated pension contributions with interest thereon repayable to staff. Members of the staff contributed to the pension scheme a percentage of their basic salary (matched by a contribution of twice that amount by the EMI); the staff contribution is repayable by the ECB at the termination of the employment contract with the EMI together with accrued interest thereon, unless a member of the EMI staff has transferred to the ECB and has elected to use the contribution in order to enhance his/her ECB pension rights.

Provision for pensions and similar obligations

This item comprises the accumulated contributions of the EMI towards the staff pension scheme. These contributions were required to cover the eventual cost of severance grants and any ill-health pensions, which are now the liability of the ECB.

Other provisions

These comprise provisions for the restoration of the EMI's premises at the end of its lease (which has been assigned to the ECB); for office rental and service charge payments outstanding in respect of the year to 31 May 1998; for building work in progress; for compensation in lieu of annual leave not taken by EMI staff; and for the production of the final accounts of the EMI. A provision of ECU 4.6 million was made, representing the bulk of a payment received by the EMI from

its landlords in recognition of the EMI's agreement to waive its rights to early termination of its lease on the Eurotower. The amount set aside is earmarked contractually for use in funding future construction work on the ECB's premises.

Contributions from EU central banks

These represent the contributions made pursuant to Article 16.2 of the Statute by the EU central banks, as detailed below. The remaining loss for 1998 has been allocated against these contributions, after being offset against the general reserve fund, in accordance with Article 17.6 of the Statute of the EMI.

Central bank	ECU	Allocated deficit
Belgium	17,235,643	(493,494)
Denmark	10,464,542	(299,623)
Germany	138,808,404	(3,974,389)
Greece	12,311,159	(352,496)
Spain	54,476,907	(1,559,793)
France	104,644,800	(2,996,210)
Ireland	4,924,381	(140,996)
Italy	97,565,912	(2,793,526)
Luxembourg	923,360	(26,438)
Netherlands	26,161,252	(749,054)
Austria	14,162,957	(405,517)
Portugal	11,387,902	(326,061)
Finland	10,160,382	(290,914)
Sweden	17,857,642	(511,303)
United Kingdom	94,488,252	(2,705,406)
Total	615,573,495	(17,625,220)

General reserve fund

This represents accumulated undistributed profits from previous years, less any losses incurred. See also Note 4.

Deficit for the year

See Note 4.

4 Notes on the Profit and Loss Account

Income

Interest income

This item represents interest of ECU 10.2 million earned on the investment of cash balances (see Notes under "Other assets"). Interest income was significantly reduced due to the substantial decline in interest rates since January 1995, when the bulk of the EMI's resources were invested at a term of three years.

Expenses

Staff costs

This item relates to salaries and allowances (ECU 12.8 million), and to employer's contributions to pensions and health and accident insurance (ECU 2.1 million), in respect of staff employed by the EMI. Salaries and allowances of staff, including emoluments of holders of senior management positions, were modelled in essence on, and are comparable to, the remuneration scheme of the European Communities.

The average number of permanent staff employed from 1 January to 31 May 1998 was 370, compared with 281 for 1997. During 1998 78 permanent staff were recruited and 5 staff ceased to be employed. Most EMI staff contracts were due to expire at the end of 1998. By the date on which these statements were drawn up, 322 permanent staff had transferred to the ECB under new contracts.

Number of staff		
Staff	31 May 1998	31 Dec. 1997
<i>Permanent staff</i>		
Senior management	7	7
Managerial	38	39
Professional	204	161
Support	158	127
Total	407	334
<i>Staff on short-term contracts</i>	13	13

Other administrative expenses

These cover all other current expenses, viz. rents, maintenance of premises and equipment, goods and equipment of a non-capital nature, professional fees, and other services and supplies, together with the expenses involved in recruitment, relocation, installation and resettlement of staff.

Extraordinary income and valuation gains

Extraordinary income

This item represents extraordinary income arising for instance from the release of provisions made in previous years in respect of anticipated expenditure arising in those years that are no longer required.

Valuation gains realised at liquidation

In accordance with the decision of the EMI Council, gains arising on the valuation of assets, which arose due to the increases in value of the private ECU and the Deutsche Mark against the official ECU, have been recognised as income in the final financial statements.

Allocation of deficit

Pursuant to Article 17.6 of the Statute of the EMI, the deficit has been offset against the general reserve fund of the EMI. The remaining deficit represents a claim against the national central banks which participated in the EMI. In accordance with the decision of the EMI Council, this claim will be settled on 4 January 1999, in euro at parity with the ECU, by deducting the respective shares of the loss from the repayments of contributions to the EMI's resources due from the ECB to the national central banks on that date.

President and Governing Council
of the European Central Bank

Frankfurt am Main

We have audited the accompanying financial statements of the European Monetary Institute as at 31 May 1998. The EMI went into liquidation on the establishment of the European Central Bank. Its Management 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 Monetary Institute's circumstances and adequately disclosed.

In our opinion, the financial statements, which have been prepared under accounting policies set out in Section 2 of the notes on the accounts of the European Monetary Institute, give a true and fair view of the financial position of the European Monetary Institute at 31 May 1998 and the results of its operations for the period 1 January to 31 May 1998.

Frankfurt am Main, 14 October 1998

C&L Deutsche Revision
Aktiengesellschaft
Wirtschaftsprüfungsgesellschaft

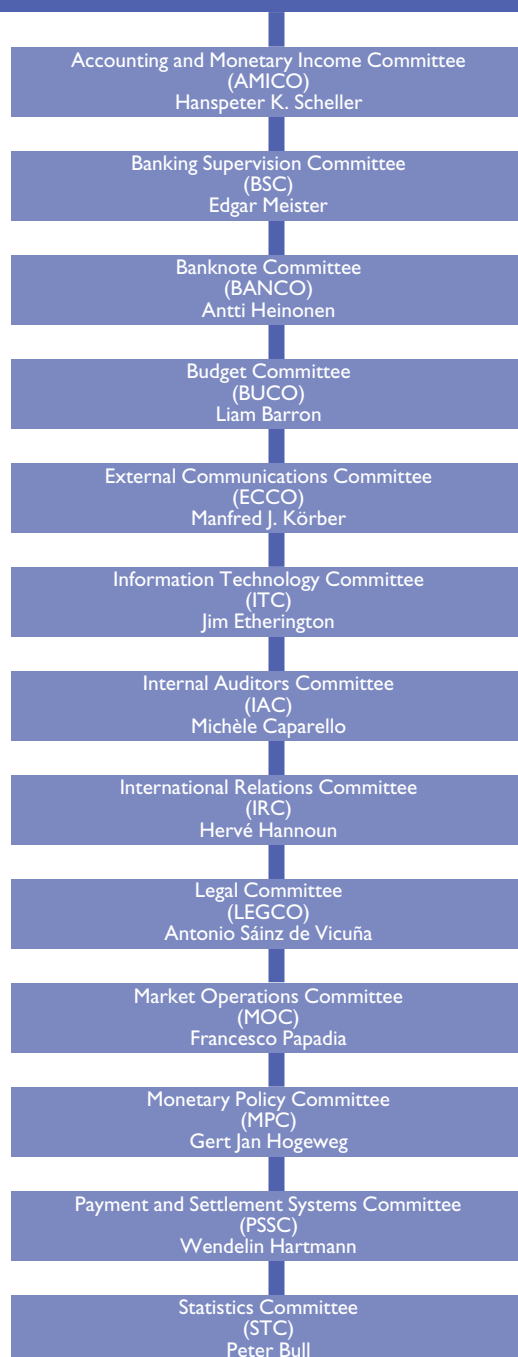
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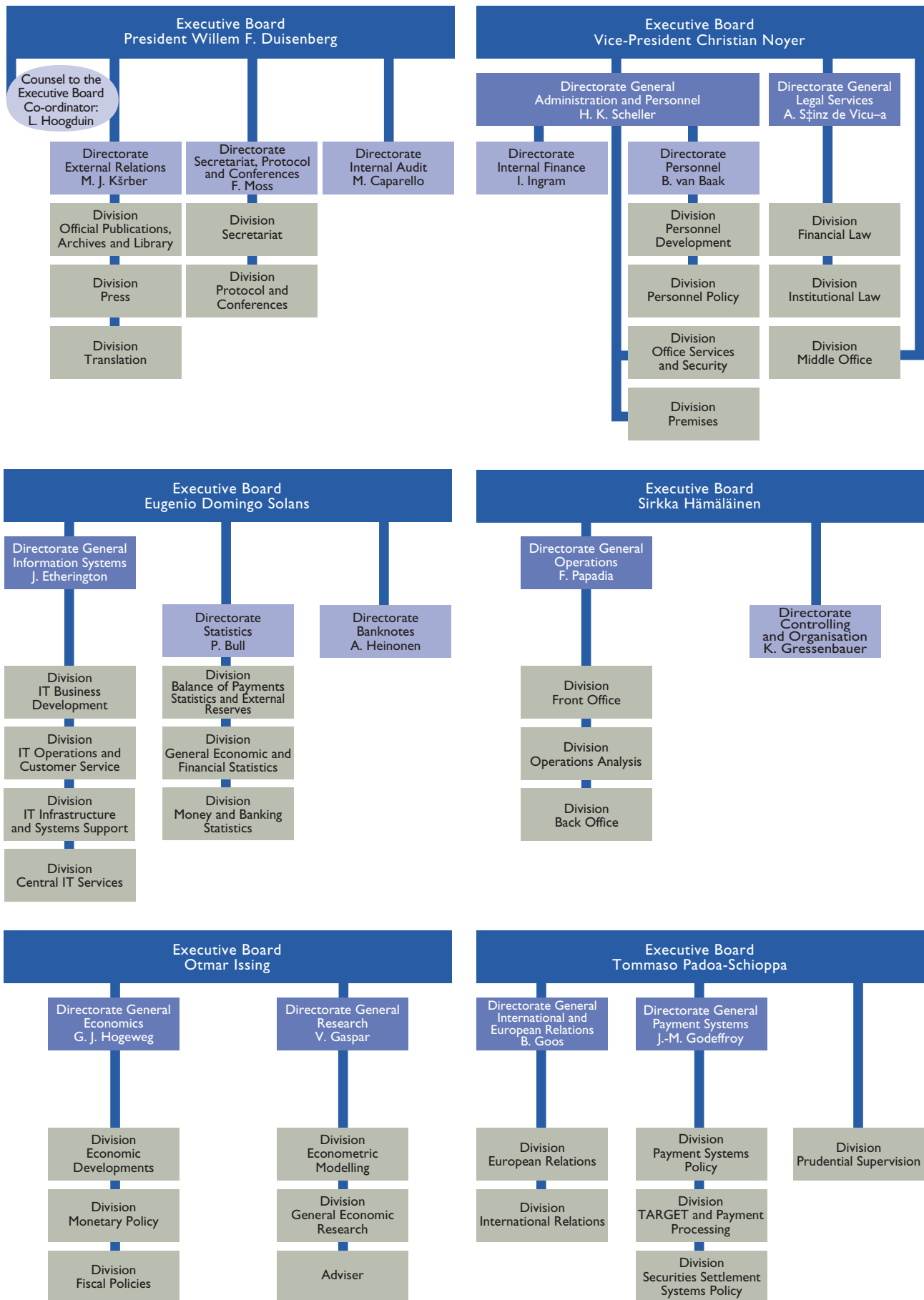
Annexes

ESCB Committees and their chairpersons





EUROPEAN CENTRAL BANK



Glossary

Bilateral central rate: the official exchange rate between any pair of former **ERM** member currencies, around which the ERM fluctuation margins were defined.

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 safekeeping, a central securities depository may incorporate comparison, 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 received by central banks from credit institutions as part of **repurchase operations**.

Convergence criteria: criteria established in Article 109j (1) of the **Treaty** (and developed further in Protocol No. 6). They relate both to performance with regard to price stability, government financial positions, exchange rates and long-term interest rates, and to the compatibility of national legislation, including the statutes of national central banks, with the Treaty and the Statute of the **ESCB**. The reports produced under Article 109j (1) by the **European Commission** and the **EMI** examined the achievement of a high degree of sustainable convergence by reference to the fulfilment of these criteria by each Member State.

Convergence programmes: medium-term government plans and assumptions provided by non-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. Convergence 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 a sufficient safety margin to ensure the avoidance of an excessive deficit. Countries participating in the euro area must submit annual *stability programmes*, in accordance with the Stability and Growth Pact.

Correspondent banking: an arrangement under which one bank provides payment and other services to another bank. Payments through correspondents are often 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 in turn regard this account as its nostro account.

Correspondent central banking model (CCBM): a model established by the **ESCB** with the aim of enabling **counterparties** to use underlying assets in a cross-border context. In the CCBM, national central banks act as custodians for each other. This implies that each national central bank has a securities account in its securities administration for each of the other national central banks (and for the **ECB**).

Counterparty: the opposite party in a financial transaction (e.g. any transaction with the central bank).

Credit institution: refers to an institution covered by the definition contained in Article I of the First Banking Co-ordination Directive (77/780/EEC), i.e. “an undertaking whose business is to receive deposits or other repayable funds from the public and to grant credit for its own account”.

Current transfers: government transfers to enterprises, households and the rest of the world, net of transfers received from the rest of the world, that are not related to capital expenditure; they comprise, among other operations, production and import subsidies, social benefits and transfers to EC institutions.

Deficit-debt adjustment: the difference between the government deficit and the change in government debt. Among other reasons, this may be due to changes in the amount of financial assets held by the government, a change in government debt held by other government sub-sectors or statistical adjustments.

Debt ratio: the subject of one of the fiscal **convergence criteria** laid down in **Treaty Article 104c (2)**. It is defined as “the ratio of government debt to gross domestic product at current market prices”, where government debt is defined in Protocol No. 5 (on the **excessive deficit procedure**) as “*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 Integrated Economic Accounts**.

Deficit ratio: the subject of one of the fiscal **convergence criteria** named in **Treaty Article 104c (2)**. Defined as “*the ratio of the planned or actual government deficit to gross domestic product*” at current market prices, where the government deficit is defined in Protocol No. 5 (on the **excessive deficit procedure**) as “*net borrowing of the general government*”. General government is as defined in the **European System of Integrated Economic Accounts**.

Delivery versus payment system (or DVP, delivery against payment): a mechanism in a **securities settlement system** that ensures that the final transfer of one asset occurs if, and only if, the final transfer of (an)other asset(s) occurs. Assets could include securities or other financial instruments.

Deposit facility: a **standing facility** of the **Eurosystem** which **counterparties** may use to make overnight deposits at the central bank which are remunerated at a pre-specified interest rate.

EBA (since December 1997 the Euro Banking Association, formerly the ECU Banking Association): an interbank organisation which is intended to be the 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. Within the EBA, a clearing company (ABE Clearing, Société par Actions Simplifiée à capital variable) has been established with the purpose of managing the Euro Clearing System as from 1 January 1999. The Euro Clearing System (Euro 1) is the successor system to the ECU Clearing and Settlement System.

ECB (European Central Bank): the ECB has legal personality. It ensures that the tasks conferred upon the **Eurosystem** and the **ESCB** are implemented either by its own activities pursuant to its Statute or through the national central banks.

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 **ECB** each appoint no more than two members of the Committee. Article 109c (2) of the **Treaty** contains a list of the tasks of the Economic and Financial Committee, including the review of 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, inter alia, for the establishment of the **European Monetary Institute (EMI)**, the prohibition of monetary financing of and privileged access to financial institutions for the public sector and the avoidance of excessive deficits. *Stage Three* started on 1 January 1999 in accordance with the decision pursuant to Article 109j (4) of the **Treaty**, with the transfer of monetary competence to the **Eurosystem** and the introduction of the **euro**.

ECU (European Currency Unit): according to Council Regulation (EC) No. 3320/94 of 20 December 1994, the ECU was a basket made up of the sum of fixed amounts of 12 out of the 15 currencies of the Member States. The value of the ECU was calculated as a weighted average of the value of its component currencies. As the official ECU it served, inter alia, as the numeraire of the **ERM** and as a reserve asset for central banks. Official ECUs were created by the **EMI** through three-month swap operations against one-fifth of the US dollar and gold assets held by the 15 EU national central banks. Private ECUs were ECU-denominated financial instruments (e.g. bank deposits or securities) based on contracts which, as a rule, made reference to the official ECU. The “theoretical” value of the private ECU was defined on the basis of the value of the individual components of the ECU basket. However, the use of the private ECU was different from that of the official ECU and, in practice, the market value of the private ECU could diverge from its “theoretical” basket value. Following Article 2 of Council Regulation (EC) No. 1103/97 of 17 June 1997 on certain provisions relating to the introduction of the euro, the private ECU was replaced by the **euro** on 1 January 1999 on a one-to-one basis. The official ECU ceased to exist with the termination of the swap mechanism at the start of Stage Three of **EMU**.

Effective (nominal/real) exchange rates: in their *nominal* version, 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 prices or costs relative to domestic ones. They are thus measures of a country’s price and cost competitiveness. The euro area nominal effective exchange rate referred to in this Report is based on BIS calculations. The figures are a weighted average of the euro area countries’ effective exchange rates. The weights are based on 1990 manufactured goods trade, capture third-market effects and refer to extra-euro area trade. The real effective exchange rate for the **euro area** is derived using national CPIs.

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 as a prepaid bearer instrument (see also **multi-purpose prepaid card**).

EMI (European Monetary Institute): the EMI was a temporary institution established at the start of Stage Two of **EMU** (on 1 January 1994). The EMI had no responsibility for the conduct of monetary policy in the European Union, which remained the preserve of the national authorities.

The two main tasks of the EMI were: (1) to strengthen central bank co-operation and monetary policy co-ordination; and (2) 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 the third stage. It went into liquidation on 1 June 1998.

EMS (European Monetary System): established in 1979 in accordance with the Resolution of the **European Council** on the establishment of the EMS and related matters of 5 December 1978. The Agreement of 13 March 1979 between the central banks of the Member States of the European Economic Community laid down the operating procedures for the EMS. The objective was to create closer monetary policy co-operation between Community countries, leading to a zone of monetary stability in Europe. The main components of the EMS were the **ECU**; the exchange rate and intervention mechanism (**ERM**); and various credit mechanisms. This mechanism ceased to exist with the start of Stage Three of **EMU**.

EMU: see **Economic and Monetary Union**.

ERM (exchange rate mechanism): the exchange rate and intervention mechanism of the **EMS** defined the exchange rate of participating currencies in terms of a central rate vis-à-vis the **ECU**. These central rates were used to establish a grid of bilateral exchange rates between participating currencies. Exchange rates were allowed to fluctuate around **bilateral central rates** within the ERM fluctuation margins. In August 1993 the decision was taken to widen the fluctuation margins to $\pm 15\%$. Pursuant to a bilateral agreement between Germany and the Netherlands, fluctuation margins between the Deutsche Mark and the Dutch guilder were maintained at $\pm 2.25\%$. Adjustments of central rates were subject to mutual agreement between all countries participating in the ERM (see also **realignment**). This mechanism ceased to exist with the start of Stage Three of **EMU**.

ERM II: as from 1 January 1999 the successor exchange rate arrangement to the **ERM**, which provides the framework for exchange rate policy co-operation between the **euro area** and Member States not participating in the euro area from the start of Stage Three. Membership of the mechanism is voluntary. Nevertheless, Member States with a derogation can be expected to join the mechanism. Currently, the Danish krone and the Greek drachma participate in ERM II with a fluctuation band around the central rate against the **euro** of $\pm 2.25\%$ and $\pm 15\%$ respectively.

ESCB (European System of Central Banks): the ESCB is composed of the **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 **EMU**. The ESCB is governed by the **Governing Council** and the **Executive Board** of the ECB. A third decision-making body of the ECB is the **General Council**.

EU Council: a body 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**.

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 generic term **ECU** 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 relevant decision-making bodies of the **ECB**. The euro area comprises Belgium, Germany, Spain, France, Ireland, Italy, Luxembourg, the Netherlands, Austria, Portugal and Finland.

European Commission: the institution of the European Community which ensures the application of the provisions of the **Treaty**, takes initiatives for 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 in the framework of multilateral surveillance and submits reports to the Council. It consists of 20 members and includes two nationals from Germany, Spain, France, Italy and the United Kingdom, and one from each of the other Member States. *Eurostat* is the Directorate General of the Commission responsible for the production of Community statistics through the collection and systematic processing of data, produced mainly by the national authorities, within the framework of comprehensive five-yearly Community statistical programmes.

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 Parliament: consists of 626 representatives of the citizens of the Member States. It is a part of the legislative process, though with different prerogatives according to the procedures through which EU law is to be enacted. In the framework of **EMU**, the Parliament has mainly consultative powers. However, the **Treaty** establishes certain procedures for the democratic accountability of the **ECB** to the Parliament (presentation of the annual report, general debate on the monetary policy, hearings before the competent parliamentary committees).

European System of Integrated Economic Accounts (ESA, second edition, 1979): a system of uniform statistical definitions and classifications aimed at a coherent quantitative description of the economies of the Member States. The ESA is the Community's version of the United Nations' revised System of National Accounts. The respective definitions are, inter alia, the basis for calculating the fiscal **convergence criteria** laid down in the **Treaty**. The European System of Accounts (ESA 95) is the new system of national accounts of the EU and will be implemented as from April 1999, replacing the European System of Integrated Economic Accounts.

Eurostat: see **European Commission**.

Eurosystem: comprises the **ECB** and the national central banks of the Member States which have adopted the **euro** in Stage Three of **EMU** (see also **euro area**). There are currently 11 national central banks in the Eurosystem. The Eurosystem is governed by the **Governing Council** and the **Executive Board** of the ECB.

Excessive deficit procedure: the **Treaty** provision (defined in Article 104c and specified in Protocol No. 5) that requires Member States to maintain budgetary discipline, defines the conditions which must prevail for a budgetary position to be judged satisfactory and regulates the steps to be taken should these conditions not be fulfilled. In particular, the fiscal **convergence criteria** (government **deficit ratio** and **debt ratio**) are specified; the procedure which may result from the **EU Council's** decision that an excessive deficit exists in a certain Member State is

described; and further steps to be taken in the event that an excessive deficit situation persists are identified. The **Stability and Growth Pact** includes further provisions aimed at speeding up and clarifying the implementation of the excessive deficit procedure.

Executive Board: one of the decision-making bodies of the **ECB**. It comprises the President, the Vice-President and four other members appointed 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 central bank 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 **ECB**) buy (or sell) euro spot against a foreign currency and at the same time sell it (or buy it back) forward.

Funded and unfunded pensions: a funded pension scheme is one in which pension commitments are covered by real or financial assets, as opposed to an unfunded, or pay-as-you-go, form of pension scheme, in which the current contributions of employers and employees are used to pay current pensions directly.

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 **ECB**. It comprises the President and the Vice-President of the ECB and the governors of all 15 EU national central banks.

General government: consists of central government, regional or local government and social security funds, as defined in the **European System of Integrated Economic Accounts**.

Governing Council: one of the governing bodies of the **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): Protocol No. 6 on the **convergence criteria** referred to in Article 109j (1) of the **Treaty** requires price convergence to be measured by means of the consumer price index on a comparable basis, taking into account differences in national definitions. Although current consumer price statistics in the Member States are largely based on similar principles, there are considerable differences of detail and these affect the comparability of the national results. In order to fulfil the Treaty requirement, the **European Commission** (Eurostat), in close liaison with the national statistical institutes and the **EMI**, carried out conceptual work on the harmonisation of consumer price statistics. The Harmonised Index of Consumer Prices is the outcome of these efforts.

Harmonised long-term interest rates: Protocol No. 6 on the **convergence criteria** referred to in Article 109j (1) of the **Treaty** requires interest rate convergence to be measured by means of interest rates on long-term government bonds or comparable government securities, taking into account differences in national definitions. In order to fulfil the Treaty requirement, the **EMI** carried out conceptual work on the harmonisation of long-term interest rate statistics and regularly collected the data from national central banks on behalf of the **European Commission** (Eurostat), a task which has been taken over by the **ECB**.

Interbank funds transfer system (IFTS): a **funds transfer system** in which most (or all) participants are **credit institutions**.

Interlinking mechanism: one of the components of the **TARGET system**. The term is used to designate the infrastructures and the procedures which link domestic **RTGS systems** in order to process cross-border payments within TARGET.

Investment: gross fixed capital formation as defined in the **European System of Integrated Economic Accounts**.

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 procedure between two **securities settlement systems** for the cross-border transfer of securities through a book-entry process (i.e. without physical transfer).

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 loss-sharing 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 obligation; the arrangement stipulates how the loss will be shared among the parties concerned in the event that the agreement is 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**.

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 against a pre-specified interest rate.

Measures with a temporary effect: comprise all non-cyclical effects on fiscal variables which: (1) reduce (or increase) the **general government** deficit or gross debt (**deficit ratio**, **debt ratio**) in a specified period only (“one-off” effects) or (2) improve (or worsen) the budgetary situation in a specified period at the expense (or to the benefit) of future budgetary situations (“self-reversing” effects).

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 broad monetary aggregate M3 has been defined by the **Eurosystem** as currency in circulation plus euro area residents’ (other than central

government) holdings of the following liabilities of euro area money issuing institutions: overnight deposits, deposits with an agreed maturity of up to two years, deposits redeemable at notice of up to three months, repurchase agreements, money market fund shares/units and money market paper and debt securities up to two years. The **Governing Council** of the **ECB** has announced a reference value for the growth of M3.

Monetary Committee: a consultative Community body which was composed of two representatives from each Member State in a personal capacity (normally one from the government and one from the central bank) and two representatives of the **European Commission**. It was created in 1958 on the basis of Article 105 of the EEC Treaty. In order to promote co-ordination of the policies of Member States to the full extent needed for the functioning of the internal market, Article 109c of the **Treaty** lists a set of areas where the Monetary Committee was to contribute to the preparation of the work of the **EU Council**. At the start of Stage Three of **EMU** the Monetary Committee was dissolved and the **Economic and Financial Committee** established.

Multi-purpose prepaid card: a stored value card which can be used for a wide range of 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**).

Net capital expenditure: comprises a government's final capital expenditure (i.e. gross fixed capital formation, plus net purchases of land and intangible assets, plus changes in stocks) and net capital transfers paid (i.e. investment grants, plus unrequited transfers paid by the **general government** to finance specific items of gross fixed capital formation by other sectors, minus capital taxes and other capital transfers received by the general government).

Net external asset or liability position (or the international investment position (i.i.p.)): the statistical statement of the value and composition of the stock of an economy's financial assets or financial claims on 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.

Nominal effective exchange rates: see **effective (nominal/real) exchange rates**.

Non-cyclical factors: indicate influences on the government's budget balances that are not due to cyclical fluctuations (the cyclical component of the budget balance). They can therefore result either from structural, i.e. permanent, changes in budgetary policies or from measures with a "temporary effect" (see also **measures with a temporary effect**).

Open market operation: an operation executed on the initiative of the central bank in the financial markets involving one of the following transactions: (1) buying or selling assets outright (spot or forward); (2) buying or selling assets under a **repurchase agreement**; (3) lending or borrowing against underlying assets as **collateral**; (4) the issuance of central bank debt certificates; (5) the collection of deposits; or (6) **foreign exchange swaps** between domestic and foreign currency.

Output gap: the difference between the actual and potential output level of an economy as a percentage of the potential output. For monetary policy purposes, the rate of growth of potential output may be considered to be the rate of real output growth consistent with price stability in the medium term (i.e. no tendency for either inflationary or deflationary pressures to appear). This may be similar in practice to the trend rate of growth of the economy. A positive (negative) output gap means that actual output is above (below) the trend or potential level of output, and suggests the possible emergence (absence) of inflationary pressures.

Outright transaction: a transaction whereby the central bank buys or sells assets up to their maturity in the market (spot or forward).

Primary balance: government net borrowing or net lending excluding interest payments on government liabilities.

Real effective exchange rates: see **effective (nominal/real) exchange rates**.

Realignment: a change in the central parity of a currency participating in an exchange rate system with a fixed but adjustable peg. In the former **ERM** a realignment consisted of a change in the **ECU** central rate and the **bilateral central rates** of one or more of the participating currencies.

Reference period: time intervals specified in Article 104c (2a) of the **Treaty** and in Protocol No. 6 on the **convergence criteria** for examining progress towards convergence.

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 national currency, is changed into **euro** at the irrevocably fixed conversion rate.

Reference value for the fiscal position: Protocol No. 5 of the **Treaty** on the **excessive deficit procedure** sets explicit reference values for the **deficit ratio** (3% of GDP) and the **debt ratio** (60% of GDP), whereas Protocol No. 6 on the **convergence criteria** specifies the methodology for the computation of the reference values relevant for the examination of price and long-term interest rate convergence.

Remote access (to an IFTS): the facility for 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, if necessary, without having established a branch in the host country.

Repurchase operation (repo): a liquidity-providing **reverse transaction** based on a **repurchase agreement**.

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**.

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 items 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 items in the **reserve base** with the amount of those items in 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 system**.

Securities settlement system: 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 an EU 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 **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 mentioned 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**.

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**.

Stock-flow adjustments: see **deficit-debt adjustment**.

TARGET (Trans-European Automated Real-time Gross settlement Express Transfer) system: a payment system consisting of one **RTGS system** in each of the Member States participating in the **euro area**. The national RTGS systems are interconnected through the **Interlinking mechanism** so as to allow same-day cross-border transfers throughout the euro area. RTGS systems of non-euro area Member States may also be connected to TARGET, provided that they are able to process **euro**.

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)* and was often referred to as the “Treaty of Rome”. The Treaty on European Union was signed in Maastricht (therefore often referred to as the “Maastricht Treaty”) on 7 February 1992 and entered into force on 1 November 1993. It amended the EEC Treaty, which is now referred to as the Treaty establishing the European Community. The Treaty on European Union has been amended by the “Amsterdam Treaty”, which was signed in Amsterdam on 2 October 1997 and later ratified.

Chronology of monetary policy measures taken in the EU in 1998

9 January

The Bank of Greece raises its lombard rate by 400 basis points to 23.0%.

19 January

The Banco de Portugal reduces its repo rate by 20 basis points to 5.1%, its liquidity absorption rate and its overnight credit facility rate by 10 basis points to 4.8% and 6.8% respectively.

13 February

The Banco de España cuts its 10-day repurchase rate by 25 basis points to 4.5%.

26 February

The Banco de Portugal reduces its repo rate, its liquidity absorption rate and its overnight credit facility rate by 20 basis points to 4.9%, 4.6% and 6.6% respectively.

14 March

The ministers and central bank governors of the Member States of the European Union, following a decision by the Irish authorities to adjust the central rate of the Irish pound, decide by mutual agreement, in a common procedure involving the European Commission and the European Monetary Institute (EMI), and after consultation of the Monetary Committee, to fix new central rates in the exchange rate mechanism of the European Monetary System (EMS) as from 16 March 1998. The previous bilateral central rates of the Irish pound against other currencies of the exchange rate mechanism are revalued by 3%, bringing them close to market rates.

The ministers and central bank governors of the Member States of the European Union, following a decision by the Greek Government to join the exchange rate mechanism of the EMS, decide by mutual agreement, in a common procedure involving the European Commission and the EMI, and after consultation of the Monetary Committee, on the terms under which the Greek drachma will participate as from 16 March 1998.

18 March

The Banco de Portugal reduces its repo rate, its liquidity absorption rate and its overnight credit facility rate by 20 basis points to 4.7%, 4.4% and 6.4% respectively.

19 March

Suomen Pankki increases its tender rate by 15 basis points to 3.4%.

30 March

The Bank of Greece lowers its lombard rate by 400 basis points to 19.0% and its overdraft rate by 200 basis points to 22.0%.

22 April

The Banca d'Italia reduces its discount and fixed term advances (or lombard) rates by 50 basis points to 5.0% and 6.5% respectively.

3 May

The Council of the European Union (EU Council), meeting in the composition of the Heads of State or Government, unanimously decides that 11 Member States, namely Belgium, Germany, Spain, France, Ireland, Italy, Luxembourg, the Netherlands, Austria,

Portugal and Finland fulfil the necessary conditions for the adoption of the single currency on 1 January 1999 and will therefore participate in the euro area as from the start of Stage Three of Economic and Monetary Union (EMU).

With a view to guiding the markets in the run-up to Stage Three, the ministers and central bank governors of the Member States of the European Union, the European Commission and the EMI announce the procedure for determining the irrevocable conversion rates for the euro. It is announced that the irrevocable conversion rates for the euro will be based on the ERM bilateral central rates of the currencies of the participating Member States.

5 May

Danmarks Nationalbank raises its discount rate and its certificates of deposit rate by 50 basis points to 4.0% and 4.25% respectively.

The Banco de España cuts its 10-day repo rate by 25 basis points to 4.25%.

11 May

The Banco de Portugal reduces its repo rate, its liquidity absorption rate and its overnight credit facility rate by 20 basis points to 4.5%, 4.2% and 6.2% respectively.

20 May

The Bank of Greece lowers its fixed tender rate for 14-day deposits by 25 basis points to 14.0%.

29 May

Danmarks Nationalbank cuts its discount rate and its certificates of deposit rate by 25 basis points to 3.75% and 4.0% respectively.

4 June

Sveriges Riksbank reduces its repo rate by 25 basis points to 4.1%, with effect from 9 June 1998.

The Bank of England raises its repo rate by 25 basis points to 7.5%.

16 June

The Banca d'Italia announces a cut in the ratio of reserve requirements from 15% to 9%.

17 June

The Bank of Greece lowers its fixed tender rate for 14-day deposits by 25 basis points to 13.75%.

7 July

The Governing Council of the ECB adopts a Recommendation for a Council Regulation (EC) concerning the application of minimum reserves by the European Central Bank in Stage Three of Economic and Monetary Union. The main provisions of the recommended Council Regulation define the basis for the minimum amount of reserves which the ECB may require credit institutions to hold on their accounts with the national central banks (NCBs). In addition, they provide the ECB with specific regulatory powers and specify the sanctions to be imposed in the event of non-compliance. This ECB Recommendation was published in the Official Journal of the European Communities No. C 246 of 6 August 1998, page 6 ff.

The Governing Council further agrees on some of the key features of the minimum reserve system to be applied as from the start of Stage Three: the minimum reserve holdings are defined to be within a range of 1.5–2.5% of the relevant liability base (after deducting a lump-sum allowance); liabilities

vis-à-vis institutions established in the euro area and liabilities vis-à-vis the Eurosystem will not be subject to reserve requirements; holdings of required reserves will be remunerated at the average, over the maintenance period, of the interest rate (weighted according to the number of calendar days) corresponding to that of the Eurosystem's main refinancing operations.

8 July

The Bank of Greece lowers its fixed tender rate for 14-day deposits by 75 basis points to 13.0%.

19 July

The Banca d'Italia announces a reduction in the ratio of reserve requirements from 9% to 6%.

23 July

The Central Bank Council of the Deutsche Bundesbank reviews its monetary targeting in 1997 and 1998 and the monetary target for 1998 and abides by its monetary policy orientation, as adopted in December 1996, which provides for an expansion of the money stock M3 in the course of 1997 and 1998 of around 5% per annum. The target corridor of 3% to 6% additionally set for 1998 is likewise retained unchanged. As already announced in December 1997, the Deutsche Bundesbank declares that it will focus increasingly on the entire area of Economic and Monetary Union and, in this connection, monetary growth will need to be given particular attention.

5 August

The Bank of Greece lowers its lombard rate by 300 basis points to 16.0%.

1 September

The ECB and the NCBs of the Member States outside the euro area (Denmark, Greece, Sweden and the United Kingdom) agree to lay down the operating procedures for an exchange rate mechanism in Stage Three of Economic and Monetary Union (the ERM II Agreement). The ERM II Agreement specifies the procedure of intervention on the basis of the EU Council Resolution of 16 June 1997 setting up an exchange rate mechanism as from 1 January 1999. The ERM II Agreement was published in the Official Journal of the European Communities No. C 345 of 13 November 1998, page 6.

The Nationale Bank van België/Banque Nationale de Belgique introduces a transitional system of minimum reserve requirements. The end-of-day rate for advances becomes a single rate and, as a purely technical adjustment in order to bring it down to the level of the German lombard rate, it is lowered by 5 basis points to 4.5%.

11 September

The Governing Council of the ECB endorses the Report entitled "The single monetary policy in Stage Three: General documentation on ESCB monetary policy instruments and procedures". The Report contains a detailed description of the monetary policy instruments and procedures to be applied by the ESCB (Eurosystem) in Stage Three of EMU. The Report was published on 18 September 1998.

18 September

Danmarks Nationalbank raises its certificates of deposit rate by 100 basis points to 5.0% and its discount rate by 50 basis points to 4.25%.

26 September

The ministers of the euro area Member States, the ECB and the ministers and central bank governors of Denmark and Greece, in a common procedure involving the European Commission and after consultation of the Monetary Committee, welcome the decision of the governments of Denmark and Greece to extend their participation in the exchange rate mechanism from ERM I to ERM II, linking their currencies to the euro. They agree that the Danish krone will participate in ERM II with a fluctuation band around its central rate against the euro of $\pm 2.25\%$ and that the Greek drachma will participate in ERM II with the standard fluctuation band around its central rate against the euro of $\pm 15\%$. These agreements became effective as from the opening of foreign exchange markets on 4 January 1999 (see also the ERM II Agreement of 1 September 1998).

6 October

The Banco de España reduces its 10-day repo rate by 50 basis points to 3.75%.

8 October

Danmarks Nationalbank lowers its certificates of deposit rate by 25 basis points to 4.75%.

The Bank of England lowers its repo rate by 25 basis points to 7.25%.

9 October

The Central Bank of Ireland lowers its short-term lending facility rate by 100 basis points to 5.75% and its weekly tender rate by 125 basis points to 4.94%, with effect from 12 October 1998.

The Banco de Portugal reduces its repo rate, its liquidity absorption rate and its overnight credit facility rate by 50 basis points to 4.0%, 3.7% and 5.7% respectively.

13 October

The Governing Council of the ECB announces the main features of the stability-oriented monetary policy strategy that the Eurosystem will pursue in Stage Three of EMU: the primary objective of price stability is to be defined as a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2% and is to be maintained over the medium term; a prominent role will be assigned to money, with a reference value for the growth of a broad monetary aggregate; in parallel, a broadly based assessment of the outlook for price developments will play a major role in the monetary policy strategy.

Further to its decision on 7 July 1998, the Governing Council announces the application of a minimum reserve ratio of 2% to a credit institution's liability base of overnight deposits, deposits with an agreed maturity of up to two years, deposits redeemable at notice of up to two years, debt securities issued with an agreed maturity of up to two years and money market paper. A reserve ratio of 0% will apply to repurchase agreements, deposits with an agreed maturity of more than two years and debt securities issued with an agreed maturity of more than two years. The lump-sum allowance to be deducted from the reserve requirement of each institution is set at €100,000. If a credit institution cannot provide evidence of its interbank liabilities in the form of debt securities with a maturity of up to two years and money market paper, it will be allowed to deduct a standardised 10% of these liabilities from its liability base.

14 October

The Bank of Greece lowers its fixed tender rate for 14-day deposits by 25 basis points to 12.75%.

22 October

Danmarks Nationalbank lowers its certificates of deposit rate by 10 basis points to 4.65%.

26 October

The Banca d'Italia reduces its discount and fixed term advances (or lombard) rates by 100 basis points to 4.0% and 5.5% respectively.

31 October

The Banca d'Italia announces a reduction in the ratio of reserve requirements from 6% to 2%.

3 November

The Governing Council of the ECB adopts three Guidelines: one specifying general principles to be followed by the NCBs when carrying out operations in their domestic assets and liabilities outside the scope of the single monetary policy; one establishing the thresholds above which NCBs must obtain the ECB's approval for operations in their remaining foreign reserve assets, including gold; and, finally, one according to which the participating Member States will have to give advance notice to the ECB of any transactions with their foreign exchange working balances which exceed a certain amount. These legal acts are based on provisions of the Statute of the ESCB and are aimed at ensuring the singleness of monetary policy and the consistency of such transactions with the Community's monetary and exchange rate policies.

Sveriges Riksbank cuts its repo rate by 25 basis points to 3.85%.

4 November

The Banco de España reduces its 10-day repo rate by 25 basis points to 3.5%.

The Banco de Portugal lowers its repo rate by 25 basis points to 3.75%, and its liquidity absorption and overnight credit facility rates by 20 basis points to 3.5% and 5.5% respectively.

5 November

The Bank of England lowers its repo rate by 50 basis points to 6.75%.

Danmarks Nationalbank reduces its discount rate and certificates of deposit rate by 25 basis points to 4.0% and 4.4% respectively.

6 November

The Central Bank of Ireland cuts its repo rate by 125 basis points to 3.69%, its short-term financing rate by 125 basis points to 4.5% and its overnight deposit facility rate by 25 basis points to 2.5%, with effect from 9 November 1998.

12 November

Sveriges Riksbank lowers its deposit and lending rates by 50 basis points to 3.25% and 4.75% respectively, with effect from 18 November 1998.

19 November

Danmarks Nationalbank lowers its certificates of deposit rate by 15 basis points to 4.25%.

24 November

Sveriges Riksbank reduces its repo rate by 25 basis points to 3.6%.

1 December

The Governing Council of the ECB agrees on the remaining issues regarding the monetary policy strategy of the Eurosystem. The first reference value for monetary growth is set at 4½% and refers to the broad monetary aggregate M3. The derivation of the reference value is based on the contributions to monetary growth resulting from assumptions made for prices (year-on-year increases in the HICP of below 2%), the medium-term trend in real GDP growth (of 2-2½% per annum) and the medium-term trend decline in the velocity of circulation of M3 (in the approximate range of ½-1% each year). Monetary developments against this reference value will be monitored on the basis of three-month moving averages of the monthly 12-month growth rates for M3. In December 1999 the Governing Council will review the reference value for monetary growth (see also the announcement of the Governing Council of 13 October 1998).

Further to its decisions on 7 July and 13 October 1998, the Governing Council adopts a Regulation on the application of minimum reserves. This ECB Regulation follows the Council Regulation (EC) No. 2531/98 of 23 November 1998 concerning the application of minimum reserves by the European Central Bank and establishes minimum reserve requirements for credit institutions in the euro area in the pursuance of monetary policy objectives. The ECB Regulation entered into force on 1 January 1999 and was published in the Official Journal of the European Communities No. L 356 of 30 December 1998, page 1.

3 December

The Nationale Bank van België/Banque Nationale de Belgique cuts its key tender rate by 30 basis points to 3.0%.

Danmarks Nationalbank reduces its certificates of deposit rate by 30 basis points to 3.95% and its discount rate by 50 basis points to 3.5%.

The Deutsche Bundesbank cuts its repo rate by 30 basis points to 3.0%.

The Banco de España cuts its 10-day repo rate by 50 basis points to 3.0%.

The Banque de France cuts its intervention rate by 30 basis points to 3.0%.

The Central Bank of Ireland cuts its repo rate by 69 basis points to 3.0%.

The Banca d'Italia cuts its discount rate by 50 basis points to 3.5% and the fixed term advances (or lombard) rate by 100 basis points to 4.5%.

De Nederlandsche Bank cuts its special advances rate by 30 basis points to 3.0%.

The Oesterreichische Nationalbank cuts its repo rate by 20 basis points to 3.0%.

The Banco de Portugal cuts its repo rate by 75 basis points to 3.0%.

Suomen Pankki cuts its tender rate by 40 basis points to 3.0%.

9 December

The Bank of Greece lowers its fixed tender rate for 14-day deposits by 50 basis points to 12.25% and its lombard rate by 50 basis points to 15.5%.

10 December

The Bank of England lowers its repo rate by 50 basis points to 6.25%.

15 December

Sveriges Riksbank cuts its repo rate by 20 basis points to 3.4%.

22 December

The Governing Council of the ECB decides that the first main refinancing operation of the Eurosystem will be a fixed rate tender offered at an interest rate of 3%. This operation will be initiated on 4 January 1999, while the allotment decision will be taken on 5 January 1999 and settlement will take place on 7 January 1999. In addition, the first longer-term refinancing operation will be announced on 12 January 1999 (with a settlement date of 14 January 1999) and will be conducted through a variable rate tender using the single rate allotment procedure.

The Governing Council furthermore decides that the interest rate for the marginal lending facility will be set at a level of 4.5% and the interest rate for the deposit facility at a level of 2% for the start of Stage Three, i.e. 1 January 1999. As a transitional measure, between 4 and 21 January 1999, the interest rate for the marginal lending facility will be set at a level of 3.25% and the interest rate for the deposit facility at a level of 2.75%. The Governing Council declares its intention to terminate this transitional measure following its meeting on 21 January 1999.

23 December

The Banca d'Italia cuts its discount rate by 50 basis points to 3.0%.

31 December

In accordance with Article 109I (4) of the Treaty establishing the European Community, the Council of the European Union, acting with the unanimity of the Member States without a derogation, upon a proposal from the European Commission and after consultation of the ECB, adopts the irrevocable conversion rates for the euro, with effect from 1 January 1999, 0.00 a.m. (local time).

The ministers of the euro area Member States, the ECB and the ministers and central bank governors of Denmark and Greece decide, in a common procedure involving the European Commission and after consultation of the Monetary Committee, to fix the central rates against the euro for the currencies participating in the exchange rate mechanism which comes into operation on 1 January 1999. Further to this decision on the euro central rates, the ECB, Denmark's Nationalbank and the Bank of Greece establish by common accord the compulsory intervention rates for the Danish krone and the Greek drachma. A fluctuation band of $\pm 2.25\%$ will be observed around the euro central rate for the Danish krone. The standard fluctuation band of $\pm 15\%$ will be observed around the euro central rate for the Greek drachma (see also the ERM II Agreement of 1 September 1998 and the agreement of 26 September 1998).

Documents published by the European Central Bank (ECB)

This list is designed to inform readers about selected documents published by the European Central Bank. The publications are available to interested parties free of charge from the Press Division. Please submit orders in writing to the postal address given on the back of the title page.

For a complete list of documents published by the European Monetary Institute, please see the following page or visit the ECB's Web site (<http://www.ecb.int>).

Annual Report

"Annual Report 1998", April 1999.

Monthly Bulletin

Articles published from January 1999 onwards:

"The euro area at the start of Stage Three", January 1999.

"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.

Other publications

TARGET brochure, July 1998.

"The TARGET service level", July 1998.

"Report on electronic money", August 1998.

"Assessment of EU securities settlement systems against the standards for their use in ESCB credit operations", September 1998.

"Money and banking statistics compilation guide", September 1998.

"The single monetary policy in Stage Three: General documentation on ESCB monetary policy instruments and procedures", September 1998.

"Third progress report on the TARGET project", November 1998.

"Correspondent central banking model (CCBM)", December 1998.

"Payment systems in the European Union – Addendum incorporating 1997 figures", January 1999

"Possible effects of EMU on the EU banking systems in the medium to long term", February 1999.

Documents published by the European Monetary Institute (EMI)

Annual Report

“Annual Report 1994”, April 1995.

“Annual Report 1995”, April 1996.

“Annual Report 1996”, April 1997.

“Annual Report 1997”, May 1998.

Other publications

“Recent developments in the use of the private ECU: statistical survey”, February 1994.

“Prepaid cards”, May 1994.

“Note on the EMI’s intentions with regard to cross-border payments in Stage Three”, November 1994.

“Developments in EU payment systems in 1994”, February 1995.

“Recent developments in the use of the private ECU: statistical survey”, April 1995.

“The TARGET System (Trans-European Automated Real-time Gross settlement Express Transfer System; a payment system arrangement for Stage Three of EMU)”, May 1995.

“Progress towards convergence”, November 1995.

“The changeover to the single currency”, November 1995.

“Role and functions of the European Monetary Institute”, February 1996.

“Developments in EU payment systems in 1995”, March 1996.

“Payment systems in the European Union”, April 1996.

“Recent developments in the use of the private ECU: statistical review”, April 1996.

“The statistical requirements for Monetary Union”, July 1996.

“First progress report on the TARGET project”, August 1996.

“Technical annexes to the first progress report on the TARGET project”, August 1996.

“Progress towards convergence 1996”, November 1996.

“Payment systems in the European Union – Addendum incorporating 1995 figures”, January 1997.

“The single monetary policy in Stage Three – Specification of the operational framework”, January 1997.

“EU securities settlement systems – Issues related to Stage Three of EMU”, February 1997.

“The single monetary policy in Stage Three – Elements of the monetary policy strategy of the ESCB”, February 1997.

“Developments in EU payment systems in 1996”, March 1997.

“Differences between national changeover scenarios and potential need for harmonised action: Common policy messages”, March 1997.

“European money and banking statistical methods 1996”, April 1997.

“Recent developments in the use of the private ECU: statistical survey”, April 1997.

“Common market standards for money market and foreign exchange transactions: Updated policy messages”, July 1997.

“Provisional list of Monetary Financial Institutions as at December 1996”, September 1997.

“Second progress report on the TARGET project”, September 1997.

“Sponsoring by the ESCB of an overnight reference interest rate in Stage Three of EMU”, September 1997.

“The European Monetary Institute”, September 1997.

“The single monetary policy in Stage Three: General documentation on ESCB monetary policy instruments and procedures”, September 1997.

“Legal convergence in the Member States of the European Union – As at August 1997”, October 1997.

“Addendum to the provisional list of Monetary Financial Institutions. Money market funds as at December 1996”, December 1997.

“European Union Balance of Payments (Capital and Financial Account) Statistical Methods”, January 1998.

“Payment systems in the European Union – Addendum incorporating 1996 figures”, January 1998.

“Standards for the use of EU securities settlement systems in ESCB credit operations”, January 1998.

“Convergence Report – Report required by Article 109j of the Treaty establishing the European Community”, March 1998.

“List of Monetary Financial Institutions – As at December 1997”, April 1998.

“Money and Banking Statistics Compilation Guide – Guidance provided to NCBs for the compilation of money and banking statistics for submission to the ECB”, April 1998.

“Money and Banking Statistics Sector Manual – Guidance for the statistical classification of customers”, April 1998.