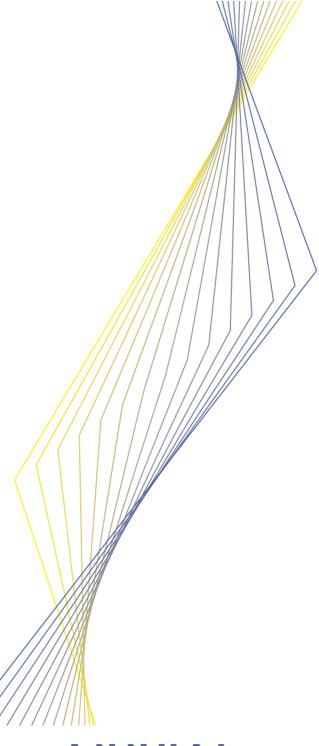


A N N U A L R E P O R T





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### **Abbreviations**

#### Countries

ΒE Belgium DK Denmark DE Germany GR Greece ES Spain FR France Ireland ΙE ΙT Italy

LU Luxembourg
NL Netherlands
AT Austria
PT Portugal
FI Finland
SE Sweden

UK United Kingdom

JP Japan

US United States

#### Others

BIS Bank for International Settlements

BPM4 IMF Balance of Payments Manual (4th edition)
BPM5 IMF Balance of Payments Manual (5th edition)

CDs certificates of deposit

c.i.f. cost, insurance and freight at the importer's border

CPI Consumer Price Index
ECB European Central Bank
ECU European Currency Unit
EMI European Monetary Institute

ESA 95 European System of Accounts 1995 ESCB European System of Central Banks

EU European Union

EUR euro

f.o.b. free on board at the exporter's border

GDP gross domestic product

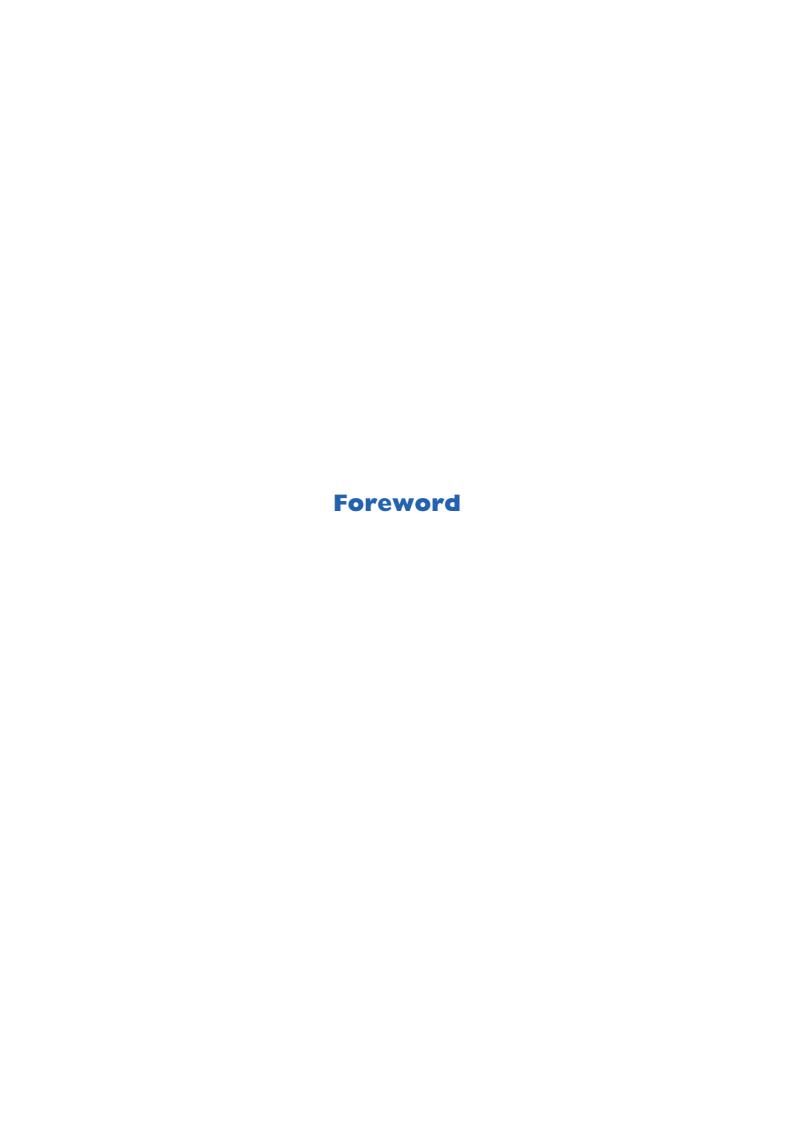
HICP Harmonised Index of Consumer Prices
ILO International Labour Organization
IMF International Monetary Fund
MFIs Monetary Financial Institutions

NCBs national central banks repos repurchase agreements

SITC Rev. 3 Standard International Trade Classification (revision 3)

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







This is the first ECB Annual Report covering a full year of Eurosystem monetary policy. It also deals with the other activities of the Eurosystem and the European System of Central Banks.

Looking back on the first year of the euro, there are grounds for experiencing a sense of satisfaction. The single monetary policy favourable started under reasonably conditions inherited as a result of sound policy measures adopted in the run-up to the introduction of the euro. In addition, the Eurosystem's monetary policy strategy proved to be a valuable tool both for making monetary policy decisions and in explaining these decisions to the general public. Throughout the year, the Eurosystem was therefore able to focus on maintaining the environment of price stability, with inflation running on average at just over 1%. The fact that prices could be kept stable in the euro area is an achievement that should not be underestimated. An examination of the not too distant past should make that clear. In the past half century price stability has been the exception rather than the rule. The Eurosystem will, therefore, continue to explain the importance of its primary

objective of maintaining price stability in the euro area and its monetary policy will continue to be conducted with a view to achieving this objective. There are, however, limits to the power of monetary policy. It cannot, for instance, prevent short-term fluctuations in price developments. Instead, monetary policy must focus on the medium term and be assessed from a medium-term perspective. Moreover, monetary policy needs the support of sound fiscal policies, of structural policies that aim to ensure that markets operate efficiently, as well as of responsible behaviour on the part of wage negotiators.

The Eurosystem must act as a single unit and as a truly European body, which means that decisions always need to be taken from an area-wide perspective. Monetary policy is one and indivisible; it cannot react to situations in individual countries or regions in the euro area. In any monetary union of the size of the euro area it is inevitable that inflation and other economic developments will not be completely uniform across all the countries involved. The existence of such differences, unless they exceed certain levels, should be seen as normal, as shown by the experience in other large monetary unions, such as the United States. However, should differences threaten to become too large, the policy response can only be provided nationally, by fiscal policy, structural policies and the adaptability of the markets.

In late 1998 and during the first months of 1999 the euro area economy experienced a slowdown in growth at a time when inflation was already low. The financial crises in Asia and Russia made themselves felt in Europe. A broadly based assessment of the outlook for price developments and the risks to price stability, the second pillar of our monetary policy strategy, on balance pointed to further downward pressure on prices. The first pillar of the strategy, a prominent role for money with an analysis of monetary growth relative to its reference value, showed a rate of growth of M3 of around 5% in early 1999. This was still relatively close to the reference

value of 41/2%. It seemed likely that the changeover to the euro itself had affected monetary growth in early 1999. It did not appear, therefore, that monetary developments in early 1999 implied a risk to price stability in the medium term. Thus, taking the information of both pillars together, the Governing Council of the ECB decided on 8 April to reduce the ECB's main refinancing rate by 50 basis points, to 2.50%. Following this rate cut, nominal short-term interest rates in the euro area were at historically low levels. This contributed to an environment in which the growth potential of the euro area could be exploited without endangering price stability.

In the course of 1999 downward risks to price stability receded and upward risks came to the fore, with their magnitude gradually increasing. The difference between the growth of money and its reference value continued to widen, while credit granted to the private sector grew by an annual rate in excess of 10%. The liquidity in the euro area was ample, while ECB interest rates were relatively low. All these developments were indicative of upward risks to price stability in the medium term. At the same time, upward pressures on prices came from the continued rise in oil prices and from the depreciation of the euro exchange rate in an environment where the economic outlook started to brighten up. Therefore, both pillars of the monetary policy strategy pointed increasing risks to price stability in the medium term. On 4 November 1999 the Governing Council raised the three main ECB interest rates by 50 basis points. Subsequently, on 3 February and 16 March 2000, it was decided to increase these interest rates by a further 25 basis points in each case. The timing of all these moves demonstrated the forward-looking character of the Eurosystem's monetary policy; by acting before risks become reality, later sharper increases in interest rates can be avoided. Rather than nipping economic recovery in the bud, such policy measures contribute to creating one of the conditions for lasting strong economic growth.

The euro is new and the ECB and the Eurosystem are young. Little more than a year has passed since the euro was introduced. The actual introduction of the euro, including the technical aspects of the process, went smoothly. The first few weeks of January 1999 saw the integration of the money markets in the euro area. The operational framework of the Eurosystem, with its use of refinancing operations, standing facilities and a minimum reserve system with an averaging provision, functioned remarkably well. Overnight interest rates were generally very stable without the need to resort to fine-tuning operations. The ECB conducted only one fine-tuning operation in early 2000 to mop up some excess liquidity after the successful transition to the year 2000.

The Eurosystem is naturally taking a keen interest in developments related to the possible expansion of the euro area. That is why developments in EU Member States which have not yet adopted the euro are analysed carefully. The Eurosystem values its work with these Member States in the General Council of the ECB. The Eurosystem also closely monitors the process of accession of new Member States to the European Union. Ultimately, these countries have to fulfil the convergence criteria and can then adopt the euro. In this context, the Eurosystem has established contacts with the central banks in all the accession countries and is ready to contribute to the accession process within its fields of competence.

So far, I have focused mainly on the activities of the ECB and the Eurosystem. However, immediately upon its launch the euro started to have an impact on the financial sector as a whole, the euro area economy in general and the global monetary system. The euro immediately became the second most important currency at the global level. The impact of the euro is ongoing and will increase in scope in the years to come. The euro will change the euro area economy and, indeed, has already begun to do so. Existing trends in the financial sector were boosted

by the launch of the euro. Generally speaking, the role of financial markets in the allocation of financial resources is growing relative to the role of financial intermediaries. The depth and liquidity of capital markets are increasing. Some segments of the capital market which had previously been underdeveloped, such as the corporate bond market, have grown significantly. In general, turnover in the financial markets was high, showing that the euro was well received.

Greater integration of the capital markets is still possible, and would be helped by measures to level the playing-field further. This also applies to the creation of a single market for financial services. The Eurosystem has, for example, emphasised the fact that retail payment systems, which reduce the costs and increase the speed of cross-border payments, have to be developed for implementation no later than the date on which the euro banknotes and coins are put into circulation.

Pressures to restructure mounted in 1999. as also evidenced by high merger and acquisition activity, and not only in the financial sector. In the financial sector all types of intermediaries and institutions, from banks to stock exchanges, are affected, as are payment and securities settlement systems. Although mergers and acquisitions are often still national in character, this may well change in the future. The euro stimulates competition by enhancing transparency, and cross-border comparisons become simpler within the euro area. This has a favourable effect on the functioning of the Single Market and thereby ultimately enhances economic welfare. This process will be given a further boost by the introduction of euro banknotes and coins. The introduction of the euro also implies that differences in the quality of economic policies of countries in the euro area are more easily exposed. This should be seen as an opportunity for governments to learn from each other and to discover and adopt best practices. Structural changes in the euro area are carefully monitored and analysed by the Eurosystem, since they may

have an impact on the way in which and the speed with which monetary policy measures affect the economic process and, in particular, inflation. From a more general perspective, an efficient and sound euro area financial system is important, since this also facilitates the conduct of monetary policy.

There are also some changes not directly related to the introduction of the euro which call for the attention of the Eurosystem. The development of electronic money impinges on all major central bank functions: monetary policy, the concern to maintain financial stability, banking supervision and oversight of payment systems. The Eurosystem attaches great importance to the adoption of a sound regulatory framework for issuers of electronic money. As this Annual Report goes to press, progress has been made in this area in the European Union, but the current proposals for regulation leave room for further improvement. This concerns, in particular, provisions to ensure that only supervised credit institutions are allowed to issue significant amounts of electronic money, that the Eurosystem can extend its monetary policy instruments to issuers of electronic money, and that electronic money should always redeemable at par value.

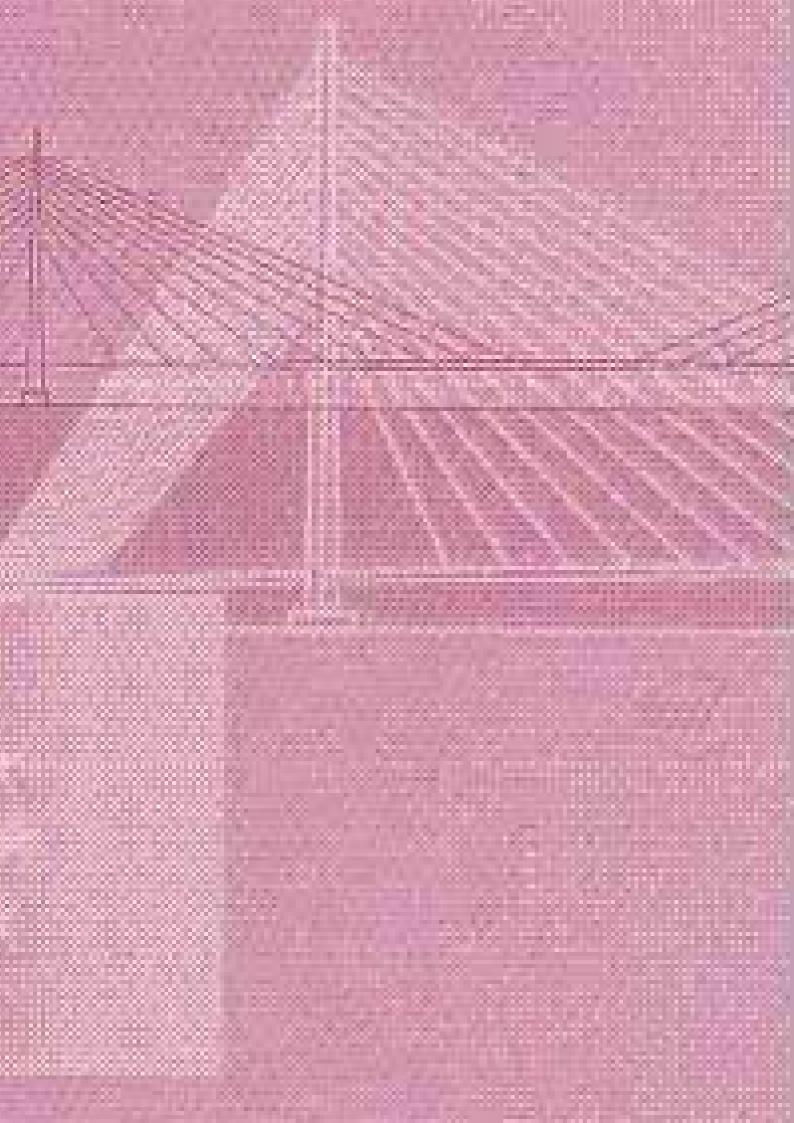
The transition to the new millennium turned out to be a non-event, thanks largely to the meticulous preparations in many sectors, including the financial sector and the Eurosystem. The euro got off to a good start, but making the euro and Economic and Monetary Union a success is clearly a long-term process. The Eurosystem will play its part in endeavouring to ensure that success. Work in all the areas mentioned above, and in others, will continue this year and beyond, with a view to further establishing the euro and the Eurosystem, its infrastructure and its policy framework.

The economy of the euro area is now entering a crucial phase. A golden opportunity to achieve substantial reductions in the level of unemployment throughout the euro area and to revitalise the economy is arising, now that economic growth is accelerating in a climate of price stability. This opportunity can only be seized if policymakers make the right choices and the private sector is confident about the future and thus dares to take initiatives. Firmly focusing on maintaining price stability in the medium term is the best contribution monetary policy can make to reducing unemployment. At the same time, this would further enhance the credibility of the Eurosystem and boost the confidence of citizens that their currency, the euro, will retain its value over time. In line with the Stability and Growth Pact, budgetary authorities should reduce their budget deficits to close to balance, or even create

surpluses. Governments should translate their intentions to undertake structural reforms enabling markets to operate more flexibly into deeds and build on the measures which they have already taken. In wage negotiations social partners should take into account the importance of maintaining price stability, the growth of productivity, the need to reduce unemployment and the fact that different local circumstances differentiated wage developments; should all consider the future as offering opportunities to bring welfare to European citizens; we should all seize these opportunities, thereby fostering Europe's development into a major dynamic force in the world economy.

Frankfurt am Main, March 2000

Willem F. Duisenberg



# Chapter I

# Economic developments and monetary policy

# Monetary policy decisions in the context of the Eurosystem's strategy

In accordance with its statutory obligations, the primary objective of the Eurosystem is to maintain price stability in the euro area. In order to achieve this objective, monetary policy decisions are taken in a forwardlooking manner based on a stability-oriented strategy. This strategy was adopted in October 1998 (see the article in the January 1999 issue of the ECB Monthly Bulletin entitled "The stability-oriented monetary policy strategy of the Eurosystem"). To summarise, the Governing Council of the ECB announced a quantitative definition of price stability, namely an annual increase of below 2% in the Harmonised Index of Consumer Prices (HICP) for the euro area. It was also stated that price stability is to be maintained over the medium term. In order to assess the outlook for price developments and the risks to future price stability, a two-pillar approach was adopted. The first pillar assigns a prominent role to money, signalled by the announcement of a reference value for the growth rate of a broad monetary aggregate. In December 1998 the reference value was set at an annual growth rate of 41/2% for M3. Monetary developments in relation to the reference value are analysed on an ongoing basis for the information that they contain regarding future price developments over the medium term. In the context of the second pillar, a broadly based assessment is undertaken of other indicators containing information about the outlook for price developments and the risks to price stability in the euro area. This assessment encompasses a wide range of financial market and other economic indicators, including forecasts. Against this background, monetary policy does not react mechanically to developments in a single indicator or forecast. Rather, based on a thorough analysis of the information provided by the two pillars of its strategy, the Governing Council sets the interest rates on the monetary policy instruments of the Eurosystem at the level which will best serve to maintain price stability in the medium term.

The interest rates on the three main monetary policy instruments at the start of Stage Three of Economic and Monetary Union were officially announced 22 December 1998. The decision followed a co-ordinated interest rate reduction by the national central banks, decided upon earlier in December 1998, which had virtually completed the process of convergence of the official interest rates in the countries that now form the euro area. On 22 December 1998 the rate on the first main refinancing operation to be conducted in 1999 was set at 3.0%. In addition, the rate on the marginal lending facility was set at 4.5% and that on the deposit facility at 2.0%, both with effect from I January 1999. As a temporary measure, in order to smooth the transition to a single money market, the Governing Council of the ECB adopted a "narrow corridor" for short-term market interest rates from 4 to 21 January 1999 by setting the interest rates on the marginal lending facility and the deposit facility at 3.25% and 2.75% respectively (see Chart I and the section entitled "Chronology of monetary policy measures of the Eurosystem").

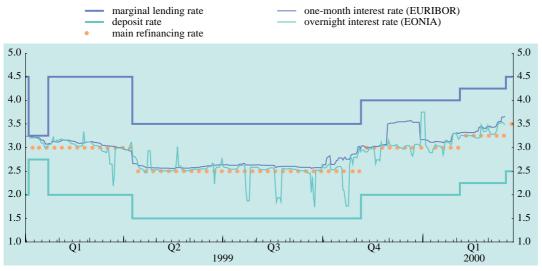
In the first quarter of 1999 price pressures continued to be weak. HICP inflation stood at 0.8% in December 1998 and remained at that level in January and February 1999. In this environment of low inflation, signs emerged that the extent of the slowdown of economic activity in the euro area - mainly caused by weaker external demand - might be greater than had been anticipated in late 1998. Figures on real GDP growth pointed to a significant economic slowdown. Furthermore, industrial production growth was weakening and business confidence was declining continuously. Therefore, it became increasingly clear at that time that the risks to price stability in the medium term were mainly on the downside.

However, in assessing the outlook for price stability, it was also necessary to take into

### Chart I

#### ECB interest rates and money market rates

(percentages per annum; daily data)



Sources: ECB and Reuters.

account the fact that some indicators appeared to point in the opposite direction in early 1999. In particular, the three-month average of the annual growth rates of M3 for the period from December 1998 to February 1999 was around 5.0%, i.e. somewhat in excess of the reference value. The January monetary data showed a significant increase in overnight deposits. In addition, credit to the private sector was growing fast, at a rate of around 10% in early 1999. Furthermore, despite the economic slowdown, consumer confidence remained comparatively high. Finally, oil prices started to rise as from mid-February 1999 and the euro depreciated in effective terms in the first few months of 1999, two factors which were also able to exert upward pressure on prices.

The Governing Council was therefore faced with some conflicting signals in early 1999. With regard to monetary developments, however, M3 growth was still close to the reference value of 4½%. In addition, it appeared that the special environment resulting from the changeover to Stage Three of EMU had contributed significantly to the sharp increase in overnight deposits in January. The partial reversal in the growth of overnight deposits, which occurred

in February, strengthened this view. Furthermore, it could not be ruled out that institutional factors, such as changes in the statistical reporting systems and the move to the new minimum reserve system, had played a role in the exceptionally strong monetary growth in January. Therefore, given the uncertainties surrounding the analysis of monetary developments in early 1999 and the modest deviation from the reference value, the Governing Council did not regard monetary developments as implying upward risks to price stability at that time.

All in all, in an environment where current inflation rates were significantly below the upper limit of the Eurosystem's definition of price stability and in view of downward pressures on future price developments associated with a weakening in economic activity, the Governing Council decided on 8 April to reduce the main refinancing rate by 50 basis points to 2.5%. On the same occasion it lowered the rate on the marginal lending facility by 100 basis points to 3.5% and that on the deposit facility by 50 basis points to 1.5%, thereby establishing a symmetrical interest rate corridor around the rate on the main refinancing operations. These policy moves were deemed appropriate as a precautionary measure to preserve price

9

stability in the medium term and, in doing so, contribute to better exploiting the growth potential of the euro area economy.

Later on in the year the balance of risks gradually moved from the downside to the upside. The three-month moving average of the annual rate of M3 growth followed a gradually rising trend, approaching 6.0% over the summer. Even when excluding the exceptional developments at the very beginning of 1999, a protracted monetary expansion was evident. The annual growth rate of overnight deposits remained high. In parallel, credit to the private sector continued to expand rapidly, confirming that liquidity was ample.

At the same time the external environment strengthened as the Asian economies stabilised and then started to recover, while concerns about financial turmoil in other emerging markets receded. In addition, economic activity in the United States showed continuing signs of strength. In this environment, economic activity in the euro area progressively recovered. The first signs of this process were observed in the substantial improvement in confidence over the summer. Industrial production stabilised in the second quarter of 1999 and accelerated in the third quarter. The steady increase in bond yields over the summer also signalled market expectations of an improvement in long-term economic conditions, as well as some increase in inflation expectations. Overall, it gradually became clear that economic activity in the euro area was set to accelerate significantly in the course of 1999 and in the year 2000. Moreover, the effective exchange rate of the euro weakened further and oil prices continued to rise, both of which were gradually feeding through to consumer prices.

It was therefore evident that the balance of risks to price stability had been progressively moving upwards since the beginning of the summer and that the downside risks which were present at the time of the reduction in ECB interest rates in April no longer prevailed. Against this background, the Governing Council decided on 4 November 1999 to raise the rate on the main refinancing operations by 50 basis points, to 3.0%. On the same occasion the rates on the deposit facility and the marginal lending facility were also raised by 50 basis points, to 2.0% and 4.0% respectively.

This change in the stance of monetary policy was expected to prevent the ample liquidity from translating into upward pressures on prices over the medium term and contribute to maintaining inflation expectations safely below 2%. It was also considered that such a timely rise in interest rates would contribute to avoiding the need for stronger measures later on and, hence, would help to sustain non-inflationary growth over an extended period of time. The size of the move was also aimed at removing uncertainties about the near-term course of monetary policy, thereby contributing to reducing any uncertainty premia potentially prevalent in financial markets. In addition, it aimed to help contain a possible increase in volatility in money markets in the period of transition to the year 2000.

At its meeting on 2 December 1999 the Governing Council reviewed the reference value for monetary growth, in accordance with the announcement it had made in December 1998. It was decided to confirm the reference value for monetary growth, namely an annual growth rate of 41/2% for the broad aggregate M3. This decision was taken on the grounds that the components underlying the derivation of the first reference value in December 1998, namely the Eurosystem's definition of price stability (an annual increase of below 2% in the HICP for the euro area) and the estimates of trend real GDP growth (2% to 21/2%), as well as the trend decline in M3 income velocity (1/2% to 1%), had basically remained unchanged.

The Governing Council also decided that, as before, monetary developments would be assessed in relation to the reference value on the basis of a three-month moving average of

annual growth rates of M3. Furthermore, it re-emphasised that this assessment would be made in parallel with the broadly based assessment of the outlook for price developments constituting the second pillar of the Eurosystem's strategy. Monetary policy decisions aimed at the maintenance of price stability over the medium term would thus continue to be based on the information obtained from both pillars of the strategy. Finally, it was decided henceforth to review the reference value for money on a regular annual basis, with the next review to take place in December 2000.

In late 1999 and early 2000 monetary and credit growth continued to signal ample liquidity in the euro area. At the same time,

developments in the exchange rate and in commodity prices continued to contribute to increases in import prices and costs in the euro area. As such increases were larger and more protracted than previously foreseen, the risk of second round effects on consumer prices rose significantly, particularly at a time when economic activity in the euro area was picking up strongly. As both of the pillars of the monetary policy strategy of the Eurosystem were seen to indicate upward risks to price stability, the Governing Council of the ECB decided twice, on 3 February and 16 March 2000, to raise the interest rates on the main refinancing operations, the deposit facility and the marginal lending facility by 25 basis points in each case.

### 2 Monetary and financial developments

### 2.1 Monetary developments

### M3 growth in excess of the reference value

The annual growth rate of the broad monetary aggregate M3 increased gradually throughout 1999. The three-month average of the annual

growth rates of M3, covering the period from October to December, stood at 6.0% (see Chart 2). This compares with 4.8% in the last quarter of 1998. Accordingly, M3 growth increasingly deviated from the reference value of 4½%. On average in 1999 M3 grew by 5.7%, compared with 4.9% in 1998 and 4.1% in 1997.





 $Source:\ ECB.$ 

The monetary expansion in 1999 was fostered by the low level of opportunity costs of holding, in particular, the most liquid components of M3. Moreover, the economic upturn in the euro area is likely to have spurred money demand for transaction purposes. Furthermore, one-off portfolio reallocations relating to the introduction of the euro and the new reserve requirement regime appear to have affected M3 growth at the beginning of the year. Overall, the monetary expansion reflected ample liquidity for most of 1999.

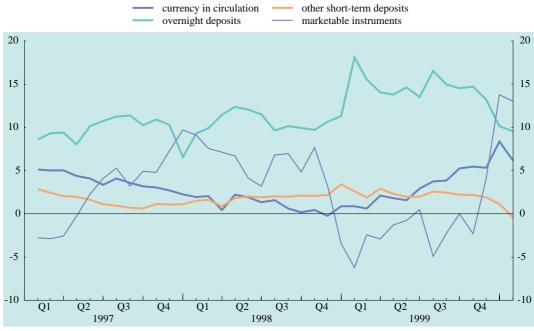
Turning to the individual components of M3, the growth of currency in circulation recovered in 1999, after having been very subdued in the previous year. In the fourth quarter of 1999 the annual increase of currency in circulation reached 6.4%, compared with only 0.4% in the last quarter of 1998 and 2.7% in the last quarter of 1997 (see Chart 3). The economic upswing and the low opportunity costs of holding banknotes may have supported this upward trend. In addition, a temporary rise in the precautionary demand for currency was

recorded shortly before the transition to the year 2000.

Overnight deposits grew at a very rapid pace in 1999, although the rate of expansion moderated somewhat in the last part of the year. In the last quarter of 1999 the annual rate of increase stood at 12.7%, compared with 10.6% in the fourth quarter of 1998 and 9.3% in the corresponding period of 1997. A surge in the demand for overnight deposits occurred in January 1999, reflecting the specific circumstances prevailing at the start of EMU. In addition, the low levels of inflation and interest rates and the resulting low opportunity costs of holding overnight deposits, as well as the economic upswing in the euro area may explain the relatively strong demand for overnight deposits in 1999.

By contrast, as in previous years, short-term deposits other than overnight deposits (namely deposits redeemable at a period of notice of up to three months and deposits with an agreed maturity of up to two years) showed a rather subdued expansion in 1999.

Components of M3 in the euro area (annual percentage changes)



Source: ECB.

In the last quarter of 1999 the annual rate of increase was 1.7%, compared with 2.6% in the fourth quarter of 1998 and 1.1% in the corresponding period of 1997. The apparently low level of attractiveness of these other short-term deposits for investors may be related to the fact that the spread between the interest rate on these deposits and that on overnight deposits narrowed significantly in the first three quarters of the year and remained comparatively low thereafter. Moreover, the steepening of the yield curve in 1999 may have been accompanied by shifts towards investments in longer-term financial assets. In addition, in some countries portfolio shifts out of these other short-term deposits were probably related to a significant decline in inflation expectations over recent years.

After having dropped significantly at the end of 1998 and the beginning of 1999, the demand for the other instruments included in M3 (negotiable instruments and repurchase agreements) recovered significantly throughout 1999. In the last quarter of 1999 the annual growth rate stood at 5.2%, compared with 2.5% in the last quarter of 1998 and 7.3% in the last quarter of 1997. The recovery in the course of 1999 was mainly due to a significant increase in the growth of both money market fund shares and debt securities issued with a maturity of up to one year. The demand for these components may have been temporarily spurred by uncertainties in financial markets, in particular in late summer and autumn, regarding the future development of bond yields. Under such circumstances short-term marketable assets, which are relatively liquid and offer a return higher than that on deposits with an agreed maturity of up to two years, are often used to park funds for some time. Moreover the attractiveness of these instruments was increased by the rise in short-term market rates after the end of September. Balance of payments statistics for some euro area countries suggest that the growth of money market fund shares and money market paper as well as of debt securities in 1999 was partly a result of purchases of these instruments by non-euro

area residents. Although the concept of M3 only refers to monetary holdings of euro area residents, statistical limitations do not, at the current stage, permit negotiable securities issued by MFIs and held by non-residents to be identified separately. While this suggests that some caution should be exercised when interpreting the development of these marketable instruments, the overall assessment of monetary growth in 1999 is judged not to be significantly affected.

In January 2000 the annual rate of M3 growth fell significantly, to 5.0%, from 6.2% in December 1999. However, this was mainly the result of a base effect, i.e. the fact that owing to the special environment at the start of Stage Three of EMU the monthly increase in M3 in January 1999 was exceptionally strong.

### Strong expansion of credit

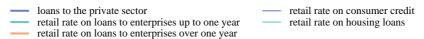
Turning to the counterparts of M3 in the consolidated balance sheet of the MFI sector. the annual rate of expansion of credit to households and corporations was between 10% and 11% for most of the year. Among the components of credit to the private sector, the outstanding amount of loans (which accounts for around 90% of total credit to the private sector) grew at an annual average rate of 10.0% in 1999 and it continued to expand strongly in January 2000 (at 8.7% on an annual basis). This compares with annual average growth rates of 8.3% in 1998 and 6.6% in 1997. Data on the breakdown of MFI loans to euro area residents by counterpart sector, type of loan and original maturity indicate that this strong expansion of loans was broadly based across the private sector.

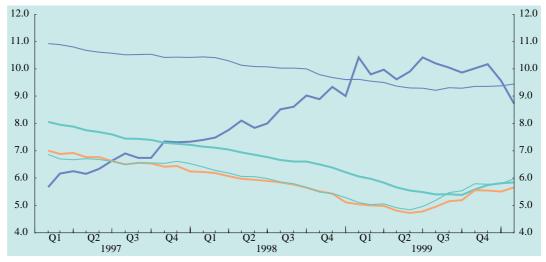
The dynamic expansion of loans to households and corporations probably mainly reflected the low level of bank lending interest rates compared with historical experience and the pick-up in economic activity in the euro area. In the first half of the year retail lending interest rates for all types of loans

### Chart 4

### Loans to the private sector and retail interest rates

(loans: annual percentage changes; interest rates in percentages per annum)





Source: ECB.

continued on the declining trend which had been apparent over previous years (see Chart 4). Subsequently, interest rates on loans for house purchase and longer-term loans to enterprises showed a rising trend, reflecting, with a time-lag, the increase in capital market interest rates which began in May 1999. Towards the end of 1999 the higher interest rates in money markets, which anticipated some tightening in monetary policy, led to a moderate increase in bank lending rates on consumer loans and shortterm loans to enterprises. The fact that the growth of loans remained strong despite rising interest rates suggests that the pick-up in economic activity is likely to have played an important role in sustaining the high growth of loans to the private sector in the latter part of 1999, although there may also have been some frontloading of borrowing during this period owing to expectations on the part of private agents of further increases in bank lending rates. Other contributing factors in 1999 were the intense merger and acquisition activity (see Section 2.2), which tended to be partly financed by short and medium-term loans, and the interaction between mortgage loans and rapidly rising real estate prices in some euro area countries.

The growth of credit to general government remained subdued throughout 1999, at an annual average rate of 1.1%. This slow rate of growth occurred both in loans and in MFI holdings of government debt securities and was in line with the diminished financing needs of the general government sector observed in 1999.

As regards other counterparts of M3, longerterm financial liabilities of the MFI sector grew at a relatively strong pace in 1999 (an annual growth rate of 7.3% was recorded in the fourth quarter, compared with 4.7% in the last quarter of 1998), in line with the steepening of the yield curve.

Finally, during 1999 the net external asset position of the MFI sector declined significantly on an annual basis (by €166 billion). The decline mirrored the fact that overall the transactions of euro area non-MFI residents with non-euro area residents resulted in a net outflow of funds.

#### 2.2 Financial markets

### Rapid growth of corporate financing through debt securities issuance

The start of Stage Three of EMU has acted as a catalyst for the development and integration of the euro area capital markets towards a pan-European capital market.

With regard to the euro-denominated bond market, the most significant development in 1999 was undoubtedly the rapid growth of the private or corporate bond market, which surpassed the expectations of many observers prior to the launch of the euro. This market gained momentum with the launch of large debt securities issues which were related to a number of sizeable mergers and acquisitions in the first half of 1999. The rather smooth

#### Box I

### Structural changes in the banking sector and their relevance for monetary policy

Developments in the competitive environment of financial services and the related structural developments in the banking sector are of relevance for the single monetary policy. In the past, banks in the euro area have been the main providers of financial services in rather fragmented and sheltered domestic markets. However, as barriers between various domestic or local markets have been reduced, banks are facing more competition from one another as well as from other providers of financial services. These changes in the competitive environment have resulted in pressure for banks to become more efficient and have prompted initiatives to maintain competitive positions, one manifestation of which is the merger and acquisition activity, which has gathered pace significantly over the past few years. This pattern of restructuring and consolidation continued in 1999. In particular, the number of large institutions involved in bank mergers was relatively high throughout 1999.

The main driving forces behind this trend towards restructuring and consolidation in the euro area banking sector are technological developments, globalisation, deregulation and increased demand for sophisticated financial services, with the introduction of the euro appearing to have acted as a catalyst for these forces. Indeed, these driving forces are seen to be reshaping the market so that financial services should become more competitive and also more integrated both within the euro area and at the global level.

However, most of the merger and acquisition activity in the euro area banking sector has not so far taken place across national borders within the euro area. The focus on national mergers may be explained by an incentive to improve efficiency by removing overlapping operations as well as by defensive strategies. In addition, issues related to cultural proximity and expectations that mergers and acquisitions at the national level are more manageable than cross-border mergers also seem to play an important role. This national orientation towards mergers and acquisitions has given rise to some concerns about the increased market shares of the largest domestic institutions. However, while some adverse effects on competition at the local level cannot be ruled out in the short term, the main picture emerging in respect of the financial services market seems to be one of increased competition and reduced fragmentation in the long term.

These changes in the competitive conditions in the banking market, as well as the possible effects on the financial strength of the banking sector, may be of relevance for the transmission mechanism of monetary policy. First, the speed of monetary policy transmission may be enhanced, as banks in more competitive markets tend to adjust their retail interest rates more rapidly in response to changes in market rates. Second, the relative importance of the credit channel of monetary policy may be altered as a result of changes in relationships between banks and their clients, which are particularly relevant for the financing of small businesses and households. Finally, increased competition in the euro area would tend to speed up the move towards a more integrated banking system across participating countries, which could reduce cross-country asymmetries in the transmission mechanism of monetary policy.

and rapid way in which the euro-denominated corporate bond market proved able to absorb these issues was widely regarded as an important sign of the increased depth of this market. In particular, the issuance of euro-denominated debt securities by private non-financial corporations and private utility companies increased in 1999 compared with 1998. According to commercial data sources, the largest private issuers of debt securities in 1999 were banks, which accounted for the bulk of total private sector issuance volume, followed respectively by non-financial corporations, other financing companies and utility companies. Taking a global perspective, the growth of net issuance of euro-denominated debt securities during 1999 was particularly strong when compared with US dollar denominated debt securities issuance. Yen-denominated issuance also experienced a strong recovery in 1999 when compared with 1998.

One of the most important factors behind the growth in the euro-denominated corporate bond market has been the ongoing process of corporate restructuring in Europe, which has resulted in a strong demand for funds in the private corporate sector. In general, merger and acquisition activities undertaken by euro area companies grew considerably in 1999, for both the banking and the non-banking industry (see Box I). Euro area companies involved in merger and acquisition activities and operations such as leveraged buyouts - in which the takeover of a company is financed through the issuance of high-yield bonds - financed these deals, to a significant extent, with large eurodenominated debt securities issues, which often served to repay bridging facilities (mainly syndicated loans). This led to some very large issues, unprecedented in the history of European capital markets. The significant growth in private eurodenominated debt securities issuance was accompanied by a reduction in the relative importance of the public sector in the debt securities markets in 1999, which also reflected the relatively smaller increases in the financing needs of the public sector in 1999 compared with previous years. In addition, a shift in demand towards higher risk securities in order to obtain higher returns owing to the historically low levels of interest rates also seemed to play a supportive role in the growth of corporate debt securities issuance.

As discussed in the article in the January 2000 issue of the ECB Monthly Bulletin entitled "The euro area one year after the introduction of the euro: key characteristics and changes in the financial structure", there were a number of notable developments in the euro area capital markets during 1999. These included closer co-operation between national stock exchanges and the development of electronic trading platforms in both bond and stock markets.

### Money market rates mirroring ECB interest rates

In 1999 the ECB managed to steer shortterm money market rates by means of the interest rate which was applied to the main refinancing operations. The overnight interest rate, as measured by the EONIA (the "euro overnight index average"), was generally very close to the rate applied to the main refinancing operations, the average spread between the two rates being equal to 3 basis points in 1999 (see Chart I). The volatility of the EONIA rate was relatively low. Somewhat larger fluctuations were normally only recorded towards the end of the reserve maintenance periods, which is when the minimum reserve constraint on the banking system becomes binding. In view of the steady pattern of the EONIA rate, the ECB saw no need to conduct fine-tuning open market operations in the course of 1999.

Other money market rates were equally stable, apart from episodes when market participants anticipated a move in ECB interest rates or, towards the end of the year, when short-term interest rates rose on account of market concerns related to the transition to the year 2000.

### Chart 5

#### Short-term interest rates in the euro area

(percentages per annum; daily data)



Source: Reuters.

At the beginning of 1999 the money market yield curve was more or less flat, with EURIBOR interest rates for maturities from one to twelve months fluctuating in a narrow range of between 3.21% and 3.26% (see Chart 5). Subsequently, during the first quarter, money market interest rates declined, reflecting gradually enhanced market expectations of declining short-term interest rates in the near future.

After the announcement of the decision of the Governing Council to reduce ECB interest rates on 8 April 1999, money market rates declined further. Since the Governing Council made it clear at the time of the cut in interest rates that it did not intend to reduce its rates any further in the period ahead, the money market yield curve regained a positive slope directly after the event. In the course of the summer, as expectations regarding the gradual improvement of economic conditions in the euro area were increasing and monetary developments tended to show an increasing deviation of M3 growth from the reference value, money market rates gradually increased, reflecting a strengthening of market expectations of an increase in ECB interest rates. This process continued in the autumn and, by the time the

decision to raise these interest rates was announced on 4 November 1999, money market rates had fully anticipated this move. In the days following the announcement, the volatility of money market interest rates fell significantly.

The analysis of developments in short-term interest rates was complicated, however, particularly in the last part of 1999, by the effect of market concerns about the impact that the transition to the year 2000 might have on money market interest rates. The associated risk premium led to a pronounced change in market rates as soon as they spanned the end of the year. This leap was most pronounced for rates at the short end of the money market curve (see Box 3 on pages 19 to 21 of the December 1999 issue of the ECB Monthly Bulletin). However, after the successful transition to the year 2000, the risk premium in money market rates quickly disappeared.

In January 2000 the slope of the money market yield curve was positive, with the spread between the one-month and twelve-month EURIBOR being equal to approximately 80 basis points. Towards the end of January money market interest rates

moved upwards, in anticipation of the decision to raise ECB interest rates which was announced on 3 February 2000. In the course of February, money market interest rates gradually increased further.

### Long-term bond yields increase from historical lows as growth prospects brighten

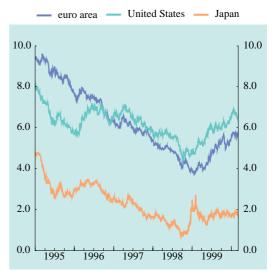
Following the prolonged decline in long-term interest rates which was observed in industrialised countries throughout much of the 1990s, long-term government bond yields in the euro area reached their lowest levels for the past 50 years in early 1999 (see Chart 6(a)). From May 1999 onwards, however, they began to edge upwards, initially led by bond yield increases in the United States and by an increase in inflation expectations from the very low levels prevailing in early 1999, but later on increasingly due to brighter economic prospects for the euro area. Overall, in the euro area, ten-year bond yields increased by more than 150 basis points in 1999, reaching a level of around 5.5% by the end of the year. Similarly, in the United States the ten-year bond yield rose by around 180 basis points, to around 6.5%, in 1999. As a result of these developments the spread between US and euro area ten-year bond yields widened slightly during 1999, reaching 100 basis points by the end of the year. In Japan developments in long-term bond yields differed somewhat from the euro area and the United States. Following initial declines from the relatively high levels reached in the aftermath of the financial turbulence in late 1998, Japanese long-term yields seemed to stabilise at a level below 2% in the second half of 1999. Between the end of 1998 and the final trading day of 1999, the ten-year bond yield in Japan declined by approximately 40 basis points, to around 1.6%.

The main factor underlying developments in global bond markets in 1999 was a pick-up in worldwide growth expectations as concerns of a prolonged global growth downturn, which had existed in the financial markets as

#### Chart 6

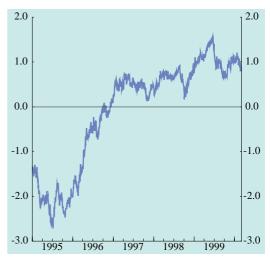
### (a) Long-term government bond yields in the euro area, the United States and Japan

(percentages per annum; daily data)



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

(percentages per annum; daily data)



Source: Reuters.

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

a result of the financial turbulence of 1998, began to recede. The US economy continued to grow at a remarkable pace throughout 1999 and, although there were few visible signs of rising inflation, the increasing tightness in the labour market resulted in growing concerns in financial markets that the US economy was growing at a rate that might lead to inflationary pressures in the

economy. To a large extent, these developments contributed to the substantial increase in US long-term bond yields witnessed throughout 1999. In addition, although a further improvement in the fiscal situation in the United States may have reduced the pressures on capital markets from the public sector, a sizeable increase in corporate bond issuance in the United States during the year may have placed upward pressure on US bond yields.

By contrast with developments in the United States, long-term bond yields in the euro area remained broadly stable in the first four months of 1999, reflecting the more sluggish pace of economic recovery and the subdued inflationary pressures in the euro area which were reflected in the decision of the Governing Council of the ECB to lower interest rates in April. Apart from the aforementioned spillover effect of the continued rise in US bond yields, it seems likely that part of the gradual increase in bond yields as from May resulted from the unwinding of the safe-haven portfolio positions that had been built up during 1998, as well as an increase in inflation expectations from the very low levels prevailing in early 1999 in the wake of the financial turbulence of the previous year. Developments in the pricing of French index-linked bonds at this time appeared to be consistent with those factors behind the increase in nominal bond yields (see Box 2). In addition, as was the case in the United States, a significant increase in the level of corporate bond issuance activity in the euro area may have put upward pressure on long-term bond yields. However, the increase in euro area bond yields in May and the first half of June 1999 was much less pronounced than in the United States, reflecting differences in cyclical positions, leading to a substantial widening of the longterm interest rate differential vis-à-vis the United States up to a maximum level of almost 160 basis points in mid-June. Later on, as increasing signs of an economic recovery in the euro area appeared, the spread between US and euro area long-term bond yields narrowed rapidly (see Chart 6(b)).

Until the end of October 1999 long-term bond yields in the euro area continued to follow an upward trend. As from the end of October, growing expectations in capital markets that ECB interest rates were to be raised in a context of increasing evidence of upward price pressures, and the subsequent decision on 4 November, temporarily led to significant declines in long-term bond yields. This seemed to suggest that, as a result of the decision to raise interest rates, market participants had revised their long-term inflation expectations downwards lowered the magnitude of the inflation risk premium required for holding eurodenominated bonds. However, during the remainder of 1999 euro area bond yields edged up again, partly following upward movements in long-term yields in the United States and partly in response to further positive news regarding the outlook for the euro area economy. As a result of the more pronounced increases in US bond yields, the yield differential vis-à-vis the United States began to increase again in November and December.

The developments described above were also reflected in movements in the euro area yield curve throughout 1999. Between the first and the last trading day of 1999 the slope of the yield curve, as measured by the difference between ten-year euro area bond yields and the three-month EURIBOR interest rate, increased by around 140 basis points to 215 basis points. The main part of this increase took place during the first nine months of 1999. Since the yield curve typically becomes steeper in advance of a pick-up in the pace of economic activity, the observed steepening of the euro area yield curve in 1999 seemed mainly to reflect increasing optimism on the part of market participants about future economic prospects and an increase in inflation expectations from the very low levels prevailing in early 1999. However, caution should be exercised when interpreting overall yield curve movements, as other factors, such as the unwinding of safe-haven portfolio positions and spillovers from US bond markets may also have influenced long-term

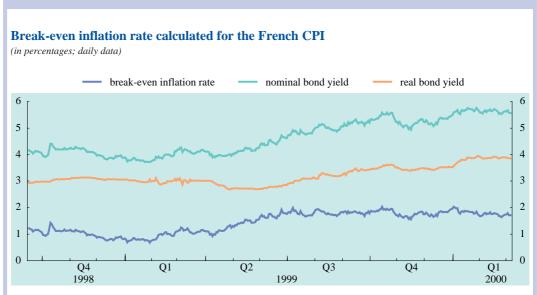
### Box 2

### Assessing the factors behind the rise in nominal bond yields using index-linked bonds

In order to assess how various underlying factors may have influenced nominal long-term bond yields in the euro area in 1999, it is useful to remember that, broadly speaking, the nominal yield on a government bond with a specified time to maturity can be broken down into three elements. These are the real interest rate required by investors for holding the bond until it matures, compensation for the average expected inflation rate during the life of the bond, and a component associated with term or risk premia linked to, inter alia, uncertainty about future rates of inflation. The yield on index-linked bonds can assist in producing this breakdown. The differential between a long-term bond yield and the real yield available on an index-linked bond of the same maturity is generally known as the "break-even" inflation rate. This is because with this rate of inflation, the expected return to an investor will be the same regardless of whether the investment is made in a fixed nominal income or an index-linked bond.

However, the break-even inflation rate is not a direct measure of inflation expectations because it does not take into account the role of various risk premia. On the one hand, the break-even rate tends to over-estimate expected inflation since the yield on the nominal bond usually contains an inflation risk premium. On the other hand, the lower level of liquidity that usually characterises index-linked bond markets implies that the real yield on index-linked bonds may incorporate a liquidity premium. The only index-linked bonds that exist in the euro area were issued by the French Treasury with 10-year and 30-year maturities. The break-even inflation rate of these bonds refers to a specific measure of the French Consumer Price Index (CPI), namely the CPI excluding tobacco, and does not refer to the euro area HICP. These properties illustrate the limitations of this indicator for evaluating developments in the euro area.

Nevertheless, bearing these caveats in mind, developments in 1999 in the pricing of ten-year index-linked bonds issued by the French Treasury provided some indications that both improved growth expectations and changes in inflation expectations may have played important roles in determining movements in nominal long-term interest rates during the year. Between the end of 1998 and the end of 1999 the real interest rate available on the ten-year French index-linked bond increased by around 50 basis points. At the same time, the



Sources: French Treasury, ISMA and Reuters.

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

ten-year break-even inflation rate increased by approximately 110 basis points from the extraordinarily low levels observed in early 1999, at a time when risks to price stability were perceived to be mainly on the downside (see the chart above).

It is worth noting that the rise in the real yield and the increase in the break-even inflation rate occurred during different periods of 1999. While the break-even inflation rate increased steadily in the second quarter and levelled off after June, the real interest rate increased mainly in the second half of the year. This suggests that the increases in nominal euro area bond yields were initially attributable more to inflation expectations increasing from very low levels than to increasing real rates. However, the unwinding of the safe-haven portfolio positions from emerging markets that had been built up during 1998 might also help to explain part of the increase in long-term interest rates in the first half of 1999, since they may have artificially compressed the break-even inflation rates prevailing in the early months of 1999. Spillovers from rising bond yields in the United States may, at times, also have played a role in this rise in break-even inflation rates in the first half of 1999. Later on, as more and more signs of an economic recovery appeared, the rise in nominal bond yields related more to increasing long-term real interest rates, while the break-even inflation rate remained stable.

interest rate developments in the euro area in 1999.

In the first half of January 2000 euro area bond yields showed some limited increases, mainly as a result of spillovers coming from US bond markets, where yields rose significantly. Subsequent to this, bond yields in the euro area remained broadly stable for the rest of January and throughout the following month. At the same time, the differential between euro area and US long-term interest rates was somewhat volatile and did not exhibit any discernible trend in early 2000.

#### Global stock prices increase significantly

In 1999 stock prices in industrialised economies showed large increases, continuing the upward trend observed over previous years (see Chart 7). A very large increase was seen in the euro area, where by the end of December 1999 the Dow Jones EURO STOXX index stood 40% above end-1998 levels. In the United States, by the end of December 1999 the Standard and Poor's 500 index was 19% above end-1998 levels, while in Japan a significant increase of 37% was also observed for the Nikkei 225 index. The main factor underlying developments in global stock markets during 1999 seemed to have

been improving market assessments of future global growth prospects.

Throughout most of 1999 the evolution of global stock market developments provided a supportive environment for stock price developments in the euro area. The principal source of the increase in US stock prices seemed to be favourable expectations of future corporate earnings growth, linked to the robust pace of activity in the US economy. In particular, optimism about the long-term earnings growth prospects for high-technology firms played an important role. Against this background, the Nasdaq Composite index (which contains a high proportion of technology stocks) increased by 86% in 1999.

Japanese stock prices appeared to benefit from increasing optimism about the prospects for future corporate earnings growth linked to a recovery in the Japanese economy particularly during the first half of 1999, before stabilising in the second half of 1999. At the same time the decline in long-term government bond yields in Japan seemed to have played a supportive role in the increase in Japanese stock prices, as did the depreciation of the Japanese yen vis-à-vis the US dollar during the first half of 1999, particularly with regard to the stock prices of export-oriented companies.

#### Chart 7

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

(1 January 1999 = 100; daily data)



Source: Reuters.

Note: Dow Jones EURO STOXX broad (stock price) index for the euro area, Standard and Poor's 500 for the United States and Nikkei 225 for Japan.

Stock prices in the euro area remained relatively subdued in the first few months of 1999, reflecting the sluggish pace of economic recovery in the euro area. Later on, as expectations regarding the pace of future activity began to improve, stock prices in the euro area started to edge upwards. The resilience of this increase to the parallel increases in long-term bond yields in the euro area was notable and appeared to indicate strong underlying expectations for corporate profitability and dividend growth in the euro area. The improvement in stock prices was initially more apparent for those firms with a higher degree of exposure to the external economic environment than in the stock prices of firms with a more domestic orientation. To the extent that larger firms tend to have a higher degree of exposure to the external economic environment, this was indicated by the stronger performance of the Dow Jones EURO STOXX 50 index, which is composed of large corporations, compared with that of the broad Dow Jones EURO STOXX index.

In the second half of 1999, as market participants became more optimistic with

regard to the prospects for domestic demand growth in parallel with improvements in business and consumer confidence, stock price increases became more broadly based across the different sectors of the economy. Towards the end of the year, particularly after mid-October, relatively sharp stock price increases were seen in the technology and telecommunications sectors. In these sectors, by the end of 1999, stock prices had increased by 134% and 105% respectively compared with the end of 1998, which contributed significantly to aggregate euro area stock price increases. Increases in the technology and telecommunications sectors seemed to be partly linked to favourable expectations growth corporate restructuring and mergers and acquisitions activity in these sectors and significant expansion of the internet business.

In the period from end-1999 to 7 March 2000 contrasting developments were seen in international stock markets. While stock prices in the United States, as measured by the Standard and Poor's 500 index, declined by 8%, in Japan the Nikkei 225 index rose by

22

5%, while in the euro area the Dow Jones EURO STOXX index rose by 11%. Continuing the trend that became evident in the latter months of 1999, stock prices in the technology sector of the euro area rose by 36% during this period and made a significant

contribution to the general increase in stock prices. Similarly, in the United States technology stock prices also exhibited significant increases, with the Nasdaq Composite index rising by 19%.

### 3 Price developments

# Upward trend in the HICP inflation rate during 1999 mainly due to oil prices

On average, the Harmonised Index of Consumer Prices (HICP) increased by 1.1% in 1999, i.e. the same rate of increase as that recorded in 1998 (see Table I). This unchanged annual increase conceals a significant contrast between the

developments in the HICP during 1999 by comparison with 1998. While the rate of inflation declined during 1998, it mainly rose during 1999 (see Chart 8). This upward trend primarily reflected factors that were external to the euro area and, specifically, developments in the world market price of oil. By contrast, domestic sources of inflationary pressure remained relatively

**Table I Price and cost developments in the euro area** 

(annual percentage changes, unless otherwise indicated)

	1997	1998	1999	1999	1999	1999	1999	1999	1999	1999	1999	2000	2000
				Q1	Q2	Q3	Q4	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.
Harmonised Index of Consumer Prices (HICP) and its components													
Overall index	1.6	1.1	1.1	0.8	1.0	1.1	1.5	1.2	1.3	1.5	1.7	2.0	
of which:													
Goods	1.2	0.6	0.8	0.3	0.6	0.9	1.5	1.1	1.3	1.5	1.9	2.2	
Food	1.4	1.6	0.5	1.3	0.6	-0.2	0.4	-0.1	0.4	0.4	0.5	0.4	
Processed food	1.4	1.4	0.9	1.2	0.8	0.7	0.9	0.6	0.8	0.9	1.0	1.0	
Unprocessed food	1.4	2.0	0.0	1.4	0.3	-1.4	-0.3	-1.2	-0.4	-0.2	-0.2	-0.5	
Industrial goods	1.0	0.1	1.0	-0.2	0.6	1.4	2.1	1.7	1.8	2.0	2.6	3.1	
Non-energy industrial goods	0.5	0.9	0.6	0.8	0.6	0.5	0.5	0.5	0.5	0.6	0.5	0.7	
Energy	2.8	-2.6	2.2	-3.9	0.5	4.6	7.8	6.1	6.3	7.2	10.0	12.0	
Services	2.3	1.9	1.6	1.7	1.6	1.5	1.5	1.4	1.4	1.5	1.6	1.6	
Other price and cost indicators													
Industrial producer prices 1)	1.1	-0.8	0.0	-2.6	-1.3	0.7	3.1	1.4	2.2	3.1	4.1	5.0	
Unit labour costs 2)	0.7	0.0		1.6	1.6	0.7		-	-	-	-	-	-
Labour productivity 2)	1.7	1.5		0.1	0.5	1.0		-	-	-	-	-	-
Compensation per employee 2)	2.4	1.5		1.7	2.0	1.7		-	-	-	-	-	-
Total hourly labour costs 3)	2.5	1.7		2.0	2.0	2.4		-	-	-	-	-	-
Oil prices (EUR per barrel) 4)	17.1	12.0	17.1	10.3	15.0	19.7	23.0	21.8	20.8	23.5	24.8	24.9	27.6
Commodity prices 5)	12.9	-12.5	-3.1	-16.0	-8.2	1.1	14.0	6.6	10.7	11.9	19.3	19.4	20.0

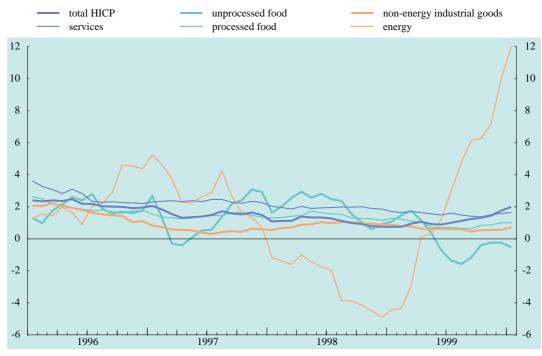
Sources: Eurostat, national data, International Petroleum Exchange, HWWA – Institut für Wirtschaftsforschung (Hamburg) and ECB calculations.

- Excluding construction.
- 2) Whole economy.
- 3) Whole economy (excluding agriculture, public administration, education, health and other services).
- 4) Brent Blend (for one-month forward delivery). In ECU up to December 1998.
- 5) Excluding energy. In euro; in ECU up to December 1998.

### Chart 8

### Breakdown of HICP inflation in the euro area by components

(annual percentage changes; monthly data)



Source: Eurostat.

subdued in 1999. By December 1999, overall HICP inflation stood at 1.7% year-on-year, compared with 0.8% in December 1998. Inflation increased further to 2.0% year-on-year in January 2000, mainly reflecting the persistence of the increase in oil prices.

Over the course of 1999 oil prices increased from €10.3 per barrel in the first quarter to an average of €23.0 per barrel in the fourth quarter, reflecting a gradual but significant recovery in the world market price of oil and also a depreciation in the euro's exchange rate vis-à-vis the US dollar. This rise, which reversed a steady decline observed in 1998, was swiftly reflected in the energy component of the HICP; by December 1999 energy prices, which include a large excise component, had increased by 10% year-on-year, with most of the increase concentrated in liquid fuel prices. Other energy components exhibited a more stable pattern of increase or were, as in the case of electricity prices some euro area countries, subject downward pressure associated with

deregulation. In addition, increasing oil prices were to some extent offset by downward pressure from other prices. In particular, unprocessed food prices made a significant negative contribution to the rate of increase in consumer prices.

### Underlying price increases were more subdued

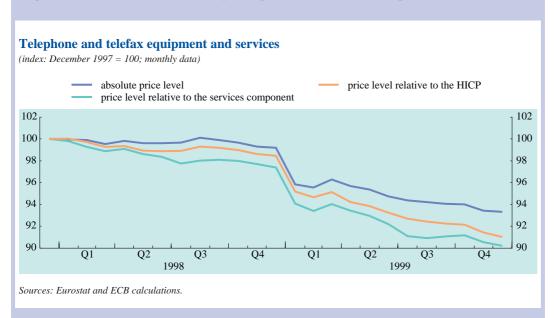
Apart from the relatively volatile components described above, consumer price increases were far more subdued in 1999, with the rate of increase in the HICP excluding energy prices and seasonal food declining to 1.0%, compared with an average of 1.4% in 1998. This reflected significant declines in the rate of increase in the price of non-energy industrial goods, services and processed food. In the case of the non-energy industrial goods component of the HICP, the pass-through from rising producer prices was relatively limited in 1999. Developments in producer prices, in turn, mainly reflected increases in oil and non-oil commodity prices,

#### Box 3

### The effects of market deregulation on consumer prices

In a number of sectors of the euro area economy there have been ongoing efforts to liberalise markets in order to ensure that firms are operating on a commercial basis and in a competitive environment. This process, which increases the overall efficiency with which resources are used, is viewed as making a positive contribution to overall economic welfare. In many cases, the liberalisation process can give rise to downward pressure on prices and profit margins. Market liberalisation continued in 1999 and, while it is difficult to separate clearly the price effects of liberalisation from the impact of other factors such as technological change, it was associated with a further decline in the prices of a number of goods and, in particular, services.

The telecommunications market provides the most striking example of the extent of the impact of increased competition on consumer prices. While liberalisation of EU telecommunications markets began in some countries in the 1980s, it accelerated over the course of the 1990s, in parallel with rapid technological innovation. In principle, most telecommunications markets in the EU have been completely opened up to competition since 1 January 1998, following the implementation of several European Council Directives.



### Further significant price declines in the telecommunications sector in 1999

This ongoing increase in competition has been reflected in consumer prices, as measured in the telephone and telefax equipment and services component of the Harmonised Index of Consumer Prices (HICP). In the two years between December 1997 and December 1999, this component has fallen by just over 7.1% in absolute terms. To the extent that it takes time to include new operators in the index, the HICP may not be reflecting the full scale of the reduction in prices. Relative to both the overall HICP and services prices, the decline has been even more marked (see the chart above). Moreover, it would appear that competition intensified across the euro area during 1999 and, as a result, the decline in prices was particularly noteworthy. Significant reductions occurred in Germany, the Netherlands, Ireland and Luxembourg. In Finland, where the process of liberalisation began much earlier, recent price decreases have been less significant. In a number of other euro area countries, the benefits of increased competition are being passed on to consumers more gradually in the form of staggered price reductions or "price caps" which are determined by the appropriate national authority.

It is likely that the relative price declines outlined above have stimulated increased demand for telecommunications equipment and services. In the telecommunications sector it is also important to note that

technological innovation has been an additional driving force behind the aforementioned price developments. A good example of this is the increased availability of low-cost and high-quality mobile telephone technology. However, the role of technological innovation cannot be completely separated from the process of market liberalisation because increased competition may have strengthened the incentives for firms to innovate and to undertake research and development. In addition, 1999 saw an increase in merger activity in the sector, which holds the prospect of further price reductions if it succeeds in producing additional efficiency gains.

#### Some evidence that liberalisation began to take hold in the energy sector in 1999

While the liberalisation in the European energy sector is lagging behind the above developments in telecommunications, there was evidence in some euro area countries that it was beginning to take hold towards the end of 1999. This comes in the wake of a number of EU initiatives aimed at establishing an internal market for the provision of energy. The Electricity Market Directive of 1996 and the Gas Market Directive of 1998 were designed to ensure that firms in these sectors can operate on a commercial basis and in an environment which is open to competition. A deadline of 19 February 1999 was set for the implementation of the Electricity Market Directive, although transition periods of one year were granted in the case of Ireland and Belgium and two years in the case of Greece. The Directive calls for an initial liberalisation of around 25% of the market, with this proportion rising to around one-third by 2003. However, a number of euro area countries have already gone beyond these requirements. A deadline of 10 August 2000 was set for the implementation of the Gas Market Directive in the Member States of the EU. According to the Directive, at least 28% of the market should be opened up by 2003, with this percentage rising to 33% by 2008.

As yet, it is difficult to detect strong signs of pervasive downward pressure on prices or profit margins in euro area energy markets. This is partly because the process of energy market liberalisation has only just begun in most euro area countries. Price developments in this sector may also be strongly influenced by other factors, such as changes in primary fuel prices, government regulations or energy taxation. Nonetheless, the disparity in electricity prices across the euro area suggests that there is significant scope for price reductions. Indeed, towards the end of 1999, electricity prices began to fall in some countries, most notably in Germany. The fall in prices has not only been a consequence of actual competition; in some countries that have opened their markets only partially, prices for consumers have been reduced in anticipation of the changes in supply and demand conditions that the full future opening of the market will bring.

While the effects of deregulation and increased competition have been most clearly evident in the telecommunications and the electricity sectors, it is likely in the years ahead that these effects will be observed in other sectors, such as the gas market and also transportation.

with the increase in the latter mainly being the result of the depreciation in the nominal effective exchange rate of the euro. Compared with an average increase of 0.9% in 1998, nonenergy industrial goods prices had increased by 0.5% year-on-year by December 1999. Similarly, the rate of increase in services prices remained subdued in the course of the year and stood at 1.6% in December 1999, i.e. 0.3 percentage point lower than the average increase in services prices in 1998. These developments reflected slightly higher but still moderate growth in euro

area labour costs (see below) and also downward pressure on profit margins in some sectors – most visibly telecommunications – as a result of market liberalisation. (See Box 3 for a further discussion of these effects.)

# Rebound in unit labour costs but underlying wage growth remained moderate

Unit labour costs are estimated to have increased by I.6% year-on-year by the second

quarter of 1999, by contrast with 1998, during which they had remained unchanged on average (see Table I). This increase mainly reflected lower productivity growth associated with the deceleration of euro area activity in 1998 and also some increase in nominal compensation per employee. In addition, the rate of increase in total hourly labour costs showed some upward movement and stood at 2.4% year-on-year in the third quarter. Against this background, in the third quarter higher productivity growth, associated with the gradual strengthening of

economic activity, gave rise to a deceleration in unit labour cost growth to 0.7% year-on-year. Profit margins are estimated to have narrowed marginally in 1999 compared with 1998. This is explained by the above increase in unit labour costs and by higher energy and non-oil input prices (as reflected in, for example, the price of intermediate goods). In some sectors, as mentioned above, competitive forces may also have restrained firms from passing increased input costs into overall consumer prices.

# 4 Output, demand and labour market developments

# Progressive upturn in real GDP growth in the course of 1999

Economic activity in the euro area in 1999 was characterised by a progressive upturn in output growth, following the slowdown in the course of 1998. In retrospect, the adverse effects of the crisis in emerging market economies on the growth of activity in the euro area appear to have been rather brief and limited. Reflecting the improvement in the outlook for growth in the course of the year, autumn forecasts for euro area real GDP growth in 1999 and 2000 were mostly revised slightly upwards from those made earlier in the spring of last year.

According to Eurostat estimates for the euro area, real GDP growth in 1999 as a whole stood at 2.2%, clearly down from a rate of 2.8% in the previous year (see Table 2). However, this growth rate for the year as a whole masks a pick-up in annual growth between the first and the second half of 1999, from 1.7% to 2.7%. The pace of economic

expansion has thus recovered fairly swiftly to the range which is assumed to be sustainable in the medium term (2% to 2½%). The strong dynamics in the second half of last year, as reflected in quarter-on-quarter real GDP growth of about 1%, are expected to continue in 2000. At the level of individual Member States, the growth performance in 1999 has been somewhat divergent, but projections are for a narrowing of growth differences in 2000 (see Box 4).

In 1999 the changeover to the new European System of Accounts 1995 (ESA 95) added to the usual uncertainty surrounding GDP estimates. The changeover as such meant a clear improvement in terms of methodology, comparability, frequency and timeliness of data, but its practical implementation was characterised by unforeseen delays, and data released in the course of 1999 partly showed larger than expected revisions. Given the relatively short experience with compiling data in accordance with the new ESA 95 methodology, backward revisions related to

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

		Annual rates 1)						Quarterly rates 2)					
	1997	1998	1999	1998	1999	1999	1999	1999	1998	1999	1999	1999	1999
				Q4	Q1	Q2	Q3	Q4	Q4	Q1	Q2	Q3	Q4
Real gross domestic product	2.3	2.8	2.2	2.0	1.7	1.8	2.3	3.1	0.2	0.6	0.5	1.0	0.9
of which:													
Domestic demand	1.7	3.4	2.8	3.1	2.8	2.7	2.7	3.0	0.8	0.9	0.4	0.6	1.1
Private consumption	1.5	3.0	2.5	3.1	2.8	2.4	2.4	2.6	0.6	0.7	0.3	0.7	0.8
Government consumption	0.7	1.2	1.2	1.0	1.2	0.9	1.2	1.3	0.2	0.8	-0.1	0.2	0.3
Gross fixed capital formation	2.2	4.4	4.5	3.8	3.6	5.1	4.8	4.6	0.6	1.6	0.7	1.7	0.5
Changes in inventories 3) 4)	0.3	0.5	0.1	0.3	0.2	0.1	0.0	0.2	0.2	-0.1	0.1	-0.3	0.4
Net exports 3)	0.6	-0.5	-0.5	-1.1	-1.0	-0.9	-0.2	0.2	-0.5	-0.3	0.1	0.4	-0.1
Exports 5)	10.1	6.7	3.9	2.0	0.7	2.1	5.2	7.7	-0.9	0.4	2.4	3.3	1.4
Imports 5)	8.7	9.1	5.7	5.6	4.0	5.0	6.4	7.5	0.7	1.4	2.1	2.1	1.8

Sources: Eurostat and ECB calculations.

- 1) Annual rates: percentage change compared with the same period a year earlier.
- 2) Quarterly rates: percentage change compared with the previous quarter.
- 3) As a contribution to real GDP growth; in percentage points.
- 4) Including acquisitions less disposals of valuables.
- 5) Exports and imports cover goods and services and include internal cross-border trade 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.

### Box 4

# Growth and inflation divergences in the euro area

In 1999 there were significant differences in both growth and inflation rates among individual euro area countries (see the table below). Although inflation and growth differentials are both expected to diminish somewhat over the next two years according to the available forecasts of major international institutions, such as those of the European Commission, there is no reason to expect that differences will entirely disappear in the future, given the evidence of other large single currency areas, such as the United States.

Real GDP growth and HICP inflation in euro area countries

(annual percentage changes)

	BE	DE	ES	FR	IE	IT	LU	NL	AT	PT	FI
Real GDP											
1998	2.7	2.2	4.0	3.2	8.9	1.5	5.0	3.7	2.9	3.8	5.0
1999	2.3	1.5	3.7	2.7	9.4	1.4	5.0	3.5	2.2	2.9	3.5
HICP											
1998	0.9	0.6	1.8	0.7	2.1	2.0	1.0	1.8	0.8	2.2	1.4
1999	1.1	0.6	2.2	0.6	2.5	1.7	1.0	2.0	0.5	2.2	1.3

Sources: Eurostat and national estimates.

With regard to recent developments in real GDP growth, the highest growth rates in 1999 are estimated to have been recorded in Ireland (9.4%) and Luxembourg (5.0%) as well as in Spain (3.7%), Finland and the Netherlands (both 3.5%). Growth in Portugal (2.9%) and France (2.7%) was also above the rate of area-wide growth, albeit to a lesser extent. In Italy (1.4%) and Germany (1.5%), by contrast, growth was significantly below that for the euro area as a whole. The divergence of growth among countries (based on the unweighted standard deviation) actually declined in 1999. While growth slowed in most euro area countries, the slowdown was generally strongest in those countries which had grown most rapidly in 1998. Some slowdown in domestic demand growth is expected in a number of the faster growing economies in the next few years. In the period ahead, further convergence in growth rates is also expected, owing to a pick-up in growth – from the second half of 1999 onwards – in those countries which have grown more slowly.

It should be borne in mind that differences in growth rates among euro area countries reflect different longer-term trends as well as cyclical divergences (see the article in the July 1999 issue of the ECB Monthly Bulletin entitled "Longer-term developments and cyclical variations in key economic indicators across euro area countries"). In particular, higher growth rates have been experienced in some countries which are in the process of "catching up". Growth differences may also reflect the progress made in implementing structural reform. However, in other cases, countries may be at a different stage of the economic cycle or have responded to a greater or lesser extent to the slowdown in the global environment in the period 1997-98. From a longer-term perspective, the magnitude of recent divergences appears to have been similar to differences observed in the past.

Differences in inflation rates have been less marked, and the current range of inflation rates has fallen considerably, compared with that recorded earlier in the 1990s. In Ireland, consumer prices, as measured in terms of the Harmonised Index of Consumer Prices (HICP), rose by 2.5% in 1999; the increase in the HICP in both Spain and Portugal was 2.2%, and in the Netherlands 2.0%. The lowest increases were recorded in Austria (0.5%), Germany and France (both 0.6%). Looking ahead, a further convergence in inflation rates can be expected. Inflation differentials in the euro area were addressed in the October 1999 issue of the ECB Monthly Bulletin (see the article entitled "Inflation differentials in a monetary union"). There are a number of reasons why price developments may differ across countries: the weights given to individual components in

the construction of national HICPs vary; a process of price convergence (as a result of Monetary Union and increased price transparency); catching-up effects. Divergences in price developments can also be the consequence of the existing cyclical divergences, which entail different degrees of demand and wage pressures. Additionally, differences in the degree of flexibility of national goods and labour markets may amplify contrasting national price conditions. The experience of the United States confirms the existence of inflation differentials within a Monetary Union and indicates that those recently prevailing among euro area countries are also not unusually large.

As already noted, structural change, not least that linked to the introduction of the euro, may lead to a different pattern of growth and inflation differentials across euro area countries in the future. The extent to which differences across countries persist or widen is monitored closely by the ECB. However, the monetary policy of the Eurosystem is based on area-wide developments. Insofar as circumstances would require a policy response, this would be the responsibility of other, national policy instruments (in the same way that regional developments have hitherto been addressed by policies other than monetary policy). There has been wide discussion of the issue that labour mobility in the euro area (and within countries) is relatively low and is unlikely to become a major means of adjustment. It is therefore important to increase labour market flexibility. Fiscal policy may also play a role in countering country-specific shocks. However, this is predicated upon the achievement of sufficient safety margins within the Stability and Growth Pact. Overall, divergences in economic developments across euro area countries emphasise the need for structural reform of labour and product markets, and for fiscal consolidation.

the changeover may also continue to occur in the future. This requires some caution in the interpretation of more recent GDP data.

# Fairly robust domestic demand, with overall dynamics determined by net exports

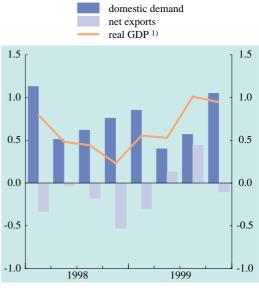
With regard to the main components of GDP, two key features essentially characterise growth performance in 1999. First, the robust growth of final domestic demand largely explains why the slowdown in activity between 1998 and 1999 was eventually less pronounced than that from 1995 to 1996. Second, the cyclical setback at the end of 1998 had been caused by a deterioration in export opportunities to third countries, just as the recovery of euro area growth in 1999 mainly reflected improvements in external performance. Over the course of the year, the contributions to real GDP growth from domestic demand became increasingly positive, while those from net exports also showed a tendency to improve (see Chart 9).

With a negative contribution to GDP growth of 0.5 percentage point, net exports dampened growth for 1999 as a whole,

but, on the basis of quarter-on-quarter developments, the contributions to growth turned positive in the second and third quarters. Apart from a stabilisation and gradual recovery of external demand, this

# Chart 9 Contributions to quarterly real GDP growth in the euro area

(quarterly percentage point contributions; seasonally adjusted)



Sources: Eurostat and ECB calculations.

1) Percentage change compared with the previous quarter.

improvement also reflects, in part, a gain in price competitiveness. While the negative effects on domestic activity of the crises in emerging market economies were reinforced by a high external value of the euro at the turn of the year 1998/99, the depreciation of the euro towards mid-1999 supported euro area exports. As a result, the growth of exports of goods and services recovered strongly and outpaced the growth of imports in the second and third quarters of last year.

Domestic demand remained fairly robust during 1999, expanding at an annual rate of around 3% in each quarter. Fairly sustained growth in private consumption largely accounted for strong domestic demand growth. Consumer confidence, which had reached an all-time high at the beginning of 1999, remained well above its long-term average throughout the year. This high level of confidence and the associated robustness of consumption growth resulted from continuously high employment growth and a pick-up in real wage growth in an environment of low real interest rates and price stability. In addition, in the context of a low interest rate environment, relatively buoyant stock and housing markets may have supported household consumption and also been conducive to the growth in credit. Government consumption expanded only modestly in 1999. This reflects ongoing needs in most Member States to further consolidate public finances and the desire to reduce the relative size of the government sector in the economy.

As regards the investment components of GDP, capital accumulation in 1999 as a whole appears to have been largely unaffected by the slowdown in total demand, i.e. domestic demand plus exports. Gross fixed capital formation in 1999 increased by 4.5% as a whole, and thus at around the same pace as in 1998. A number of factors have contributed to this development. The fact that the negative demand effects had been rather short-lived, as reflected in the upturn in industrial confidence after the first quarter of 1999, appears to have limited the adverse

effects on business investment. In particular, capacity utilisation in the manufacturing sector, an indicator of demand pressure relative to supply capacity, did not fall below its long-term average during 1999 and, hence, did not signal excessive spare capacity. An important incentive to maintain investment efforts, not only in the business field but also with regard to housing investment, is likely to have been the low levels of real interest rates that prevailed. As regards the other component of investment, inventory changes made a small positive contribution to GDP growth in 1999. However, given the statistical uncertainties associated with the compilation of inventory changes in national accounts, the interpretation of the contribution from inventories faces clear limits. Due to these uncertainties, it is also not possible to assess in detail the more specific effects on inventory developments in 1999, such as those purportedly related to the year 2000 phenomenon.

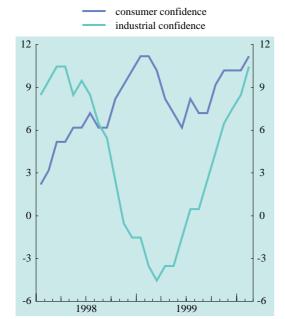
# Cyclical pattern most visible in the industrial sector

At the sectoral level, both the slowdown and the subsequent resumption of overall activity growth were largely concentrated in the industrial sector, while output developments in the services sectors appear to have been more stable. This reflects the relatively high importance of external demand for output in the manufacturing sector and of domestic demand for services. The different sectoral growth patterns were mirrored in the different developments of industrial and consumer confidence (see Chart 10). On the one hand, the decrease in consumer confidence from the peak reached at the beginning of 1999 was only small and shortlived, and the indicator remained well above long-term average level. Industrial confidence, on the other hand, saw a more protracted downturn, which had started in early 1998, and fell below its long-term average in the first half of 1999. Both confidence indicators picked up over the further course of the year and, by the end of

### Chart 10

#### Confidence indicators in 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 1985.

1999, were almost back to their previous peak levels.

Industrial production continued to decline up to the beginning of 1999, before witnessing a turnaround to positive rates of growth. In the first quarter production was already higher, on average, than in the final quarter of 1998. While production growth started to accelerate after the summer months, the pace of expansion at the end of the year was somewhat slower than that observed during previous periods of recovery. However, production data for the fourth quarter of 1999 are likely to be revised upwards in line with additional information which became available after the release of production data for December 1999. Bearing this in mind, in 1999 as a whole industrial production increased by less than 2% (see Table 3). Growth was strongest in the durable consumer goods industries, reaching 2.3% for the year as a whole. Output in these industries is likely to have benefited from a number of factors, over and above the continued strength of consumer demand in general. In particular, the liberalisation of the telecommunications markets and advances in internet technology have boosted production of the equipment concerned. In the capital goods industries the turnaround in production growth occurred somewhat later than in other industries, with growth in 1999 as a whole reaching 1.5%. Finally, in the intermediate goods industries, the recovery began slightly earlier than in other parts of the manufacturing sector, but it evolved only gradually, and production growth did not exceed 1.5% in 1999.

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

	Annual rates 1)							Quarterly rates 2)					
	1997	1998	1999	1998	1999	1999	1999	1999	1998	1999	1999	1999	1999
				Q4	Q1	Q2	Q3	Q4	Q4	Q1	Q2	Q3	Q4
Total industry excl. construct.	4.4	4.1	1.6	1.6	0.5	0.4	2.1	3.3	-0.2	0.2	0.5	1.4	1.1
Manufacturing	5.0	4.6	1.6	1.4	0.2	0.3	2.1	3.6	-0.8	0.5	0.6	1.8	0.8
by main industrial groupings:													
Intermediate goods	5.4	3.7	1.5	0.3	-0.1	0.2	2.7	3.6	-0.2	0.4	0.7	1.5	1.0
Capital goods	5.0	6.8	1.5	4.3	1.1	-0.3	1.3	3.6	0.0	-0.2	0.3	1.5	1.3
Consumer goods	2.7	3.1	1.7	1.3	1.1	1.2	2.0	2.5	-0.4	0.6	0.7	1.2	0.0
Durable consumer goods	2.8	6.4	2.3	4.6	1.9	2.8	2.3	2.4	0.3	-0.3	1.4	1.6	0.1
Non-durable consumer goods	2.6	1.5	1.5	-0.3	0.8	0.1	2.3	2.6	0.2	0.4	0.3	1.0	0.4

Sources: Eurostat and ECB calculations.

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

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

Overall, in 1999 the negative impact of developments in the external environment on euro area activity was limited and short-lived. The upturn in overall activity in the course of the year was largely the result of increasing export growth and, in terms of sectoral developments, mainly reflected the recovery of industrial production. Together with the fairly sustained growth of domestic demand and of service sector output, this may be seen as forming the basis for a broadly based expansion in 2000.

#### Employment growth sustained in 1999

According to national data, in 1999 employment in the euro area is estimated to have increased at broadly the same rate as in 1998, i.e. at 1.4%. While this suggests that the slowdown in economic activity around the turn of the year 1998/99 did not, on average, affect overall employment growth, its impact is evident from the quarterly

growth pattern. This shows a slight deceleration in the quarter-on-quarter growth rate in the first half of 1999 by contrast with the gradual acceleration recorded in the previous year (see Chart 11).

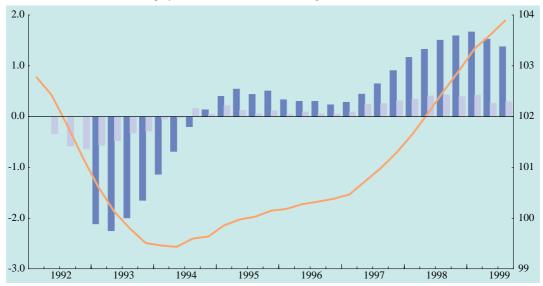
This pattern of total employment growth largely reflects developments in the industrial sector, where growth remained negative in the first two quarters of 1999. The more pronounced pattern in industry was caused by the fact that the industrial sector is far more sensitive to external developments than other sectors of the economy. In 1999 as a whole employment in industry declined slightly. Consequently, it can be concluded that the very limited impact of the slowdown in economic activity on total employment growth in 1999 must have resulted from the sustained strength of employment growth in the other sectors of the economy, particularly services sector. the **Employment** developments in this sector, which is more

### Chart II

### Total employment in the euro area 1)

(quarterly data; seasonally adjusted)

percentage change compared with the same period a year earlier (left-hand scale)
percentage change compared with the preceding period (left-hand scale)
total employment level; index: 1995 = 100 (right-hand scale)



Sources: National data (excluding Belgium and Ireland) and ECB calculations.

The national data taken into account in the calculation of the euro area indicator refer, wherever possible, to total employment (employees and non-employees) in all sectors of activity excluding the armed forces. In the Netherlands they refer only to employees.

labour-intensive than the industrial sector, have benefited from the continued growth of domestic demand.

Other factors which also explain employment developments in the euro area in 1999 are, as mentioned in Section 3 above, favourable labour cost developments resulting from the continuation of moderate wage growth as well as cuts in non-wage labour costs. In addition, government policies aimed at reducing structural rigidities in the labour market as well as employment creation programmes contributed to employment growth in 1999.

# Unemployment rate continued to decline gradually

The standardised rate of unemployment continued to decrease in the course of 1999, broadly in line with the trend observed in 1998 (see Chart 12). At the end of the year the rate of unemployment stood at 9.6%, i.e. 0.9 percentage point lower than in December 1998. On average, the number of unemployed fell by around I million in 1999 (compared with a fall of 785,000 in 1998) to reach 12.9 million, the lowest level recorded since 1992. As was also the case in 1998, the growth of the labour force which accompanied the sustained pace of net job creation in 1999

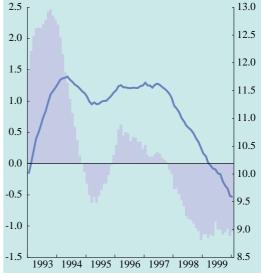
#### Chart 12

## Unemployment in the euro area

(monthly data)



% of the labour force (right-hand scale)



Source: Eurostat.

appears to have limited somewhat the effect of employment growth on the decline in unemployment (see Table 4). The labour force is estimated to have increased at a similar rate of growth to that registered over the previous three years, i.e. at 0.6%, which is 0.4 percentage point higher than the average rate of growth recorded earlier in the 1990s. This stronger growth may in part

# Table 4 Labour market developments in the euro area (annual percentage changes and percentages)

	1997	1998	1999	1997 Q3	1997 Q4	1998 Q1	1998 Q2	1998 Q3	1998 Q4	1999 Q1	1999 Q2	1999 Q3	1999 Q4
Labour force	0.7	0.6		0.7	0.8	0.7	0.6	0.6	0.6	0.6	0.5	0.5	
Employment	0.6	1.4		0.6	0.9	1.2	1.3	1.5	1.6	1.7	1.5	1.4	
Total industry	-1.3	0.2		-1.2	-0.5	0.1	0.1	0.3	0.4	0.1	0.0	0.0	
Unemployment	0.6	-5.3	-7.8	0.7	-0.5	-2.8	-4.8	-6.2	-7.5	-7.7	-7.7	-7.9	-8.0
Rates of unemployment 1)													
Total	11.5	10.9	10.0	11.6	11.4	11.2	10.9	10.8	10.6	10.3	10.1	10.0	9.7
Under 25 years	23.2	21.2	19.1	23.1	22.6	21.8	21.4	21.1	20.7	20.0	19.3	18.9	18.3
25 years and over	9.9	9.4	8.8	9.9	9.9	9.7	9.5	9.3	9.1	9.0	8.9	8.7	8.6

Sources: Eurostat, national data and ECB calculations.

<sup>1)</sup> Percentage of the labour force according to ILO recommendations.

be the result of an improvement in the employment situation in recent years, which may have incited more people to enter or return to the labour market.

Looking at developments in the course of 1999, the decline in the unemployment rate slowed somewhat during the summer months. This reflected the lagged negative effect of the temporary slowdown in economic activity at the turn of the year 1998/99. However, from September onwards the rate of unemployment resumed its decline in reaction to a strengthening of economic activity.

The breakdown by age shows that the unemployment rate declined for both young people and those above 25 years of age. However, the decline was stronger for the former (from 20.7% to 18.3% between the end of 1998 and the end of 1999) than for the latter (from 9.1% to 8.6% over the same period). Finally, at the individual country level, dispersion in the rates of unemployment declined during the year, owing to cyclical factors and to the protracted effects of structural labour market reforms implemented in some countries.

# 5 Fiscal developments

# Deficits continue to decline mainly for cyclical reasons and owing to lower debt service costs

Budgetary positions continued to improve modestly in 1999. The outlook for a further improvement in budgetary balances had deteriorated in the early part of 1999 on account of a slowdown in economic growth. However, thereafter and especially in the second half of the year economic conditions improved; this, together with relatively low interest rates, exerted a beneficial effect on

public finances. On balance, an improvement in budgetary positions was seen across the euro area, with the average general government deficit-to-GDP ratio falling from 2% in 1998 to 1¼% in 1999 (see Table 5). This reduction in the deficit ratio was the result of slightly lower government expenditure relative to GDP and a slight increase in the government revenue-to-GDP ratio. A smaller decline in the deficit ratio had been expected earlier in the year, but the results turned out to be more favourable than anticipated owing to higher than

Table 5
Fiscal positions in the euro area

(as a percentage of GDP)

General government surplus (+) or deficit (-)

	1996	1997	1998	1999
Euro area	-4.3	-2.6	-2.0	-1.2
Belgium	-3.7	-2.0	-1.0	-0.9
Germany	-3.4	-2.6	-1.7	-1.2
Spain	-5.0	-3.2	-2.6	-1.1
France	-4.2	-3.0	-2.7	-1.8
Ireland	-0.6	0.8	2.1	2.0
Italy	-7.1	-2.7	-2.8	-1.9
Luxembourg	2.7	3.6	3.2	2.4
Netherlands	-1.8	-1.2	-0.8	0.5
Austria	-3.8	-1.9	-2.5	-2.0
Portugal	-3.8	-2.6	-2.1	-2.0
Finland	-3.2	-1.5	1.3	2.3

## General government gross debt

	1996	1997	1998	1999
Euro area	75.2	74.6	73.0	72.2
Belgium	128.3	123.0	117.4	114.4
Germany	59.8	60.9	60.7	61.1
Spain	68.0	66.7	64.9	63.5
France	57.1	59.0	59.3	58.6
Ireland	74.1	65.3	55.6	52.4
Italy	122.1	119.8	116.3	114.9
Luxembourg	6.2	6.0	6.4	6.2
Netherlands	75.3	70.3	67.0	63.8
Austria	68.3	63.9	63.5	64.9
Portugal	63.6	60.3	56.5	56.8
Finland	57.1	54.1	49.0	47.1

Sources: Eurostat and ECB for euro area aggregates.

Note: Data are based on the ESA 95.

expected government revenue, which was partly due to improved economic conditions. In addition, revised budgetary outcomes for 1998 resulted in a better than expected starting position for 1999. General government gross debt, in relation to GDP for the euro area, declined slightly in 1999.

Given that fiscal policies are the responsibility of each Member State, assessing only euro area figures would mean neglecting important differences in the public finances of individual countries. Four countries can be seen to have recorded budget surpluses in 1999 (Ireland, Luxembourg, the Netherlands and Finland). With the exception of the Netherlands, these countries also comfortably comply with the reference value for government debt of 60% of GDP. The Netherlands and Finland improved their fiscal balances and managed to lower their debt ratios further in 1999. Luxembourg reported very low government debt at 6.2% of GDP. Two countries - Italy and Belgium - recorded debt ratios above 110% of GDP, but these were declining further. Italy showed a deficit ratio improving from 2.8% in 1998 to 1.9% in 1999, while the deficit ratio in Belgium remained virtually constant at 1%. All the remaining countries had deficit ratios of up to 2% in 1999 and debt ratios somewhat below (France and Portugal) or slightly above the 60% of GDP level (Germany, Spain, the Netherlands and Austria). Budget balance ratios remained broadly stable in Belgium, Ireland and Portugal between 1998 and 1999, whereas more significant progress was made in the remaining countries with the exception of Luxembourg, where the budget surplus-to-GDP ratio declined. Three countries showed rising debt ratios (Germany, Austria and Portugal).

However, an assessment of governments' underlying budgetary positions must take due account of both cyclical developments and other factors outside the direct control of governments. In this context, it appears that public finances in the euro area continue to be largely driven by economic conditions and declining debt service costs. European Commission estimates suggest only a marginal

improvement in the cyclically adjusted primary balance-to-GDP ratio (i.e. the budget balance excluding government debt interest payments and corrected for cyclical influences) for the euro area as a whole in 1999. Active consolidation measures do not thus appear to have played an active role in improving the underlying budgetary positions in 1999. This was already evident in 1998, despite the opportunity which strong growth had provided for accelerating the reduction of structural imbalances in many Member States.

While declining debt service costs had a strong impact on overall budgetary positions, the average primary surplus in relation to GDP saw only a slight improvement in 1998 and 1999. It is worth mentioning, in particular, that primary surplus-to-GDP ratios declined in Belgium and Italy in 1999, countries where high government debt ratios warrant relatively ambitious budgetary targets in order to bring about a rapid reduction in the level of debt. However, the aforementioned evidence suggests that Member States with the highest debt ratios in the euro area still need to make significant further progress in this regard.

Furthermore, with regard to the evolution of government debt, the role played by "deficitdebt adjustments" in changing debt ratios in the euro area was not insignificant, as was already the case in previous years. Such adjustments leave the deficit ratio unaffected, but have an impact on government debt levels. They reduce public debt, for example in the case of privatisation, a course of action which was pursued by most euro area governments in 1999 and earlier. In a few other instances, for example, capital injections to public enterprises and adjustments in the value of foreign currency debt have kept public debt at levels above those which might have been expected from the fiscal deficit.

## Member States' consolidation strategies

Most Member States have made it clear during recent discussions on the orientation of their fiscal policies that they intend to further consolidate public finances in order to achieve budgetary positions consistent with the requirements of the Stability and Growth Pact. Accordingly, deficit ratios in the euro area are forecast to continue to decline in 2000, albeit only slowly. Moreover, current budgetary plans suggest that further reductions in government deficits can again be largely explained by favourable economic conditions and by a continued lowering of interest payments in relation to GDP.

At the same time, the key objectives of fiscal policy-makers seem to be shifting towards a strategy of reducing budgetary imbalances while also modifying the level and structure of government revenue and expenditure. A number of governments are planning to take advantage of the favourable economic outlook in order to introduce tax reforms aimed at promoting growth and employment, while at the same time controlling expenditure in order to create room for further deficit cuts. As a result, the reduction in deficit ratios in 2000 is forecast to be fuelled by lower government expenditure-to-GDP ratios in almost all Member States, mainly on account of savings in the government sector wage bill and in household transfer payments. At the same time, government revenue in relation to GDP is predicted to fall in 2000 as a result of planned or already implemented reforms affecting taxes and social security contributions. Tax reform should not jeopardise budgetary targets or result in pro-cyclical impulses.

By the end of 1999 and in early 2000 Member States submitted updated stability programmes covering the period up to 2002/2003 to the European Commission in accordance with the Stability and Growth Pact. According to the Stability and Growth Pact, Member States are committed to adhering 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". When setting medium-term objectives, other factors should also be taken into account. These include possible future tax shortfalls and expenditure overruns, the need to ensure a rapid decline in debt ratios in those countries in which they stand above 60% and the need to cope with expenditure related to the ageing of the population in the future.

According to the updated stability programmes, prospects for economic growth in 2000 and in the next few years are at least as favourable as in the original programmes. Against this background, governments aim to further consolidate general government budgetary positions in the medium term. The envisaged progress in bringing down government deficit and debt ratios varies from one country to another, as do the fiscal positions targeted towards the end of the planning horizon. A number of governments are now planning to achieve somewhat more ambitious fiscal targets than those in their original programmes. Most countries are expected to achieve deficits of below 0.5% or fiscal surpluses and debt levels below 60% of GDP by 2002/2003. At the same time, most governments are planning to reduce taxes. Belgium and Italy will still report public debt levels close to 100% of GDP.

It should be noted that during the planning horizon any additional government revenues resulting from higher than expected growth (the growth dividend) should normally be devoted to faster progress in fiscal consolidation, rather than to lowering the tax pressure. This is particularly appropriate for countries in which the deficit ratio is not distant enough from the limit of 3% of GDP, for those in which public debt is still high and for those in which the economy is subject to the risk of overheating.

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

# A significant improvement in the global macroeconomic environment

Global economic and financial conditions have improved markedly since the slowdown in 1998, as most of the crisis-hit economies in Asia began to recover in the course of 1999 and the world economy appears to be on a cyclical upturn. Adjustment in some of the worst hit countries has been far more favourable than expected. Financial market confidence has returned in most of the emerging Asian economies, allowing monetary conditions to ease and setting the stage for economic recovery. At the same time, stronger than expected economic growth in some industrialised countries, particularly in the United States, led to substantially more positive assessments of the global outlook.

The improved economic outlook in the course of 1999 was partly counterbalanced by a substantial rise in oil prices from the very low levels seen in late 1998 and early 1999, reversing one of the factors that had contributed to low inflation in 1998. Crude oil prices rose from USD 11.5 per barrel in the first quarter of 1999 to USD 26 in December 1999. These price rises were the combined result of a decision of the Organization of the Petroleum Exporting Countries (OPEC) to curtail oil supplies and stronger demand, especially from Asia. The impact of this strong increase in oil prices on global inflation, however, was partly dampened by non-oil commodity prices measured in US dollars, which on aggregate remained largely constant over the year and saw only a moderate upswing in the last two months of 1999. The oil price increase continued in early 2000 and the price had reached USD 31.9 per barrel at the time this Report was finalised.

In the United States strong output growth and productivity, declining unemployment and subdued inflationary pressures continued to

characterise economic developments in 1999. Real GDP growth was vigorous throughout the year, ranging from a low seasonally adjusted quarter-on-quarter rate of 0.5% in the second quarter of 1999 to a high of 1.7% in the fourth quarter. As a result, the economy recorded an overall growth rate of around 4% in 1999, for the third consecutive year. The strength of domestic demand, particularly private consumer expenditure and business fixed investment, continued to drive the expansion, while the contribution of net exports to GDP growth remained strongly negative. US exports suffered in the first half of the year, but improved markedly in the second half in response to the rapid recovery of global economic growth. Nevertheless, imports grew faster than exports throughout 1999, leading to a further widening of the US trade deficit. The latter, in conjunction with the continuing deterioration in the US investment income balance, resulted in the current account deficit reaching an estimated 3.6% of GDP in 1999. As a result of several years of strong growth, the unemployment rate declined further to 4.1%, a level not seen since the late 1960s. Despite the tight labour markets, inflationary pressures remained subdued as a result of large gains in labour productivity and increased competition in product markets. Consumer price inflation rose to 2.2% in 1999, up from 1.6% in 1998, while underlying inflation - which excludes the volatile components of food and energy - was 2.1% on average compared with 2.3% in 1998. In order to counteract increasing inflationary risks, indicated by increasingly tight labour market conditions and overall excess demand, from the summer onwards the Federal Reserve tightened monetary policy by gradually raising its target for the federal funds rate from 4.75% to 5.5% at the end of 1999, thereby reversing the rate cuts of autumn 1998.

In Japan economic conditions improved in the first half of 1999, but then deteriorated

again in the second, indicating that no self-sustained recovery was yet in place. As a result of a fiscal stimulus amounting to around 10% of GDP in 1998, public investment as well as private consumption and residential investment registered positive growth in the first half of 1999, while business fixed investment continued to contract following a trend which started in 1998. However, by the third quarter of 1999, as the fiscal impulse faded away, a sharp downward correction of public investment growth took place, accompanied by negative growth in consumption and private investment. Net exports made a somewhat negative contribution to GDP growth, but exports recorded an improvement throughout the year, despite the real appreciation of the Japanese yen of around 25%. In the meantime, weak economic activity was reflected in a persistent decline in prices, as measured by both the Consumer Price Index (CPI) and the Wholesale Price Index (WPI), which in 1999 declined on average by around 0.2% and 3.6% respectively, although both stabilised in the last few months of 1999. In 1999 monetary policy remained supportive, with the Bank of Japan pushing its operational target (the uncollateralised overnight call rate) towards nil. By the end of the year, the Japanese Government had approved a supplementary fiscal package worth approximately JPY 18 trillion (3.6% of GDP), as the recovery of private consumption remained sluggish and business investment was still contracting.

The other Asian economies achieved a remarkable and stronger than expected rebound in 1999 from the severe economic and financial crisis that had affected the region the year before. The economies of South Korea, Malaysia, Singapore and Thailand all achieved strong real rates of growth in 1999, with growth initially being driven by net exports and subsequently by strong recoveries in domestic demand. In these economies, financial markets developed increasingly favourably over the course of 1999. In Hong Kong (SAR) and Indonesia, however, growth barely turned positive in

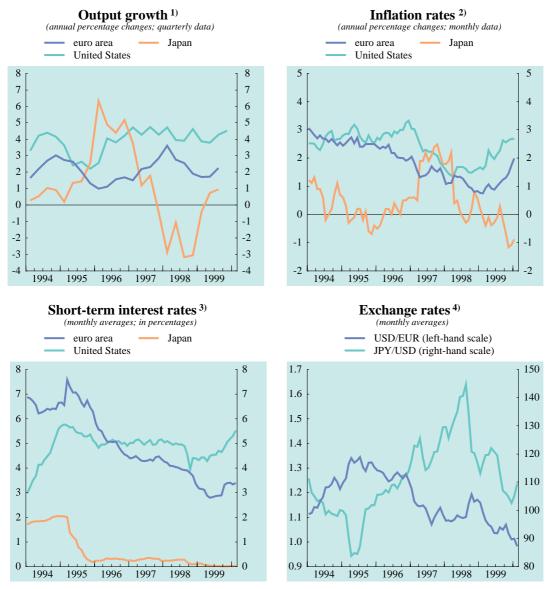
1999. China continued to weather the effects of the Asian crisis in 1999. While undergoing significant structural reforms, real growth declined only slightly to 7.2%.

Over the course of 1999 transition economies were confronted with the adverse impact of the Russian crisis on investor confidence. However, after a significant slowdown in the first quarter of 1999, the broad economic outlook rapidly improved in the Czech Republic, Hungary and Poland. In Russia the economy continued to be affected by political uncertainty and weak economic fundamentals, although there were some positive signals in the real sector, including a rebound in industrial production. As a result of these developments, real GDP growth is estimated to have increased by around 3%, which was significantly higher than initially projected, following a contraction of almost 5% in 1998. In other transition economies, and particularly in the Baltic states, there was a sharp deceleration of growth, as the Russian crisis had a stronger than anticipated impact. The political and economic situation in Romania remained a cause for concern, as the losses in GDP since 1997 totalled approximately 16%.

In Latin America by the end of 1999 the economic outlook had improved in terms of growth prospects and financial stability. The year started inauspiciously, with most countries in the region in recession in the aftermath of the Russian crisis of 1998. The Brazilian currency came under intense pressure and was left to float in January 1999. Ultimately, the recession in Brazil was less severe than had been feared and the contagion effects of the Brazilian crisis were limited. By the end of the year, the region as a whole was pulling out of recession, although the economic recovery remained fragile in a number of countries as a result of slow progress in fiscal consolidation and structural reforms.

# Chart 13

# Main developments in major industrialised economies



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

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

#### The euro weakened during 1999

The exchange rate of the euro declined against the currencies of most trading partners of the euro area in 1999, in particular against the major currencies such as the US dollar, the Japanese yen and the pound sterling. In nominal effective terms, weighted against the currencies of the euro area's major trading partners, the euro weakened by around 8% from the first to the fourth quarter of 1999, and the average level of the nominal effective exchange rate index in 1999 was around 6% below the level in 1998 (see Chart 14). In early 2000 the euro's depreciation continued and the average level of the nominal effective exchange rate index in January and February 2000 was 2.6% below that in the fourth quarter of 1999 and 10.3% below that in the first quarter of 1999.

Throughout the first half of the year, the euro depreciated by around 12% against the US dollar. The most important factors that contributed to the strength of the dollar were the changes in the respective cyclical outlooks for the United States and the euro area and the better than expected performance of the

Chart 14
Nominal effective exchange rate 1)
(monthly averages; index: 1999 Q1 = 100)



Source: ECB.

 Data are ECB calculations (see Box 5 in the October 1999 issue of the Monthly Bulletin). An upward movement of the index represents an appreciation of the euro. The horizontal line shows the average over the period shown (January 1994 to February 2000). US economy in the aftermath of the global financial crisis in the second half of 1998. There was a turnaround in mid-July, when positive readings of euro area economic indicators triggered a rebound of the euro, which was further fuelled by expectations of a slowdown in the US economy and risks of larger corrections on US stock markets. However, subsequent data releases diminished these fears, with data showing continuous strong growth and subdued inflationary pressures in the US economy. At end-1999 the euro was quoted at USD 1.005. The pattern of relative economic performance and related exchange rate movements continued into early 2000, when the euro continued to depreciate against the US dollar. On 7 March 2000 the euro was quoted at USD 0.959.

Among the major currencies the Japanese yen experienced the most significant appreciation in 1999, albeit amid high volatility. From the beginning to the end of 1999, the Japanese yen rose by 30% against the euro and by 11% against the US dollar. This strengthening occurred mainly against the background of significant current account surpluses and in parallel with a turnaround of the economy, which started to record slightly more positive growth after the relatively deep recession of 1998. In line with this improvement in growth, long-term nominal interest rates in Japan recovered from the troughs of below 1% which they had reached in the second half of 1998 to around 1.8% at the end of the year. At end-1999 the euro was quoted at JPY 102.73. The Japanese yen continued to be relatively volatile in early 2000 and displayed no strong overall trend. On 7 March 2000 the euro was quoted at IPY 103.00.

### Reduced current account surplus

The current account surplus of the euro area declined slightly to approximately 0.75% of GDP in 1999 (€43.2 billion), from around 1% of GDP in 1998 (ECU 60.3 billion). The reason for this decline was a decrease in the

surplus on trade in goods which, in turn, was mainly the result of a strong increase in import values in the course of the year, attributable to higher import prices, particularly energy (see Box 5), along with a low level of export values in the first half of 1999 and, to a lesser extent, the deterioration in the services trade balance. By contrast, lower deficits were recorded for the current transfers and income accounts in 1999.

Over 1999 as a whole, the goods trade surplus of the euro area declined to €99.9 billion from ECU 118.8 billion in 1998. In the second half of last year, however, export values began to show stronger underlying growth, reflecting both rising foreign demand and improvements in price competitiveness. Despite the increase in exports during the course of the year, import values continued to grow faster than exports, which seems to be related to higher import prices, partly resulting from higher oil prices and the weakening of the euro, along with signs of increased activity in the euro area during the last six months of 1999.

The services balance also deteriorated in 1999, compared with 1998, reaching a deficit of  $\in$ 6.6 billion by the end of last year. Higher payments, combined with virtually zero growth in receipts, underlay the rise in the deficit in services. By contrast, the deficits on the current transfers and income accounts fell in 1999, declining by  $\in$ 3.0 billion and  $\in$ 4.6 billion respectively. The improvement in the income account was mostly a result of lower investment income payments in 1999, compared with the very high levels reached in 1998.

# Euro area residents increased foreign direct investment, while portfolio investment outflows declined

In 1999 direct and portfolio investment net outflows amounted to €168.5 billion, i.e. lower than the ECU 187.9 billion in the previous year. The major determinant of the outflows from the euro area were net direct investment outflows. The latter increased from ECU 102.6 billion in 1998 to €147.2 billion in 1999; in particular, euro area residents invested more abroad (€212.5 billion in 1999, compared with ECU 183 billion in 1998). At the same time foreign direct investment in the euro area remained subdued (€65.2 billion, compared with ECU 80.4 billion in 1998).

The increase in net direct investment outflows contrasted with a €64.0 billion decline in net portfolio investment outflows to €21.3 billion in 1999, compared with 1998. This was related to the swing in debt instruments from net outflows in 1998 (ECU 84.8 billion) to net inflows in 1999 (€34.8 billion). Both lower investment on the part of euro area residents abroad and stronger demand on the part of foreign investors for euro area debt securities, in particular money market instruments, contributed to the turnaround. On the other hand, net equity outflows increased to €56.1 billion (from ECU 0.4 billion in 1998), mainly as a result of higher investment in foreign equities on the part of euro area residents (which rose to €150.0 billion, from ECU 98.7 billion in 1998).

### Box 5

# The decline in the surplus of trade in goods of the euro area in 1999

Some of the decline in the surplus of trade in goods in 1999 is explained by the low level of export values during the first half of the year, primarily owing to the "carry-over" effects of weak foreign demand in 1998. Although export values recovered later in 1999, in line with stronger growth in foreign demand, import values grew even more rapidly throughout the year, mainly as a result of rising import prices and of higher activity in the euro area.

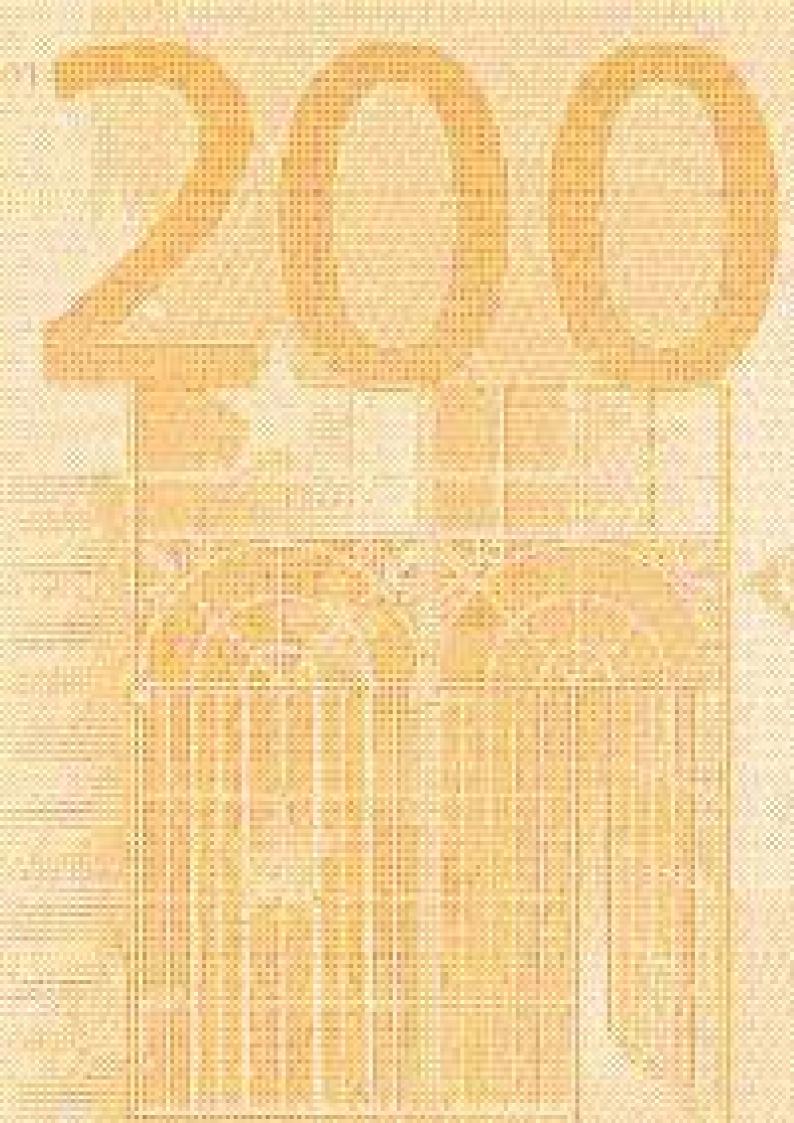
The recovery in foreign demand, defined as a weighted average of the import volumes of the euro area's main export markets, is shown in the chart below. The strong negative growth rates for demand in Japan and the rest of Asia, together with a deceleration in UK import growth, partly explain the decline in export values in 1998 and early 1999. Similarly, the rebound in demand in Asia, as well as continued robust import growth in the United States, corresponds with the recovery in exports in 1999. Although the United Kingdom is the largest market, accounting for around 19.3% of the exports of the euro area, Asia including Japan accounts for 18.3%, followed by the United States (14%) and the transition economies of eastern Europe (13.5%).

On the imports side, a persistently high level of import volumes – combined with the sharp rise in import prices since the beginning of 1999 and largely accounted for by the strong rise in oil prices as well as the decline of the euro – contributed significantly to the growth in import values in 1999. However, part of the rise in import values can also be attributed to imports of manufactured goods which grew by 7% in 1999. Imports of machinery and vehicles grew particularly rapidly, increasing by around 11% in 1999, which is consistent with a higher level of activity in the euro area in the second half of 1999. In terms of supplier countries, imports of goods from China and Hungary registered the strongest growth in value terms in 1999, recording annual increases of around 16% and 19% respectively.



<sup>1</sup> Total foreign demand is approximated by a weighted average of the import volumes of the euro area's main export markets hi hmj (i.e. the weights of the markets multiplied by their respective import volume growth rates). The respective weights are: United States 14.0%, Japan 3.6%, United Kingdom 19.3%, Switzerland 6.4%, Other developed countries 14.9%, non-Japan Asia 14.7%, Transition economies 13.5%, Latin America 4.4%, Rest of the world 9.2%.

<sup>2</sup> Data for imports by commodity or country compare the period from January to November 1999 with the corresponding period in 1998 (source: Eurostat). These data are based on Eurostat trade statistics and are not fully comparable with ECB b.o.p. data.



# Chapter II

**Central bank operations** 

# I Monetary policy implementation

#### I.I Liquidity management

The monetary policy operational framework of the Eurosystem contains a wide set of instruments which were chosen in view of the need to respect the principles of market orientation, operational efficiency (understood as the capacity to achieve efficiently the objectives of the Eurosystem), equal treatment, simplicity, transparency and cost-efficiency. In addition, while the relevant decisions are taken by the governing bodies of the ECB, they are implemented in a decentralised manner by the 11 NCBs of the Eurosystem. The variety of instruments available is such that the governing bodies of the ECB are able to use them in the combination deemed most appropriate to the circumstances. Overall, in the first year of implementation of the single monetary policy, the operational framework of the Eurosystem worked smoothly.

One element of the Eurosystem's operational framework is the minimum reserve system, which requires credit institutions to hold cash balances with the Eurosystem's NCBs in an amount equal to 2% of their reserve base, i.e. a range of short-term liabilities. The fact that such a requirement must only be fulfilled, on average, during one-month "maintenance periods" has a significant smoothing effect on the demand for reserves by credit institutions and thereby also on the behaviour of short- term money market interest rates. This has been a factor enabling the Eurosystem to conduct monetary policy efficiently resorting only to a limited number of the instruments available during the first year implementation of the single monetary policy.

In its liquidity management the ECB focuses on the interbank market for reserves, the latter being understood as the current account deposits that credit institutions in the euro area hold with the NCBs of the Eurosystem. The supply of such reserves is determined by the net effect of the liquidity provided through monetary policy operations

and the liquidity absorbed or injected by "autonomous factors" (i.e. items of the Eurosystem's balance sheet, the amount of which does not depend on the central bank's monetary policy operations, such banknotes in circulation, government deposits and net foreign assets). The demand for reserves is determined by credit institutions' need to fulfil reserve requirements and a further limited demand for "excess" reserves. The market price of reserves is the short-term interbank rate, whereby the overnight maturity plays a dominant role in terms of volume and is often a point of reference, since it is the shortest relevant maturity and, therefore, the initial point of the yield curve. The widely used reference rate for overnight euro deposits, the EONIA (euro overnight index average) rate, is an effective overnight rate computed as a weighted average of the unsecured overnight lending transactions of a panel of 57 contributing banks in the interbank market.

The liquidity management of the credit institutions in the euro area is driven by their aim to minimise the cost of holding the required reserves over the maintenance period. The cost incurred by credit institutions in holding reserves on a given day can be measured by the difference between the interbank overnight rate and the interest rate paid on the required reserves (the main refinancing operations (MRO) rate) on that day. Therefore, credit institutions will attempt to build up reserve surpluses whenever this difference is low, compared with future expected differences within the same maintenance period, and vice versa. This behaviour tends to stabilise market rates as, in order for the market to clear, overnight rates will tend to be aligned with future expected overnight rates within the maintenance period. Interbank rates will consequently be determined by past, current, and expected future liquidity conditions in the maintenance period. In addition, the interbank overnight rate is influenced by market expectations of future changes in the MRO rate by the ECB. Therefore, the ECB influences the interbank overnight rate not only through its actual decisions, but also through the expectations it generates with regard to its interest rate and its allotment policy in open market operations.

The quantity of reserves available to credit institutions is not only affected by monetary policy operations, but also by fluctuations in other items of the Eurosystem's balance sheet, namely the autonomous factors. The effects of autonomous factors on liquidity are sometimes considerable: day-to-day changes of autonomous factors in the order of €10 billion are relatively frequent. In the case of the Eurosystem, the most volatile autonomous factor is government deposits with the NCBs. The volatility of the daily changes in government deposits (measured by its standard deviation) amounted to more than €5 billion, compared with around €I billion for banknotes. In 1999 the total reserve requirements of credit institutions in the euro area varied between €98.2 billion (during the first maintenance period) and €105 billion (during the maintenance period ending on 23 December). The reserve holdings of banks fluctuated between €63.0 billion and €126.4 billion in the course of the year without producing significant stress in the prevailing market rates, indicating that the liquidity buffers provided by the system were never exhausted.

### 1.2 The main refinancing operations

The MROs are the most important open market operations conducted by the Eurosystem, playing a pivotal role in steering liquidity conditions and signalling the stance of monetary policy. They provide the bulk of liquidity to the financial sector. They are regular, liquidity-providing, reverse transactions, conducted as standard tenders, with a weekly frequency and a maturity of two weeks. In 1999 the Eurosystem conducted a total of 52 MROs. The allotment volumes varied between €39 billion and €102 billion, with the average amounting to €69 billion.

The operational framework of the Eurosystem provides for the possibility of carrying out either fixed rate or variable rate tenders. The ECB has so far only applied fixed rate tenders in the Eurosystem's MROs. Fixed rate tenders are conducted in such a way as to allow the ECB both to signal clearly the stance of monetary policy and to allot the amount of liquidity it considers necessary given the anticipated autonomous factor flows. In the MROs conducted through fixed rate tenders, the interest rate of the operation is pre-announced. Counterparties submit bids at the preannounced rate. The ECB then matches the bids with its own estimate of the liquidity needs of the banking sector, mainly determined by reserve requirements and autonomous factor forecasts. If bids are higher than the forecast liquidity needs, as is usually the case, the ECB normally determines an allotment ratio below 100%.

The average amount of bids submitted to the MROs conducted in 1999 was €954 billion and the average amount allotted was €69 billion. The average "allotment ratio" (i.e. the average of the ratios of the liquidity actually allotted by the ECB to the total amount of bids in individual tenders) was 10.8%. The smallest amount of bids, €67.4 billion, was recorded in the operation on 6 April 1999, in an environment of strong expectations of a lowering of the interest rate on the MROs within the same maintenance period. All bids were satisfied by the ECB on that occasion, implying an allotment ratio of 100%. The highest bids, €2,344 billion, were observed on 2 November 1999, in an environment of strong expectations of an increase in the rate on the MROs within the same maintenance period. The chosen allotment volume of €66 billion implied an allotment ratio of 2.82%, which was the lowest ever observed. While the average amount of bids increased in the first three quarters of the year (the average amounts of total bids in the first three quarters of the year were €674 billion, €763 billion and €1,274 billion respectively), they fell slightly in the fourth quarter, to an average total volume of  $\in I, I04$  billion.

The evolution of the volume of bids submitted can be explained by the expectations prevailing among credit institutions with regard to the relative cost of obtaining funds in the interbank market, compared with the interest rate on the MROs. A state of equilibrium between the expected cost of refinancing with the central bank and the expected cost of obtaining funds through the interbank market (including a premium for the higher uncertainty of market funding) has to be achieved in order to prevent the bids of banks from either escalating or drying up. Central banks can control the average overnight rate by virtue of determining the quantity of bank reserves. Generally (i.e. in the absence of strong expectations regarding interest rate changes), they thus have the means to ensure the achievement of this equilibrium for any tender rate within the corridor set by the standing facilities.

The ECB tended to orient its allotment decisions towards ensuring an average interbank overnight rate close to the tender rate. This policy implied that, on average in 1999, the EONIA rate was 2½ basis points higher than the rate on the MROs. Moreover, the volatility of the EONIA rate was low throughout the year, although it was higher at the end of the reserve requirement maintenance periods.

# 1.3 The longer-term refinancing operations

In addition to the MROs, the Eurosystem also conducts longer-term refinancing operations (LTROs), which are regular liquidity-providing reverse transactions, conducted as standard tenders with a monthly frequency and a maturity of three months. They provide only a limited part of the global refinancing volume and are not, as a rule, conducted with the intention of steering the liquidity situation, of sending signals to the market or of guiding market interest rates. In order for the Eurosystem to act as a rate-taker, LTROs are usually conducted in the form of variable rate tenders with

pre-announced allotment volumes. This was indeed the case in all 14 LTROs in 1999. The allotment volumes were pre-announced by means of press releases for longer periods and then confirmed in the tender announcements on the day before the allotment decision. While the first 11 LTROs in 1999 had a volume of  $\in$ 15 billion, the last three amounted to  $\in$ 25 billion, thus also contributing to a smooth transition to the year 2000. On average over the year, a volume of liquidity of  $\in$ 49 billion was provided through this type of operation, and 316 counterparties submitted bids.

The first three LTROs of the year were special insofar as they were conducted in parallel on 14 January and two of them had a shortened maturity (of 42 and 70 days respectively) in order to phase in three outstanding LTROs without delay. While the first four LTROs were conducted as single rate auctions (Dutch auctions), from March onwards all LTROs were conducted as multiple rate auctions (American auctions) in order to orient them towards usual market practices.

For all operations conducted between March and September, the weighted average rates in the LTROs carried out through a multiple rate auction were I basis point above the marginal rate, reflecting a low and stable dispersion of expectations. The picture was different in the LTRO settled on 28 October, when the marginal rate was 23 basis points below the weighted average rate, reflecting heterogeneous but increasing expectations of a hike in the MRO rate as well as heterogeneous preferences induced by the maturing of the operation after the transition to the year 2000. In the operations conducted on 24 November and 22 December respectively, the situation partially normalised, with the spread between the marginal and the weighted rates falling to 9 and 3 basis points respectively.

#### 1.4 Other open market operations

Besides the two regular reverse operations, the Eurosystem's operational framework provides for fine-tuning and structural operations on an ad hoc basis. These operations may also be conducted in the form of reverse operations, but the Eurosystem has a wide range of other ways of implementing such non-regular operations, namely as outright transactions, as foreign exchange swaps, via the issuance of debt certificates and in the form of a collection of fixed-term deposits. The instruments and procedures applied to the conduct of fine-tuning operations can be adapted to the types of transaction and the specific objectives pursued.

In 1999 the Eurosystem did not conduct any fine-tuning or structural operations, but exclusively on the main longer-term refinancing operations for its liquidity management, as well as on the available standing facilities, benefiting from the averaging mechanism inherent in the minimum reserve requirement system. At the beginning of 2000, exceptional market conditions prompted the Eurosystem to conduct a liquidity-absorbing fine-tuning operation. It collected one-week deposits through a variable rate quick tender amounting to €14.2 billion in order to withdraw the excess liquidity accumulated at the end of 1999 as a consequence of the events surrounding the transition to the year 2000.

#### 1.5 Standing facilities

The standing facilities are aimed at providing and absorbing overnight liquidity on the initiative of credit institutions, signalling the general stance of monetary policy and setting an upper and a lower limit for overnight market interest rates. The marginal lending facility can be used to obtain overnight liquidity from the Eurosystem against eligible assets. The interest rate on the marginal lending facility normally provides a ceiling for the overnight market interest rate.

The deposit facility can be used to deposit overnight surplus funds with the Eurosystem. The interest rate on the deposit facility normally provides a floor for the overnight market interest rate. Thus the two facilities together determine a corridor for the overnight market rate. The width of this corridor varied in 1999 between 50 basis points (between 4 and 21 January, with the aim of facilitating the adaptation of credit institutions to the new framework) and 250 basis points between 22 January and 8 April. The corridor had a width of 200 basis points from 9 April to the end of the year.

Over the year, the daily recourse to the marginal lending and deposit facilities amounted, on average, to  $\in$ I billion and  $\in$ 0.8 billion respectively. Particularly intense recourse to the standing facilities was nonetheless witnessed in January 1999, namely an average of  $\in$ 6.0 billion for the marginal lending facility and  $\in$ 2.0 billion for the deposit facility. This high use of the standing facilities was due in part to the fact that their costs were kept very low until 21 January, but also suggested that the interbank market had still to adapt to the new environment.

While a large simultaneous recourse to both standing facilities on one day, which could be interpreted as an indication of the lack of perfection of the interbank market, has not occurred, except at the very beginning of the year, a high use of only one facility is normally an indication of aggregate liquidity imbalances. Such imbalances typically occur at the end of maintenance periods when the averaging mechanism of the reserve requirements can, by definition, no longer operate. The average use of the marginal lending and deposit facilities on the last day of the II maintenance periods of 1999 was €3.6 billion and €6.8 billion respectively. However, at the end of any given maintenance period when there was a large recourse to one of the standing facilities, the other was scarcely used, indicating that the interbank market was rather successful in allocating funds even on the last days of maintenance periods.

Moreover, even considerable recourse to the standing facilities at the end of individual maintenance periods and high volatility of the interbank overnight rates, have typically had no lasting influence on longer-term money market rates, thus not creating uncertainty with regard to the stance of monetary policy.

#### 1.6 The minimum reserve system

During 1999 the two main functions of the minimum reserve system, namely the stabilisation of money market interest rates and the enlargement of the structural liquidity deficit of the banking sector, were successfully fulfilled. The previously mentioned smoothing effect of the minimum reserve system on the EONIA rate is primarily associated with the stabilising role played by the averaging features of the minimum reserve system. With regard to the enlargement function, the levels of required reserves usually accounted for more than 50% of the total refinancing needs of the banking sector (i.e. the total outstanding amount of regular open market operations). Furthermore, the remuneration of the required reserves at the level of the main refinancing rate of the Eurosystem ensured that the system did not impose a significant cost on banks.

Given the smooth functioning of the minimum reserve system, its main features (i.e. the averaging provisions, the duration of the maintenance period and the remuneration of the required reserves) were not changed in 1999. Similarly, no changes were made to the reserve ratio, the reserve base and the amount of the lump-sum allowance (€100,000) which is deductible from the required reserves. The only element modified during 1999 was the standardised deduction from the reserve base applicable by each individual credit institution to liabilities vis-à-vis credit institutions of the euro area subject to the ECB's reserve requirements. In the case of liabilities in the form of debt securities with an agreed maturity of up to two years and money market paper, credit institutions were allowed, during 1999, to apply a standardised deduction of 10% if they could not provide evidence of that kind of liability vis-à-vis other credit institutions established in the euro area. After reviewing the statistical evidence available for 1999, the ECB decided on 2 December to modify the standardised deduction from the reserve base to 30% with effect from January 2000. Credit institutions readily adapted to the new reporting schemes and methods for the calculation of the minimum reserves. As a consequence, cases of non-compliance with the minimum reserve requirements were rather limited in the course of 1999. After a grace period of three months, to allow credit institutions to adapt to the new single monetary policy, a framework for the sanctioning of breaches of obligations regarding the minimum reserve requirements was enforced by the ECB.

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

All Eurosystem credit operations - intraday credit and monetary policy operations - must be based on adequate collateral provided by the Eurosystem's counterparties. In order to take account of differences in the financial structure of Member States, assets eligible for credit operations include a large number of different instruments. A distinction is made between two categories of assets eligible for the credit operations of the Eurosystem. These two categories are referred to as "tier one" and "tier two" respectively. This distinction was made exclusively for purposes internal to the Eurosystem and has no bearing on the quality of the assets and their eligibility for the various types of operations, except that tier two assets would not normally be used by the Eurosystem in outright transactions.

Tier one consists of marketable debt instruments fulfilling uniform euro area eligibility criteria specified by the ECB. Tier two consists of assets which are of particular importance to the national financial markets

and banking systems and for which eligibility criteria are established by the NCBs, subject to approval by the ECB.

As at mid-December 1999 the amount of marketable eligible assets available for Eurosystem operations was almost €5,700 billion (up from over €5,300 billion in January 1999). The overwhelming proportion of this amount (96%) was composed of tier one assets. Measured by issuer, 62.7% of the marketable tier one assets were government securities, 32.8% securities issued by credit institutions, and 4.2% corporate paper. In terms of maturity, 93% of the assets were longer-term bonds and medium-term notes, while 6.5% were short-term securities; equities and other marketable tier two assets were negligible in amount (0.3% and 0.2% respectively).

Eurosystem counterparties may use eligible assets on a cross-border basis, i.e. obtain funds from the NCB of the Member State in which they are established by making use of assets located in another Member State (see Chapter V).

In the course of 1999, at the request of several NCBs, the ECB conducted an assessment of new categories of assets which either had not existed in 1998 or with regard to which changes making them compliant with the minimum eligibility criteria of the ECB had occurred in the course of 1999. As a result, these categories of assets were added to the list of eligible collateral for the Eurosystem's credit operations.

# 1.8 Participation of Eurosystem counterparties in monetary policy operations

The Eurosystem's monetary policy framework is formulated with a view to ensuring the participation of a broad range of counterparties. Institutions subject to the Eurosystem's minimum reserve requirement system are eligible as counterparties for open market operations (OMOs) based on

standard tenders and for accessing the standing facilities.1 At the end of December 1999 around 7,900 euro area credit institutions were subject reserve to requirements. Out of these, around 4,100 had direct or indirect access to a real-time gross settlement system's account, which is an operational condition for participating in monetary policy operations. Around 3,800 had access to the deposit facility, and 3,200 could access the marginal lending facility. In order to have access to OMOs, counterparties may need, furthermore, to have access to the national tendering systems, as was the case for the approximately 2,500 counterparties which could potentially participate in OMOs in 1999. Around 200 institutions have been selected the Eurosystem for potential fine-tuning operations conducted through quick tender or bilateral procedures.

The number of counterparties effectively participating in the MROs ranged from 1,068 (in January 1999) to 302 (in April 1999), whereas the number of participants in the LTROs varied between 466 (in January 1999) and 198 (in September 1999). In the second half of 1999 there was a trend towards a reduction in the number of counterparties participating in the Eurosystem's operations compared with the first half of the year. In parallel, a decline in the share of small-scale institutions participating in the MROs relative to larger institutions was observed during the year, which seems to indicate a decline of the incentives for smaller institutions to participate in the MROs. These developments may be attributed to several factors, including, inter alia, the ongoing consolidation process in the banking industry and a perception by counterparties that the differentials between the rates applied by the Eurosystem in its operations and the EONIA rates were rather narrow.

I Pursuant to Article 19.1 of the Statute of the ESCB, the ECB generally requires credit institutions established in participating Member States to hold minimum reserves. A definition of "credit institutions" is 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".

### 1.9 Money market developments

Following the introduction of the euro and the new monetary policy framework, the money market went through a process of deep integration throughout the euro area. However, such integration was not homogeneous across the various market segments: the unsecured deposit market, in which banks exchange short-term liquidity without the guarantee of collateral, and the derivatives markets experienced faster integration, while the repo market, in which participants exchange short-term liquidity against collateral, and the short-term securities markets (Treasury bills, commercial paper and certificates of deposit) still have much scope for further integration. From the very start of Stage Three of EMU, crossborder transactions in the euro area money market increased substantially and currently represent more than 50% of overall activity in all segments of the money market. That development was fostered by the smooth functioning of the TARGET system for the transfer of large-value funds throughout the euro area and the other EU countries. TARGET has proven to be a key element in ensuring an efficient redistribution of liquidity across the euro area.

The unsecured and swap segments of the money market were those that experienced the most far-reaching changes, including the substantial increase in cross-border transactions which can be seen both as a reflection and as a cause of those changes. It also explains their homogeneity and the high level of liquidity. Such homogeneity is evident, in particular, for the overnight maturity, as shown by the very limited differences between the overnight rates observed in the individual euro area countries.

Other structural changes observed in the euro area money market since the introduction of the euro include: a surge in the liquidity of secondary markets; increased concentration of euro cash management activities compared with the situation prevailing in the formerly fragmented money markets; increased competitiveness and a larger number of counterparties actually available to individual banks. A description of structural developments in the euro area money markets can be found in the article entitled "The euro area one year after the introduction of the euro: key characteristics and changes in the financial structure" in the January 2000 issue of the ECB Monthly Bulletin.

# 2 Investment of foreign exchange assets and own funds

# 2.1 The foreign reserve assets of the Eurosystem

The Eurosystem is responsible for holding and managing the foreign reserves of the Member States. Both the ECB and the NCBs hold foreign reserves. Although the NCBs manage their own foreign reserves independently, their operations in the foreign exchange market are subject, above a certain limit, to the approval of the ECB, in order to ensure consistency with the single monetary policy of the Eurosystem.

The transfer of foreign reserves from the NCBs to the ECB took place at the very

beginning of 1999 for the maximum permissible amount of €50 billion, adjusted downwards by deducting the shares in the ECB capital of the NCBs of the countries not participating in Monetary Union from the outset. This amounted to €39.46 billion, i.e. around 80% of €50 billion. The foreign exchange reserves represent a very large part of the assets side of the ECB Balance Sheet. In accordance with Article 123 of the Treaty, further calls by the ECB on the NCBs' foreign reserve assets are possible, subject to secondary European Community legislation; a recommendation for an EU Council Regulation has been put forward by the ECB.

The currency distribution of the foreign reserves of the ECB has been defined on the basis of prospective operational needs and may change if and when appropriate. 15% of the foreign reserves pooled at the ECB were transferred in the form of gold, while the remaining 85% are denominated in US dollars and, to a lesser extent, Japanese yen. There is no active management of the currency composition of reserves for investment purposes, in order to avoid any interference with the single monetary policy of the Eurosystem.

# 2.2 The Eurosystem's approach to foreign reserve management

The management of the ECB's foreign reserves has to ensure that, at any point in time, the ECB has an adequate amount of liquid resources at its disposal for any foreign exchange intervention. If interventions were to take place, the foreign reserves pooled at the ECB would be used. Liquidity and security are therefore the basic requirements for the investment of the ECB's foreign reserves. Subject to these constraints, the ECB's foreign reserves are managed to maximise their value. Furthermore, the management of the foreign reserves also allows the Eurosystem to enhance its knowledge of market techniques and its forward-looking understanding of the behaviour of market participants.

The ECB's foreign reserves are managed in a decentralised manner by the euro area NCBs. The key investment guidelines and the strategic benchmark are determined by the Governing Council, and the Executive Board decides on the tactical investment framework. In addition to the currency distribution, the ECB defines four key parameters for the investment of its foreign reserves in the US and Japanese bond markets. The key parameters are, first, a two-level investment benchmark (i.e. a strategic and a tactical benchmark) for each currency; second, permitted deviations from these benchmarks in terms of the interest rate risk; third, a list

of eligible instruments and operations; and, fourth, limits for credit risk exposures. NCBs use the leeway given to them by the deviation bands and risk limits to maximise the return on the portfolios they manage on behalf of the ECB, within a real-time monitoring framework established by the ECB. When conducting the ECB's investment activity, NCBs act on behalf of the ECB, on a disclosed agency basis, so that the ECB's counterparties in the international financial markets can distinguish the operations carried out by the NCBs on behalf of the ECB from those carried out by NCBs while managing their own reserves.

The counterparties used for operations involving the ECB's foreign reserve assets are selected in consultation with the NCBs, on the basis of creditworthiness and operational efficiency. The general principle for defining the instruments to be used is primarily defined by the requirements of security and liquidity. Subject to these constraints, the Eurosystem strives to use state-of-the-art portfolio and risk management practices and techniques.

#### 2.3 The ECB's own funds management

The ECB has been endowed with an initial capital of approximately €4,000 million. The principal purpose of the capital is to endow the ECB with a reserve fund which should provide it with sufficient income, while maintaining an appropriate level of security. In accordance with Article 123 of the Treaty, an increase in the capital of the ECB is possible, subject to secondary European Community legislation; a recommendation for an EU Council Regulation has been put forward by the ECB.

Since all of the ECB's own funds are currently invested in euro-denominated assets, it is of utmost importance to prevent any interference with the ECB's monetary policy decisions. Thus, in order to prevent the misuse, or even the mere suspicion of misuse, of privileged information in the management

of the ECB's own funds and to protect the ECB's reputation, a specific set-up has been established along the lines of a Chinese wall concept, i.e. a strict functional and physical division between the unit managing the own funds and the other units of the ECB.

The basic investment framework is consistent with the methodology applied to the ECB's foreign reserve management (see Section 2.1 above), taking into account the fact that the predominant share of the ECB's own funds is invested in euro-denominated long-term interest rate instruments. In addition, the ECB follows a relatively passive

investment approach, particularly in the money market area, in order not to generate any monetary policy signals. Following the acquisition by the ECB of the status of BIS shareholder, on 7 December 1999, part of the ECB's capital was also used to finance the purchase of the BIS shares.

The list of eligible counterparties for the ECB's own funds investment and the relevant legal documentation, while prepared separately from those corresponding to the management of the ECB's foreign reserve assets, meet the same criteria of creditworthiness and operational efficiency.

## 3 Payment and settlement systems operations

### 3.1 The TARGET system

### Start of TARGET live operation

The Trans-European Automated Real-time Gross settlement **Express** Transfer (TARGET) system was designed to serve two main objectives: first, to facilitate the integration of the money market in euro in order to allow for the smooth implementation of the single monetary policy and, second, to improve the soundness and efficiency of intra-EU cross-border payments in euro. It successfully commenced live operation on Monday, 4 January 1999, together with several other large-value payment systems in euro. Owing to the fact that the banks needed some time to adapt to the new payment systems environment and to new treasury management practices, the ESCB provided an "extended service window" between 11 and 29 January 1999 by delaying the closing time of TARGET by one hour from 6 p.m. to 7 p.m. To avoid any abuse of this arrangement a special fee of €15 was levied for each payment made during the extra hour of operation. Since the banks increasingly adjusted to a more efficient way of managing their liquidity, it did not prove necessary to continue to make use of the extended opening hours of TARGET.

Nevertheless, in order to make it easier for TARGET participants to manage their end-of-day positions, the ECB decided that, as from 5 February 1999, the deadline for requesting access to the marginal lending facility of the Eurosystem should coincide with the corresponding deadline for the deposit facility, i.e. 30 minutes after the actual closing time of TARGET.

#### Development of TARGET in 1999

TARGET can be accessed by some 34,000 institutions (mostly credit institutions, including their branches and subsidiaries) throughout the EU. In 1999 the number of payments processed in the system as a whole, i.e. cross-border and domestic payments taken together, was 163,157 as a daily average, representing a value of €925 billion. Cross-border activity in TARGET steadily increased over the whole period. Compared with January 1999, the December 1999 figures show an increase of 58% in terms of volume and 6% in terms of value. The share of cross-border payments in all TARGET payments processed in 1999 was 18% with regard to volume (a daily average of 28,777 payments) and 39% with regard to value (a daily average of €360 billion). The peak days thus far have been 22 February 2000, as far as volume is concerned, with around 52,000 cross-border payments being processed, and 31 January 2000, as far as value is concerned, with the total value of payments processed amounting to €522 billion.

The average value of individual transactions processed by TARGET and other large-value euro payment systems decreased during 1999. The main reason for this was the progressive of commercial payments correspondent banking into organised payment systems. In December 1999 34% of crossborder payments processed through TARGET were customer payments, while, in January 1999, these accounted for only 15%. Using TARGET and other large-value systems for customer payments instead of correspondent banking allows corporate customers to improve their cash management.

In the TARGET section of its website the ECB provides and regularly updates statistical data on TARGET and the different national real-time gross settlement (RTGS) systems participating in it or connected to it.

# Operational framework

In technical terms TARGET has proved capable of processing a significant number of large-value payments within transmission times. The requirement of full collateralisation of intraday credit did not turn out to be a problem and the price difference between TARGET and alternative systems has not deterred banks from using TARGET extensively. Even the larger banks, which may have cheaper alternatives for processing their payments, use TARGET for their very large-value payments, for which the system offers advantages in terms of risk and liquidity management. Moreover, many small and medium-sized banks which lack access to other systems have found TARGET to be an efficient alternative to correspondent banking.

Owing to the importance of TARGET for the euro area money market and its interdependence with different large-value payment and settlement systems in euro, a very high level of technical availability needs to be ensured. In this respect, the performance of some system components was, however, not always fully satisfactory. In those cases the improvement of system availability has been actively addressed and given highest priority.

With regard to TARGET operating days, in 1999 the system closed on New Year's Day, Christmas Day and, in order to enhance the safety of the transition to the year 2000, exceptionally on 31 December. The payment traffic was, however, rather low on other days which are traditionally public (or bank) holidays in most of the euro area countries. Therefore, and following a request from the European banking industry, the ECB decided in July 1999 to have six closing days in 2000 in addition to Saturdays and Sundays: New Year's Day, Good Friday, Easter Monday, I May (Labour Day), Christmas Day and 26 December. These days are, de facto, non-settlement days for the money market and the financial markets in euro, as well as for foreign exchange transactions involving the euro. However, in some of those euro area countries in which one of these days is not a public holiday, the national RTGS system will be open for limited domestic payment activity.

#### Dialogue with TARGET users

During 1999 the ECB regularly reported on developments related to TARGET, both in the TARGET section of its website and in the quarterly issues of its Monthly Bulletin. More detailed information on TARGET, specifically addressed to the users of the system, was made available by the NCBs in the second quarter of 1999 in an updated version of the "Information guide for credit institutions using TARGET".

To continue to remain attractive, TARGET has to meet present and future market needs.

In this respect, an active exchange of views and co-operation with its users play an important role. During 1999 the ECB therefore conducted a survey on the crossborder payment service offered by TARGET, as perceived by its users. The main findings of this survey were presented in the report entitled "Cross-border payments in TARGET: A users' survey", which was published by the ECB in November 1999. Input for this report was obtained by means of a questionnaire addressed to the different European banking associations and to the national TARGET user groups. In addition, a meeting with market participants on the subject of TARGET and large-value payment systems, held at the ECB in September 1999, provided valuable information. One of the findings of the report was that a large group of credit institutions is satisfied with the present TARGET service level. However, large participants in particular would prefer a higher degree of harmonisation of the service provided by the different RTGS systems participating in TARGET. The requests of these banks ranged from the harmonisation of message formats to the provision of a uniform service throughout TARGET. The Eurosystem will actively continue to seek input and feedback from national TARGET user groups and, more generally, from the banking and financial community.

# 3.2 The correspondent central banking model

The correspondent central banking model (CCBM) was established in order to facilitate the cross-border use of collateral in the Eurosystem's monetary policy operations and the intraday credit operations of the ESCB. Within the CCBM the national central banks act as correspondents for each other and thereby enable counterparties to use all their eligible assets to obtain credit from their national central bank.

Experiences with the CCBM during the first year of operation have shown that it has successfully met the aims for which it was

created. The value of assets held in custody on a cross-border basis increased constantly, amounting to €162.7 billion at the end of 1999. Of the total amount of collateral provided by the counterparties, around 17% is held via the CCBM. The use of the CCBM has been asymmetric among countries, with most activity being concentrated among a few NCBs. The main collateral providers (acting as correspondent central banks) are Italy, which accounts for almost half of all collateral that is used on a cross-border basis, Belgium and Germany. However, the main collateral users (acting as home central banks) are Germany, which uses about one-quarter of all cross-border collateral, the Netherlands and France. Owing to the relative scarcity of domestic collateral in Ireland and Luxembourg, foreign collateral held via the CCBM on a cross-border basis amounts to 90% of all collateral held by counterparties in Luxembourg and 55% of that held in Ireland. Analysis also shows that during the first year of operation, counterparties did not actively use assets once they were held as collateral in the CCBM. On average, assets were held as collateral for a period of at least four months before the counterparty asked for its return. The cross-border use of tier two assets is insignificant. Since these assets are of particular importance at the national level only, it is no surprise that they are rarely found in foreign counterparties' portfolios. So far, the CCBM has been the main tool for the cross-border delivery of collateral used in the credit operations. Alternative means for these cross-border transfers, i.e. the links between securities settlement systems, the use of which has been allowed since May 1999, were used for around 4% [updated figure] of all collateral holdings at the end of 1999.

The fees for cross-border transfers via the CCBM were increased as from I October 1999. The primary aim was to cover the costs which the NCBs incurred in setting up the model and continue to incur in running it. Once more experience with the use of the CCBM had been gained, a study was undertaken to determine the actual costs

incurred. As a consequence, the fee of  $\[ \in \]$ 5 per CCBM transaction was replaced by a multiple fee composed of a transaction fee of  $\[ \in \]$ 30 and a combined custody and administration fee of 0.0069% per annum. The combined custody and administration fee is based on the amount of collateral held in the

CCBM. As was previously the case, the new fees are intended to cover the costs of the correspondent central bank which holds the collateral on behalf of the home central bank. The latter can continue to claim additional fees to cover its own costs incurred in running the CCBM.

# 4 Risk management

The main quantifiable and non-quantifiable risks arising from monetary policy and payment systems operations of the Eurosystem and operations involving the foreign reserve assets and own funds of the ECB are credit risk, market risk, liquidity risk and operational risk. A framework for identifying, monitoring and managing risks arising from these operations is in place. This risk management framework has been developed in line with best market practices.

#### Credit risk

Credit risk is the risk of incurring a loss due to the failure (bankruptcy) of a counterparty in a contractual relationship or of an issuer of a security held by the Eurosystem. The Eurosystem incurs credit risk in monetary policy operations and payment systems operations (principally via the TARGET system, through the provision of intraday liquidity), and the ECB incurs credit risk in foreign exchange operations and own funds management operations.

Credit risk related to monetary policy and payment systems operations is limited by the use of assets provided by counterparties as collateral pledged to the Eurosystem in the course of open market operations and the provision of intraday liquidity. Only high-quality assets are eligible for these operations. The credit risk is controlled by using consistent and prudent eligibility criteria throughout the Eurosystem. Credit risk related to foreign exchange reserves holdings and own funds management limited is by selecting counterparties and issuers with a high credit standing. Moreover, credit risk limits for countries, issuers and counterparties are set up to limit the exposure to any eligible country, issuer and counterparty.

#### Market risk

Market risk is the risk of incurring a loss due to movements in interest rates (interest rate risk) and foreign exchange rates (exchange rate risk). In the field of market risk management of the ECB's foreign exchange operations and own funds management operations, the following constitute the key elements of the market management framework: rate benchmarks, interest currency distribution benchmarks, a list of eligible instruments and a reporting system mainly focused on market risk exposures and portfolio performance.

Interest rate risk related to foreign exchange reserves holdings and own funds management is mainly controlled on the basis of modified duration. The modified duration of the own funds and foreign reserve portfolios is limited by deviation bands around the modified duration of the strategic benchmarks. The exchange rate risk of the foreign reserve portfolios is limited by deviation bands around the currency distribution benchmark. Value at risk measurements are also in place to complement the analysis of exposures. The performance of the own funds and foreign reserve portfolios is monitored and reported on an ongoing basis.

As regards monetary policy and payment systems operations, the market risk embedded in the underlying assets delivered as collateral is managed throughout the Eurosystem by applying appropriate risk control measures (e.g. haircuts and margins).

### Liquidity risk

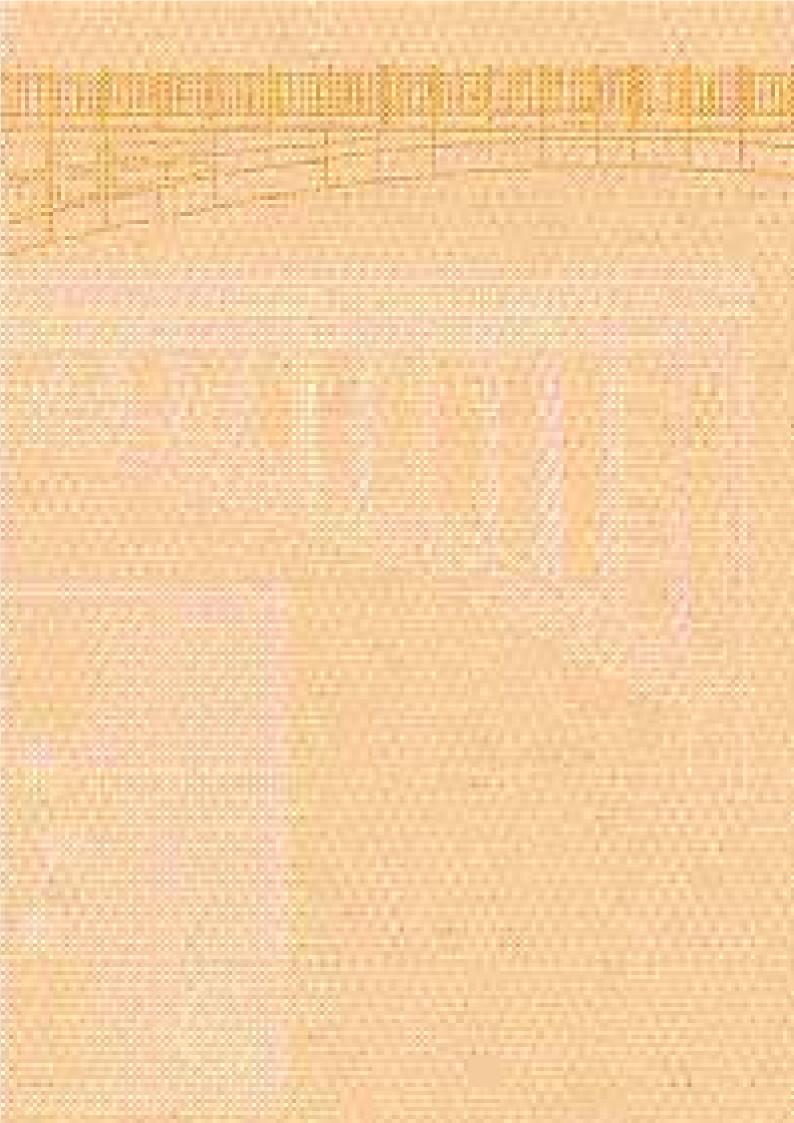
Liquidity risk is the risk of being unable to unwind or offset a particular position, without difficulty, at or near the previous market price owing to inadequate market depth or disruptions in the market-place. In monetary policy and payment systems operations, the liquidity risk embedded in the underlying assets is mitigated by risk control measures applied to these assets. In foreign exchange and own funds operations, it is limited by the appropriate choice of eligible instruments and a suitable maturity structure of the portfolios.

### Operational risk

Operational risk is the risk of incurring losses due to system failures, human error, breaches in internal control, fraud, catastrophes or other unforeseen events affecting its operations. Adequate internal controls of all operational flows have been set up in order to diminish operational risk. Contingency facilities are maintained by the Eurosystem to support its operations.

#### Current developments

Attention is being devoted to the continued improvement of risk management. Current developments include the analysis of risk management systems and methodologies and the discussion of risk management practices at the Eurosystem level.



## Chapter III

Economic developments in the other countries of the European Union

The Eurosystem and the NCBs of the non-participating EU countries co-operate closely in the context of the General Council of the ECB with a view to contributing to the maintenance of price stability in the EU as a whole. In this context, 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 currently not participating in the euro area. Although these NCBs 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.

#### **Denmark**

In Denmark real gross domestic product (GDP) increased by an estimated 1.5% in 1999, slowing to well below the euro area average and the high growth rates of around 3% or more achieved from the middle of 1993 until 1998. In the course of 1999 the impact of government action in 1998 to reduce domestic demand and increase savings (the Whitsun package), combined with the impact of higher long-term interest rates, contributed to a marked slowdown in the pace of domestic demand. The external outlook improved, however, and provided support for net exports, resulting in a renewed current account surplus. Overall, compared with most euro area countries, Denmark still enjoyed a relatively advanced position in the business cycle and a positive output gap. In 1999 the Danish labour market conditions continued to tighten; the unemployment rate was 4.1% in December, the lowest rate in almost 20 years, as labour supply failed to increase despite recent labour market initiatives. In addition, real wage increases in 1999 were above productivity growth, as in the previous two years.

As a result of wage growth of around 4% and the fact that declining oil prices no longer acted as a counterweight, inflationary pressures continued to rise in 1999. Consequently, the spread in the rate of

increase in the Harmonised Index of Consumer Prices (HICP) against the euro area widened and stood at 1.4 percentage points in December 1999, as the HICP reached 3.1% compared with an average of 1.3% in 1998. Wage increases in industry became somewhat more moderate, but increased in the more sheltered services sector. The apparent increase in total wage costs in 1999 was, however, mainly the result of the conflict in the labour market in the spring of 1998, which distorted the data for 1998 by making the total wage bill lower than usual.

Since the substantial fiscal consolidation in the period from 1993 to 1997 (when the budget balance moved from a deficit of 2.9% of GDP to a surplus of 0.1% of GDP), the general government budget balance has been improving further in recent years. The Whitsun fiscal austerity package, which will gradually lower tax deductions for interest payments and increase indirect taxes over the period 1999-2002, was introduced in June 1998 in order to counteract inflationary pressures arising from the significant increase in domestic demand. The general government surplus reached 3% of GDP in 1999, almost 2 percentage points higher than in the previous year, while the debt-to-GDP ratio also continued to improve. In 1999 it decreased by 3 percentage points to 52.6%.

The monetary policy strategy of Danmarks Nationalbank implies that monetary policy is geared towards stabilising the exchange rate of the Danish krone vis-à-vis the euro. Denmark has been participating in ERM II since I January 1999, with a narrow band of ±2.25% around the euro central rate. The Danish krone remained stable in 1999 around a level marginally stronger than its ERM II central rate of DKK 7.46038 against the euro. In the first half of 1999 Danmarks Nationalbank cut its key interest rates twice, reducing the lending rate by 50 basis points on 9 April - following a similar decision by the Eurosystem - and by 5 basis points on 17 June 1999. Accompanying the increases in Eurosystem interest rates, the central bank

#### Table 6

#### **Macroeconomic indicators for Denmark**

(annual percentage changes, unless otherwise indicated)

	1993	1994	1995	1996	1997	1998	1999	1999	1999	1999	1999
								Q1	Q2	Q3	Q4
Real GDP	0.8	5.8	3.7	2.8	3.1	2.7	1.5	0.5	1.8	1.0	
Contribution to real GDP growth: 1)											
Real domestic demand including stocks	0.6	6.6	5.0	2.4	4.2	4.4		0.4	-0.9	0.6	
Net exports	0.4	-0.8	-1.4	0.4	-1.1	-1.6		0.3	2.5	0.4	
HICP	0.9	1.8	2.0	2.1	1.9	1.3	2.1	1.4	1.8	2.3	2.8
Compensation per employee	2.3	3.5	3.5	2.9	3.8	3.0		4.5	6.3	3.7	
ULC, whole economy	0.0	-2.5	0.5	1.4	2.8	2.4		6.3	4.3	3.6	
Import prices	-0.7	1.5	2.4	0.2	2.1	-0.7	-0.3	-2.7	-1.9	0.4	3.1
Current plus new capital account (% of GDP)					0.1	-0.1		0.2	0.1	0.2	
Total employment	-1.5	-0.4	0.7	1.4	2.1	2.1	1.0	2.3	-0.0	1.0	
Unemployment rate (% of labour force)	10.1	8.2	7.2	6.8	5.6	5.1	4.5	4.8	4.5	4.4	4.2
Fiscal balance (% of GDP) <sup>2) 3)</sup>	-2.9	-2.4	-2.3	-1.0	0.1	1.2	3.0	-	-	-	-
Consolidated gross debt (% of GDP) <sup>2)</sup>	78.0	73.5	69.3	65.0	61.3	55.6	52.6	-	-	-	-
three-month interest rate (% per annum) 4)	11.0	6.2	6.1	3.9	3.7	4.1	3.3	3.5	3.0	3.1	3.6
ten-year long-term interest rate (% per annum) 4)	7.3	7.8	8.3	7.2	6.3	4.9	4.9	4.2	4.5	5.3	5.6
Exchange rate against the ECU or euro 4)5)	7.59	7.54	7.33	7.36	7.48	7.50	7.44	7.44	7.43	7.44	7.44

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

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

- 1) Percentage points.
- 2) Consistent with the Maastricht Treaty definition.
- 3) General government surplus (+) / deficit (-).
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- 5) Units of national currency per ECU until the end of 1998; thereafter per euro.

then raised its lending rate by 45 basis points on 4 November 1999, by 30 basis points on 3 February 2000 and by 25 basis points to 3.85% on 16 March 2000. Taking the year as a whole, short-term interest rates as measured by the three-month money market rates, rose by 0.2 percentage point and the spread vis-à-vis the comparable euro area rates remained broadly stable at around 20 basis points. At the end of February 2000 short-term interest rates amounted to 4.1%, constituting a spread of 50 basis points against euro area rates.

Long-term interest rates as measured by ten-year government bond yields followed the international increase in levels throughout 1999, rising by some 1.3 percentage points. In February 2000 the spread vis-à-vis the average euro area rates amounted to around 30 basis points, i.e. broadly unchanged since the beginning of 1999.

#### Greece

Greece continued to experience buoyant economic growth in 1999. The 1998 rate of GDP growth (3.7%) decreased only slightly to 3.5% in 1999, mainly as a result of a small negative contribution of net exports to GDP growth. Growth continues to be driven mainly by public and private investment. Real gross fixed capital formation grew by 8.1% in 1998 and by 8.3% in 1999. Reversing the previous deceleration, growth in private consumption increased from 2.1% in 1998 to 2.6% in 1999. The unemployment rate declined somewhat to an estimated annual average of 10.5% in 1999. Employment growth declined from 3.4% in 1998 to 1.2% in 1999.

<sup>1</sup> The high employment growth figure for 1998 reflects the fact that over 200,000 previously illegal immigrants were granted a work permit.

The 1999 trade deficit (partly distorted by unrecorded exports) is estimated to have been at broadly the same level as in the previous year, i.e. around 13% of GDP.

The HICP inflation rate continued its downward trend in 1999. In September 1999 the annual percentage change in the HICP reached its lowest point (1.5%), that is to say 2 percentage points below the January 1999 figure of 3.5%. In the last three months of 1999, however, HICP inflation accelerated somewhat, mainly as a result of the increase in energy prices, reaching 2.4% in December 1999, 0.7 percentage point above the euro area average.

The main factors contributing to the overall reduction in inflation were the Bank of Greece's stability-oriented monetary policy and a considerable decline in the rate of increase in unit labour costs (from 5.5% in 1998 to 2.5% in 1999). The decline in unit labour cost growth was, in turn, supported by strong productivity growth and continued wage moderation, following the two-year agreement between the social partners signed in May 1998. Underlying inflation, as measured by the HICP excluding seasonal food and energy prices, was on a declining trend for most of 1999, falling from 4.4% in January to 1.7% in December 1999. Other explanatory factors regarding the decline in inflation are a number of cuts in indirect taxes in 1998 and 1999 and, to a lesser extent, the Greek Government's "gentleman's agreements" with industry to encourage price restraint in the private sector. The combined effect of these tax cuts and the gentleman's agreements is estimated to be around I percentage point.

Following a sizeable general government deficit reduction from 13.8% of GDP in 1993 to 2.5% of GDP in 1998, fiscal consolidation continued in Greece in 1999 as the deficit declined further to 1.6% of GDP. This decline was attributable to the strong performance of budget revenues, which rose from 50.8% of GDP in 1998 to 51.7% of GDP in 1999. The total expenditure-to-GDP ratio, on the

other hand, declined only marginally, from 53.3% in 1998 to 53.2% in 1999, mainly driven by the decline in interest payments. The primary surplus also increased from 6.4% to 7.1% of GDP. Government debt declined by I percentage point to 104.4% of GDP in 1999, at a slightly less rapid pace than in 1997 and 1998, when public debt fell by approximately 3 percentage points in each year. This means that the debt ratio developed less favourably than the deficit ratio and nominal economic growth would suggest, owing, on balance, to unfavourable debt-deficit adjustments, including capital injections into public enterprises and revaluation effects. The updated convergence programme introduced in December 1999 set out more ambitious budget targets than the previous convergence programme, which was facilitated by better than expected results in previous years. The deficit is projected to decline further to 1.2% of GDP in 2000 and to 0.2% of GDP in 2001. The debt is anticipated to decline only slightly in 2000, while a more sizeable decline, by almost 4 percentage points, to 99.5% of GDP is expected in 2001.

The primary objective of the monetary policy strategy of the Bank of Greece continued to be the maintenance of price stability, with the latter being defined as a year-on-year increase in the Consumer Price Index (CPI) of below 2%. The Greek drachma joined the ERM on 16 March 1998 and has been participating in ERM II since I January 1999, observing a fluctuation band of ±15% around its central rate of GRD 353.109 against the euro. Throughout 1999 the drachma traded on average 8.4% above its central parity, as required by the price stability objective. On 17 January 2000 the central rate was revalued by 3.5% to GRD 340.750 against the euro.

As part of its monetary policy strategy, the Bank of Greece has reference ranges for both broad money and domestic credit expansion, which are both currently set at between 7% and 9% as annual growth rates. In 1999 the broad monetary aggregate did not quite reach the reference range, growing by an annual rate of 5.6%, while domestic credit expansion

stabilised in the second half of 1999, partly as a consequence of the temporary reserve requirements on banks for credit growth above target imposed by the Bank of Greece. Annual domestic credit growth remained, however, above its reference range in 1999 at 12.3%.

The Bank of Greece cut the fixed tender rate for 14-day deposits to 12% on 13 January 1999 and further to 11.5% and 10.75% on 20 October and 15 December 1999 respectively. On 26 January and 8 March 2000 the Bank of Greece cut its key 14-day deposits rate by 100 and 50 basis points respectively, thereby reducing it to 9.25%. At the beginning of 1999 short-term interest rates continued their decline from an average annual level of 13.9% in 1998 to around 10% in the second quarter of 1999. Thereafter, short-term interest rates remained broadly stable for the rest of the year, except

for a temporary increase in November 1999. In the first two months of 2000 the three-month interest rate (the ATHIBOR) declined further, standing at 8.7% at the end of February. This translated into a spread of 510 basis points visà-vis similar euro area rates compared with a spread of 850 basis points at the beginning of 1999.

In the first few months of 1999 the declining trend in long-term interest rates also continued, with ten-year interest rates falling from 6.3% in January to 5.8% in May. Subsequently, long-term interest rates gradually increased to 7.0% in October, but fell once again to 6.4% at the end of February 2000. The differential vis-à-vis average euro area yields narrowed from 250 basis points in January 1999 to around 80 basis points in February 2000.

**Table 7 Macroeconomic indicators for Greece** 

(annual percentage changes, unless otherwise indicated)

	1993	1994	1995	1996	1997	1998	1999	1999 Q1	1999 Q2	1999 Q3	1999 Q4
Real GDP	-1.6	2.0	2.1	2.4	3.4	3.7	3.5				
Contribution to real GDP growth: 1)											
Real domestic demand including stocks	-1.0	1.3	4.2	3.5	4.4	3.4	3.9				
Net exports	-0.6	0.7	-2.1	-1.1	-1.1	0.3	-0.4				
HICP				7.9	5.4	4.5	2.3	3.4	2.2	1.7	2.2
Compensation per employee	9.8	10.8	12.9	8.8	12.4	5.8	4.8	-	-	-	-
ULC, whole economy	12.6	10.7	11.6	5.9	8.4	5.5	2.5	-	-	-	-
Import prices	7.7	5.8	6.8	5.0	2.2	5.1	0.6	-	-	-	-
Current plus new capital account (% of GDP)	-0.8	-0.1	-2.4	-3.6	-4.0	-3.0	-2.7	-	-	-	-
Total employment	0.9	1.9	0.9	-0.4	-0.3	3.4	1.2	-	-	-	-
Unemployment rate (% of labour force)	8.6	8.9	9.1	9.8	9.7	10.9	10.5	-	-	-	-
Fiscal balance (% of GDP) <sup>2) 3)</sup>	-13.8	-10.0	-10.2	-7.4	-3.9	-2.5	-1.6	-	-	-	-
Consolidated gross debt (% of GDP) <sup>2)</sup>	116.9	109.3	108.7	111.3	108.5	105.4	104.4	-	-	-	-
three-month interest rate (% per annum) 4)	19.1	26.7	16.4	13.8	12.9	13.9	10.3	10.8	10.0	10.1	10.4
ten-year long-term interest rate (% per annum) <sup>4)</sup>	23.4	20.9	17.3	14.6	10.2	8.5	6.3	6.1	5.9	6.6	6.7
Exchange rate against the ECU or euro 4) 5)	268	288	303	306	309	331	326	323	325	326	329

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

Note: National accounts are according to the ESA 95.

- 1) Percentage points.
- 2) Consistent with the Maastricht Treaty definition.
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- 4) Average of period values.
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#### **Sweden**

Swedish real GDP grew by 3.8% in 1999, accelerating from 3.0% in 1998. The driving force was, as in the previous year, attributable to strong growth in domestic demand resulting from favourable growth in real disposable income (mainly on account of very low inflation) and employment, rising asset prices and historically low interest rates. Private consumption and capital formation showed the largest increases, while the contribution to growth from changes in inventories was negative at -0.5 percentage point. In addition, export growth was less affected than expected by the slowdown in world economic activity at the end of 1998 and the beginning of 1999, while import growth decelerated considerably. contribution to growth from external trade thus turned positive again after being negative in 1998. Since the autumn of 1997 the unemployment rate has been declining significantly and employment accelerated further in 1999, mainly in the private services sector. Unemployment stood at 6.5% of the labour force at the end of 1999 compared with an average of 8.3% in 1998. The trade surplus reached nearly the same level as in 1998, i.e. 6.9% of GDP, while the current account surplus declined marginally and stood at 2.8% of GDP.

Consumer price inflation started to rise from very low levels in 1999 mainly as a result of higher oil prices. Underlying inflation, as measured by UNDIX (CPI excluding interest expenditure and direct effects of altered indirect taxes and subsidies), increased from below 1% in 1998 to 1.9% in December 1999. HICP inflation in December 1999 was 1.2%, 0.5 percentage point below the euro area average. For most of the year Sweden was one of the three best-performing EU Member States in terms of price stability. However, real wages continue to increase faster than productivity growth and remain the main risk to price stability and employment in the medium term.

Following marked fiscal consolidation between 1993 and 1998, when the budget

balance improved from a deficit of 11.9% of GDP to a surplus of 1.9% of GDP, public finances remained stable in 1999 at a level of 1.9% of GDP. In 1999 the debt ratio decreased by 6.9 percentage points to 65.5% of GDP. The updated Swedish convergence programme, introduced in November 1999, gives the budget surplus targets for 2001 and 2002 as 2% of GDP. The debt is projected to decline by 6.7 percentage points in 2000 to 58.8% of GDP and further to 54.1% of GDP in 2001.

On I January 1999 new central bank legislation was introduced to reinforce the independence of Sveriges Riksbank. The primary objective of monetary policy in Sweden is to achieve price stability. Sveriges Riksbank has operated with a flexible exchange rate regime and conducted monetary policy with an explicit inflation target since 1993. Monetary policy is targeted at keeping CPI inflation at 2%, with a tolerance margin of ±1 percentage point. At the beginning of 1999 clarification was given regarding the formulation of monetary policy in Sweden. Sveriges Riksbank explicitly stated that departures from the inflation target may be warranted if, for instance, inflation is influenced by temporary factors. This was the case in 1999. In practice, monetary policy was based on an assessment of underlying inflation, UNDIX, which recorded an average level of 1.5% in 1999.

Reflecting two cuts in Sveriges Riksbank's repo rate - totalling 50 basis points - to 2.9% in March 1999, short-term interest rates declined at the beginning of 1999. The repo rate was raised by 35 basis points on 11 November 1999 and by 50 basis points to 3.75% on 4 February 2000 as inflation prospects for the next one to two years were estimated to be marginally higher than their target. Short-term interest rates rose even more towards the end of the year. The spread between the Swedish and euro area short-term interest rates narrowed slightly in the course of 1999 and stood at 50 basis points by end-February 2000. In 1999 and the first two months of 2000 the Swedish krona appreciated by some 10% against the euro

#### Table 8

#### **Macroeconomic indicators for Sweden**

(annual percentage changes, unless otherwise indicated)

	1993	1994	1995	1996	1997	1998	1999	1999 Q1	1999 Q2	1999 Q3	1999 Q4
Real GDP	-1.8	4.1	3.7	1.1	2.0	3.0	3.8	3.9	3.7	3.8	3.8
Contribution to real GDP growth: 1)											
Real domestic demand including stocks	-5.1	2.9	1.9	0.7	0.8	3.5	3.3	3.8	2.1	3.6	3.7
Net exports	3.3	1.2	1.9	0.4	1.3	-0.5	0.5	0.1	1.6	0.2	0.1
HICP				0.8	1.8	1.0	0.6	0.2	0.3	0.7	1.0
Compensation per employee		4.7	3.0	6.7	3.1	3.4	3.3	3.2	3.2		
ULC, whole economy		-0.1	0.5	5.1	0.4	1.5	2.4	1.7	3.8		
Import prices	13.3	4.7	6.5	-3.5	1.9	-1.0	2.5	-1.0	2.5	3.6	4.9
Current plus new capital account (% of GDP)	-1.7	0.7	2.9	2.6	3.3	3.6	2.0	2.5	1.1	3.3	
Total employment	-5.5	-0.9	1.6	-0.6	-1.1	1.4	2.2	2.7	3.0	1.8	1.5
Unemployment rate (% of labour force)	9.1	9.4	8.8	9.6	9.9	8.3	7.0	7.5	7.0	6.9	6.6
Fiscal balance (% of GDP) <sup>2) 3)</sup>	-11.9	-10.9	-6.8	-3.4	-2.0	1.9	1.9	-	-	-	-
Consolidated gross debt (% of GDP) 2)	75.8	79.0	77.6	76.0	75.0	72.4	65.5	-	-	-	-
three-month interest rate (% per annum) 4)	8.8	7.7	8.8	6.0	4.4	4.4	3.3	3.3	3.1	3.2	3.7
ten-year long-term interest rate (% per annum) 4)	8.6	9.7	10.2	8.0	6.6	5.0	5.0	4.2	4.5	5.5	5.7
Exchange rate against the ECU or euro 4) 5)	9.11	9.16	9.33	8.52	8.66	8.91	8.81	8.98	8.90	8.71	8.65

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

Note: National accounts are according to the ESA 95.

- 1) Percentage points.
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after having experienced a depreciation of approximately the same magnitude in the second half of 1998. The appreciation of the krona was mainly due to the improved growth prospects for the Swedish economy.

Long-term interest rates rose in the course of 1999 by 1.6 percentage points and further to 5.8% by the end of February 2000. The ten-year spread vis-à-vis the euro area broadened slightly in the course of 1999, reflecting, inter alia, the improved cyclical outlook for Sweden in relation to the euro area. At the end of February 2000 the spread had narrowed somewhat to 30 basis points.

#### **United Kingdom**

In the United Kingdom real GDP grew by 2% in 1999 compared with 2.2% in 1998.

Following a slowdown in the latter part of 1998, the pace of activity picked up during the course of 1999. Growth was driven by domestic demand, notably consumer spending, reflecting significant real wage increases, lower mortgage interest payments and rising asset prices (particularly house prices). However, export volume growth, although improving around the middle of the year, lagged significantly behind import volume growth owing to the strength of sterling, the subdued growth of some export markets and the rapid growth of domestic demand, resulting in a continued negative contribution of net exports to GDP growth for the year as a whole. Despite the somewhat slower output growth there was a further fall in unemployment in 1999. The annual average unemployment rate fell to 6.2% compared with 6.3% in 1998.

Table 9

#### Macroeconomic indicators for the United Kingdom

(annual percentage changes, unless otherwise indicated)

	1993	1994	1995	1996	1997	1998	1999	1999 Q1	1999 Q2	1999 Q3	1999 Q4
Real GDP	2.3	4.4	2.8	2.6	3.5	2.2	2.0	1.4	1.6	2.1	2.9
Contribution to real GDP growth: 1)	2.3	4.4	2.0	2.0	3.3	2.2	2.0	1.4	1.0	2.1	2.9
Real domestic demand including stocks	1.9	3.3	1.8	3.0	3.7	4.1	3.5	4.0	3.2	2.8	4.0
Net exports	0.1	0.9	1.0	-0.5	-0.3	-2.1	-1.6	-2.7	-1.7	-0.9	-1.3
HICP	2.5	2.0	2.6	2.5	1.8	1.6	1.4	1.6	1.4	1.2	1.2
Compensation per employee	3.6	3.4	2.0	3.2	4.6	5.4		4.9	4.6	4.8	
ULC, whole economy	0.1	-0.5	1.4	1.7	2.9	3.8		4.2	4.0	3.4	
Import prices	8.6	3.1	6.1	0.3	-6.7	-6.3	-2.6	-3.8	-3.2	-2.3	-1.1
Current plus new capital account (% of GDP)	-0.2	-0.0	-0.0	0.0	0.1	-0.0		-0.2	-0.1	-0.1	
Total employment	-1.2	0.8	1.1	1.0	1.8	1.0	1.2	1.2	1.3	1.2	1.1
Unemployment rate (% of labour force)	10.5	9.8	8.8	8.3	7.3	6.3	6.2	6.3	6.0	5.9	5.9
Fiscal balance (% of GDP) <sup>2) 3)</sup>	-8.0	-6.8	-5.8	-4.4	-2.0	0.3	1.2	-	-	-	-
Consolidated gross debt (% of GDP) 2)	45.5	48.7	52.1	52.6	50.8	48.4	46.0	-	-	-	-
three-month interest rate (% per annum) 4)	5.9	5.5	6.7	6.0	6.8	7.3	5.4	5.5	5.2	5.2	5.9
ten-year long-term interest rate (% per annum) <sup>4)</sup>	7.5	8.2	8.3	7.9	7.1	5.6	5.0	4.4	4.8	5.4	5.5
Exchange rate against the ECU or euro 4) 5)	0.78	0.78	0.83	0.81	0.69	0.68	0.66	0.69	0.66	0.65	0.64

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

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

- Percentage points.
- 2) Consistent with the Maastricht Treaty definition.
- 3) General government surplus (+) / deficit (-).
- 4) Average of period values.
- 5) Units of national currency per ECU until the end of 1998; thereafter per euro.

Inflation continued to remain subdued and the rate of increase in prices, as measured by the retail price index excluding mortgage interest payments (RPIX), was 2.3% in 1999 compared with 2.7% in 1998. Annual average inflation as measured by the HICP was 1.4% in 1999, i.e. 0.3 percentage point higher than the euro area annual average, compared with 1.6% in 1998. However, at the end of 1999 and in early 2000 HICP inflation was well below the euro area average. A number of factors may have helped to contain price developments. These include the appreciation of sterling, increased competition in the retail sector and some further pressure by the regulators of utilities to lower prices in these industries. While overall inflation remained subdued, house prices rose more rapidly, buoyed by historically low mortgage rates and the improving economic situation and outlook.

In 1999 the general government balance-to-GDP ratio showed a surplus of 1.2% compared with 0.3% in 1998. Government expenditure declined to 39.9% of GDP from 40.3% of GDP in 1998, while receipts rose marginally to 40.6% of GDP from 40.5% of GDP. The debt-to-GDP ratio decreased to 46% in 1999 compared with 48.4% in 1998.

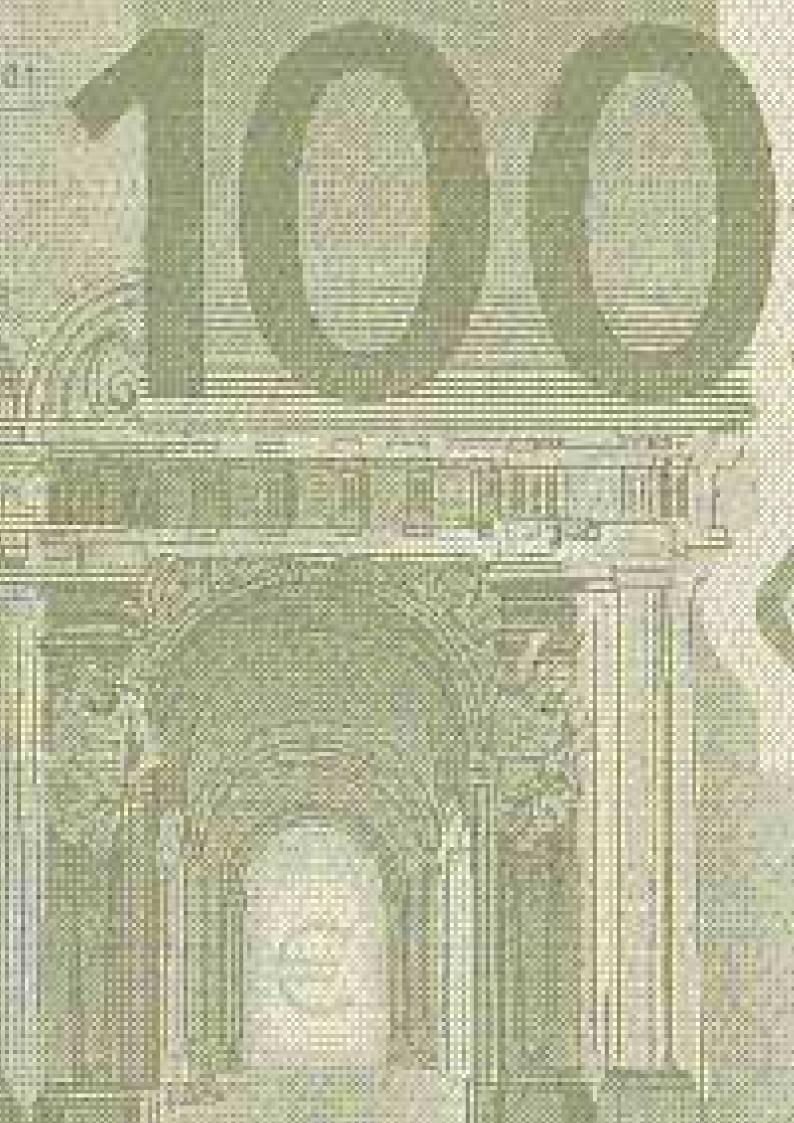
During 1999 the UK Government continued to set the Bank of England the monetary policy objective of meeting an inflation target defined as a 2.5% increase in the RPIX. The Bank's repo rate was 6.25% at the start of 1999 and was progressively cut to 5% in June, reflecting the weakness of the economy in the early part of the year and its likely impact on future inflation. However, from 8 September 1999 to 10 February 2000 official interest rates were raised in four stages (by 25 basis points each time) to 6%.

This reflected concerns about upward risks to future inflation, given the strength of world demand, domestic consumption (including effects resulting from the housing market) and continuing tight conditions in the labour market. Short-term market interest rates fell by around I percentage point to 5.1% in the first eight months of 1999, before rising again to 6.2% in late February 2000. The interest rate differential with the United Kingdom's euro area counterparts stood at 260 basis points at the end of February 2000.

Sterling appreciated significantly against the euro in 1999. This appreciation may partly

have reflected cyclical divergence between the UK and euro area economies in recent years. In addition, sterling was probably supported by the strength of the US dollar, given the close historical dollar-sterling link, and the strength of the US economy.

Long-term interest rates increased by around I percentage point in the course of 1999 and stood at 5.4% by the end of February 2000. The ten-year spread against comparable euro area rates disappeared at the end of February 2000, compared with 50 basis points at the start of 1999.



## Chapter IV

# European/international co-operation and the Eurosystem

#### I European issues

#### I.I Bilateral relations

In the course of 1999 the ECB established close relations with the central banks of non-EU neighbouring countries. The Eurosystem takes a keen interest in economic developments in such countries, in particular with regard to sustainable economic growth and stability-oriented policies, not least owing to the increasing role of the euro as an anchor for monetary and exchange rate policies. Therefore an ongoing dialogue and co-operation with the monetary authorities of these countries is of crucial importance.

The Eurosystem focused its attention on three groups of states within Europe:

- First, the accession countries preparing for entry into the European Union (Bulgaria, Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia and Slovenia). Although Turkey was granted the status of accession country at the Helsinki European Council on 10 and 11 December 1999, the conditions to be fulfilled before the start of negotiations have yet to be met.
- Second, the countries which form the European Free Trade Association (Iceland, Liechtenstein, Norway and Switzerland) and which already exhibit a high degree of economic and institutional integration with the EU (as established by the European Economic Area Agreement and other agreements).
- Third, regions and territories of the Western Balkans, in particular Kosovo and the Republic of Montenegro, where, in the wake of the 1999 Kosovo conflict, efforts – initiated by the international community – were made to bring peace and stability to the area and to rebuild the economy.

#### Accession countries

The Eurosystem has a keen interest in the prospect of the accession of new EU Member States, as well as in their subsequent participation in the new exchange rate mechanism (ERM II) and their eventual adoption of the euro after strict fulfilment of the required preconditions. In this context, a permanent dialogue between the Eurosystem and the central banks of accession countries is considered essential, with a view to their future integration into the ESCB and, eventually, the Eurosystem itself.

Officially recognised accession countries already enjoy a special status and maintain close relations with the EU. In the course of 1999 the EU and six accession countries (Cyprus, the Czech Republic, Hungary, Poland and Slovenia) started negotiations on the "EMU chapter", i.e. the implementation of the provisions of the Treaty establishing the European Community and derived EU legislation relating to Economic and Monetary Union. The EU made clear its intention not to make any "opting out" status available to the accession countries. For their part, the accession countries did not request any specific transitional arrangements. Therefore, the preliminary round of negotiations on the EMU chapter has been closed. Negotiations with a further six accession countries (Bulgaria, Latvia, Lithuania, Malta, Romania and Slovakia) started in February 2000. The exact time frame for EU accession has yet to be set, although the Helsinki European Council in December 1999 agreed that "the Union should prepare itself to be in a position to welcome new Member States from the end of 2002 as soon as they have demonstrated their ability to assume the obligations of membership and once the negotiating process has been successfully completed".

The Eurosystem is not directly part of the negotiation process. However, some form of association with the broader accession process is necessary, in particular with a view to issues which fall within the Eurosystem's exclusive, or shared, areas of competence, namely monetary policy, foreign reserve management, exchange rate policy, payment systems, collection of certain statistical data and financial stability.

Regarding the issues of particular concern to the Eurosystem, the accession process may be divided into four different steps, each of which should be considered separately.

First, before accession to the EU, applicant countries will be free to pursue their monetary and exchange rate policies independently. The Eurosystem monitors these policies and developments in accession countries closely, not least in view of their prospective EU membership. Applicant countries will have to ensure that the acquis communautaire (which has recently also become known as the acquis de l'Union) related to EMU is transposed into national legislation and implemented effectively before accession.

In the pre-accession phase, applicant countries will be obliged to fulfil the accession criteria set at the Copenhagen European Council in 1993. These imply, inter alia, "the existence of a functioning market economy as well as the capacity to cope with competitive pressure and market forces within the Union" and "the ability to take on the obligations of membership including adherence to the aims of (...) economic and monetary union".

Compliance with the aforementioned "Copenhagen criteria" requires accession countries to undertake numerous structural reforms and to complete the transition from their former status as planned economies to well-functioning market economies, promoting a process of real convergence, which is necessary to improve their living standards and to integrate their economies

further into the EU. Even though fulfilment of the Maastricht criteria on nominal convergence is not mandatory for accession, "adherence to the aims" of EMU also implies a willingness to strive for gradual progress in nominal convergence and the implementation of stability-oriented monetary and fiscal policies. In sum, real and nominal convergence are two components of the same strategy for achieving sustainable non-inflationary economic growth and should therefore be pursued in parallel.

Second, upon accession to the EU the new Member States will enter into Economic and Monetary Union, but with the special status of "Member States with a derogation". In concrete terms this means that, in accordance with the wording of the Treaty establishing the European Community, they shall treat their exchange rate policy as a matter of common interest (Article 124) and regard their economic policy as a matter of common concern (Article 99). However, they will not immediately introduce the euro, and the responsibility for monetary policy in their territories will remain in the hands of the respective central banks. In institutional terms, the central banks of new EU countries will become members of the ESCB. As is currently the case for the central banks of Denmark, Greece, Sweden and the United Kingdom, they will be represented on the General Council of the ECB but not on the Governing Council, the supreme decisionmaking body of the ECB. The central banks will, inter alia, have to contribute to the statistical framework of the ESCB and ensure, once they have joined the euro area, the consolidation of their accounts (the other tasks of the General Council of the ECB are listed in Section 2.3 of Chapter XI).

Third, after joining the EU (even if not necessarily upon accession) the new Member States will be expected to enter into ERM II – linking the currencies of the non-participating members (at present, the Danish krone and the Greek drachma) to the euro. With regard to the terms of entry into ERM II, it should be feasible to take into account country-

specific economic conditions, given the flexible features of ERM II.

Finally, the new Member States will be in a position to participate fully in the euro area. Membership will be subject to an examination of the convergence situation in each case, which will be carried out at least once every two years, or at the request of the countries themselves. Once they fulfil the necessary conditions as set out in the Maastricht Treaty, they will adopt the euro.

Progress towards the introduction of the euro will not necessarily be uniform in all accession countries. Against the background of different starting-points and degrees of economic transition, a plurality of approaches should be feasible without compromising equality of treatment. The nominal convergence criteria should be implemented in such a way that these countries are provided with clear references necessary to bring their economies into line with the standards and the final goal of EMU.

The Eurosystem is prepared to advise these countries in their pursuit of appropriate structural reforms and stability-oriented policies in line with the accession and convergence criteria. The Eurosystem is also willing to provide accession countries with technical assistance in its field of competence. In fact, several euro area national central banks (NCBs) already provide the central banks of the accession countries with technical support in a broad number of areas and will continue to do so. Requests for technical assistance from accession countries can be expected to increase following their preparatory work for integration into the ESCB and, later on, the Eurosystem. Therefore, the Eurosystem is developing appropriate procedures to meet this increasing demand in a co-ordinated manner, while ensuring that all accession countries receive the necessary support. In this context, full use will be made of the resources and expertise available within the Eurosystem, while adopting consistent approaches and strategies.

## The Helsinki seminar on the accession process

To open a dialogue with the monetary authorities of the accession countries, a high-level seminar on the accession process took place in Helsinki from 10 to 12 November 1999, bringing together the Eurosystem and governors and deputy governors of the central banks of Bulgaria, Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia and Slovenia. The seminar was organised jointly by the ECB and Suomen Pankki, the Finnish central bank.

The objective of the seminar was to carry out a review of the central banking issues involved in the accession process, to identify the main problem areas and to enhance cooperation between the Eurosystem and the central banks of accession countries.

The fruitful and comprehensive discussions covered a wide array of issues, ranging from the adoption of the EMU-related acquis communautaire to exchange rate strategies of the accession countries and to the requirements of smoothly functioning banking systems and financial markets.

Similar events will be held in the years to come, starting in Vienna in 2000.

## Seminars with central banks of accession countries hosted by the ECB

Following the Helsinki seminar, a number of specialised multilateral events were organised at the ECB. They formed part of a structured policy of multilateral contacts, both at the policy level (i.e. governors and deputy governors) and at the expert level, involving all relevant business areas of the ECB.

Such multilateral events were supplemented by bilateral visits to the ECB by delegations from the central banks of accession countries, allowing for more detailed exchanges of views at management and staff level, in particular with a view to the prospective inclusion of these central banks in the ESCB. The ECB intends to intensify both multilateral and bilateral co-operation with accession countries' central banks.

### Relations with the central banks of EFTA countries

In 1999 the ECB carried on the tradition of maintaining contact with the central banks of Iceland, Norway and Switzerland, which involves regular meetings at governor level twice a year. At these meetings a broad set of issues of common interest is reviewed.

The ECB also concluded a swap agreement with Norges Bank, which became effective on I January 1999 for a period of 12 months. The agreement replaced similar bilateral swap arrangements between Norges Bank and the euro area NCBs. As requested by Norges Bank, the Governing Council decided in December 1999 to renew the swap agreement for the year 2000 for an amount of €1.500 million.

### Monetary developments in the Western Balkans

As part of the stabilisation efforts pursued by the United Nations Interim Administration Mission in Kosovo (UNMIK) in the aftermath of the conflict, the latter designated the Deutsche Mark as the "currency to be used for payments made to a public authority" and liberalised the denomination of contracts and other voluntary transactions in "any foreign currency that is widely accepted in the territory of Kosovo". In practice, banknotes denominated in Deutsche Mark were already used in Kosovo as a main tool for cash transactions and a store of value before the new legislation entered into force.

On 2 November 1999 the Government of the Republic of Montenegro announced that "in addition to the Yugoslav dinar, the German mark is introduced as the means of payment in Montenegro". In the case of Montenegro, as in Kosovo, banknotes denominated in Deutsche Mark have traditionally played a major role as a store of value and a tool for making payments.

In the case of both Kosovo and the Republic of Montenegro, any reference in their legislation to the Deutsche Mark should obviously be read as if it were made to the euro. The respective authorities took these decisions unilaterally and without any implication for the Eurosystem, either in terms of legal obligations or of policy constraints.

## I.2 Co-ordination of national economic policies in the European Union

Through its participation in a number of EU fora (such as the Economic and Financial Committee and the Economic Policy Committee) the ECB became involved in discussions about a coherent co-ordination framework.

## The relevance and justification of economic policy co-ordination in EMU

Economic and Monetary Union (EMU), as set out in the Treaty, institutes a single monetary policy in the euro area and created for this purpose the ESCB. However, the economic facet of EMU did not give rise to a single economic policy. Rather, the Treaty requires Member States to "regard their economic policies as a matter of common concern" (Article 99). In order to render this principle operational, the provisions of the Treaty prescribe common policy guidelines (the Broad Economic Policy Guidelines) and a multilateral surveillance exercise. In the run-up to the introduction of the euro, the Member States endeavoured to flesh out the framework of the Treaty, by developing new co-ordination procedures (such as the Stability and Growth Pact) and by further refining existing ones.

While the creation of the European Community's single market had already produced an unprecedented depth of economic integration among EU Member States, the introduction of the euro makes economic developments in euro area Member States a more direct and immediate concern of national policy-makers. Economic policy decisions in one country can produce "spillover" effects for other euro area Member States, in particular via the single euro area financial market and the changing perception of market participants. Fiscal laxity in one country, for instance, might generate upward pressure on long-term interest rates, which in turn alters economic conditions throughout the euro area.

At first sight, the case for closer coordination of economic policies appears clear-cut. То the extent that the responsibility for the conduct of interlinked economic policies is attributed to different actors, co-ordination might help to reduce negative spillovers, create peer pressure, facilitate the exchange of best practices and thereby generate positive welfare effects. However, in order to reap the benefits of co-ordinating economic policies, it is essential that co-ordination takes an appropriate form and supports rather than conflicts with the "co-ordinating" forces of markets. In the current EMU set-up, co-ordination procedures range from more stringent rulebased approaches (e.g. Stability and Growth Pact) to more discretionary or less formal approaches centred on policy dialogue (e.g. the "Cardiff process" for the monitoring of structural reform).

## The role of the Eurosystem in the EU economic policy framework

The role of the Eurosystem is determined by the stipulations of the Treaty governing its status and activities, notably its independence and the primary objective of maintaining price stability. As a consequence, the Eurosystem cannot engage in any form of agreement aimed at bringing about a predetermined "policy mix", since this could commit the Eurosystem to pursue a monetary policy which might conflict with the primary objective of price stability.

The clear separation of policy responsibilities between monetary authorities and governments is rooted in the belief confirmed by decades of practical experience and a substantial body of economic research - that committing monetary policy-makers to the primary objective of maintaining price stability helps significantly to achieve price stability in a credible and lasting manner. In this way, monetary policy will make the best possible contribution to the broader economic objectives of the European Union and its citizens.

Since economic policy co-ordination relates predominantly to co-operation among the Member States themselves, the ECB's contribution to the overall co-ordination process lies in a dialogue with competent European bodies, notably the Council of Ministers and the Euro-II Group, whereby views and information are exchanged. In this dialogue, the prerogatives and independence of policy actors are respected.

#### Policy co-ordination instruments and fora

Economic policy co-ordination in the EU is conducted in an annual policy cycle, which centres on the Broad Economic Policy Guidelines. These guidelines, which are approved each year by the European Council, are intended to steer the general conduct of economic policy and make specific recommendations to each Member State. The Broad Economic Policy Guidelines are the pivot of all existing co-ordination processes, uniting them under a single overarching structure and gearing them towards a single timetable. Specialised co-ordination processes apply to budgetary policy (in the framework Stability and of the Growth Pact), employment policy (generally referred to as the "Luxembourg process") and structural reform policies (generally referred to as the "Cardiff process") – each of them with a distinctive set of rules and co-ordination fora. In addition, the European Employment Pact instituted the Macroeconomic Dialogue, which is explained in more detail in Section 1.3 below.

In line with the conclusions of the 1997 Luxembourg European Council, the main locus of economic policy co-ordination is the Council of Economics and Finance Ministers (ECOFIN) which, in particular, adopts the recommendation setting out the Broad Economic Policy Guidelines and issues opinions on the stability and convergence programmes. In accordance with the provisions of the Treaty (Article 113), the President of the ECB is to be invited to sessions of the EU Council whenever matters relating to the objectives and tasks of the ESCB are discussed. Members of the Executive Board of the ECB attend Council meetings on an ad hoc basis in order to participate in exchanges of views on general economic matters in a broader sense. In addition, informal ECOFIN sessions and the informal meetings of the Euro-II Group - to which the ECB can be, and has indeed been, regularly invited - allow for a frank exchange of views and thus provide a forum for an open dialogue between ministers and the ECB.

#### 1.3 Macroeconomic Dialogue

At its meeting in Cologne on 3 and 4 June 1999 the European Council took the initiative to establish a European Employment Pact aimed at achieving a sustainable reduction of unemployment. Specifically, the European Employment Pact is built on three "pillars", all of which are viewed as long-term processes to be developed over time and in the light of changing circumstances. These three pillars consist of two previously existing initiatives, namely the Luxembourg and Cardiff processes (see above), and a new, third pillar, the Cologne process, bringing together the Member States, the European Commission, the monetary authorities and

the social partners at the EU level in a regular Macroeconomic Dialogue.

The ECB participated in the first meetings of the Macroeconomic Dialogue at both the technical and the political level (on 29 October and 8 November 1999 respectively) and will continue to participate in future meetings.

#### Scope and purpose

In the context of the preparatory work on the formulation of the European Employment Pact, it was agreed that the establishment of a Macroeconomic Dialogue should not lead to the creation of new institutions or to cumbersome procedures. It was nonetheless considered worthwhile to establish a forum within which the various policy actors could be kept informed of developments in other relevant policy areas. Moreover, a regular exchange of views among the main policy actors was regarded as an essential tool for fostering greater mutual understanding concerning the creation of appropriate conditions for higher, non-inflationary growth and, with it, a sustainable reduction in unemployment.

The European Council's Resolution on the European Employment Pact clearly states that the Broad Economic Policy Guidelines are to remain "the central instrument for economic policy co-ordination in the EU". Moreover, the appropriate guidelines for the various macroeconomic policies are described in the same resolution as follows: "Fiscal policy is required to respect the objectives of the Stability and Growth Pact which implies bringing budgets securely close to balance or to a surplus over the medium term. Wages must keep a sustainable path, with wage developments that are consistent with price stability and job creation. The primary objective of monetary policy is to maintain price stability. For this, it is crucial that monetary policy be underpinned by fiscal and wage policies of the type described above."

#### Principles of ECB participation

From the outset, the ECB expressed its willingness to participate in a macroeconomic policy dialogue in order to exchange information and views with those parties responsible for the conduct of fiscal and structural policies and the negotiation of wage settlements. Nonetheless, it was necessary to ensure that to do so would not conflict with the ECB's independence as laid down in Article 108 (ex Article 107) of the Treaty, which prohibits the ECB from taking instructions from any other institution or body when carrying out its tasks and objectives. Accordingly, the need to respect the ECB's independence, along with that of all participants, was acknowledged by the European Council in its resolution on the European Employment Pact.

#### The ECB's role in the dialogue

The ECB has identified a number of ways in which it might best contribute to the Macroeconomic Dialogue. First, the ECB can provide a comprehensive assessment of the economic outlook and, against background, explain the reasoning behind its monetary policy decisions. Second, the Macroeconomic Dialogue offers opportunity for the ECB to share its views concerning the major economic policy challenges which lie ahead and appropriate direction of macroeconomic and structural policies to achieve the ultimate aim of sustained growth and high employment in an environment of price stability.

#### 2 International issues

The introduction of the euro implies a transfer of core central banking competencies from the national to the Community level. Thus, with the exception of exchange rate policy, which is a responsibility shared between the ECOFIN Council and the Eurosystem, and banking supervision policies, to which the Eurosystem contributes, monetary policy and related central banking tasks (e.g. management of official reserves) are an exclusive competence of the Eurosystem. On matters related to the Eurosystem's exclusive tasks, international representation rests solely with Eurosystem, customarily through the ECB, while the participation of the euro area NCBs varies, depending on the membership of the institutions or fora concerned.

Appropriate arrangements for the international representation of the euro area by the Eurosystem have to take two specific features into account. The first relates to the fact that membership of different fora (for example the G7 or the G10) varies across euro area Member States, which is also

reflected at the central bank level. The second derives from the fact that intergovernmental institutions such as the International Monetary Fund (IMF) or the Organisation for Economic Co-operation and Development (OECD) are organised on the basis of country membership.

Against this background, arrangements were implemented in 1998 and at the beginning of 1999 in order to establish working relations between the ECB and relevant international institutions and fora. These arrangements were put into operation in 1999 for the first time. Some of them were worked out in the context of changes in the institutional framework of multilateral co-operation (see Section 2.1). The ECB has also started developing bilateral relations with central banks outside the European Union (see Section 2.2). In this context two issues were the main focus of the ECB in 1999: the strengthening of the architecture of the international monetary and financial system (see Section 2.3) and the international role of the euro (see Section 2.4).

## 2.1 The activities of the ECB in the field of multilateral co-operation

#### The International Monetary Fund (IMF)

The ECB participates in the activities of the IMF with an observer status, at the level of both the International Monetary and Financial Committee (IMFC, formerly the Interim Committee) and the IMF Executive Board.

The IMF Board of Governors decided on 30 September 1999 to transform the IMF Interim Committee into the IMFC. Compared with its predecessor, the new Committee has been given a permanent standing, which is reflected in the organisation of preparatory meetings at the level of deputies. Apart from these changes, the creation of the IMFC leaves the current institutional setting of the IMF broadly unaffected, with the Board of Governors as the highest decision-making body, delegating the day-to-day business to the Executive Board. The IMFC, like the former Interim Committee, will advise and report to the Board of Governors on the supervision of the management and adaptation of the international monetary and financial system. Several observers, including the President of the ECB, participate in the meetings of the IMFC.

In order to enable the ECB to be represented on the IMF Executive Board, a permanent representative in Washington, D.C. with observer status at the IMF was appointed by the President of the ECB on 8 February 1999.

In the context of his mandate (see Box 6), inter alia, the ECB observer represented the Eurosystem at the meeting of the IMF Executive Board on 26 March 1999, at which the first staff report on "Monetary and Exchange Rate Policies of the Euro Area" was discussed. Subsequently, a Public Information Notice (PIN) was released by the IMF on 23 April 1999, making available to the public the assessment of the members of the IMF Executive Board of euro area economic policies. In the context of the next consultation cycle in 2000, the euro area will

participate in the pilot project for the voluntary release of the IMF staff report on monetary and exchange rate policies of the euro area. This pilot project is an important element of the IMF's ongoing efforts to improve transparency, which is fully supported by the Eurosystem.

#### G7 Finance Ministers and Central Bank Governors and related groups (FSF, G20)

The President of the ECB, together with the EU Presidency, represented the euro area in the three meetings of the G7 finance ministers and central bank governors which took place in 1999.

The President of the ECB represented the Eurosystem as far as the review of exchange rates and multilateral surveillance issues were concerned. Central bank governors of the euro area G7 countries (Germany, France and Italy) took part in the G7 sessions on the review of progress being made towards strengthening the international financial architecture. On the basis of their discussion, the G7 finance ministers issued a report to the Cologne Economic Summit (18 June 1999) on "Strengthening the International Financial Architecture".

#### Financial Stability Forum (FSF)

At their meeting in Bonn in February 1999, the G7 finance ministers and central bank governors endorsed the recommendation of the Tietmeyer Report to set up the FSF. Its objectives are to assess vulnerabilities affecting the international financial system, to identify and oversee action needed to address these vulnerabilities, and to improve coordination and the exchange of information among the various authorities responsible for financial stability. The FSF is made up of the national authorities responsible for financial stability in the G7 countries (namely ministers of finance, central banks and supervisory agencies). Several international institutions and groupings which are concerned with

financial stability, either as standard-setting agencies or through their involvement in the surveillance and monitoring of financial systems, are also members of the FSF (e.g. the BIS, the IMF, the World Bank and the OECD). The ECB participates in the FSF as an observer.

At its meeting on 15 September 1999 the FSF broadened its membership to four non-G7 countries representing major financial centres (the Netherlands, Singapore, Australia and Hong Kong).

The FSF met twice in 1999. Subsequent to its April meeting, three working groups were set up in order to analyse issues of relevance to systemic stability: Highly Leveraged Institutions, Capital Flows and Offshore Financial Centres. These groups prepared interim reports for the FSF members which were presented at the meeting in September 1999 (see Section 2.3 for further details). At this meeting the FSF also agreed to establish a Task Force on the Implementation of Standards and a Study Group on Deposit Insurance Schemes.

#### Box 6

## The function and activities of the ECB permanent representation in Washington, D.C.

The Executive Board of the International Monetary Fund (IMF) decided on 21 December 1998 to grant observer status to the ECB. Pursuant to this decision, the ECB observer has a standing invitation to represent the Eurosystem in IMF Executive Board meetings in which issues relevant to euro area monetary and exchange rate policies are discussed. This includes:

- meetings that are part of the surveillance process with euro area authorities, namely Article IV surveillance over the common monetary and exchange rate policies of the euro area and the policies of individual euro area Member States;
- the role of the euro in the international monetary system;
- the process of multilateral surveillance by the IMF (World Economic Outlook, International Capital Markets, World Economic and Market Developments).

In addition, the ECB observer is invited to take part, on a case-by-case basis, in meetings concerning items recognised by the ECB and the IMF as being of mutual interest for the performance of their respective mandates. Against this background, the ECB has set up a permanent representation in Washington, D.C.

The ECB representative's activities relating to such observer status at the IMF include participation in the meetings of the IMF Executive Board on topics falling into the above-mentioned categories as well as acting as primary contact between the IMF and the ECB on other matters of common interest. The representative also accompanies the IMF delegations during their missions to the ECB in the context of IMF surveillance under Article IV over the common monetary and exchange rate policies of the euro area. Furthermore, as a member of the ECB delegation to the IMF annual meetings and the spring meetings of the International Monetary and Financial Committee, the representative assists the President of the ECB, who participates in these meetings as an observer.

The ECB representation in Washington, D.C. maintains contacts with the US authorities, in particular the Federal Reserve System. In addition, the representation gathers information on developments in the United States and gives information to interested parties on euro area-related topics. As part of these tasks the representative maintains contacts with the financial community, academia and research institutions in the United States.

#### **G20**

At its September meeting the G7 announced the creation of the so-called G20 group. This new forum was initiated with a view to broadening the informal dialogue among systemically significant economies on key economic and financial policy issues. Both the EU Presidency and the President of the ECB participate in this new forum, in addition to ministers and central bank governors from the G7 and the following countries: Argentina, Australia, Brazil, China, India, Indonesia, Mexico, Russia, Saudi Arabia, South Africa, South Korea and Turkey. To liaise effectively with the IMF and the World Bank, the World Bank President, the IMF Managing Director and the Chairmen of the IMFC and the Development Committee have been invited to take part as ex officio members of the group.

The first meeting of the G20 took place in Berlin on 15 and 16 December 1999, under the chairmanship of Paul Martin, the Finance Minister of Canada. Ministers and governors of the G20 discussed the role and objectives of the new group. They agreed that the G20 provides a useful forum for informal discussion, while the Bretton Woods institutions, in particular the IMF, should remain the decision-making bodies with regard to international monetary and financial issues. Furthermore, they identified the main issues to be addressed both at the domestic levels international reduce and macroeconomic and financial vulnerabilities. In this context, the need for adopting exchange rate arrangements consistent with domestic macroeconomic and structural policies was stressed. Likewise, improved overall management of official and private sector external assets and liabilities was deemed to be instrumental in reducing sensitivity to shocks. Moreover, the G20 committed itself to demonstrating leadership in the implementation of codes and standards (see Section 2.3). The next meeting of the G20 ministers and governors will take place in Canada in autumn 2000.

#### **G10** Ministers and Governors

The President of the ECB participated in the two meetings of the finance ministers and central bank governors of the GIO countries (Belgium, Canada, France, Germany, Italy, Japan, Netherlands, Sweden, Switzerland, United Kingdom and United States). Their main focus was on the prevention and management of international financial crises as well as the involvement of the private sector in this context (see Section 2.3). At their meeting on 26 September 1999 the GIO ministers and governors agreed to undertake work on the ongoing process of financial sector consolidation.

## GIO Governors and fora related to the Bank for International Settlements (BIS)

The BIS plays an important role in facilitating co-operation within the central banking community, with a focus on meetings of the G10 governors, in which the President of the ECB and the governors of five euro area NCBs (Belgium, France, Germany, Italy and the Netherlands) participate. The GI0 governors regularly monitor (seven times a year) monetary and economic developments and major trends in international capital markets. The GIO governors also give guidance to Committees set up under their aegis to deal with issues relevant to the central banking community. **ECB** representatives take part in the Basel Committee on Banking Supervision (BCBS), the Committee on the Global Financial System (CGFS), the Committee on Payment Settlement Systems (CPSS), the Committee on Gold and Foreign Exchange, regular meetings of Central Bank Statisticians, Economists, Internal Auditors and Data Bank Experts, and all groups established by these Committees.

On 9 December 1999 the ECB became a shareholder of the BIS by underwriting 3,000 shares of the third tranche of the capital of the BIS, alongside the central banks of Argentina, Indonesia, Malaysia and Thailand.

## The Organisation for Economic Co-operation and Development (OECD)

Using Protocol No. I to the OECD Convention as a legal basis, the Secretary General of the OECD confirmed in February 1999 that the ECB would be allowed to participate in the work of the relevant OECD committees and working groups as a separate member of the European Community delegation alongside the European Commission. The ECB attended the meetings of the following committees and working groups: the Economic Policy Committee and its working groups (Working Parties I and 3 and Short-Term Economic Prospects), the Monetary Meeting, the Economic and Development Review Committee (EDRC) and the Financial Markets Committee (FMC). In the context of its regular country reviews within the Economic and Development Review Committee, the OECD is adjusting its review process of the euro area in a manner consistent with the new institutional setting. Euro area countries have agreed in principle on the examinations of individual euro area Member States being supplemented by a regular review of euro area developments and policies within the Economic and Development Review Committee. Since the practical arrangements still had to be worked out, an informal seminar was held to review the common monetary and exchange rate policies of the euro area in 1999.

## 2.2 The development of bilateral relations between the ECB and countries outside the European Union

During its first year of operation the ECB has established widespread bilateral contacts and working relations with central banks and other institutions of countries outside the European Union.

Executive Board members visited, inter alia, several countries in Asia in the course of 1999. On these occasions matters of common interest and the implications of the

introduction of the euro for the Asian region were reviewed.

A number of official delegations from non-EU countries were received by the Executive Board at the ECB premises in Frankfurt. In this context, the ECB hosted the meeting of Asia-Europe Ministers of Finance (ASEM) on 15 and 16 January 1999. Several high-level representatives from Latin American countries also visited the ECB in the course of the year.

## 2.3 The architecture of the international monetary and financial system

In accordance with the arrangements regarding the international representation of the Eurosystem, the ECB has taken part in new initiatives and progress achieved so far in the architecture strengthening of the international monetary and financial system. Since the Mexican crisis in 1994-95 and following the financial crises that affected the east Asian economies in 1997-98, the international community has undertaken work to promote a more stable global capital market. In 1999, against the background of a significant improvement in the world economic outlook, further progress was made in implementing already agreed measures and new initiatives were agreed.

#### Transparency, codes and standards

The most visible progress has been achieved in enhancing the transparency and accountability of the public and private sectors. Initiatives in this field aim at improving the scope and quality of information to support better private and official decision-making, which would enhance financial stability. In addition to improving data collection and disclosure by both the public and private sectors, the international community has been actively promoting the development and dissemination of codes and standards of good practices in various fields.

In the area of data transparency, several initiatives concern the decision-making process of international institutions. On a voluntary basis, information is now available on countries' IMF-supported programmes (Letters of Intent, Policy Framework Papers (PFPs) and, in the future, Poverty Reduction Strategy Papers (PRSPs), which are the supporting documents underlying the newly established Poverty Reduction and Growth Facility (PRGF)), as well as on Article IV surveillance (Public Information Notices reflecting the outcome of the IMF Executive Board discussion). In April 1999 a pilot project was launched by the IMF Executive Board to improve transparency further through the voluntary release of Article IV staff reports.

In order to disclose comprehensive, reliable and consistent data on foreign reserve assets and liabilities of the official sector, a statistical template for public dissemination of Data on International Reserves and Foreign Currency Liquidity, under the IMF Special Data Dissemination Standard (SDDS), has been agreed jointly by the IMF and the G10 central banks. Compliance will be voluntary under the SDDS and most G10 countries plan or have already started to report on the new basis.

Improving transparency is also important with regard to the private sector. Several BIS working groups (see Section 2.1 above) have developed a number of initiatives in this area. In order to improve the quality of BIS consolidated international banking statistics, the CGFS has agreed to shorten the reporting frequency from semi-annual to quarterly as from January 2000. Moreover, credit exposures towards the ultimate counterparts will be published in addition to those towards the immediate counterparts. Under the joint leadership of several groupings (the BCBS, the CGFS, the FSF, the International Association of Insurance Supervisors (IAIS), the International Accounting Standards Committee (IASC) and the International Organisation of Securities Commissions (IOSCO)), several initiatives aim at enhancing disclosure requirements by individual financial market institutions.

With regard to the development and dissemination of standards and codes of good practices, a key challenge is their implementation by a large number of developing countries and emerging market economies. Further progress in that area is expected to contribute significantly to crisis prevention by improving the institutional framework for the decision-making process in the official sector, as well as information provided to market participants for their own risk assessment. The international financial community is currently assessing the most effective way to monitor the observance by individual countries of internationally agreed codes and standards.

In the context of a pilot project, the IMF, in conjunction with the relevant authorities of the countries concerned, has embarked on a series of experimental "Reports on the Observance of Standards and Codes" (ROSCs). These reports assess the extent to which member countries observe certain internationally recognised standards, focusing primarily on the areas of direct operational concern to the IMF.

Following the adoption by the IMF in November 1998 of a Code of Good Practices Transparency (subsequently amended in April 1999), a Code of Good Practices on Transparency in Monetary and Financial Policies was adopted at the IMF Annual Meetings in September 1999. The Eurosystem was actively involved in the design of the latter Code, together with the BIS and a representative group of central banks and other experts. Further work is under way to prepare the supporting documentation to the Code. The monitoring of compliance with the Code of Good Practices on Transparency in Monetary and Financial Policies is expected to be part of the aforementioned ROSCs. This is already reflected in some of the experimental reports which have been compiled by the IMF so far and which have been made available on its website. Experts

from the Eurosystem took part in this monitoring activity.

Finally, several initiatives have been taken in order to facilitate the development and implementation of standards relevant to the functioning of financial systems. Under the aegis of the FSF a Task Force on the Implementation of Standards was set up in order to examine ways of fostering the implementation of international standards and codes relevant to the strengthening of financial systems. In the specific area of banking standards, in June 1999 the Basel Committee on Banking Supervision (BCBS) released a proposal for a new capital adequacy framework consisting of three pillars: minimum capital requirements (developing and expanding the 1988 agreement), a supervisory and internal review of an institution's capital adequacy and the effective use of market discipline. The BCBS was seeking comments from all interested parties by March 2000 in order to put forward more definitive proposals later on in the same year.

#### Strengthening financial sector stability

Efforts to improve the soundness of financial systems and of regulatory and supervisory frameworks have been undertaken by various institutions and fora such as the IMF, the World Bank and the BCBS.

The recently established FSF is expected to enhance the exchange of information and international co-operation between the competent national and international bodies in financial market supervision, particularly where there is a cross-sectoral dimension. Moreover, two of the working groups set up by the FSF are expected to formulate policy recommendations aimed at reducing the risk associated with unregulated or poorly regulated segments of financial systems, namely highly leveraged institutions and offshore financial centres.

While abstaining from conducting an assessment of countries' actual adherence to its Core Principles for Effective Banking Supervision (adopted in 1997), the BCBS published a document in October 1999 to provide a methodology for evaluating compliance with them. This document will serve as an input for financial sector surveillance by the IMF and the World Bank. The Financial Sector Liaison Committee (FSLC) has agreed to co-ordinate a joint IMF/ World Bank financial sector monitoring and assessment programme aimed at evaluating the soundness and vulnerabilities of members' financial systems. The IMF and the World Bank initiated a Financial Sector Assessment Program (FSAP), in which joint teams, with the participation of outside experts from national supervisory agencies, assess the vulnerability of national financial sectors, initially for a selected number of countries. In keeping with such missions and on an experimental basis, the IMF has been elaborating Financial Sector Stability (FSSAs) Assessments as background documentation to its Article IV consultations.

### Exchange rate regimes and capital account liberalisation

Another important area subject to ongoing analysis and discussion is the review of appropriate exchange rate regimes, as attempting to maintain unsustainable exchange rate regimes was a major factor behind recent financial crises. As emphasised in recent discussions at the IMF and in other fora, the optimal exchange rate regime differs from country to country. Moreover, the optimal exchange rate regime for a country may change over time, depending on its state of macroeconomic and financial development. It is the Eurosystem's opinion that fund surveillance will have to focus on the consistency of the exchange rate system chosen by a given country with its macroeconomic and structural policies, as well as its major external trade and financial links.

Similarly, further work is needed on capital account liberalisation. While there is a consensus that liberalisation has the potential to bring substantial benefits to a country, the management and sequencing of liberalisation are delicate issues. A sound macroeconomic framework, including consistent monetary and exchange rate policies, and a strong financial infrastructure are crucial in that respect. The merits and risks of controls on capital inflows and outflows, including taxbased controls on inflows, are still under consideration. In a connected area, the FSF Working Group on Capital Flows is currently considering a range of policy recommendations in borrower and creditor countries which could, over time, reduce the volatility of capital flows and the risks to financial systems of excessive short-term external indebtedness. In this context, the prudent management of external official and private debt and, more broadly, of national balance sheets plays an important role.

Crisis management and the involvement of the private sector

In addition to substantially increasing its financial resources to cope with systemic crises in recent years (including the doubling of resources callable under the pre-existing General Arrangement to Borrow (GAB) and the New Arrangement to Borrow (NAB) from SDR 17 billion to SDR 34 billion in 1998 and increasing the IMF quotas by SDR 66 billion in 1999), the IMF has also developed new instruments with which to deal with financial crises. In April 1999 the IMF Executive Board approved Contingent Credit Line (CCL) facility, which establishes a means of providing short-term financing for countries with sound economic policies but whose external position is endangered by international financial contagion. In order to support adjustment measures during debt negotiations, the IMF Executive Board has re-affirmed its policy to lend into sovereign arrears (adopted in 1989) on a case-by-case basis. It has also been agreed that the IMF might extend this policy,

in principle, to the case of non-sovereign arrears.

Further progress is needed in the complex but crucial area of ensuring private sector involvement in crisis prevention resolution. Recent financial crises have highlighted the disruptive effects of changes in market sentiment. Some steps have already been taken, ranging from ex ante and voluntary measures (such as the establishment of regular communication channels between debtor countries and their private creditors and the arrangement of private sector contingent credit lines) to more compulsory schemes (for instance, the Paris Club required a country to seek comparable treatment from its bond creditors). Moreover, both the IMF Interim Committee and the GI0 ministers and governors supported the framework elaborated in the report by the G7 finance ministers to the Cologne Economic Summit (18 June 1999).

#### 2.4 The international role of the euro

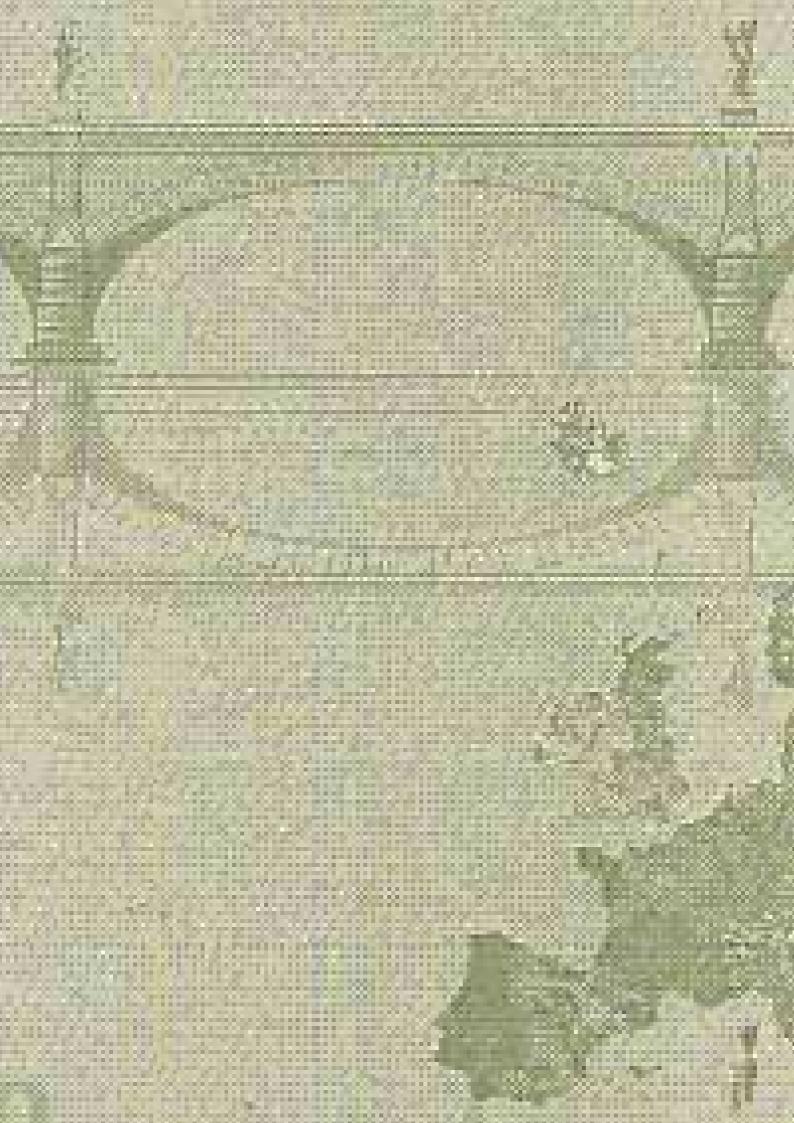
The introduction of the euro on I January 1999 was a major event with important implications not only inside but also outside the euro area. The euro is the second most widely used currency at the international level, as a result of both the legacy of the former national currencies replaced by the euro and the economic weight of the euro area in the world economy. The development of the euro as an international currency will mainly be a marketdriven process. In particular, the use of the euro by private agents as an investment and financing currency, as well as a payment and vehicle currency, will play a prominent role. The decisions of private sector agents will be influenced to a large extent by the degree of integration, liquidity and diversification of the euro financial markets, and by the cross-border relationships of the euro area. Moreover, the international role of the euro will be affected by the economic conditions in the euro area, thereby highlighting the contribution of all economic policies to a sound and stable currency.

Since the internationalisation of the euro, as such, is not a policy objective, it will be neither fostered nor hindered by the Eurosystem. The orientation the of Eurosystem's monetary policy towards price stability will remain a major factor behind investors' confidence in the euro. Conversely, the Eurosystem is aware of potential implications for the conduct of its monetary policy of the internationalisation of the euro. These potential implications will not be allowed to impair its ability to maintain price stability.

The emergence of the euro area — with characteristics similar to those of the two other major economic regions, the United States and Japan, in terms of large size and low trade openness — and the expected increase of the euro's international use also have implications for international co-operation.

Given its economic weight in the world (more than one-fifth in terms of GDP), the euro area is generally expected to play an important role in the process of international co-operation. Fewer players at the global level and more balanced relationships among them should, in principle, facilitate international co-operation, while at the same time strengthening the awareness of each player of the need to assume his respective responsibility. This process is assisted by regular exchanges of views and consultations among major economic areas.

In addition to adequate representation arrangements (where the ECB is concerned, see Section 2.1), a more efficient international co-operation process and a smaller risk of policy inconsistencies require the euro area to take a single position whenever appropriate. This is also supportive of the euro area exerting an international influence commensurate with its economic weight and further limits the risk for the Eurosystem of being pressed to pursue inappropriate short-term-oriented policy measures, which would undermine longer-term domestic and thereby external stability.



## Chapter V

## Payment and securities settlement systems

#### I Oversight of large-value payment systems

#### Large-value payment systems in euro

As from 4 January 1999 five large-value payment systems, all of which comply with the safety standards laid down in the 1990 G10 Report on Interbank Netting Schemes (the Lamfalussy standards), commenced operations in euro together with TARGET, namely the Euro Clearing System (Euro I) run by the Clearing Company of the Euro Banking Association (EBA), Euro Access Frankfurt (EAF) in Germany, Système Net Protégé (SNP) in France, Servicio Español de Pagos Interbancarios (SEPI) in Spain Pankkien On-line Pikasiirrot ja Sekit-järjestelmä (POPS) in Finland. In April 1999 SNP was upgraded and converted into a new "hybrid" system called Paris Net Settlement (PNS). Similar to EAF, the new system combines features of net and gross settlement systems.

In accordance with the common oversight policy stance of the Eurosystem, the NCBs are responsible for the oversight of the systems located in their respective countries, whereas the ECB is responsible for the oversight of Euro I. Within this framework, the ECB in particular monitored the daily settlement process of Euro I and closely followed the more general development of the EBA. The latter was characterised by, inter alia, an increase in the number of clearing banks from 62 (in January 1999) to 72 (in December 1999). In addition to its oversight activity, the ECB played a twofold role in respect of Euro 1: it acted as the settlement service provider and as the holder

of a liquidity pool, established in order to ensure timely settlement in the event of the failure of a participant.

As part of their ongoing oversight functions, the ECB and the NCBs regularly collected and reviewed relevant statistical data pertaining to the main large-value payment systems in euro. These data provide valuable information on the smooth functioning and development of the different systems.

#### Continuous Linked Settlement (CLS)

In 1997 a group of major foreign exchange (FX) trading banks established Continuous Linked Settlement Services Ltd. (CLSS) in London. The objective of CLSS is to provide multi-currency services for the simultaneous settlement of both legs of foreign exchange transactions, whereby, through implementation of a payment versus mechanism, foreign exchange payment settlement risk will be largely eliminated. The system will be operated by Continuous Linked Settlement Bank (CLSB), New York, a whollyowned subsidiary of CLSS. CLSB is due to become operational in 2001. Owing to the fact that the intention is for the euro to become one of the first currencies that the CLSB will settle, the Eurosystem is involved in the oversight of the system. In the course of 1999 the Eurosystem focused in particular on evaluating the impact of the CLSB on the liquidity situation in euro area large-value payment systems and, in order to exchange views on this issue, sponsored a meeting with the euro area banks involved in the project.

#### 2 Oversight of retail payment systems

#### Cross-border retail payment services

Efficient cross-border retail payment services are essential for the smooth functioning of the Single Market and full exploitation of its benefits by citizens and businesses alike.

However, the service level in the area of cross-border retail payments is still unsatisfactory, in terms of both the speed of execution and the charges levied on customers. Improvements in banks' practices should follow from the implementation of

the European Parliament and Council Directive No. 97/5/EC of 27 January 1997 on cross-border credit transfers. However, the implementation of the Directive may not be sufficient. Being a legal instrument, it could not fully address the issues of inadequacies in infrastructure and standardisation, which currently represent a major source of costs. Against this background, the ECB published a report entitled "Improving cross-border retail payment services in the euro area — the Eurosystem's view" in September 1999 which analysed the current situation and defined the Eurosystem's policy line.

After having discussed several options, the Eurosystem took the view that its operational involvement would not be justified at present. It intends rather to become a catalyst for change, initiating regular discussions with the banking and payment service industry in order to facilitate euro area agreements which will improve the environment for cross-border retail transfers, in particular in the area of standardisation. In order to launch the discussion and to give a clear signal to the markets, the Eurosystem defined a set of objectives which the industry should fulfil by the time the euro banknotes and coins are introduced. These objectives are aimed both at inviting the industry to make the investment needed in order to bring the efficiency level of cross-border retail payments closer to that of domestic payment systems and at endeavouring to strike a balance between what is expected by users and what the industry can realistically deliver in the short run.

One indication that the markets are starting to address the problem is the EBA's Low-Value Payments (LVP) initiative, which is aimed at developing a service for the processing of cross-border retail payments in euro and would, in the early stages, be based on the technical capabilities of Euro I. The system is scheduled to become operational in the second half of 2000.

#### **Electronic money**

Although electronic money is still in its infancy and growth has been very modest to date, the possibility of exponential growth cannot be ruled out. Hence electronic money has the potential 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, protection against criminal abuse and level playing-field considerations, have also to be taken into account. For these reasons, clear rules on the conditions under which electronic money can be issued need to be established.

The European Commission and the EU Council are preparing Directives on the taking-up, pursuit and prudential supervision of the business of electronic money institutions and on amending Council Directive No. 77/780/EEC of 12 December 1977 on the co-ordination of the laws, regulations and administrative provisions relating to the taking-up and pursuit of the business of credit institutions. The ECB has actively contributed to this work in accordance with its policy line defined in the "Report on electronic money" (August 1998) and provided a formal opinion on the abovementioned draft Directives in January 1999. Inter alia, the ECB highlighted the fact that it is strongly in favour of all electronic money issuers being classified as credit institutions, as well as of a redeemability requirement being imposed on them. Whereas the draft Directives take into account many of the concerns of the Eurosystem, these major issues which have yet to be resolved will be discussed further with the European Parliament, to which the draft Directives have been submitted for a second reading in accordance with the co-decision procedure.

#### 3 Other payment systems activities

In February 1999 the ECB published an addendum, incorporating 1997 data, to the descriptive guide to the payment and securities settlement systems operating in the EU Member States, the "Blue Book". Moreover, in order to provide comprehensive information on the major payment and securities settlement systems in the EU accession countries, the ECB released a report in August 1999 entitled "Payment

systems in countries that have applied for membership of the European Union". This publication was prepared in co-operation with the central banks of Bulgaria, Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia. It marks an important milestone in the deepening of co-operation with the central banks of these countries in the field of payment systems.

#### 4 Securities settlement systems policy

## Assessment of EU securities settlement systems and their links

Following the publication of the report entitled "Standards for the use of EU securities settlement systems in ESCB credit operations" and the first assessment of the EU securities settlement systems (SSSs) in 1998, SSSs have made substantial efforts to enhance the level of their compliance with the standards and, as a result, the preconditions for their use have been reduced in many cases. The assessment of SSSs was updated in May 1999 and the result showed that there are now five SSSs in the euro area which can be used without preconditions, compared with one at the start of Stage Three of EMU. A further ten SSSs have improved their level of compliance substantially. The eligibility of SSSs will be reviewed periodically in order to take new developments into account.

Some of the EU SSSs have built links between themselves in order to enable the cross-border transfer of securities in general. Before these links can be used in the context of the single monetary policy of the Eurosystem and the ESCB's intraday credit operations, they have to be assessed against the standards for the use of EU SSSs. After these assessments were carried out in 1999, the Governing Council agreed that a number of links between SSSs were eligible for the

cross-border transfer of collateral used in the Eurosystem's monetary policy operations and the intraday credit operations of the ESCB. In May, after a first wave of assessments, 26 links were deemed to comply with the ECB's standards. After a second wave of assessments in October, the Governing Council agreed that a further 21 links were eligible. Thus, in addition to the correspondent central banking model (CCBM), which was established by the Eurosystem, there are now alternatives available in some countries for the cross-border transfer of collateral. For the time being, the links are eligible to be used on a free-of-payment (FOP) basis, as currently no delivery versus payment (DVP) facilities exist on a cross-border basis. Further links were assessed and approved by the Governing Council in February 2000.

#### The cross-border transfer of securities

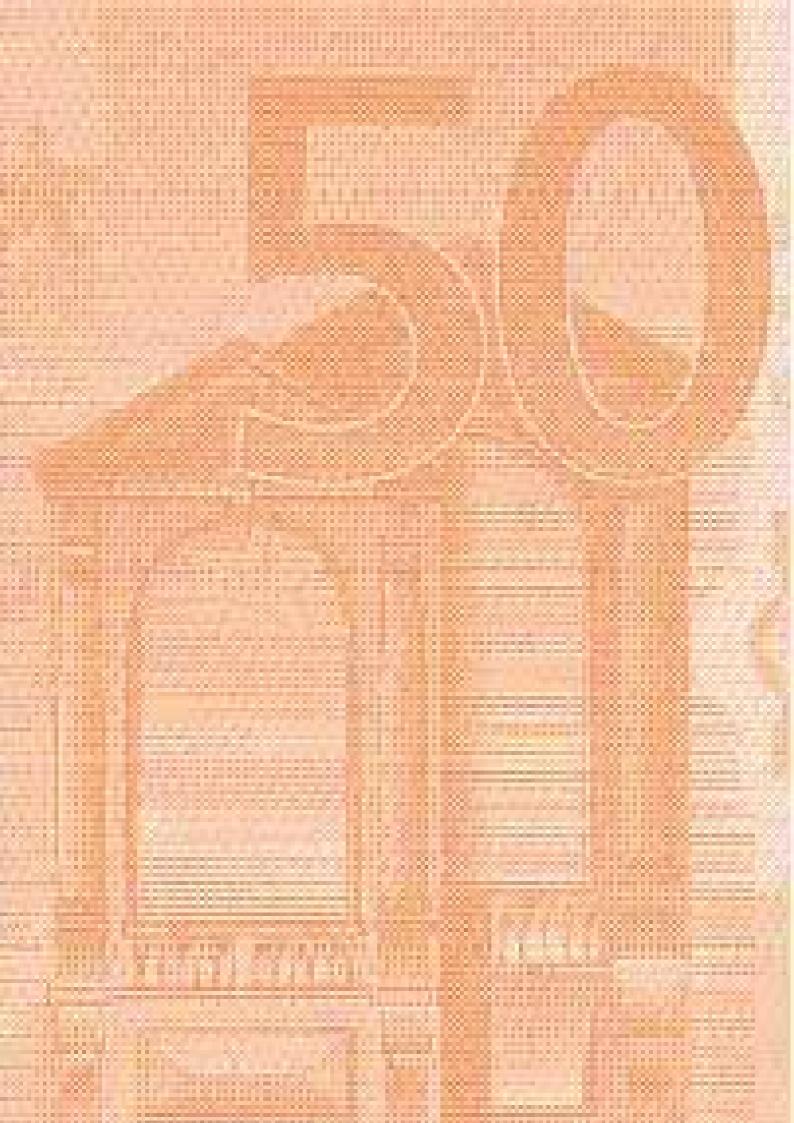
The CCBM was established as an interim solution to the cross-border use of collateral in the Eurosystem's monetary policy operations and the intraday credit operations of the ESCB until the private sector develops more comprehensive solutions for the cross-border use of securities in general. Increasingly, the cross-border transfer of securities in general has become an important issue for the private market, which is trying

to develop not only links, but also further market solutions to facilitate transfers across borders. Within the euro area, market participants tend to be in favour of a more efficient and integrated securities settlement infrastructure. Several projects are being implemented in competition with one another; however, the position of the Eurosystem remains neutral in this respect. The Eurosystem will try to ensure that all proposed alternatives offer a degree of safety which is compatible with the standards set for the collateralisation of the single monetary policy of the Eurosystem and ESCB intraday credit operations.

## Infrastructural barriers to the integration of the euro area repo market

The Eurosystem has a keen interest in the smooth functioning of the euro area financial

markets, in particular with a view to ensuring the transmission of its monetary policy impulses. In this context, studies carried out by the Eurosystem have shown that, unlike the uncollateralised money market, the collateralised money market is not integrated throughout the euro area. One of the issues analysed related to the existing infrastructural barriers to integration, in particular the securities settlement aspects. The potential barriers to further integration in this area are the lack of cross-border settlement procedures based on a delivery versus payment mechanism and the different legal frameworks, which are tailored to the needs of the domestic markets. It is clear that the Eurosystem has a role to play in increasing awareness of these problems. Initiatives to find solutions must, however, come primarily from the market.



## Chapter VI

## Financial stability and prudential supervision

#### I The institutional framework for financial stability

The institutional framework for financial stability in the EU and in the euro area is based on national competence and international co-operation. A variety of national structures and practices thus contribute, within the harmonised regulatory framework defined by the Treaty establishing the European Community (Treaty) and the EC Directives, to the pursuance of financial stability objectives.

The Treaty provides the instruments needed in Stage Three of Economic and Monetary Union (EMU) to link the jurisdiction of the single monetary policy (i.e. the euro area) with those of national supervisory policies (domestically chartered institutions). First, the Eurosystem is to "contribute to the smooth conduct of policies pursued by competent authorities relating to the prudential supervision of credit institutions and the stability of the financial system" (Article 105 (5) of the Treaty). Second, the ECB is accorded an advisory function in the regulatory process (Article 105 (4) of the Treaty and Article 25.1 of the Statute of the ESCB). These provisions reflect the interest of the Eurosystem, as the central bank of the euro area, in the maintenance of the stability of the financial system.

The Banking Supervision Committee (BSC), a group of high-ranking representatives of central banks and banking supervisory authorities, is the main body which assists the Eurosystem in the fulfilment of above-mentioned tasks. Although Article 105 (5) of the Treaty applies only to participating countries, the co-operation within the BSC involves all central banks and supervisory authorities of the 15 Member States. At the same time, the BSC may also act as a forum for consultations among EU banking supervisors on issues not related to the supervisory tasks of the Eurosystem. In the accomplishment of this twofold mandate, it contributes to ensure the ability of both NCBs and supervisory authorities to co-operate across national borders, whenever

needed. The arrangements currently in place can be described by looking at co-ordination mechanisms: (i) within the Eurosystem, (ii) between supervisors and the Eurosystem and (iii) among supervisory authorities.

Co-ordination mechanisms are primarily called for within the Eurosystem. This is the case for emergency liquidity assistance (ELA), which embraces the support given by central banks in exceptional circumstances and on a case-by-case basis to temporarily illiquid institutions and markets. At the outset, it is necessary to stress that the importance of ELA should not be overemphasised. Central bank support should not be seen as a primary means for ensuring financial stability, since it bears the risk of moral hazard. Preventive measures aimed at fostering the adoption of sound risk management practices on the part of financial institutions, and the effectiveness of prudential regulation and supervision in achieving this goal, are the first line of defence against excessive risk-taking behaviour and financial distress. Furthermore, the provision of ELA has been a very rare event in industrial countries over the past few decades, while other elements of the safety net have gained importance in the management of crises. However, if and when appropriate, the necessary mechanisms to tackle a financial crisis are in place. The main guiding principle is that the competent NCB takes the decision concerning the provision of ELA to an institution operating in its jurisdiction. This would take place under the responsibility and at the cost of the NCB in question. Mechanisms ensuring an adequate flow of information are in place in order that any potential liquidity impact can be managed in a manner consistent with the maintenance of the appropriate single monetary policy stance. The agreement on ELA is internal to the Eurosystem and therefore does not affect the existing arrangements between central banks and supervisors at the national level or bilateral and multilateral co-operation among supervisors and between the latter and the Eurosystem. However, their smooth functioning assumes an ability to implement, swiftly and efficiently, co-ordination mechanisms aimed at dealing with the cross-border implications of financial crises and at preventing contagion.

As far as co-operation between the Eurosystem and the supervisory authorities of the EU countries is concerned, the BSC is the major forum for addressing relevant issues. In assisting the Eurosystem with prudential supervision and financial stability issues, it examines matters of a macro-prudential nature, reviews developments in the banking and financial systems and promotes a smooth exchange of information between the Eurosystem and banking and other supervisory authorities. This function of the BSC is aimed at providing the co-ordination needed between central banking and banking supervision. In particular, the BSC serves as a channel for conveying useful information to the supervisory authorities on credit institutions which the ECB and the NCBs might gain from the performance of their basic tasks in the field of monetary policy and payment and securities settlement systems. At the same time, it allows the reverse flow of information from supervisory authorities to the Eurosystem to be managed. In particular, in the light of possible systemic implications, supervisors are prepared to inform the Eurosystem as soon as any major problems in the banking system arise. As a matter of principle, the BSC is in a position to address all the relevant issues, since, at the Community level, the post-BCCI Directive has removed legal impediments to the flow of confidential information between supervisory agencies and the central banks, including the ECB and the Eurosystem. By relying on existing arrangements at the national level, the flow of information between the supervisory agencies and the Eurosystem is, as a rule, channelled through the respective NCBs.

Co-operation between national authorities in the field of prudential supervision is based on both bilateral and multilateral arrangements. Bilateral co-operation between home and host country authorities has been significantly

strengthened in all sectors of financial activity. The network of memoranda of understanding implemented in the European Economic Area (EEA) in the banking sector is an expression of the effort to sharpen the channels for the exchange of information and to facilitate the supervision of cross-border activities. The memoranda of understanding typically cover practical provisions governing establishment facilitating procedures, cross-border examinations of branches and enhancing the exchange of information in respect of subsidiaries. Multilateral co-operation in the field of prudential supervision within the various sectors of financial activity is also well established through the operation of several committees. In the banking sector, besides the second function of the BSC, the Groupe de Contact has been operating since 1972. This group functions as a forum for multilateral co-operation and the exchange of information at the EEA level on issues relating to the implementation of banking regulation and supervisory practices, including the discussion of individual cases. In the securities sector, the Forum of European Securities Commissions (FESCO) was established in 1997 to foster multilateral cooperation among the securities commissions at the EEA level. The Conference of Insurance Supervisory Authorities fulfils similar functions in respect of the insurance sector.

All in all, the integration of the banking and financial system within the EU has been achieved through reliance on an institutional framework based on national competence and co-operation. The single monetary policy and the accelerated integration of banking and financial markets in the euro area have increased the importance of co-operation within the Eurosystem, between supervisory authorities and the Eurosystem, well as among supervisors. The necessary arrangements to facilitate the exchange of information and to implement commonly agreed policy actions to tackle threats to financial stability are in place.

#### 2 Structural changes in the EU banking and financial sector

The monitoring of structural changes taking place in the euro area and EU banking and financial markets is relevant both to the needs of the Eurosystem, as the central bank for the euro area, and to the national supervisory policies. Since the introduction of the euro, these changes have gained momentum, fostering the re-organisation of the financial services industry. The potential specific effects of the introduction of the euro on EU banks have been examined extensively by the BSC.

An important driving force for change is information and communication technology.2 This contributes to reducing the costs associated with the collection, storage, processing and transmission of information, by replacing paper-based and labour-intensive methods with automated processes. Second, it modifies the ways in which customers have access to banking services and products, mainly through automated channels, viz. telephone, personal computer and internet banking ("remote banking"). Both effects alter the nature of competition in banking and potentially affect the latitude of the market for banking services, also broadening the set of potential entrants. Financial institutions are in different ways responding to, and at the same time further strengthening, these and other changes in the market structures. In general, large institutions are repositioning themselves in the new market by adding new activities and/or expanding geographically. This is deemed necessary in order for them to be able to continue to serve the market for wholesale activities. This repositioning has led to an increase in mergers and acquisitions involving large European financial institutions. However, only a few cross-border mergers and acquisitions have taken place.

Different market dynamics are driving changes within small institutions. The fixed costs associated with investments in information and communication technology have increased the relevance of economies of scale. A significant number of small

European institutions have been involved in domestic mergers and acquisitions. In some EU countries savings and co-operative banks have further intensified the mutual co-operation within their groups, either through specific co-operation agreements or by setting up joint venture institutions to provide asset management and securities clearing facilities. The downsizing effect on banking capacity in Europe - measured as the number of branches and number of employees - has as yet proved largely insubstantial. However, rationalisation of the organisational structures and significant improvements in efficiency are generally visible only with a time-lag.

Banks, both large and small, are also adopting strategies to respond to the process of disintermediation, whereby an increasing number of financial services are provided by means of direct market intermediation or by non-bank financial institutions. Banks are expanding into the asset management business in order to contain disintermediation of traditional banking products. This is mainly evident in the following: (i) an increased involvement in services for securities trading, (ii) custody and, most frequently, (iii) the establishment of subsidiaries to manage investment funds. In any event, the effect is quite visible in banks' income statements, which show a shift from interest to non-interest income. The analysis conducted by the BSC<sup>3</sup> shows that in the EU non-interest income has been the most dynamic component in the banks' income structure in recent years and its relative importance (as a percentage of the total operating income) has been constantly increasing. Notwithstanding the increased costs associated with the development of non-traditional activities, the increase in non-interest income also seems to have had

<sup>1 &</sup>quot;Possible effects of EMU on the EU banking systems in the medium to long term", ECB, February 1999.

<sup>2 &</sup>quot;The effects of technology on the EU banking systems", ECB, July 1999.

<sup>3 &</sup>quot;EU banks' income structure", ECB, April 2000.

a positive effect on EU banks' profitability in recent years, largely compensating for the shrinkage in income margins from traditional banking activities. The composition of non-interest income across the EU banking systems is somewhat heterogeneous; fees and commissions represent the main sub-component, accounting for around 60% of total non-interest income.

On the whole, the reorganisation of the banking and financial industry has occurred

mainly within national borders, and the relevance of cross-border activity is still limited, especially in the supply of retail services. However, common trends are at work in the euro area and EU countries. The swift establishment of a single money market and the accelerated integration of capital markets after the introduction of the euro highlight the fact that financial intermediaries and markets are increasingly exposed to shocks originating beyond national borders.

#### 3 Macro-prudential analysis

The BSC has started to analyse the soundness of the banking and financial sector at the EU/euro area level on the basis of a commonly agreed body of information. This work is referred to as macro-prudential analysis. In addition, other international organisations are currently developing this field of analysis, in order to sharpen the instruments for comprehending the reasons for the severe financial turbulence which has recently taken place. A key component in this work has been the development of reliable data sources for understanding the vulnerabilities in the financial systems of both developed and developing countries.

The framework for macro-prudential analysis relies on a number of indicators based on aggregated banking system data obtained from central bank and supervisory sources, and on the data on the macroeconomic and financial environment relevant to assessing the soundness of the banking sector. These indicators aim at capturing significant buildups of risk exposure within the banking system, potential disturbances emerging from outside the banking system, and channels of contagion through which difficulties at one institution could spread to others. The techniques used involve systematic and regular analysis on the basis of quantitative indicators and an interpretative input that relies on the information and insights obtained from the supervisory process. The

macro-prudential analysis carried out within the BSC focuses on the banking sector at the EU/euro area level. It integrates with other activities carried out within the Eurosystem in the fields of the oversight of payment and securities settlement systems, the surveillance of money and capital markets relevant to the conduct of monetary policy and the monitoring of international financial markets. The analysis put forward in these different contexts further enhances the Eurosystem's instruments for contributing to the safeguarding of financial stability.

In 1999 ad hoc investigations were carried out on two topics: the credit exposures of EU banks to emerging and developing countries and the possible implications of adjustments in asset prices for the stability of the banking sector. With regard to the first issue, it was found that the EU banking sector has continued to reinforce its position as the largest group of international lenders to emerging and developing countries. However, since the exposures to the riskiest countries have been relatively limited, banks have made significant risk provisions and the general economic situation in these countries has improved, the assessment of the risks to EU banking systems became more positive during 1999. With regard to the second issue, the prolonged rise in most EU stock prices, together with the rapid increases registered in some EU countries' real estate prices,

indicated the need for increasing attention on the part of national supervisory authorities. In this regard, some national authorities have taken special action to increase awareness of the risks and ensure that banks are not overly exposed.<sup>4</sup>

#### 4 Risk assessment systems and credit registers

In addition to the collection of information on market developments and threats to banking and financial stability, the implementation of preventive measures at the national level is enhanced by co-operation on, and the exchange of information with regard to, supervisory practices. Risk assessment systems are tools commonly used in this regard.

Supervisory risk assessment systems comprise all formalised and structured systems and operations employed by banking supervisors to identify, at an early stage, credit institutions which display high or risk or weak Notwithstanding their national orientation given that they are geared to the specific features and needs of national banking systems - supervisory risk assessment systems share many similarities across the EU. The efforts undertaken in this field by the BSC have mainly entailed the analysis of systems in operation or in the process of being developed by banking supervisory authorities and the NCBs in several Member States. Contacts have extended beyond the EU, since an analysis of the systems used by the Canadian Deposit Insurance Corporation and by the US Federal Reserve was also made and presented to the EU supervisory authorities and NCBs represented in the BSC.

Although they are mainly intended to assist risk management by institutions, credit registers may also be used as a supervisory tool. Information-sharing among national authorities in the field of central credit registers (CCRs) currently in operation has also intensified. Despite the legal obstacles which some EU countries are facing and which, for the time being, do not allow a cross-border exchange of information among CCRs for commercial banks' use, all technical and operational problems associated with a possible opening-up are being tackled within the BSC. The debate on restructuring the international financial architecture in the light of the lessons learned from the recent crises has flagged the need for extended co-operation in also monitoring exposures of systemic relevance on a cross-border basis.5 The positive and negative aspects of the establishment of an international credit register have been examined. Additional work is being carried out to explore the feasibility of a euro area credit register.

<sup>4 &</sup>quot;Asset prices and banking stability", ECB, April 2000.

<sup>5</sup> See also Chapter IV.



# **Chapter VII**

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

#### I Production of the euro banknotes

The euro banknotes and their individual components are being produced in different European countries by the NCBs and by privately and publicly owned companies. Production of the euro banknotes started in July 1999 after the successful completion of the printing of a pilot series. Before the end of the year printing had started in 9 of the 11 printing works involved in euro banknote production. The later start of production at some printing works is due either to the volume of euro banknotes they need to print, or to the production requirements for national banknotes.

For the time being, the denominations which will be produced in the largest volumes are being printed first. By I January 2002 around 13 billion euro banknotes will have been

printed for the 11 participating countries: 9 billion banknotes to replace national banknotes and 4 billion banknotes as logistical stocks (see Table 10). The nominal value of these banknotes amounts to approximately €600 billion. The estimates of the number of euro banknotes to be printed before the launch will be updated annually, in order to take account of possible changes in the demand for the banknotes.

The security procedures relating to the production and transportation of banknotes and individual components have been reviewed and consolidated. A set of obligatory rules has been developed to ensure a common minimum level of security at the various production facilities.

#### 2 The quality of the euro banknotes and coins

#### Quality of the banknotes

Producing banknotes to the same quality standards at 11 printing works — using raw materials from different suppliers — is a demanding task. It is imperative to ensure identical appearance and consistent performance in both banknote-sorting and banknote-accepting machines, in line with best practice in the production of national banknotes. For this purpose, well-defined inspection and quality control procedures have been established.

All printing works involved in the production of the euro banknotes have implemented a common quality management system, based on ISO standards. The structure of this common system focuses on the quality of the individual banknotes. Detailed procedures for inspection and testing have been defined in order to evaluate fulfilment of the requirements; these were tested during the production of the pilot series.

The proper implementation and application of the quality management system is being assessed by the ECB on the basis of detailed monthly reports prepared by the printing works and audits conducted at the production sites.

#### Quality of the coins

The euro coins are produced in 10 countries by 14 different mints. In June 1999 the EU finance ministers, the mints and the ECB agreed on a detailed quality management system to ensure a high and uniform quality of euro coins. Each mint is responsible for the quality of its own coins in accordance with common rules. The ECB acts as an independent assessor. It evaluates the monthly quality reports on the coins produced and conducts visits to the mints. The ECB would immediately alert the finance ministers if any quality-related problems were to occur.

I ISO 9002: 1994.

#### 3 Protecting the euro banknotes and coins against counterfeiting

Since the decision of the Governing Council of the ECB to establish a database at the ECB to store all the technical and statistical data on counterfeit euro banknotes and coins, the planning process for the counterfeit monitoring system (CMS), comprising the database itself, the tools needed to exploit it and the links to the various users, has progressed. The user requirements have been established and will form the basis for further work. An outline of the technical architecture of the CMS has been elaborated and preparatory work for the development of the functional analysis has started.

In November 1999 the ECB published the "Report on the legal protection of banknotes in the EU Member States". The report is the result of a careful study and assessment of the various aspects of the legal regime for

the protection of the euro banknotes. These include counterfeiting; copyright protection; anti-copying devices for reproduction equipment; the adoption and publication of euro banknote designs; the exchange of damaged or worn euro banknotes; the withdrawal of euro banknotes; the issuance of banknotes by entities other than the ECB and the NCBs; and the issuance of non-legal tender banknotes, known as "fancy" banknotes.

Contacts with Europol, Interpol and the European Commission have been either established or intensified with a view to making the appropriate communication and collaboration arrangements which will be crucial to ensuring the effective flow of information in connection with the prevention and combating of counterfeiting.

#### 4 The EURO 2002 campaign

The Governing Council selected a global communications group to assist in conducting an information campaign in preparation for the introduction of the euro banknotes and coins on I January 2002. Each NCB will be the key interlocutor of the global communications group at the national level.

The main goals of the EURO 2002 campaign are:

- to educate the general public and, more specifically, the different target groups in how to recognise genuine euro banknotes;
- to train shop and bank cashiers how to examine euro banknotes fast and efficiently in order to detect possible counterfeits;

- to ensure favourable reception of the euro banknotes and coins; and
- to gradually prepare the general public as a whole for the introduction of the euro banknotes and coins by repeatedly drawing attention to their designs.

In this context, the term "general public" is used to refer not only to the resident population of the euro area, but also to citizens of other countries in which the euro banknotes will circulate, as well as to visitors to the euro area countries. The campaign will be co-ordinated with the European Commission and the euro area Member States, as well as with Greece.

#### 5 The changeover to the euro banknotes and coins in 2002

#### Changeover framework

With a view to ensuring a successful and smooth operation, the logistics of the 2002 cash changeover need to be clearly determined well in advance so that all those concerned can start the necessary preparations in a timely manner. During the second half of 1999 there were intensive discussions among all those concerned, which allowed ministers represented in the ECOFIN Council – in close co-operation with the NCBs and in line with the views expressed by the ECB – to reach a consensus on the outline of the cash changeover. This is as follows:

- Member States will make their best efforts to ensure that the bulk of cash transactions can be made in euro within a fortnight of I January 2002.
- Participating Member States consider that the period of dual circulation of the old and new banknotes and coins should ideally last between four weeks and two months.
   Member States may facilitate the exchange of old banknotes and coins after this period.
- In order to provide for a sufficient quantity for circulation in the first few days of January 2002, it would be helpful if financial institutions and certain other groups, notably cash-in-transit companies and retailers, were provided with banknotes and coins some time before I January 2002. Member States recall that such frontloading must not lead to putting euro banknotes and coins into circulation before I January 2002.
- In order to help citizens familiarise themselves with the new coins and to facilitate the changeover, Member States agree that making limited quantities of coins available to the public on request, notably to the vulnerable groups of the population, can be envisaged, but not before the second half of December 2001.

This framework allows Member States to implement the cash changeover in the

way which best suits the circumstances prevailing in each country.

#### **Frontloading**

The need and the lead time for frontloading euro banknotes and coins to banks prior to I January 2002 - and, in principle, through the latter to certain other target groups greatly depends on the national changeover scenario chosen, as well as on the national logistical infrastructure. As a general principle, any frontloading should be carried out "as late as possible and as early as necessary". In accordance with this, the Governing Council has agreed on the principle of harmonised earliest delivery dates for supplying relevant target groups with euro banknotes and coins prior to E-day. Each NCB would be free to operate within the maximum lead time in order to meet the domestic needs of frontloading.

With regard to the different target groups, all participating countries acknowledge the need to supply commercial banks with both euro banknotes and euro coins prior to E-day. This will be a prerequisite for a smooth and rapid changeover. In addition, there is a consensus on the need to supply the retail sector, or parts thereof, with euro coins via the banks prior to E-day (sub-frontloading). This stems from the fact that, unlike banknotes, coins are generally brought into active circulation by the retail sector, rather than by banks. In other words, the retail sector will need to have sufficient amounts of euro coins available, from the very first day of circulation, to be given as change for banknotes which consumers will have withdrawn from automated teller machines (ATMs) and over bank counters. Frontloading, as mentioned above, would help to contribute to the important requirement of completing the changeover process within a relatively short period of time.

In accordance with the common statement issued by the ECOFIN Council, several Member States are considering frontloading coins to citizens in the second half of December 2001. As for the euro banknotes, the Governing Council holds the view that the possibility of frontloading to the general public is excluded 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 putting them into circulation.

## Adaptation of ATMs, currency sorting and accepting machines

A considerable number of euro banknotes can be expected to be distributed via ATMs or paid in via cash-in machines. In addition, consumers will be interested from the outset in using euro banknotes and coins to pay for goods and services available from all types of vending machines. Finally, the banks and the cash-in-transit industry will require counting

and sorting equipment which is capable of processing the euro banknotes and coins reliably and securely as soon as they are put into circulation.

It should, therefore, be clear that the adaptation of the relevant machines will be of crucial importance to ensuring a smooth introduction of the euro banknotes and coins in 2002.

Related discussions with the relevant industry and its associations began some years ago. These discussions focused on the question of the timely availability of information on the technical specifications for the euro banknotes and coins and on their availability for the development and testing of the required sensors and other devices.

The relevant industry will have the opportunity to test their sensors and other equipment with euro banknotes in 2000 at a central location provided by the ECB, and in 2001 under a decentralised scheme.<sup>2</sup>

#### 6 Cash circulation before 2002

On I January 1999 the national currency units became sub-units of the euro. However, the euro banknotes and coins will not be issued until I January 2002. In the meantime the banknote circulation in the euro area consists of national monetary tokens. The ECB authorises the issue of the national banknotes and the volume of coin issuance. During the transitional period, to ensure substitutability between the national currency units, the exchange of banknotes denominated in the national currencies of the euro area will be governed by Article 52 of the Statute of the ESCB, which reads as follows:

"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 NCBs at their respective par values."

Against this background, the Governing Council has decided that the NCBs shall, at least in one location in the national territory, by themselves or through their appointed agent, ensure that banknotes of other participating Member States can be either exchanged against national banknotes and coins or, upon request, credited to an account with the institution effecting the exchange, if the national legislation provides for such possibility, in both cases at their respective par value. The NCBs may limit the number and/or the total value of the banknotes they are prepared to accept for any given transaction or on any one day.

With regard to the euro coins, the industry has the possibility to conduct tests in test centres established by Member States for that purpose.

#### Table 10

# Quantity of euro banknotes to be produced by 1 January 2002

(1999 estimates, in millions of banknotes)

EU-11 TOTAL	12,990
Finland	170
Portugal	450
Austria	520
Netherlands	605
Luxembourg	45
Italy	1,950
Ireland	180
France	2,585
Spain	1,925
Germany	4,030
Belgium	530

In accordance with the above, some 500 NCB branches throughout the euro area have been involved in the exchange of non-national euro area banknotes. From a practical point of view, the exchange within the framework of Article 52 ran smoothly in all the participating Member States in 1999.

In addition, the NCBs may repatriate the banknotes of other participating countries or appoint an agent to perform this repatriation service on their behalf or use existing commercial repatriation channels.

Banknotes repatriated to their respective issuing countries were worth a total value of  $\[ \in \]$ 6.2 billion and amounted to 115.7 million banknotes in total. The highest amounts (in terms of value) were denominated in Italian lire ( $\[ \in \]$ 1.7 billion), Dutch guilders ( $\[ \in \]$ 1.1 billion) and Austrian schillings ( $\[ \in \]$ 0.8 billion).



# **Chapter VIII**

# Development of the statistical framework

The main focus of the ECB's statistical work, carried out in close co-operation with the NCBs which collect data from reporting agents, is the production and further development of statistics covering the euro area, in order to support the conduct of the single monetary policy of the Eurosystem as required by the Treaty establishing the European Community (Treaty).

## Money and banking statistics, interest rates and securities issues

The ECB published the first data relating to the consolidated balance sheet of the Monetary Financial Institutions (MFI) sector, and the monetary statistics drawn from it, in December 1998. Such data have been published each month since, within a month of the reporting date. The statistics were developed further in the course of 1999. In March 1999 (with regard to February data) growth in the monetary aggregates was calculated for the first time from flows, that is after adjustment for reclassifications, revaluations and other changes which do not arise from transactions; the growth rates had previously been calculated from levels outstanding. Changes in the consolidated MFI balance sheet in the form of flows became available at the same time. With effect from the publication of monetary statistics for May 1999 in late June, the three monetary aggregates (MI, M2 and M3) have been available in a provisional seasonally adjusted form. The balance sheet data are also used to calculate credit institutions' required holdings of minimum reserves.

MFIs report more detailed information quarterly, as a sectoral, currency and maturity analysis of their business, with some additional information on the type of lending. Limited quarterly data were first published in the April 1999 issue of the ECB Monthly Bulletin. These have since been extended in coverage, and now include some backdata.

The "List of MFIs" is updated monthly and is published on the ECB's website; the

requirement is to maintain a consistent application of the definition of an MFI across the euro area (and indeed the European Union).

The ECB published data on debt securities issued for the first time in November 1999. These data relate to new issues, redemptions and net issues by residents of the euro area, in euro and in other currencies separately, and to issues denominated in euro by non-residents of the euro area, together with amounts outstanding.

Since the beginning of 1999 the ECB has also published a range of money market interest rates and government bond yields in the euro area, as well as various interest rates representing the rates paid by MFIs on deposits and charged on loans in their retail business. Retail banking markets remain rather fragmented in the euro area. The data from which these rates are compiled are not yet fully comparable across the euro area, and the results should be used primarily to analyse developments in retail interest rates over time, rather than levels.

Work began in 1999 on improving the comparability of retail interest rate statistics; this may take some time and should be kept in step with the probable growing integration of retail financial markets in the euro area. Similar improvements to securities issues statistics will also be necessary. Supplementary information which cannot be derived from MFI balance sheets, such as information on holders of negotiable instruments issued by MFIs, requires further development. Revisions in the monetary and securities issues statistics have been necessary in most months, although their incidence, judging from experience with the longer-established MFI balance statistics, should decrease as systems settle down. Finally, statistics on other (nonmonetary) financial institutions, especially collective investment institutions, and on financial derivatives business are in the process of being defined.

# Balance of payments and international investment position statistics (including reserves) and effective exchange rates

The first euro area monthly balance of payments (b.o.p.) aggregates covering key items were published in April 1999, with data in ECU back to the beginning of 1998. The first, more detailed, quarterly figures were published in September. The first net international investment position (i.i.p.) data for the euro area relating to end-1997 and end-1998 were published in the December 1999 issue of the ECB Monthly Bulletin.

The concepts and definitions followed in b.o.p./i.i.p. statistics generally conform to the 5th edition of the IMF Balance of Payments Manual (October 1993), although some departures in the monthly statistics are accepted in order for it to be possible for tight deadlines to be met. Member States devoted much effort to achieving harmonisation before the publication of the first data. However, the revisions observed in some Member States indicate that the process is still incomplete; efforts to enhance data quality will continue in 2000. The ECB has taken an active role, in co-operation with the European Commission (Eurostat), NCBs and statistical institutes, in analysing discrepancies in b.o.p. statistics.

Portfolio investment and the "other investment" account present the greatest challenges to compilers of b.o.p. and i.i.p. statistics. A major difficulty, with repercussions throughout financial statistics, is the recording of holdings of negotiable securities, together with the necessary breakdowns.

The Eurosystem's international reserves have been published with the b.o.p. data since April. These data comprise the Eurosystem's foreign currency claims on non-residents of the euro area, together with gold, special drawing rights and reserve positions in the IMF. Foreign currency claims on residents of the euro area – for example, non-euro deposits placed with banks located in

participating Member States – are published separately, but are not included in international reserves. Preparations were made for the publication of the Eurosystem's international reserves in accordance with the new standard established by the IMF and the BIS beginning in March 2000.

In the early months of Stage Three of Economic and Monetary Union (EMU), the ECB used a measure of the effective exchange rate of the euro compiled by the BIS. Since October 1999 the ECB has published its own index, calculated as a geometric weighted average of bilateral exchange rates of the euro against the currencies of 13 countries, taking account of bilateral trade as well as competition in third markets. A monthly "real" index makes adjustment for changes in consumer prices in the euro area and competitor countries.

#### Financial accounts

The ECB is developing financial accounts statistics, covering financial flows and a statement of financial assets and liabilities outstanding, to complement monetary analysis and economic research.

The main sources for these data will be euro area MFI consolidated balance sheet, b.o.p. and securities issues statistics; financial statistics for the government sector in euro area countries; and national financial accounts, as required under the European System of Accounts 1995 (ESA 95), which represents a powerful instrument for harmonisation.

At present the ECB publishes annual data relating to the saving, investment and financing of private non-financial sectors in the euro area from national capital and financial accounts. The intention is to compile such data from the quarterly euro area sources mentioned above, making the best possible use of national financial accounts data.

#### **Economic statistics**

The ESCB's primary objective according to the Treaty is to maintain price stability; the measure of prices used for this purpose is the Harmonised Index of Consumer Prices (HICP) covering the euro area. The ECB also uses a wide range of economic data to make a broadly based assessment of the outlook for price developments and the risks to price stability in the euro area. The ECB consequently takes a keen interest in the quality and availability of statistics relating to prices and costs, national accounts, labour market data, and economic indicators in general. Survey data of a qualitative nature are also used. Frequency and timeliness are important elements of quality as far as their use to support the conduct of monetary policy is concerned.

Further progress has been made with regard to the HICP. Its coverage has been extended to include the health, education and social protection sectors, although no backdata for the newly covered items are available. The issue of the treatment of owner occupied housing expenditures remains to be resolved.

The European Commission (Eurostat) produces three quarterly estimates for euro area GDP, after 70, 100 and 120 days. Some estimation is necessary since not all euro area countries currently compile quarterly accounts. The introduction of the ESA 95 proved to be more difficult than expected. Some indicators, particularly labour market statistics, are still missing for many countries, thus making it impossible to compile euro area aggregates which are consistent with national accounts. The lack of employment and labour cost data for the euro area also affects derived indicators such as unit labour costs.

The European Commission publishes euro area aggregates for several short-term indicators, in particular industrial production and producer prices. Most indicators do not cover all euro area countries and rely on some estimation. The timeliness of the data

improved in 1999. Full implementation of the EU Council Regulation on short-term statistics (1998) will take some years owing to derogations. The ECB uses timely business and consumer confidence surveys carried out by the European Commission on a monthly basis.

## Co-operation with the European Commission

Money and banking statistics are the responsibility of the ECB at the European level; responsibility for b.o.p., i.i.p. and financial accounts statistics is shared between the ECB and the European Commission (Eurostat); price and cost and other economic statistics are the responsibility of the European Commission. This division of responsibility worked well in 1999.

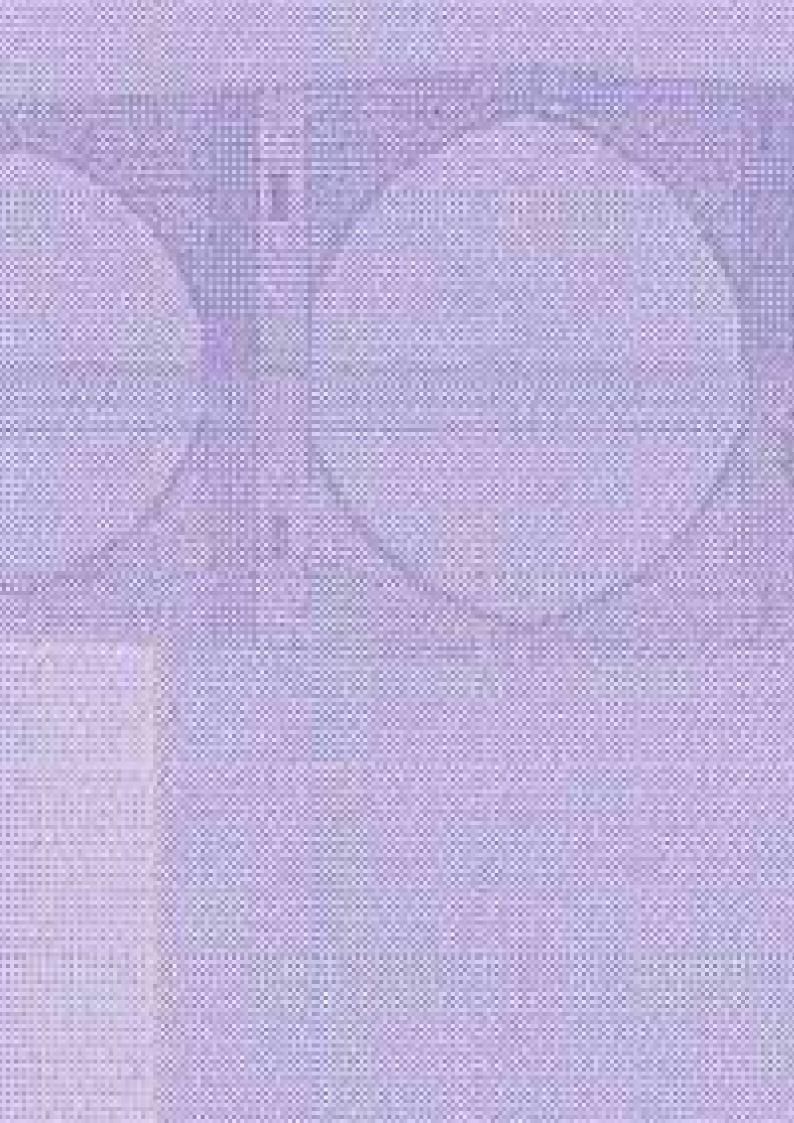
#### Co-operation with international institutions

In accordance with Article 5.1 of the Statute of the ESCB, the ECB also co-operates closely with international organisations with regard to statistical matters. Co-operation in 1999, involving mainly the BIS and the IMF, was particularly close in the areas of b.o.p. statistics and international reserves, securities issues (where the BIS is the source of data on euro-denominated issues by non-residents of the euro area), and data relating to the international use of the euro.

### Statistics relating to non-participating Member States

All EU Member States were strongly encouraged to undertake the statistical preparations for participation in Stage Three of EMU. In practice, the ECB receives a fairly full set of data from non-participating Member States. The data are used to monitor economic and financial developments in those countries. The integration of statistics relating to those countries into euro area aggregates will, however, require intensive work with

the country or countries concerned in the period preceding the enlargement of the euro area.



# Chapter IX

# Other tasks and activities

#### I Advisory functions

Article 105 (4) of the Treaty and Article 4 of the Statute of the ESCB require that the ECB be consulted by the EU Council or the responsible national authorities, as appropriate, on any proposed Community or national legislation within the ECB's fields of competence.

The limits and conditions which apply to consultations on draft legislation by national authorities are set out in Council Decision 98/415/EC of 29 June 1998.

In addition, the ECB may be consulted on a voluntary basis by national authorities on

draft legislation implementing EC Directives within its fields of competence.

In total, 22 consultations were initiated in 1999, of which three involved Community legal acts and 19 related to draft national legislative provisions falling within the fields of competence of the ECB. This is less than in 1998 (64 consultations), since legislation on the statutes of the NCBs and on the introduction of the euro was passed before January 1999.

The box below summarises the consultations initiated in 1999.

Box 7				
Consultation procedures in 1999				
No.	Originator	Subject		
1	Spain	Implementation of Directive 98/26/EC of 19 May 1998 on settlement finality in payment and securities settlement systems ("Settlement Finality Directive")		
2	Italy	Amendments to law on the introduction of the euro		
3	Italy	Production and issuance of coins		
4	Greece	Dematerialisation of the shares of the Bank of Greece		
5	Austria	Banking supervisory authority		
6	European Commission	Detailed rules for the implementation of Council Regulation (EC) No. 2494/95 as regards minimum standards for the treatment of insurance in the Harmonised Index of Consumer Prices <sup>1</sup>		
7	Austria	Implementation of Directive 97/5/EC of 27 January 1997 on cross-border credit transfers and of the Settlement Finality Directive		
8	European Commission	Amendment to the Commission Regulation (EC) No. 2214/96 concerning the sub-indices of the Harmonised Index of Consumer Prices <sup>2</sup>		
9	Sweden	Implementation of the Settlement Finality Directive		
10	Germany	Third act on the introduction of the euro		
11	EU Council	Detailed rules for the implementation of Council Regulation (EC) No. 2494/95 as regards minimum standards for the treatment of products in the health, education and social protection sectors in the Harmonised Index of Consumer Prices <sup>3</sup>		
2 O.	I C 252, 3.9.1999, p.4. I C 285, 7.10.1999, p.14. I C 324, 12.11.1999, p.11.			

12	Ireland	Copyright and Related Rights Bill
13	The Netherlands	Protection of credit institutions and other financial institutions against liabilities resulting from the closure of payment and securities settlement systems on 31 December 1999
14	Portugal	Draft law endowing the Banco de Portugal with the competence (i) to produce and print paper money and other security documents, (ii) to perform the distribution of banknotes and (iii) to develop services related to the pursuance of such activities
15	Portugal	(i) Legal framework of credit institutions and financial companies concerning the Deposit Guarantee Fund and (ii) activities of the Deposit Guarantee Fund
16	Spain	Arrangements for the allocation of the Banco de España's profits to the Treasury
17	Luxembourg	Contractual obligations of the financial sector due on 31 December 1999
18	Greece	Amendments to the Statute of the Bank of Greece
19	Luxembourg	Implementation of the Settlement Finality Directive
20	France	Statute and role of the IEDOM (Institut d'émission des départements d'outre-mer)
21	France	Statute and role of the IEDOM
22	Luxembourg	Balance of payments statistics

# 2 Compliance with the prohibitions on monetary financing and privileged access

Pursuant to Article 237d (ex Article 180d) of the Treaty establishing the European Community (the Treaty), the ECB is entrusted with the task of monitoring compliance on the part of the 15 NCBs of the EU with the provisions under Articles 101 and 102 (ex Articles 104 and 104a respectively) of the Treaty and the related Council Regulations (EC) Nos. 3603/93 and 3604/93. Article 101 prohibits the ECB and the NCBs from providing overdraft facilities or any other type of credit facility to governments and Community institutions or bodies, as well as from purchasing debt instruments directly from them. Article 102 prohibits any measure, not based on prudential considerations, which establishes privileged access for governments and Community institutions or bodies to financial institutions. From the start of Stage Two of EMU this monitoring exercise was the responsibility of the European Monetary Institute. As from I June 1998 the ECB continued to monitor the NCBs' fulfilment of their obligations. In parallel, the European Commission monitors Member States' compliance with the above provisions.

The Eurosystem considers it very important that the above-mentioned Treaty provisions and the associated Council Regulations are respected under all circumstances. Monetary financing of governments and public institutions, as well as any form of privileged access to financial institutions, would generate inflationary expectations and would. therefore, significantly hamper the credibility of the single monetary policy. In addition, it could reduce the incentives for pursuing the necessary fiscal consolidation programmes in

euro area countries, by providing governments with an easy way of meeting their borrowing requirements.

The ECB also monitors the NCBs' secondary market purchases of debt instruments issued both by the domestic public sector and by the public sector of other Member States. According to Council Regulation (EC) No. 3603/93, the acquisition of public sector debt instruments in the secondary market must not be used to circumvent the objective of Article 101 of the Treaty. Such purchases

should not become a form of indirect monetary financing of the public sector.

Overall, the information provided by the NCBs to the ECB confirms that the provisions of Articles 101 and 102 of the Treaty and the associated Council Regulations have generally been complied with during the period under review. Some imperfections and technical problems have occurred in the course of the transition to new arrangements. These inconsistencies are of minor importance and corrective measures are in hand.

#### 3 Transition to the year 2000

In 1999 the ESCB devoted significant effort and resources to ensuring a smooth transition to the year 2000. As the year 2000 problem had its roots in computer technology, most of the initial work was aimed at achieving year 2000 compliance for IT systems, with a particular focus both on the critical systems needed to conduct monetary policy and on the TARGET system.

#### Testing and remedial activities

An inventory was compiled of all software and hardware at the ECB and at each of the NCBs. Where appropriate, systems were upgraded and year 2000 compliant versions of software were installed. The ECB and each of the NCBs were individually responsible for carrying out a series of tests on their internal systems in order to ascertain that the systems correctly recognised dates in 2000. In addition to its internal system compliance tests, the ECB conducted the initial testing of the ESCB-wide systems to the extent that this was possible within a closed environment at the ECB. In this way, all the individual components of the Eurosystem-wide information systems were tested for their year 2000 compliance in the first few months of 1999.

Thereafter, a series of bilateral tests were conducted between the ECB and all the euro area NCBs, as well as with other non-euro area NCBs which chose to participate. These tests were carried out in a simulated year 2000 environment, but using the ESCB production infrastructure, in order to test the continued business functionality of the applications. During testing, only a very small number of year 2000-related problems were identified. In the few cases where noncompliance issues were detected, remedial work was carried out successfully and by late summer 1999 all critical ECB and ESCB systems were deemed to be year 2000 compliant.

In line with other year 2000 compliance activities of the ESCB, TARGET underwent an intensive period of testing. The approach used in the tests was based on the testing procedure which had proven its worth in the testing of TARGET before it went into operation on 4 January 1999. After the successful completion of individual tests of the national components and the connections to the S.W.I.F.T. FIN service, "cross-system" tests were conducted, in which all the NCBs' and the ECB's systems ran for a full TARGET business day in a simulated year 2000 environment. During this second phase a number of credit institutions were involved in the testing of the national real-time gross

settlement system in each country. Finally, TARGET's year 2000 compliance was demonstrated on Saturday, 25 September 1999. Several hundred credit institutions proved their ability to carry out operations for sending and receiving TARGET cross-border payments in a "dress rehearsal" of a full business day in a simulated year 2000 environment. In several countries domestic payment systems were also tested in co-operation with third parties.

In parallel, tests were carried out on the correspondent central banking model, which is a system used to mobilise collateral across borders in order to accommodate the need for collateral for monetary policy operations and for payment systems. The testing did not reveal any problems.

As part of its oversight function, the ESCB also monitored the progress made by other large-value and major EU retail payment systems, in particular those which settle their end-of-day balances in TARGET. Having introduced the TARGET year 2000 strategy as the norm, country reporting procedures were established to verify that all payment systems had completed internal testing by the end of April 1999 and multilateral testing by the end of July 1999.

Once the testing and remedial activities had been completed, the ECB entered into a moratorium, which was in place from I October 1999 to I March 2000, in order to ensure that its systems would remain in a stable year 2000 compliant status.

#### Other precautionary measures

With a view to limiting transactions on 31 December 1999, and to enable banking institutions to conduct end-of-year operations and produce full backups of the relevant systems prior to the transition to 2000, on 31 March 1999 the ECB announced its decision to close TARGET on 31 December 1999. In line with this measure, the ECB was also instrumental in bringing

forward legislative initiatives by the EU Member States by proposing a communiqué, as endorsed by the ministers of finance on 17 April 1999. The communiqué stated that Member States should ensure by appropriate means that, as on a normal public holiday, the fulfilment of any contractual obligations on the part of credit institutions or other agents in the financial markets, at least for transactions in euro, would neither fall due nor be enforceable on 31 December 1999.

In addition to its intensive internal compliance activities, the ECB also analysed the impact that the year 2000 transition might have on the euro area. As a result of this exercise, it concluded that the monetary and economic implications of the year 2000 transition were unlikely to be of relevance to the ECB's medium-term-oriented monetary policy strategy. The ECB saw no need for the public to hold higher amounts of banknotes during the transition period than would normally be the case at year-ends; nonetheless, NCBs ensured that sufficient stocks of banknotes were available to meet any extraordinary precautionary demand.

Furthermore, the ECB carefully assessed the appropriateness of the monetary policy operational framework of the Eurosystem for the year 2000 transition. The Eurosystem announced in August 1999 that it did not see a need to introduce any systemic changes to its operational framework as a result of the changeover to the year 2000. Indeed, the operational framework of the Eurosystem was, from the outset, designed with a view to ensuring maximum flexibility in the implementation of monetary policy and it thus allows for any technical adaptations that may be considered appropriate. The Eurosystem's operational framework already had built-in mechanisms designed to accommodate any level of liquidity demand from market participants. In view of the above, only a minor technical change was announced on 23 September 1999, namely that no new main refinancing operation would be initiated in the first week of 2000, and that no such operation would mature during that week,

which was made possible by extending the maturity of the last two main refinancing operations of 1999 to three weeks. An additional measure aimed at contributing to a smooth transition to the year 2000 in the money markets was the increase in the allotment volume for longer-term refinancing operations from the previous level of  $\in$ 15 billion to  $\in$ 25 billion for the last three longer-term refinancing operations of 1999.

In addition, existing legal agreements to which the ECB was party were reviewed and, where necessary, updated to ensure their operability in any year 2000 scenario.

Nonetheless, the ECB did not wish to ignore the potential for unexpected problems to affect the smooth functioning of its systems. As a precautionary measure, the ECB therefore reviewed the contingency procedures developed for the euro changeover, in order to ensure their viability in the event of any problems arising during the transition to the year 2000. It also prepared emergency procedures which would have enabled ECB staff to conduct critical activities from another location. Fortunately, the ESCB systems entered the year 2000 smoothly, and none of the contingency and emergency procedures had to be activated.

#### Communications infrastructure

The various ESCB Committees devoted significant resources to year 2000 preparations during 1999. In order to ensure the overall consistency of year 2000 preparations within the ESCB, the Governing Council established an ESCB Year 2000 Co-ordination Committee, consisting of year

2000 co-ordinators from the NCBs. The Committee was responsible for co-ordination among the ESCB institutions and between the ESCB and international bodies dealing directly with year 2000 issues. Its main tasks included analysing the feasibility and suitability of contingency measures and the procedures for activating such measures, as well as defining ESCB milestones to be monitored before, during and after the transition to the year 2000.

The ESCB Year 2000 Co-ordination Committee formed the core of an efficient communications infrastructure between the ECB and the NCBs, which was established specifically to monitor developments over the year 2000 transition period. Through the regular exchange of information concerning ESCB's internal systems infrastructures, as well as the euro area financial markets, the Committee maintained a continuous overview of the status of the ESCB systems and was in a position to detect any potential problems at a very early stage. The ECB and the NCBs also exchanged information with the Joint Year 2000 Council co-ordinated by the Bank for International Settlements in an effort to help mitigate year 2000-related risks beyond the Eurosystem at the global level. These infrastructures proved to be very efficient.

A significant number of staff members were present at the ECB and at the NCBs during the year 2000 transition weekend to ensure that any unforeseen problems could be dealt with efficiently and effectively. The thorough preparations in 1999 were well rewarded, as both the activities during the transition weekend and the start of operations on 3 January 2000 went very smoothly.

# 4 The administration of the borrowing and lending operations by the European Community

In accordance with Article 1091 (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 European Community under the Medium-Term Financial Assistance mechanism.

In 1999 the ECB received the sums due in respect of interest on outstanding loans from the remaining borrower country (Italy) and paid them to creditors vis-à-vis the European Community. The total amount of outstanding Community lending operations with Italy as at 31 December 1998 was €2,483 million. This figure was unchanged as at 31 December 1999.



# Chapter X

# Public information and accountability

#### I The ECB's information policy and its tools

#### 1.1 Communication policy objectives

Using a wide range of communication tools, the ECB aims to keep the general public informed about its objectives and tasks and to explain the reasons for its actions. In this way the ECB contributes to fulfilling the aims of the Eurosystem's communication policy, namely to enhance the understanding of monetary policy and thus to foster public acceptance of the Eurosystem's policies in the euro area and beyond. Another goal of the communication policy is to promote knowledge and understanding of the way in which the ESCB functions.

The ECB is committed to the principles of openness, transparency and accountability. With this in mind, it provides various audiences with detailed information on its assessment of developments in the euro area economy and in the financial markets. The dissemination of information is organised with a view to ensuring equal and non-discriminatory treatment of different countries and media. The NCBs in the ESCB play an important role in achieving the goals of the ESCB's communication policy.

Some guidance on the communication policy can be found in the Statute of the ESCB, according to which the ECB must publish a report on the activities of the ESCB at least once every quarter. The ECB also has to deliver an annual report on both these activities and the monetary policy of the previous and the current year to the European Parliament, the EU Council, the European Commission and also the European Council. Furthermore, the ECB is obliged to publish a consolidated weekly financial statement of the Eurosystem.

#### 1.2 Communication tools

In fact, the ECB has committed itself to going beyond these requirements. The President and the Vice-President of the ECB explain

the reasons behind the Governing Council's decisions in a press conference held immediately after the first Governing Council meeting each month. The introductory statement to this press conference is released to the press and simultaneously published on the internet on the ECB's website (http://www.ecb.int), and it is also available on the websites of the NCBs of the Eurosystem. This practice has the advantage of presenting the Governing Council's assessment of the economic situation and explaining the main considerations underlying its decisions straight after the meeting.

Further details of the Governing Council's views on the economic situation and the outlook for price developments can be found in the ECB Monthly Bulletin, which is released one week after the first meeting of the Governing Council each month in all II official Community languages.

The ECB Monthly Bulletin is intended to be a valuable tool for observers of the euro area single monetary policy, be they financial analysts, academic economists or representatives of the media. The circulation of this publication exceeds 80,000 copies per issue, not including the number of times this publication is accessed from the ECB's website or from the websites of the NCBs.

In addition, the ECB is sponsoring a series of working papers, in order to disseminate the results of research conducted within the ECB to the broader academic and financial communities. The subject matter addressed in the working paper series reflects those issues of most relevance to the Eurosystem.

A number of reports on topical issues aimed at a professional audience have also been published by the ECB in the period under review. A comprehensive list of documents published by the ECB can be found in an annex to this Annual Report. A complete and systematic collection of all the published ECB legal instruments is provided in the

"Compendium: collection of legal instruments, June 1998 – May 1999", which was published in October 1999.

The ECB has published a brochure describing the euro banknotes and coins. The brochure is intended for the general public and is available in all II official Community languages.

In communications with the general public, however, mass media such as newspapers, magazines, radio and television are very important intermediaries. The European media have shown great interest in the Eurosystem's policies and in the outcome of the Governing Council's deliberations. The members of the Governing Council have endeavoured to accommodate this interest by giving a large number of interviews to a number of media. Public speeches by the members of the Governing Council have also given rise to numerous articles in the European and indeed the international press.

As well as the full range of publications and press releases, a large number of speeches by members of the Executive Board are available on the ECB's website. In addition, it contains background information and a wide variety of statistics on the euro area economy.

Furthermore, the ECB's website provides links to the websites of all the EU NCBs, where much of the material is available in the

respective languages. With the increasing use of the Internet as a communication tool, the importance of the website for the ECB's communication policy is growing all the time. The number of "visits" (one or more pages accessed by the same computer during one session) to the ECB's website confirms that the demand for information through this channel is considerable. In 1999 this figure fluctuated between 20,000 and 40,000 per week, with peaks in the weeks in which press conferences were held or important documents were published.

An intrinsic feature of this communication instrument is the multiplication effect resulting from the distribution of ECB documents via other websites. This effect is impossible to quantify, but should not be underestimated.

The efforts to describe and explain the monetary policy of the Eurosystem would not be complete without personal contacts between the staff of the ECB and opinion leaders and multipliers, such as teachers and students of economics, business administration and law, as well as those involved in other relevant academic fields. To this end, groups of visitors are received at the ECB almost every working day throughout the year. In 1999 the total number of such visitors exceeded 10,000. Visitors come from all over the world, although naturally with a concentration of groups from the EU countries.

#### 2 Accountability

# 2.1 Central bank independence and accountability in Economic and Monetary Union

The institutional independence of central banks allows monetary policy-makers to focus on safeguarding price stability in a lasting and credible manner, without being subject to short-term political considerations. A large

body of theoretical analysis, supported by substantial empirical evidence, supports the view that central bank independence leads to an improved design and implementation of monetary policy and, therefore, to more stable prices. Consequently, central banks have been made independent in a large number of countries around the world. This model is also reflected in the institutional

set-up of the Eurosystem, as laid down in the Treaty. The Treaty stipulates that, when exercising the powers and carrying out the tasks and duties conferred upon them, neither the ECB nor the 11 euro area NCBs, nor any members of their decision-making bodies shall seek or take instructions from Community institutions or bodies, from any government of a Member State or from any other body. Furthermore, the Treaty strictly requires that the Community institutions and bodies and the governments of the Member States undertake to respect this principle and not to seek to influence the decision-making bodies of the ECB or the NCBs in the performance of their tasks.

democratic retain legitimacy, an independent central bank must accountable. Therefore, a framework has to be established which allows the general public and the competent political bodies to monitor the policy of the independent institution and to assess whether it is accomplishing the tasks conferred upon it and is acting within the scope of its responsibilities. This, in turn, requires a clear and precise definition of its mandate. In this way, the decisions and activities of institutions can be assessed against a specific benchmark. Where the mandate includes more than one objective, it is essential for these objectives to be clearly prioritised. Whether or not a task has been accomplished must be evaluated by reference to the observable policy outcome. The primary objective of the Eurosystem is to maintain price stability in the euro area. This primary objective is the ultimate benchmark against which the performance of the Eurosystem has to be evaluated. The ECB has announced a quantitative definition of price stability which further specifies, in precise terms, the yardstick against which the Eurosystem's performance should be measured, thereby facilitating accountability.

# 2.2 The role of the European Parliament in holding the ECB to account

Several channels for the practical implementation of the ECB's accountability are provided for in the Treaty. As described above, the ECB is subject to stringent reporting requirements vis-à-vis the general public and, more specifically, the European Parliament, the EU Council, the European Commission and also the European Council.

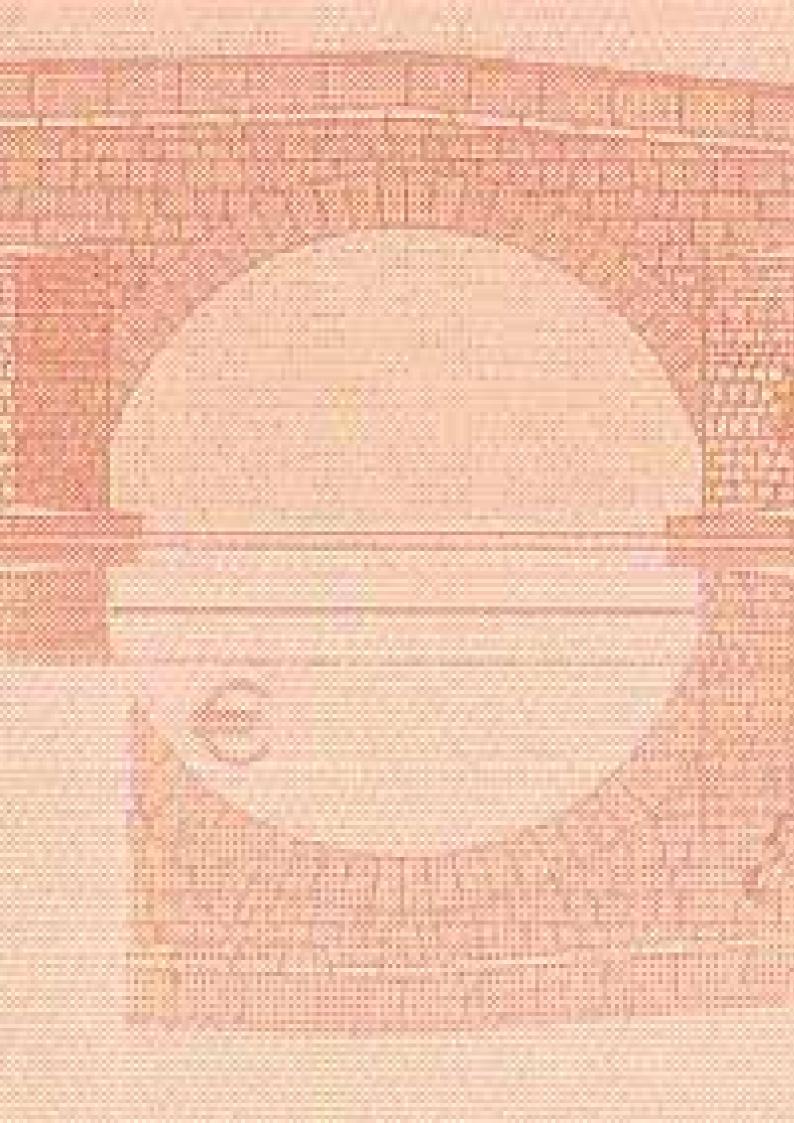
As regards the specific accountability of the ECB vis-à-vis the European Parliament, the Treaty stipulates that the President of the ECB and other members of the Executive Board of the ECB may, at the request of the European Parliament or on their own initiative, be heard by the competent committees of the European Parliament. According to the Rules of Procedure of the European Parliament, the President of the ECB shall be invited to attend meetings of the competent committees at least four times a year to deliver a statement and answer questions.

The regular appearances of the President before the Committee on Economic and Monetary Affairs can certainly be considered as one of the cornerstones of the process by which the ECB is held to account. In this context, the ECB took note of the decision of the European Parliament to restructure its internal working procedures and to establish the Committee on Economic and Monetary Affairs as a full committee in its own right. When appearing before the Committee on Economic and Monetary Affairs, the President of the ECB and other members of the Executive Board have the opportunity to explain in detail the ECB's assessment of current economic and monetary developments in the context of the monetary policy strategy of the Eurosystem, which underpins its monetary policy decisions, as well as the decisions taken by the ECB in other areas of its competence.

The transcripts of these hearings are published on the websites of both the European Parliament and the ECB shortly after each hearing, in order to make the President's statements and the discussions during the question and answer sessions of the hearings available to the general public as soon as possible. In 1999 these quarterly hearings were held on 18 January, 19 April, 27 September and 29 November.

Moreover, the Treaty stipulates that the President of the ECB shall present an annual report on the activities of the ESCB and on its monetary policy to the European Parliament, which may hold a general debate on that basis. In line with this provision, on 26 October 1999 the President attended the plenary session of the European Parliament in order to present the ECB's Annual Report 1998.

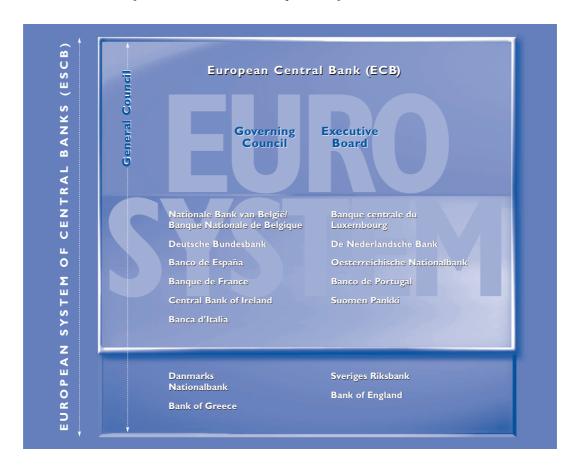
Furthermore, the European Parliament invited members of the Executive Board and staff of the ECB to participate in additional hearings on a number of specific issues inter alia, the representation of the Eurosystem, the preparation of the euro banknotes and statistical matters. These hearings provide a supplementary forum in which the ECB can present its views and explain the reasoning behind its opinions. In addition, a close working relationship has been established between the ECB and the European Parliament, which also includes occasional visits by members of the Committee on Economic and Monetary Affairs to the ECB.



# Chapter XI

# The institutional framework of the Eurosystem and the European System of Central Banks

#### I The Eurosystem and the European System of Central Banks



The European System of Central Banks (ESCB) is composed of the European Central Bank (ECB) and the national central banks (NCBs) of all 15 EU Member States, i.e. it includes the four NCBs of the Member States which have not yet adopted the euro. In order to enhance transparency and facilitate understanding of the structure of central banking in the EU, the term "Eurosystem" has been adopted by the Governing Council of the ECB. The Eurosystem comprises the ECB and the NCBs of the Member States which have adopted the euro. As long as there are Member States which have not yet adopted the euro, it will be necessary to make a distinction between the Eurosystem and the ESCB.

The ECB has legal personality under public international law. It has been established as the core of the Eurosystem and ensures that the tasks of the Eurosystem are carried out either through its own activities or via the

NCBs. In taking its decisions on the way in which the tasks of the ESCB should be carried out, the ECB is committed to the principle of decentralisation in accordance with the Statute of the ESCB.

Each of the NCBs has legal personality according to the national law of its respective country. Despite having separate legal personality, the euro area NCBs form an integral part of the Eurosystem. As such, NCBs carry out the tasks conferred upon the Eurosystem in accordance with the rules established by the ECB. Inter alia, through the participation of their respective representatives in the various ESCB Committees (see Section 4 below), the NCBs also contribute to the work of the ESCB. The NCBs may perform non-Eurosystem functions on their own responsibility, unless the Governing Council finds that such functions interfere with the objectives and tasks of the Eurosystem.

#### 2 The decision-making bodies of the ECB

The Eurosystem and the ESCB are governed by the decision-making bodies of the ECB: the Governing Council and the Executive Board. Without prejudice to this, the General Council is constituted as a third decision-making body of the ECB, if and for as long as there are Member States which have not yet adopted the euro as their currency. The functioning of the decisionmaking bodies is governed by the Treaty establishing the European Community (Treaty), the Statute of the ESCB and the relevant Rules of Procedure. While decisions relating to the objectives and tasks of the Eurosystem/ESCB are taken centrally, operations in the euro area are decentralised and are carried out by the NCBs to the extent deemed appropriate and possible.

2.1 The Governing Council

The Governing Council, which is the supreme decision-making body of the ECB, comprises all the members of the Executive Board and the governors of the NCBs of the Member States which have adopted the euro. According to the Treaty, the main responsibilities of the Governing Council are:

- to adopt the guidelines and take the decisions necessary to ensure the performance of the tasks entrusted to the ESCB; and
- to formulate the monetary policy of the euro area, including, as appropriate,

decisions relating to intermediate monetary objectives, key interest rates and the supply of reserves in the Eurosystem, and to establish the necessary guidelines for their implementation.

When taking decisions on monetary policy and on other tasks of the Eurosystem, the members of the Governing Council do not act as national representatives, but in a fully independent personal capacity. This is reflected in the principle of "one person, one vote".

In 1999 the Governing Council met, as a rule, every other week at the ECB's premises in Frankfurt am Main. However, two of these meetings were held by means of teleconferencing. Moreover, the Governing Council decided to meet twice a year in another euro area country as of 2000. In 2000 one meeting will be hosted by the Banco de España in Madrid and one by the Banque de France in Paris.

The Rules of Procedure have been published in the Official Journal of the European Communities, see Rules of Procedure of the European Central Bank, OJ L 125, 19.5.1999, p. 34; Rules of Procedure of the General Council of the ECB, OJ L 75, 20.3.1999, p. 36 and L 156, 23.6.1999, p. 52; Decision of the European Central Bank of 12 October 1999 concerning the Rules of Procedure of the European Central Bank (ECB/1999/7), OJ L 314, 8.12.1999, p. 34. With the exception of the latter, they have been reproduced in the ECB's first legal yearbook "Compendium: Collection of legal instruments, June 1998 – May 1999", October 1999.

#### The Governing Council



Back row (left to right): Luis Ángel Rojo, Guy Quaden, Tommaso Padoa-Schioppa, Jean-Claude Trichet, Klaus Liebscher, Antonio Fazio, Yves Mersch, Maurice O'Connell, Vítor Manuel Ribeiro Constâncio, Nout Wellink, Matti Vanhala, Ernst Welteke, Eugenio Domingo Solans

Front row (left to right): Otmar Issing, Christian Noyer, Willem F. Duisenberg, Sirkka Hämäläinen

Willem F. Duisenberg Christian Noyer Vítor Manuel Ribeiro Constâncio (as of 23 February 2000)

Eugenio Domingo Solans

Antonio Fazio Sirkka Hämäläinen

Otmar Issing Klaus Liebscher Yves Mersch

Maurice O'Connell

Tommaso Padoa-Schioppa

Guy Quaden (as of I March 1999)

Luis Ángel Rojo

António José Fernandes de Sousa (until 22 February 2000)

Hans Tietmeyer (until 31 August 1999)

Jean-Claude Trichet

Matti Vanhala

Alfons Verplaetse

(until 28 February 1999)

Nout Wellink

Ernst Welteke (as of I September 1999)

President of the ECB
Vice-President of the ECB

Governor of the Banco de Portugal

Member of the Executive Board of the ECB

Governor of the Banca d'Italia

Member of the Executive Board of the ECB

Member of the Executive Board of the ECB

Governor of the Oesterreichische Nationalbank

Governor of the Banque centrale du Luxembourg

Governor of the Central Bank of Ireland

Member of the Executive Board of the ECB

Governor of the Nationale Bank van België/

dovernor of the radionale bank vall beig

Banque Nationale de Belgique

Governor of the Banco de España

Governor of the Banco de Portugal

President of the Deutsche Bundesbank

Governor of the Banque de France

Governor of Suomen Pankki

Governor of the Nationale Bank van België/

Banque Nationale de Belgique

President of De Nederlandsche Bank

President of the Deutsche Bundesbank

#### 2.2 The Executive Board

The Executive Board comprises the President, the Vice-President and four other members, appointed by common accord of the governments of the participating Member States at the level of the Heads of State or Government. The main responsibilities of the Executive Board are:

- to prepare the meetings of the Governing Council:
- to implement monetary policy in accordance with the guidelines and decisions laid down by the Governing

- Council and, in doing so, to give the necessary instructions to the Eurosystem NCBs;
- to be responsible for the current business of the ECB; and
- to assume certain powers delegated to it by the Governing Council, including those of a regulatory nature.

Current practice is for the Executive Board to meet at least once a week in order to decide on, inter alia, the allotment volume for the main refinancing operations of the Eurosystem.



Back row (left to right): Tommaso Padoa-Schioppa, Otmar Issing, Sirkka Hämäläinen, Eugenio Domingo Solans Front row: Christian Noyer, Willem F. Duisenberg

Willem F. Duisenberg

Christian Noyer

Eugenio Domingo Solans

Sirkka Hämäläinen

Otmar Issing

Tommaso Padoa-Schioppa

President of the ECB

Vice-President of the ECB

Member of the Executive Board of the ECB

#### 2.3 The General Council

The General Council is composed of the President and the Vice-President of the ECB and the governors of all 15 NCBs, i.e. of both participating and non-participating Member States. It carries out those tasks taken over from the European Monetary Institute which, on account of the fact that the Member States have not all adopted the euro, still have to be performed by the ECB in Stage Three of Economic and Monetary Union. Therefore, the General Council is primarily responsible for reporting on the progress made towards convergence by the non-participating Member States<sup>2</sup> and for giving advice on the necessary preparations

for irrevocably fixing the exchange rates of the currencies of those Member States (see Chapter III). Moreover, the General Council contributes to particular activities of the ESCB, such as the advisory functions (see Chapter IX) and the collection of statistical information (see Chapter VIII). In 1999 the General Council met every three months in Frankfurt.

<sup>2</sup> In accordance with the Protocol on certain provisions relating to the United Kingdom of Great Britain and Northern Ireland and the Protocol on certain provisions relating to Denmark, both of which are annexed to the Treaty, this reporting shall be carried out for the United Kingdom and Denmark only if they decide to adopt the euro.

#### The General Council



Back row (left to right): Yves Mersch, Urban Bäckström, Nout Wellink, Jean-Claude Trichet, Maurice O'Connell, Lucas D. Papademos, Klaus Liebscher, Matti Vanhala, Vítor Manuel Ribeiro Constâncio, Luis Ángel Rojo, Ernst Welteke, Edward A. J. George, Guy Quaden

Front row (left to right): Antonio Fazio, Christian Noyer, Willem F. Duisenberg, Bodil Nyboe Andersen

Willem F. Duisenberg
Christian Noyer
Bodil Nyboe Andersen
Urban Bäckström
Vítor Manuel Ribeiro Constâncio
(as of 23 February 2000)
Antonio Fazio
Edward A. J. George
Klaus Liebscher
Yves Mersch
Maurice O'Connell
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(until 28 February 1999)
Nout Wellink

Ernst Welteke (as of I September 1999)

President of the ECB Vice-President of the ECB Governor of Danmarks Nationalbank Governor of Sveriges Riksbank Governor of the Banco de Portugal

Governor of the Banca d'Italia
Governor of the Bank of England
Governor of the Oesterreichische Nationalbank
Governor of the Banque centrale du Luxembourg
Governor of the Central Bank of Ireland
Governor of the Bank of Greece
Governor of the Nationale Bank van België/
Banque Nationale de Belgique
Governor of the Banco de España
Governor of the Banco de Portugal

President of the Deutsche Bundesbank
Governor of the Banque de France
Governor of Suomen Pankki
Governor of the Nationale Bank van België/
Banque Nationale de Belgique
President of De Nederlandsche Bank
President of the Deutsche Bundesbank

#### 3 The organisation of the ECB

#### 3.1 Corporate governance

Ever since the establishment of the ECB the financial interests of the shareholders of the ECB have been protected and monitored both by the external auditors in accordance with Article 27.1 of the Statute of the ESCB and, with regard to specific aspects, by the European Court of Auditors in accordance with Article 27.2 of the Statute of the ESCB. Moreover, the ECB has its own internal audit and control procedures, which follow the general rules relating to the control structures of private financial and credit institutions. The Directorate Internal Audit continuously assesses the ECB's efficiency and internal control functions. The Directorate is involved in reviewing the reliability and integrity of financial information. In addition, the Internal Auditors Committee (see Section 4) ensures EU-wide co-operation among the ESCB's internal audit functions, by jointly defining audit programmes and audit standards to be used in a decentralised manner for the review of ESCB-wide common infrastructures. The budgetary authority of the ECB is vested in the Governing Council, which adopts the budget of the ECB, acting on a proposal put forward by the Executive Board. In addition, the Budget Committee assists the Governing Council in matters related to the ECB's budget. It is worth mentioning that, among the set of internal controls, the ECB also has internal rules to prevent the abuse of sensitive financial market information ("insider trading rules" and "Chinese walls").

In this respect, the ECB shares the concerns of the European Parliament, the EU Council and the European Commission with regard to the need to combat fraud and has joined the Community initiative against fraud. On 7 October 1999 an Anti-Fraud Committee was established to enforce an anti-fraud scheme within the ECB.<sup>3</sup> The Anti-Fraud Committee is composed of three independent persons of recognised standing and professional experience in the fields of central banking,

justice and policing, and fraud prevention and detection, all of whom were appointed Governing Council, John L. Murray, Judge of the Supreme Court of Ireland, Erik Ernst Nordholt, adviser to the Minister for the Interior of the Netherlands and former Commissioner of the Amsterdam Police Force, Schaumayer, Governor Oesterreichische Nationalbank from 1990 to 1995. The members of the Anti-Fraud Committee took up their functions with effect from I January 2000.4 In response to the conclusions of the Cologne European Council in June 1999, a co-operative relationship will be established with the European Anti-Fraud Office (OLAF5). Within the ECB, the Directorate Internal Audit is entrusted with the task of performing all investigations relating to fraud prevention and detection and, for this purpose, reports directly to the Anti-Fraud Committee.

#### 3.2 Staff developments

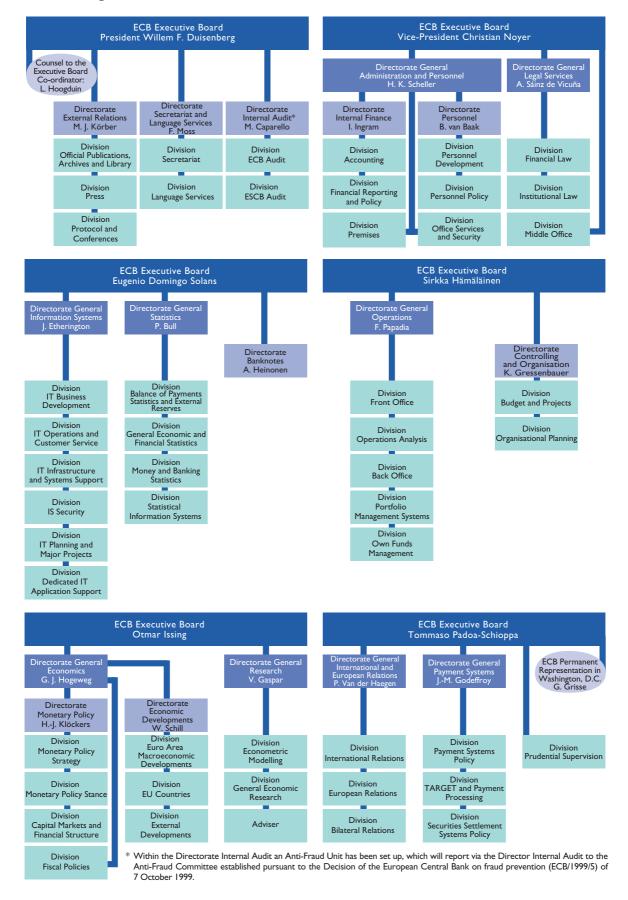
At the end of 1999 the number of staff employed by the ECB from all 15 Member States stood at 732. This compares with 534 staff at the end of 1998. On 2 December 1999 the Governing Council approved the ECB's budget for 2000, which envisages bringing the ECB's staff to slightly over 1,000 in the course of the year. As a consequence, the Executive Board decided on a number of organisational adjustments aimed at reinforcing the ECB's managerial structure, are reflected in the revised organisational chart of the ECB which took effect as of 4 January 2000.

<sup>3</sup> See the Decision of the European Central Bank of 7 October 1999 on fraud prevention (ECB/1999/5), OJ L 291, 13.11.1999, p. 36. In connection with this, the Rules of Procedure of the European Central Bank were amended by a new Article 9a, see OJ L 314, 8.12.1999, p. 32.

<sup>4</sup> See the Decision of the European Central Bank of 16 November 1999 appointing the members of the Anti-Fraud Committee of the European Central Bank (ECB/1999/8), OJ L 299, 20.11.1999, p. 40.

<sup>5 &</sup>quot;Office européen de lutte antifraude".

#### 3.3 The organisational chart of the ECB



#### 4 **ESCB** Committees

The ESCB Committees have continued to play an important role in the performance of the tasks of the Eurosystem/ESCB. At the request of both the Governing Council and the Executive Board, they have provided expertise in their fields of competence and have facilitated the decision-making process. The ESCB Committees are composed of representatives of the Eurosystem central banks and, where appropriate, of other competent bodies, such as national supervisory authorities in the case of the Banking Supervisory Committee. The NCBs of the non-participating Member States have

each also appointed a representative to take part in the meetings of an ESCB Committee whenever it deals with matters which fall within the field of competence of the General Council. At present there are 13 ESCB Committees, 12 of which were established under Article 9 of the Rules of Procedure of the European Central Bank. However, the Budget Committee, which assists the Governing Council in matters related to the ECB's budget, was established in accordance with Article 15 of the Rules of Procedure of the European Central Bank.

#### **ESCB** Committees and their chairpersons

Accounting and Monetary Income Committee (AMICO) Hanspeter K. Scheller International Relations Committee (IRC) Hervé Hannoun

Banking Supervision Committee (BSC) Edgar Meister Legal Committee (LEGCO) Antonio Sáinz de Vicuña

Banknote Committee (BANCO) Antti Heinonen

Market Operations Committee (MOC) Francesco Papadia

External Communications Committee (ECCO) Manfred J. Körber Monetary Policy Committee (MPC) Gert Jan Hogeweg

Information Technology Committee (ITC) Jim Etherington Payment and Settlement Systems Committee (PSSC)

Jean-Michel Godeffroy

Internal Auditors Committee (IAC) Michèle Caparello Statistics Committee (STC) Peter Bull

Budget Committee (BUCOM) Liam Barron



## Chapter XII

# Annual Accounts of the ECB and Consolidated Balance Sheet of the Eurosystem 1999

#### Balance Sheet as at 31 December 1999

<b>A</b> :	ssets	Note number	1999 €	1998 €
ı	Gold and gold receivables	1	6,956,995,273	0
2	Claims on non-euro area residents denominated in foreign currency Balances with banks and security	2		
	investments, external loans and other external assets		41,923,041,208	343,047,341
3	Claims on euro area residents			
	denominated in foreign currency  Claims on financial sector counterparties	2	2,595,090,860	0
4	Claims on non-euro area residents denominated in euro	3		
	Balances with banks, security investments and loans		3,002,567,659	3,739,796,108
5	Securities of euro area residents denominated in euro	4	3,537,141,285	0
	denominated in euro	4	3,537,141,205	U
6	Other assets 6.1 Tangible and intangible fixed assets	5.1	42,589,467	30,112,071
	6.2 Other financial assets	5.2	641,807,406	25,276,953
	6.3 Accruals and deferred expenditure	5.3 5.4	777,032,332	553,582
	6.4 Sundry items	5.4	6,774,149 <b>1,468,203,354</b>	3,458,140 <b>59,400,746</b>
7	Loss for the year		247,281,223	0
To	otal assets		59,730,320,862	4,142,244,195
				,

Li	abilities	Note number	l999 €	1998 €
ı	Liabilities to other euro area residents denominated in euro	6	1,080,000,000	0
2	Liabilities to non-euro area residents denominated in euro	7	301,656,911	0
3	Liabilities to non-euro area residents denominated in foreign currency Deposits, balances and other liabilities	8	4,708,950,946	0
4	<ul><li>Intra-Eurosystem liabilities</li><li>4.1 Liabilities due to the transfer of foreign reserves</li><li>4.2 Other liabilities within the</li></ul>	9.1	39,468,950,000	0
	Eurosystem (net)	9.2	1,720,937,646 <b>41,189,887,646</b>	0 <b>0</b>
5	Other liabilities 5.1 Off-balance-sheet instruments: revaluation differences 5.2 Accruals and deferred income 5.3 Sundry items	10	0 1,237,727,166 302,605,481 <b>1,540,332,647</b>	725,321 4,172,760 78,550,581 <b>83,448,662</b>
6	Provisions	11	21,862,239	31,006,791
7	Revaluation accounts	12	6,860,539,710	697,979
8	Capital and reserves 8.1 Capital 8.2 Reserves	13	3,999,550,250 27,540,513 <b>4,027,090,763</b>	3,999,550,250 0 <b>3,999,550,250</b>
9	Profit for the year		0	27,540,513
To	otal liabilities		59,730,320,862	4,142,244,195

#### Profit and Loss Account for the year ending 31 December 1999

	Note		1998 (7 months)
	- Indirib	€	(7 months)
Interest income Interest expenses	(	4,872,234,880 (4,118,082,387)	97,851,703 (2,683,980)
Net interest income	ı	754,152,493	95,167,723
Realised gains/losses arising from financial operation	ns <b>2</b>	(264,942,584)	22,182,536
Write-downs on financial assets and positions	3	(604,920,383)	(22,249,604)
Net result of financial operations, write-down and risk provisions	าร	(115,710,474)	95,100,655
Income from fees and commissions Expenses relating to fees and commissions		593,902 (361,702)	0
Net income from fees and commissions	4	232,200	0
Other income	5	436,898	490,101
Total net income		(115,041,376)	95,590,756
Staff costs Administrative expenses Depreciation of tangible and intangible fixed assets	6 & 7 8	(61,022,091) (60,748,855) (10,468,901)	(29,744,540) (30,229,686) (8,076,017)
(Loss)/Profit for the year		(247,281,223)	27,540,513

Frankfurt am Main, 29 February 2000

EUROPEAN CENTRAL BANK

Willem F. Duisenberg President

#### Accounting policies<sup>1</sup>

## Form and presentation of the financial statements

The financial statements of the European Central Bank (ECB) have been designed to present fairly the financial position of the ECB and the results of its operations. They have been drawn up in accordance with the following accounting policies, which the Governing Council of the ECB considers to be appropriate to the function of a central bank. These policies are consistent with the provisions of Article 26.4 of the Statute of the ESCB, which require a standardised approach to the rules governing the accounting and reporting operations of the Eurosystem.

#### **Accounting principles**

The following accounting principles have been applied:

- · economic reality and transparency;
- prudence;
- recognition of post-balance-sheet events;
- materiality;
- the accruals principle;
- a going concern basis;
- consistency and comparability.

#### **Basis of accounting**

The accounts have been prepared on a historical cost basis, modified to include market valuation of marketable securities, gold and all other on-balance-sheet and off-balance-sheet assets and liabilities denominated in foreign currency. Transactions in financial assets and liabilities are reflected in the accounts on the basis of the date on which they are settled.

## Gold, foreign currency assets and liabilities

Assets and liabilities denominated in foreign currency are converted into euro at the exchange rate prevailing on the balance sheet

date. Income and expenses are converted at the exchange rate prevailing at the time of the transaction. The revaluation of foreign exchange assets and liabilities is performed on a currencyby-currency basis, including on-balance-sheet and off-balance-sheet instruments.

Revaluation to the market price for assets and liabilities denominated in foreign currency is treated separately from the exchange rate revaluation.

No distinction is made between the price and currency revaluation differences for gold. Instead a single gold valuation is accounted for on the basis of the price in euro per fine ounce of gold, which is derived from the exchange rate of the euro against the US dollar on 30 December 1999.

#### **Securities**

All marketable debt securities and similar assets are valued at the mid-market prices prevailing at the balance sheet date. For the year ending on 31 December 1999, mid-market prices on 29 December 1999 were used. Non-marketable securities are valued at cost.

#### Repurchase agreements

Repurchase agreements are recorded in the balance sheet as collateralised inward deposits. The balance sheet shows the deposits and the value of the securities used as collateral. Securities sold under this type of agreement remain on the balance sheet of the ECB and are treated as if they had remained part of the portfolio from which they were sold. Agreements involving securities denominated in foreign currency have no effect on the average cost of the currency position.

I The detailed accounting policies of the ECB are laid down in a Decision of the Governing Council of the ECB of I December 1998 (ECB/1998/NP23), which is available on request

Reverse repurchase agreements are recorded as collateralised loans on the assets side of the balance sheet, for the value of the loan. Securities acquired under this type of agreement are not revalued.

basis and treated in a similar manner to securities. Profits and losses arising from off-balance-sheet instruments are recognised and treated in a similar manner to profits and losses relating to on-balance-sheet instruments.

#### Income recognition

Income and expenses are recognised in the period in which they are earned or incurred.

Realised gains and losses are taken to the profit and loss account. An average cost method is used on a daily basis to calculate the acquisition cost of individual items. In the event of an unrealised loss on any item at the year-end, the average cost of that item is reduced in line with the end-of-year exchange rate and/or market price.

Unrealised gains are not recognised as income, but are transferred directly to a revaluation account.

Unrealised losses are taken to the profit and loss account if they exceed previous revaluation gains registered in the corresponding revaluation account. Unrealised losses in any one security or currency or in gold are not netted against unrealised gains in other securities or currencies.

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

#### Off-balance-sheet instruments

Currency instruments, namely foreign exchange forward transactions, forward legs of foreign exchange swaps and other currency instruments involving an exchange of one currency for another at a future date, are included in the net foreign currency position for the purpose of calculating foreign exchange gains and losses. Interest rate instruments are revalued on an item-by-item

#### Post-balance-sheet events

Assets and liabilities are adjusted for events that occur between the annual balance sheet date and the date on which the Governing Council of the ECB approves the financial statements if such events materially affect the condition of assets and liabilities at the balance sheet date.

#### Intra-Eurosystem balances

Intra-Eurosystem balances (except for the capital of the ECB and positions resulting from the transfer of foreign reserve assets to the ECB) are presented in the balance sheet of the ECB as a net position.

## Treatment of tangible and intangible fixed assets

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

- computers, related hardware and software, and motor vehicles: four years;
- equipment, furniture and plant in building: ten years.

Fixed assets costing less than  $\in$ 10,000 are written off in the year of purchase.

#### ECB's retirement plan

The ECB operates a defined contribution pension scheme. The assets of the plan, which exist solely for the purpose of providing benefits for members of the plan and their dependants, are included in the other assets of the ECB and are identified separately. Valuation gains and losses arising on the assets of the pension fund are recognised as income and expenditure of the retirement plan in the year in which they arise. The benefits payable from the core benefit account, resulting from the contributions of the ECB, have minimum guarantees underpinning the defined contribution benefits.

#### Other issues

Having regard to the role of the ECB as a central bank, the Executive Board of the ECB is of the opinion that the publication of a cash flow statement will not provide the readers of the financial statements with any additional relevant information.

In accordance with Article 27 of the Statute of the ESCB, and on the basis of a recommendation of the Governing Council of the ECB, the Council of the European Union approved the appointment of PricewaterhouseCoopers GmbH as the external auditors of the ECB.

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#### **Notes on the Balance Sheet**

#### I Gold and gold receivables

The ECB holds 24 million ounces of fine gold. This gold was transferred to the ECB at the beginning of 1999 at its then current market value of €246.368 per fine ounce, as part of the foreign reserve assets transferred to the ECB by the NCBs, and represented 15% of the initial value of these assets.

# 2 Claims on non-euro area and euro area residents denominated in foreign currency

These claims consist of balances with foreign banks, loans denominated in foreign currency and investments in securities, denominated mainly in US dollars and Japanese yen.

## 3 Claims on non-euro area residents denominated in euro

These claims principally represent balances with non-participating NCBs arising from transactions processed via the TARGET system.

## 4 Securities of euro area residents denominated in euro

These securities comprise marketable debt issued by specific euro area issuers with a high level of credit quality.

#### 5 Other assets

#### 5.1 Tangible and intangible fixed assets

Net of cumulative depreciation totalling €29.1 million (including depreciation during the lifetime of the EMI), tangible fixed assets comprised the following main items on 31 December 1999:

•	let book value 31 December 1999 €	Net book value at 31 December 1998 €
Computers	15,865,660	12,510,812
Equipment, furniture, plant in building and		
motor vehicles	5,955,720	3,329,884
Assets under construction	n 12,989,835	11,864,257
Other fixed assets	7,778,252	2,407,118
Total	42,589,467	30,112,071

#### 5.2 Other financial assets

The principal components of this item are as follows:

- (a) The counterpart of repurchase operations made in connection with the investment of the ECB's own funds. As at 31 December 1999 repurchase contracts of €565.7 million were outstanding.
- (b) The investment portfolios relating to the ECB pension fund, which are valued at €32.2 million. The assets held represent the investments of accumulated pension contributions by the ECB and the staff of the ECB as at 31 December 1999, and are managed by an external fund manager. The regular contributions of the ECB and members of the plan have been invested on a monthly basis. The assets of the plan are not fungible with other financial assets of the ECB, and net income thereon does not constitute income of the ECB, but is reinvested in the funds concerned, pending payment of benefits. The value of the assets held by the plan is based on a valuation by the external fund manager, using year-end market prices.
- (c) Following an invitation by the Board of Directors of the Bank for International Settlements for the ECB to become a member, on 9 December 1999 the ECB purchased 3,000 shares in the Bank for International Settlements at a cost of €38.5 million.

#### 5.3 Accruals and deferred expenditure

The principal component of this item is accrued interest on securities and other financial assets.

#### 5.4 Sundry items

This position consists mainly of a claim against the German Federal Ministry of Finance in respect of recoverable value added and other indirect taxes paid. Such taxes are refundable under the terms of Article 3 of the Protocol concerning the privileges and immunities of the European Communities, which applies to the ECB by virtue of Article 40 of the Statute of the ESCB.

## 6 Liabilities to other euro area residents denominated in euro

This item comprises deposits by members of the Euro Banking Association (EBA), which are used in order to provide the ECB with collateral in respect of the EBA payments settled through the TARGET system.

#### 7 Liabilities to non-euro area residents denominated in euro

These liabilities principally represent the balance with one non-participating NCB arising from transactions via the TARGET system.

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

Liabilities arising from repurchase agreements in connection with the management of the foreign currency reserves of the ECB are shown under this heading.

#### 9 Intra-Eurosystem liabilities

## 9.1 Liabilities equivalent to the transfer of foreign reserves

At the start of Stage Three of EMU, the NCBs of the participating countries transferred foreign reserve assets to the ECB in accordance with Article 30 of the Statute of the ESCB and a decision of the Governing Council of the ECB which gave effect to that Article. Amounts equivalent to €39.5 billion were transferred between 4 and 7 January 1999 in the form of gold, cash and securities. The currency component (which amounted to 85% of the total value of the transfer) comprised 90% US dollars and 10% Japanese yen.

	C	Capital key
	(%)	€
Nationale Bank van België/ Banque Nationale de Belgique	e 2.8658	1,432,900,000
Deutsche Bundesbank	24.4935	12,246,750,000
Banco de España	8.8935	4,446,750,000
Banque de France	16.8337	8,416,850,000
Central Bank of Ireland	0.8496	424,800,000
Banca d'Italia	14.8950	7,447,500,000
Banque centrale du Luxembo	ourg 0.1492	74,600,000
De Nederlandsche Bank	4.2780	2,139,000,000
Oesterreichische Nationalba	nk 2.3594	1,179,700,000
Banco de Portugal	1.9232	961,600,000
Suomen Pankki	1.3970	698,500,000
Total	78.9379	39,468,950,000

The resulting claims of the NCBs are denominated in euro and remunerated at the short-term refinancing rates of the Eurosystem, adjusted to reflect a zero return on the gold component (see "Notes on the profit and loss account", Note I). During the first three years of Stage Three of EMU, and following a decision of the Governing Council, these claims are subject to a waiver in the event that the ECB has insufficient net income and reserves to cover unrealised losses caused by falls in the exchange rates relating to the foreign reserve assets held. Any

amounts to be waived may not reduce the liability to below 80% of its original value.

## 9.2 Other liabilities within the Eurosystem (net)

This item consists mainly of the TARGET balances of the participating NCBs vis-à-vis the ECB, as follows:

	€
Due from participating central banks in respect of TARGET	7,697,803,922
Due to participating central banks in respect of TARGET	(9,418,628,635)
Net position	(1,720,824,713)

#### 10 Other liabilities

The principal item under the sub-heading "sundry items" comprises repurchase operations made in connection with the investment of the ECB's own funds. The ECB's liabilities in respect of the pension fund (€32.2 million) are also shown under this sub-heading.

#### **II** Provisions

This item consists mainly of administrative provisions relating to expenditure on goods and services.

#### 12 Revaluation accounts

These accounts represent revaluation reserves arising from unrealised gains on assets and liabilities, primarily owing to increases in exchange rates against the euro during the course of 1999.

	1999 €	1998 €
Gold	1,036,876,277	0
Foreign currency	5,821,397,453	697,979
Securities	2,265,980	0
Total	6,860,539,710	697,979

#### 13 Capital and reserves

The fully paid-up subscriptions of the euro area NCBs to the capital of the ECB of  $\in$ 5 billion amount to a total of  $\in$ 3,946,895,000, as shown below:

	Capital key		
	(%)	€	
Nationale Bank van België/ Banque Nationale de Belgique	2.8658	143,290,000	
Deutsche Bundesbank	24.4935	1,224,675,000	
Banco de España	8.8935	444,675,000	
Banque de France	16.8337	841,685,000	
Central Bank of Ireland	0.8496	42,480,000	
Banca d'Italia	14.8950	744,750,000	
Banque centrale du Luxembourg	0.1492	7,460,000	
De Nederlandsche Bank	4.2780	213,900,000	
Oesterreichische Nationalbank	2.3594	117,970,000	
Banco de Portugal	1.9232	96,160,000	
Suomen Pankki	1.3970	69,850,000	
Total	78.9379	3,946,895,000	

The non-euro area NCBs' contributions, which represent 5% of the amount which would have been payable had these countries participated in Monetary Union, amount to a total of  $\[ \in \]$ 52,655,250 as shown below:

	Capital key		
	(%)	€	
Danmarks Nationalbank	1.6709	4,177,250	
Bank of Greece	2.0564	5,141,000	
Sveriges Riksbank	2.6537	6,634,250	
Bank of England	14.6811	36,702,750	
Total	21.0621	52,655,250	

These amounts represent contributions to cover the operational costs incurred by the ECB in connection with tasks performed for the non-euro area NCBs. The non-euro area NCBs are not required to pay up any capital subscriptions beyond the amounts already decided until such time as they join the Eurosystem. The non-participating NCBs are not entitled to receive any share of the

distributable profits of the ECB, nor are they liable to fund any losses of the ECB.

The reserves of the ECB are as follows:

	€ 1999
General reserve fund	5,508,000
Other reserves	0
Retained profit	22,032,513
Total	27,540,513

#### 14 Off-balance-sheet items

No claims and liabilities remained outstanding on unmatured contracts or other open positions. No material contingent liabilities were outstanding as at 31 December 1999.

#### Notes on the Profit and Loss Account

#### I Net interest income

This item includes interest income, net of interest expense, in respect of the assets and liabilities denominated in foreign currency and in euro. The bulk of interest income and expenses arose on balances resulting from TARGET transactions. Net interest income on the foreign reserve assets amounted to €1.5 billion. Remuneration of €913 million was paid to NCBs on their claims on the ECB in respect of the foreign reserve assets transferred at the beginning of 1999.

#### Composition of interest income

	Denominated in foreign exchange (%)		Denominated in euro (%)	
	1999	1998 (7 months)	1999	1998 (7 months)
Securities	84.5%	0.0%	5.1%	0.0%
Other assets	15.5%	100.0%	94.9%	0.0%
Total	100.0%	100.0%	100.0%	0.0%

#### Composition of interest expense

Denominated in foreign exchange (%)			ominated euro (%)	
	1999	1998 (7 months)	1999	1998 (7 months)
Securities	99.6%	0.0%	0.9%	0.0%
Other liabili	ties 0.4%	0.0%	99.1%	100.0%
Total	100.0%	0.0%	100.0%	100.0%

## 2 Realised gains/losses arising from financial operations

A net realised loss resulted from normal portfolio management transactions in securities owing to significant falls in the prices of securities held during the course of 1999.

## Write-downs in financial assets and positions

Falls in prices resulted in the write-down of the acquisition cost of securities shown in the balance sheet to their market value as at 31 December 1999 (see "Accounting policies: Income recognition").

## 4 Net income from fees and commissions

The sub-item "Income from fees and commissions" consists of penalties imposed on credit institutions for non-compliance with the minimum reserve requirement.

#### 5 Other income

Other miscellaneous income during the year arose principally from the transfer of unused administrative provisions to the profit and loss account.

#### 6 Staff costs

Salaries and allowances (€52.3 million) and employer's contributions to the ECB's pension fund and to health and accident insurance are included under this heading. The emoluments of the Executive Board of the ECB amounted to a total of €1.8 million. No pensions were paid to former members of the Executive Board or their dependants during the year. Salaries and allowances of staff, including the emoluments of holders of senior management positions, are modelled in essence on, and are comparable with, the remuneration scheme of the European Communities.

On the last working day of 1999 the ECB employed 732 staff, of whom 55 held managerial positions. The average number of staff employed by the ECB in 1999 was 648, compared with 478 in 1998. 242 additional

staff were employed during the period, and 44 members of staff left the service of the ECB.

#### 7 ECB's retirement plan

In accordance with the rules of the plan, a triennial full actuarial valuation is required. A full actuarial valuation will, however, be carried out annually as long as staff numbers increase significantly during the year. The latest actuarial valuation was carried out as at 31 December 1998, using the Projected Unit Credit Method, subject to minimum liabilities equal to cash lump sums that would be payable to members on termination of service. The valuation showed that the actuarial value of the fund's assets represented 110% of the benefits which had accrued to members at the balance sheet date, after providing for future increases in earnings and the pensions liability.

The pension cost relating to the plan is assessed in accordance with the advice of a qualified actuary. The total pension cost to the ECB was  $\leqslant$ 8.1 million. This includes a provision for pensions to members of the Executive Board of  $\leqslant$ 1.8 million. The required future service contribution rate by the ECB is 16.5% of pensionable earnings of all staff.

#### 8 Administrative expenses

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

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 1999. 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 I 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 1999 and the results of its operations for the year then ended.

Frankfurt am Main, I March 2000

PricewaterhouseCoopers

Gesellschaft mit beschränkter Haftung Wirtschaftsprüfungsgesellschaft

[signed]
(Wagener)
Wirtschaftsprüfer

[signed] (Kern)

Wirtschaftsprüfer

#### Note on the allocation of losses

Note: this item does not form a part of the financial statements of the ECB. It is published in the Annual Report for information purposes.

Pursuant to Article 33.2 of the Statute of the ESCB, a loss incurred by the ECB shall be transferred in the following order:

- (a) the loss may be offset against the general reserve fund of the ECB;
- (b) following a decision by the Governing Council of the ECB, any remaining loss shall be offset against the monetary income for the relevant financial year in proportion to and up to the amounts allocated to the NCBs in accordance with Article 32.5;1
- (c) in the event that such losses cannot be offset in accordance with Article 33.2, the Governing Council has agreed that any remaining loss should be funded as follows:
  - (i) any remaining loss may be offset in the first instance by waiving a part of the original value of the ECB's liabilities equivalent to the transfer of foreign reserves in the balance sheet of the ECB. The maximum waiver may not exceed:
    - the amount of unrealised losses which arise on the foreign currency and gold positions;

- an amount which would reduce the aforesaid liability to below 80% of its original value.
- (ii) any remaining loss may be offset against a direct charge on income, apportioned in accordance with the ECB's capital key, accruing to participating NCBs from national banknotes in circulation, subject to the limitation that no such direct charge on any one NCB may exceed that NCB's income from national banknotes.

At its meeting on 16 March 2000 the Governing Council of the ECB decided to allocate the loss of the ECB for the year ending on 31 December 1999 as follows:

	1999 €	1998 €
(Loss)/Profit for the year	(247,281,223)	27,540,513
Withdrawals from/allocated to general reserve funds	27,540,513	(5,508,000)
Transfer from monetary income pooled	35,160,676	0
Retained profit carried forward		(22,032,513)
Direct charge on NCBs	184,580,034	0

I In accordance with Article 32.5 of the Statute of the ESCB, the NCBs' monetary income shall be allocated to the NCBs in proportion to their paid-up shares in the capital of the ECB. The Governing Council of the ECB decided for the financial years 1999 to 2001 to calculate monetary income by the application of a reference rate to the liability base, which consists of all deposit liabilities to credit institutions, current accounts, the deposit facility, fixed-term deposits, deposits related to margin calls, liquidity-absorbing repurchase agreements and liabilities of participating NCBs arising from the issuance by the ECB of debt certificates. The reference rate used is the latest available twoweek repo rate and is applied on a daily basis to the liability base of each NCB to calculate the pool of monetary income. Amounts of interest paid by an NCB on liabilities included within its liability base are to be deducted from the amount of monetary income to be pooled.

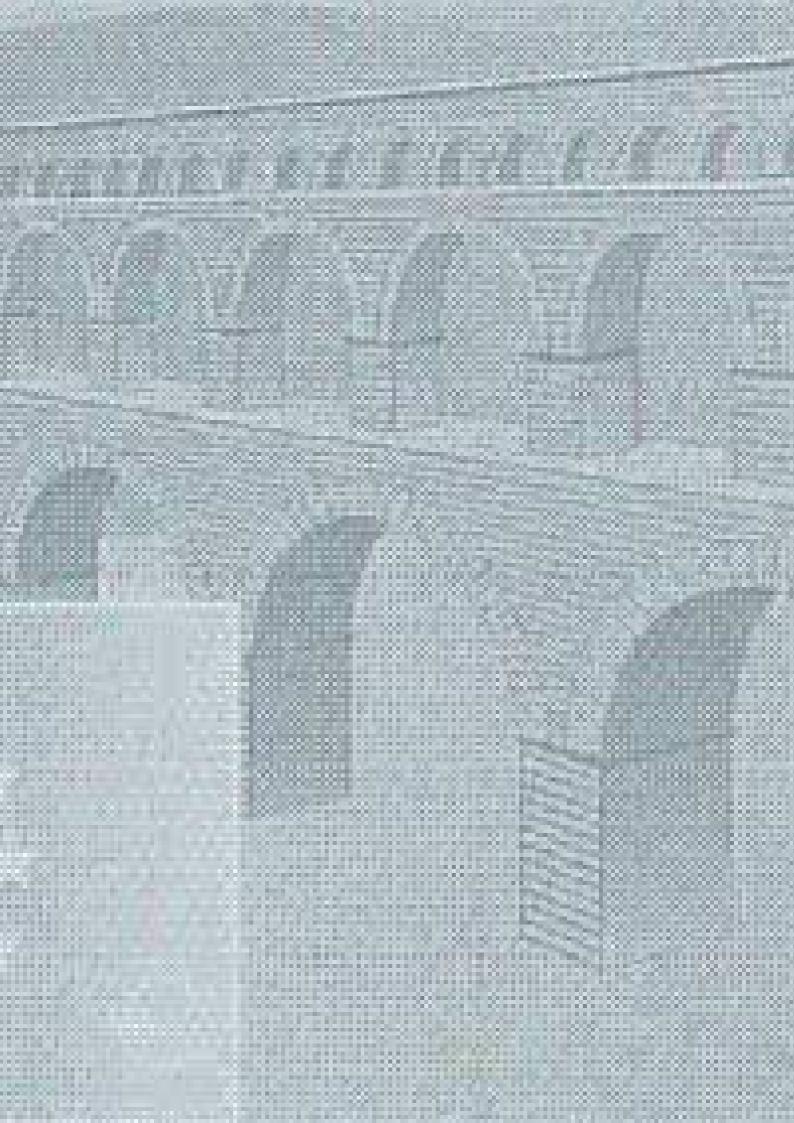
## Consolidated Balance Sheet of the Eurosystem as at 31 December 1999 (EUR millions)

A	ssets	Balance as at 31 December 1999	Balance as at I January 1999
I	Gold and gold receivables	116,610	99,565
2	Claims on non-euro area residents denominated in foreign currency	ו	
	2.1 Receivables from the IMF	71,744	29,511
	2.2 Balances with banks and security investments	s,	
	external loans and other external assets	182,803	201,494
		254,547	231,005
3	Claims on euro area residents denominated in for		
	currency	14,412	6,283
4	Claims on non-euro area residents denominated in 4.1 Balances with banks, security investments	n euro	
	and loans	6,050	8,941
	4.2 Claims arising from the credit facility under		
	ERM II	0	0
		6,050	8,941
5	Lending to financial sector counterparties of the e	uro area	
	5.1 Main refinancing operations	161,988	143,696
	5.2 Longer-term refinancing operations	74,996	24,698
	5.3 Fine-tuning reverse operations	0	6,680
	5.4 Structural reverse operations	0	0
	5.5 Marginal lending facility	11,429	6,372
	5.6 Credits related to margin calls	404	26
	5.7 Other lending	1,276	3,641
		250,093	185,113
6	Securities of euro area residents denominated		
	in euro	23,513	21,673
7	General government debt denominated in euro	59,180	60,126
8	Other assets	81,899	80,731

Total assets 806,304 693,437

Totals/sub-totals may not add up, due to rounding.

Li	abilities	Balance as at 31 December 1999	Balance as at I January 1999
I	Banknotes in circulation	374,976	342,194
2	Liabilities to euro area financial sector counterpa	rties	
	denominated in euro		
	2.1 Current accounts		
	(covering the minimum reserve system)	114,826	84,428
	2.2 Deposit facility	2,618	973
	2.3 Fixed-term deposits	0	1,886
	2.4 Fine-tuning reverse operations	0	0
	2.5 Deposits related to margin calls	10	12
		117,454	87,299
3	Debt certificates issued	7,876	13,835
4	Liabilities to other euro area residents denomina	ted in euro	
-	4.1 General government	57,539	55,279
	4.2 Other liabilities	3,061	3,075
		60,600	58,354
5	Liabilities to non-euro area residents denominate	ed in euro <b>9,048</b>	9,972
6	Liabilities to euro area residents denominated in		
	foreign currency	927	595
7		ed in	
	foreign currency		
	<ul><li>7.1 Deposits, balances and other liabilities</li><li>7.2 Liabilities arising from the credit facility und</li></ul>	11,896 Ier	3,314
	ERM II	0	0
		11,896	3,314
8	Counterpart of special drawing rights allocated by	y the IMF <b>6,529</b>	5,765
9	Other liabilities	54,493	58,070
10	Revaluation accounts	106,629	60,083
П	Capital and reserves	55,876	53,956
Т	otal liabilities	806,304	693,437



## Annexes

#### Glossary\*

**Benchmark:** in relation to investments, a benchmark is a reference portfolio or index constructed on the basis of the objectives for liquidity, risk and return of the investments. The benchmark can also serve as a basis for comparison of the performance of the actual portfolio.

**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.

Capital transfers: these consist of (i) cross-border transfers related to the ownership of fixed assets; (ii) cross-border transfers of funds linked to, or conditional upon, the acquisition or disposal of fixed assets; and (iii) the cancellation, without any counterparts being received in return, of cross-border liabilities by creditors. Capital transfers may be in cash or in kind (e.g. debt forgiveness).

Central securities depository (CSD): an entity which holds securities and which enables securities transactions to be processed by book entry. Physical securities may be immobilised by the depository or securities may be dematerialised (i.e. so that they exist only as electronic records). In addition to the safekeeping and administration of securities (e.g. services for issuance and redemption), a central securities depository may incorporate clearing and settlement functions.

**Collateral:** assets pledged as a guarantee for the repayment of the short-term liquidity loans which **credit institutions** receive from the central banks, as well as assets sold to central banks by credit institutions as part of **repurchase operations**.

Consolidated MFI balance sheet: the consolidated balance sheet of the Monetary Financial Institutions (MFI) sector is obtained by netting out inter-MFI positions on the aggregated MFI balance sheet (e.g. inter-MFI loans and deposits of money market funds with MFIs). It provides information on the MFI sector's assets and liabilities vis-à-vis residents of the euro area not belonging to this sector (the general government and other euro area residents) and vis-à-vis non-residents of the euro area. The consolidated balance sheet is the main statistical source for the calculation of monetary aggregates and it provides the basis for the regular analysis of the counterparts of M3.

#### Convergence programmes: see stability programmes.

Correspondent banking: an arrangement by 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 regard this account as its nostro account.

Correspondent central banking model (CCBM): a model established by the European System of Central Banks (ESCB) with the aim of enabling counterparties to transfer eligible assets as collateral in a cross-border context. In the CCBM, national central banks act as

<sup>\*</sup> The numbering of the Articles and Protocols follows that established by the Treaty as signed in Amsterdam.

custodians for one another. 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 **European Central Bank (ECB)**).

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

**Credit institution:** 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".

Credit to euro area residents: a broad measure of the financing of non-Monetary Financial Institution (MFI) euro area residents (including general government and the private sector) provided by the MFI sector. It is defined as including (i) loans and (ii) MFI holdings of securities. The latter include shares, other equity and debt securities including money market paper issued by non-MFI euro area residents. As securities can be seen as an alternative source of funds, relative to loans, and as some loans can be securitised, this definition provides more accurate information on the total amount of financing provided by the MFI sector to the economy than a narrow definition comprising loans only.

Currency in circulation: currency in circulation includes both banknotes and coins in circulation that are commonly used to make payments. It includes banknotes issued by the **Eurosystem** and by other **Monetary Financial Institutions (MFIs)** in the euro area (in Ireland and Luxembourg) as well as the coins issued by the Eurosystem and by the central government. Currency in circulation included in **M3** is a net concept, i.e. it refers only to banknotes and coins in circulation that are held outside the MFI sector (as shown in the **consolidated MFI balance sheet**, implying that currency issued but held by MFIs – "vault cash" – has been subtracted). Currency in circulation does not include a central bank's stock of own banknotes (as they are not issued), nor commemorative coins that are not commonly used to make payments.

**Current transfers:** these consist of transfers which are not transfers of capital and which have a direct impact on the level of disposable income of the **euro area** donor or recipient.

**Debt ratio:** the subject of one of the fiscal convergence criteria laid down in Article 104 (2) of the **Treaty**. It is defined as "the ratio of government debt to gross domestic product at current market prices", while government debt is defined in Protocol No. 20 (on the excessive deficit procedure) as the "total gross debt at nominal value outstanding at the end of the year and consolidated between and within the sectors of **general government**". General government is as defined in the **European System of Accounts 1995 (ESA 95)**.

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

**Deficit ratio:** the subject of one of the fiscal convergence criteria named in Article 104 (2) of the **Treaty**. It is defined as "the ratio of the planned or actual government deficit to gross domestic product" at current market prices, while the government deficit is defined in Protocol No. 20 (on the excessive deficit procedure) as "net borrowing of the general government". **General government** is as defined in the **European System of Accounts 1995 (ESA 95)**.

Delivery versus payment system (DVP, or delivery against payment): a mechanism in a securities settlement system which 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 a national central bank and which are remunerated at a pre-specified interest rate.

Deposits redeemable at notice: this category consists of saving deposits for which the holder has to respect a fixed period of notice before he or she can withdraw his or her funds. In some cases there is the possibility of withdrawing a certain fixed amount in a specified period or of earlier withdrawal subject to the payment of a penalty. Deposits redeemable at a period of notice of up to three months belong to M2 (and hence to M3), while those with a longer period of notice belong to the (non-monetary) longer-term financial liabilities of the Monetary Financial Institutions (MFI) sector.

Deposits with agreed maturity: this instrument category consists mainly of time deposits with a given maturity that may, depending on national practices, either not be convertible prior to maturity or be convertible only subject to a penalty. It also encompasses some non-marketable debt instruments, such as non-marketable (retail) certificates of deposit. Deposits with an agreed maturity of up to two years are included in M2 (and hence in M3), while those with agreed maturity over two years are included in the (non-monetary) longer-term financial liabilities of the Monetary Financial Institutions (MFI) sector.

#### **ECOFIN:** see **EU Council**.

**Economic and Financial Committee:** a consultative Community body set up at the start of Stage Three, when the Monetary Committee was dissolved. The Member States, the **European Commission** and the **European Central Bank (ECB)** each appoint no more than two members of the Committee. Article 114 (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 I January 1994. It provided for, inter alia, 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 I January 1999, in accordance with the decision pursuant to Article 121 (4) of the Treaty, with the transfer of monetary competence to the Eurosystem and the introduction of the euro.

**ECU** (European Currency Unit): the ECU was a basket made up of the sum of fixed amounts of 12 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. The ECU was replaced by the **euro** on a one-to-one basis on I January 1999.

**Effective (nominal/real) exchange rates:** nominal effective exchange rates consist of a weighted average of various bilateral exchange rates. Real effective exchange rates are nominal

effective exchange rates deflated by a weighted average of foreign, relative to domestic, prices or costs. They are thus measures of price and cost competitiveness. The nominal effective exchange rate of the **euro** calculated by the **European Central Bank (ECB)** is a geometric weighted average of the exchange rates of the euro against the currencies of 13 trading partners of the **euro area**. The weights are based on trade in manufactured goods with the trading partners in the period from 1995 to 1997, and capture third market effects. The real effective exchange rate for the euro is calculated using consumer price indices (the **Harmonised Index of Consumer Prices (HICP)** for the euro area and other EU Member States).

**Electronic money (e-money):** an electronic store of monetary value on a technical device that may be widely used for making payments to undertakings other than the issuer without necessarily involving bank accounts in the transaction, but acting as a prepaid bearer instrument (see also **multi-purpose prepaid card**).

EMU: see Economic and Monetary Union.

**EONIA** (euro overnight index average): a measure of the effective interest rate prevailing in the euro interbank overnight market. It is computed as a weighted average of the interest rates on unsecured overnight contracts on deposits denominated in euro, as reported by a panel of contributing banks.

**ERM II** (exchange rate mechanism II): the exchange rate arrangement which provides the framework for exchange rate policy co-operation between the **euro area** and EU Member States not participating in the euro area from the start of Stage Three of **Economic and Monetary Union** (**EMU**). Membership of the mechanism is voluntary. Nevertheless, Member States with a derogation can be expected to join the mechanism. Currently, the Danish krone and the Greek drachma participate in ERM II with a fluctuation band around the central rate against the **euro** of ±2.25% and ±15% respectively. Foreign exchange intervention and financing at the margins of the standard or narrower fluctuation bands are, in principle, automatic and unlimited, with very short-term financing available. The **European Central Bank** (**ECB**) and the participating non-euro area national central banks could, however, suspend automatic intervention if this were to conflict with their primary objective of maintaining **price stability**.

**EU Council:** an institution of the European Community. It is made up of representatives of the governments of the Member States, normally the ministers responsible for the matters under consideration (therefore often referred to as the Council of Ministers). The EU Council meeting in the composition of the Ministers of Finance and Economy is often referred to as the **ECOFIN** Council. In addition, the EU Council may meet in the composition of the Heads of State or Government. See also **European Council**.

**EURIBOR** (euro interbank offered rate): is the rate at which a prime bank is willing to lend funds in euro to another prime bank. The EURIBOR is computed daily for interbank deposits with a maturity of one week and one to twelve months as the average of the daily offer rates of a representative panel of prime banks, rounded to three decimal places.

**Euro:** the name of the European currency adopted by the **European Council** at its meeting in Madrid on 15 and 16 December 1995 and used instead of the generic term **ECU (European Currency Unit)** employed in the **Treaty**.

**Euro area:** the area encompassing those Member States in which the **euro** has been adopted as the single currency in accordance with the **Treaty** and in which a single monetary policy is

conducted under the responsibility of the **Governing Council** of the **European Central Bank** (**ECB**). The euro area comprises Belgium, Germany, Spain, France, Ireland, Italy, Luxembourg, the Netherlands, Austria, Portugal, Finland.

**Euro Banking Association (EBA):** an interbank organisation 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 I January 1999. The Euro Clearing System (Euro I) is the successor system to the ECU Clearing and Settlement System.

**Euro** central rate: the official exchange rate of the **ERM II** member currencies vis-à-vis the **euro**, around which the ERM II fluctuation margins are defined.

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

**European Commission (Commission of the European Communities):** the institution of the European Community which ensures the application of the provisions of the **Treaty**, 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 responsible for the production of Community statistics.

**European Council:** provides the European Union with the necessary impetus for its development and defines the general political guidelines thereof. It brings together the Heads of State or Government of the Member States and the President of the **European Commission** (see also **EU Council**).

**European Monetary Institute (EMI):** the EMI was a temporary institution established at the start of Stage Two of **Economic and Monetary Union (EMU)** (on I January 1994). The two main tasks of the EMI were (i) to strengthen central bank co-operation and monetary policy co-ordination and (ii) to make the preparations required for the establishment of the **European System of Central Banks (ESCB)**, for the conduct of the single monetary policy and for the creation of a single currency in Stage Three. It went into liquidation following the establishment of the **European Central Bank (ECB)** on I June 1998.

**European Parliament:** consists of 626 representatives of the citizens of the Member States. It is a part of the legislative process, although with different prerogatives according to the procedures through which EU law is to be enacted. In the framework of **Economic and Monetary Union** (**EMU**), the Parliament has mainly consultative powers. However, the **Treaty** establishes certain procedures for the democratic accountability of the **European Central Bank** (**ECB**) to the Parliament (presentation of the annual report, general debate on the monetary policy, hearings before the competent parliamentary committees).

**European System of Accounts 1995 (ESA 95):** a system of uniform statistical definitions and classifications aimed at achieving a harmonised quantitative description of the economies of the Member States. The ESA is the Community's version of the world System of National Accounts 1993. The ESA 95 is a new version of the European system, implementation of which began in the course of 1999 in accordance with Council Regulation (EC) No. 2223/96.

**European System of Central Banks (ESCB):** the ESCB is composed of the **European Central Bank (ECB)** and the national central banks of all 15 Member States, i.e. it includes, in addition to the members of the **Eurosystem**, the national central banks of the Member States which did not adopt the **euro** at the start of Stage Three of **Economic and Monetary Union (EMU)**. The ESCB is governed by the **Governing Council** and the **Executive Board** of the ECB, and, as a third decision-making body of the ECB, by the **General Council**.

**Eurostat:** see **European Commission**.

**Eurosystem:** comprises the **European Central Bank (ECB)** and the national central banks of the Member States which have adopted the **euro** in Stage Three of **Economic and Monetary Union (EMU)** (see also **euro area**). There are currently 11 national central banks in the Eurosystem. The Eurosystem is governed by the **Governing Council** and the **Executive Board** of the ECB.

**Eurosystem's foreign exchange liquidity position:** this comprises the **Eurosystem's foreign reserve assets** and the Eurosystem's other foreign currency claims and liabilities, including positions vis-à-vis **euro area** residents such as, for instance, foreign exchange deposits placed with banking institutions resident in the euro area.

**Eurosystem's foreign reserve assets:** the reserve assets of the **euro area** consist of the **Eurosystem**'s reserve assets, i.e. the reserve assets of the **European Central Bank (ECB)** and the reserve assets held by the national central banks of the participating Member States. Reserve assets must (i) be under the effective control of the relevant monetary authority, whether the ECB or the national central bank of one of the participating Member States, and (ii) refer to highly liquid, marketable and creditworthy foreign (non-**euro**) currency-denominated claims on non-residents of the euro area, plus gold, special drawing rights and the reserve positions in the International Monetary Fund of the participating national central banks.

**Executive Board:** one of the decision-making bodies of the **European Central Bank (ECB)**. It comprises the President, the Vice-President and four other members appointed by common accord by the Heads of State or Government of the Member States which have adopted the **euro**.

**Fine-tuning operation:** a non-regular **open market operation** executed by the **Eurosystem** mainly in order to deal with unexpected liquidity fluctuations in the market.

Foreign exchange swap: two simultaneous spot and forward transactions of one currency against another. The Eurosystem may execute open market monetary policy operations in the form of foreign exchange swaps where the national central banks (or the European Central Bank (ECB)) buy (or sell) euro spot against a foreign currency and at the same time sell it (or buy it back) forward.

**Frontloading:** the distribution of **euro** banknotes and/or coins to certain target groups (e.g. banks, retailers, cash-in-transit companies, cash-operated machine industry, general public) prior to 2002.

**Funds transfer system (FTS):** a formal arrangement, based on private contract or statute law, with multiple membership, common rules and standardised arrangements, for the transmission and settlement of money obligations arising between the members.

**General Council:** one of the governing bodies of the **European Central Bank (ECB)**. It comprises the President and the Vice-President of the ECB and the governors of all 15 EU national central banks.

**General government:** consists of central, state and or local government and social security funds, as defined in the **European System of Accounts 1995 (ESA 95)**.

**Governing Council:** one of the governing bodies of the **European Central Bank (ECB)**. It comprises all the members of the **Executive Board** of the ECB and the governors of the national central banks of the Member States which have adopted the **euro**.

Harmonised Index of Consumer Prices (HICP): the HICP is the measure of prices used by the Governing Council for the purpose of assessing price stability. In order to fulfil the Treaty requirement for a consumer price index constructed on a comparable basis, taking into account differences in national definitions, the HICP was developed by the European Commission (Eurostat) in close liaison with the national statistical institutes and the European Monetary Institute (EMI) and later the European Central Bank (ECB).

**Interbank funds transfer system (IFTS):** a funds transfer system in which most (or all) direct participants are **credit institutions**.

**Interlinking mechanism:** one of the components of the **TARGET** system. The term is used to designate the infrastructures and the procedures which link domestic **RTGS** systems in order to process cross-border payments within TARGET.

**Large-value payments:** payments, generally of very large amounts, which are mainly exchanged between banks or between participants in the financial markets and usually require urgent and timely settlement.

**Links between securities settlement systems:** the procedures and arrangements between two **securities settlement systems** for the cross-border transfer of securities through a book-entry process.

**Longer-term refinancing operation:** a regular **open market operation** executed by the **Eurosystem** in the form of a **reverse transaction**. Longer-term refinancing operations are executed through monthly **standard tenders** and have a maturity of three months.

Loss-sharing rule (or 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 obligations; the arrangement stipulates how the loss will be shared among the parties concerned in the event of the agreement being activated.

**Lump-sum allowance:** a fixed amount which an institution may deduct in the calculation of its **reserve requirement** within the minimum reserve framework of the **Eurosystem**.

MI, M2, M3: see monetary aggregates.

Main refinancing operation: a regular open market operation executed by the Eurosystem in the form of a reverse transaction. Main refinancing operations are conducted through weekly standard tenders and have a maturity of two weeks.

**Maintenance period:** the period over which compliance with **reserve requirements** is calculated. The maintenance period for **Eurosystem** minimum reserves is one month, starting on the 24th calendar day of each month and ending on the 23rd calendar day of the following month.

Marginal lending facility: a standing facility of the Eurosystem which counterparties may use to receive overnight credit from a national central bank against a pre-specified interest rate.

Monetary aggregates: a monetary aggregate can be defined as the sum of currency in circulation plus outstanding amounts of certain liabilities of financial institutions that have a high degree of "moneyness" (or liquidity in a broad sense). The narrow monetary aggregate MI has been defined by the Eurosystem as currency in circulation plus euro area residents' (other than central government) holdings of overnight deposits with euro area money-issuing institutions. The monetary aggregate M2 comprises MI plus deposits with an agreed maturity of up to two years and deposits redeemable at notice of up to three months. The broad monetary aggregate M3 includes M2 plus repurchase agreements, money market fund shares/units and money market paper and debt securities with a maturity of up to two years. The Governing Council has announced a reference value for the growth of M3 (see also reference value for monetary growth).

Monetary Financial Institutions (MFIs): financial institutions which form the money-issuing sector of the euro area. It includes the Eurosystem, resident credit institutions as defined in Community law and all other resident financial institutions whose business is to receive deposits and/or close substitutes for deposits from entities other than MFIs and, for their own account (at least in economic terms), to grant credit and/or invest in securities. The latter group consists predominantly of money market funds. At the end of 1999, there were 9,443 MFIs in the euro area (12 central banks, 7,906 credit institutions, 1,517 money market funds and 8 other financial institutions).

Multi-purpose prepaid card: a stored value card which can be used for a wide range of payment purposes and which has the potential to be used on a national or international scale, but which may sometimes be restricted to a certain area. A reloadable multi-purpose prepaid card is also known as an electronic purse (see also electronic money (e-money)).

Net international investment position (i.i.p.) (or net external asset or liability position): the statistical statement of the value and composition of the stock of an economy's financial assets or financial claims 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.

Open market operation: an operation executed on the initiative of the central bank in the financial markets involving one of the following transactions: (i) buying or selling assets outright (spot or forward); (ii) buying or selling assets under a repurchase agreement; (iii) lending or borrowing against underlying assets as collateral; (iv) the issuance of central bank debt certificates; (v) the collection of fixed-term deposits; or (vi) foreign exchange swaps between domestic and foreign currency.

Outright transaction: a transaction whereby the central bank buys or sells assets up to their maturity in the market (spot or forward).

Overnight deposits: this instrument category comprises mainly those sight/demand deposits which are fully transferable (by cheque or similar). It also includes non-transferable deposits that are convertible on demand or by close of business the following day.

**Payment versus payment (PVP):** a mechanism in a foreign exchange settlement system which ensures that a final transfer of one currency occurs if, and only if, a final transfer of the other currency or currencies takes place.

Price stability: the Governing Council has published a quantitative definition of price stability in order to give clear guidance to expectations of future price developments. The Governing Council defines price stability as a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2%. Reflecting the need for monetary policy to have a forward-looking, medium-term orientation, price stability according to this definition is to be maintained over the medium term. The definition delineates an upper bound for the rate of measured inflation and, at the same time, the use of the word "increase" signals that deflation, i.e. prolonged declines in the level of the HICP, would not be deemed consistent with price stability.

**Primary balance:** government net borrowing or net lending excluding interest payments on consolidated government liabilities.

**Quick tender:** the tender procedure used by the **Eurosystem** for **fine-tuning operations**. Quick tenders are executed within a time frame of one hour and are restricted to a limited set of **counterparties**.

**Realignment:** a change in the central parity of a currency participating in an exchange rate system with a fixed but adjustable peg. In **ERM II** a realignment consists of a change in the **euro** central rate.

**Re-denomination of securities:** the denomination of a security is the currency in which the par value of the security is expressed (in most cases, the face value of a certificate). Re-denomination refers to a procedure through which the original denomination of a security, issued in national currency, is changed into **euro** at the irrevocably fixed conversion rate.

**Reference period:** time intervals specified in Article 104 (2a) of the **Treaty** and in Protocol No. 21 on the **convergence criteria** for examining progress towards convergence.

Reference value for monetary growth: the Governing Council assigns money a prominent role in the conduct of its policy, implying that monetary aggregates and counterparts are thoroughly analysed regarding their information content for future price developments. This is signalled by announcing a reference value for the growth rate of the monetary aggregate M3. The reference value is derived in a manner which is consistent with and serves the achievement of the Governing Council's definition of price stability on the basis of medium-term assumptions regarding trend real GDP growth and the trend in the velocity of circulation of M3. Substantial or prolonged deviations of M3 growth from the reference value would, under normal circumstances, signal risks to price stability over the medium term. However, the concept of the reference value does not entail a commitment on the part of the Governing Council to correct mechanistically deviations of M3 growth from the reference value.

Reference value for the fiscal position: Protocol No. 20 of the Treaty on the excessive deficit procedure sets explicit reference values for the general government deficit ratio (3% of GDP) and the debt ratio (60% of GDP) (see also Stability and Growth Pact).

Remote access (to an IFTS): the facility 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 without necessarily having established a branch in the host country.

Repurchase agreement: an arrangement whereby an asset is sold while the seller simultaneously obtains the right and obligation to repurchase it at a specific price on a future date or on demand. Such an agreement is similar to collateralised borrowing, with the exception that ownership of the securities is not retained by the seller. The Eurosystem uses repurchase agreements with a fixed maturity in its reverse transactions. Repurchase transactions are included in M3 in cases where the seller is a Monetary Financial Institution (MFI) and the counterpart is a non-MFI resident in the euro area. According to the Regulation of the ECB concerning the consolidated balance sheet of the Monetary Financial Institutions sector<sup>1</sup> (ECB/1998/16), repurchase operations (repos) are classified as deposit liabilities since they are not marketable. However, repos are not included in M2, because repurchase transactions have a higher degree of substitutability with regard to short-term securities than to deposits with an agreed maturity or to deposits redeemable at notice.

Repurchase operation (repo): a liquidity-providing reverse transaction based on a repurchase agreement.

**Reserve base:** the sum of the balance sheet items (in particular liabilities) which constitute the basis for calculating the **reserve requirement** of a **credit institution**.

**Reserve ratio:** the ratio defined by the central bank for each category of eligible balance sheet 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 charge or against payment.

I OLL 356, 30.12.1998, p. 7.

**Settlement agent:** an institution that manages the settlement process (e.g. the determination of settlement positions, monitoring the exchange of payments, etc.) for transfer systems or other arrangements that require settlement.

**Settlement risk:** a general term used to designate the risk that settlement in a transfer system will not take place as expected. This risk may comprise both credit and liquidity risk.

Stability and Growth Pact: consists of two EU Council Regulations on the strengthening of the surveillance of budgetary positions and the surveillance and co-ordination of economic policies and on speeding up and clarifying the implementation of the excessive deficit procedure and of a European Council Resolution on the Stability and Growth Pact adopted at the Amsterdam summit on 17 June 1997. It is intended to serve as a means of safeguarding sound government finances in Stage Three of Economic and Monetary Union (EMU) in order to strengthen the conditions for price stability and for strong sustainable growth conducive to employment creation. More specifically, budgetary positions close to balance or in surplus are required as the medium-term objective for Member States, which would allow them to deal with normal cyclical fluctuations while keeping the government deficit below the reference value of 3% of GDP. In accordance with the Stability and Growth Pact, countries participating in EMU will report stability programmes, while non-participating countries will continue to provide convergence programmes.

Stability programmes: medium-term government plans and assumptions provided by participating Member States regarding the development of key economic variables towards the achievement of the medium-term objective of a budgetary position close to balance or in surplus as referred to in the Stability and Growth Pact. Regarding budgetary positions, measures to consolidate fiscal balances as well as underlying economic scenarios are highlighted. Stability programmes must be updated annually. They are examined by the European Commission and the Economic and Financial Committee. Their reports serve as the basis for an assessment by the ECOFIN Council, focusing, in particular, on whether the medium-term budgetary objective in the programme provides for an adequate safety margin to ensure the avoidance of an excessive deficit. Countries not participating in the euro area must submit annual convergence programmes, in accordance with the Stability and Growth Pact.

**Standard tender:** a tender procedure used by the **Eurosystem** in its regular **open market operations**. Standard tenders are carried out within a time frame of 24 hours. All **counterparties** fulfilling the general eligibility criteria are entitled to submit bids in standard tenders.

**Standing facility:** a central bank facility available to **counterparties** on their own initiative. The **Eurosystem** offers two overnight standing facilities: the **marginal lending facility** and the **deposit facility**.

**TARGET (Trans-European Automated Real-time Gross settlement Express Transfer) system:** a payment system composed of one **RTGS system** in each of the 15 EU Member States and the ECB payment mechanism. The domestic RTGS systems and the ECB payment mechanism are interconnected according to common procedures (**Interlinking mechanism**) to allow cross-border transfers throughout the EU to move from one system to another.

**Treaty:** refers to the Treaty establishing the European Community. The Treaty was signed in Rome on 25 March 1957 and entered into force on I 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 entered into force on 1 May 1999.

# Chronology of monetary policy measures of the Eurosystem

## 22 December 1998

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 3.0%, a level which it intends to maintain for the foreseeable future. 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 2.0% for the start of Stage Three, i.e. I 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 intends to terminate this transitional measure following its meeting on 21 January 1999.

### 31 December 1998

In accordance with Article 1091 (4) of the Treaty establishing the European Community, the EU Council, acting with the unanimity of the Member States of the European Community 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 I 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 I January 1999. Further to this decision on the euro central rates, the ECB, Danmarks 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 ±2.25% will be observed around the euro central rate for the Danish krone. The standard fluctuation band of ±15% will be observed around the euro central rate for the Greek drachma.

### **7 January 1999**

The Governing Council of the ECB decides that for the two main refinancing operations to be announced on 11 and 18 January 1999 respectively the same conditions will apply as for the first such operation, which was settled on 7 January 1999, i.e. they will be fixed rate tenders conducted at an interest rate of 3.0%.

# 12 January 1999

Following the decision of the Governing Council of the ECB on 22 December 1998, the ECB announces that the first longer-term refinancing operations of the Eurosystem will be conducted as variable rate tenders using the single rate method of allotment. With a view to phasing in the longer-term refinancing operations, the first such operation is conducted through three parallel tenders with three different maturities, namely 25 February, 25 March and 29 April 1999. The ECB also announces that the intention is to allot an amount of €15 billion in each of these parallel tenders. For the subsequent longer-term refinancing operations in the first three months of 1999, the intention is to allot an unchanged amount of €15 billion per operation.

## 21 January 1999

The Governing Council of the ECB decides to revert to the interest rates on the Eurosystem's two standing facilities which it had set for the start of Stage Three, i.e. to set the interest rate for the marginal lending facility at a level of 4.5% and that for the deposit facility at a level of 2.0% with effect from 22 January 1999. Furthermore, it decides that for the two main refinancing operations to be settled on 27 January and 3 February 1999 respectively the same conditions will apply as for the first three such operations settled earlier in January, i.e. they will be fixed rate tenders conducted at an interest rate of 3.0%.

## 4 February 1999

The Governing Council of the ECB decides that for the main refinancing operations to be settled on 10 and 17 February 1999 the same conditions will apply as for the first such operations settled earlier in the year, i.e. they will be fixed rate tenders conducted at an interest rate of 3.0%. In addition, the interest rate on the marginal lending facility continues to be 4.5% and the interest rate on the deposit facility remains 2.0%.

## 18 February 1999

The Governing Council of the ECB decides that for the main refinancing operations to be settled on 24 February and 3 March 1999 the same conditions will apply as for the previous such operations settled earlier in the year, i.e. they will be fixed rate tenders conducted at an interest rate of 3.0%. In addition, the interest rate on the marginal lending facility continues to be 4.5% and the interest rate on the deposit facility remains 2.0%.

## 4 March 1999

The Governing Council of the ECB decides that for the main refinancing operations to

be settled on 10 and 17 March 1999 the same conditions will apply as for the previous such operations settled earlier in the year, i.e. they will be fixed rate tenders conducted at an interest rate of 3.0%. In addition, the interest rate on the marginal lending facility continues to be 4.5% and the interest rate on the deposit facility remains 2.0%. The Governing Council also decides that for forthcoming longer-term refinancing operations of the Eurosystem the multiple rate method of allotment will be applied (starting from the operation with a settlement date of 25 March 1999) until otherwise indicated.

#### 18 March 1999

The Governing Council of the ECB decides that for the main refinancing operations to be settled on 24 and 31 March and 7 April 1999 the same conditions will apply as for the previous such operations settled earlier in the year, i.e. they will be fixed rate tenders conducted at an interest rate of 3.0%. In addition, the interest rate on the marginal lending facility continues to be 4.5% and the interest rate on the deposit facility remains 2.0%

# 8 April 1999

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

## 22 April 1999

The Governing Council of the ECB decides that the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility will remain unchanged at

2.5%, 3.5% and 1.5% respectively. In addition, the Governing Council announces that for the longer-term refinancing operations to be settled during the next six months, the intention is to continue to allot an amount of  $\leqslant$ 15 billion per operation.

## 6 May 1999

The Governing Council of the ECB decides that the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility will remain unchanged at 2.5%, 3.5% and 1.5% respectively.

## 20 May 1999

The Governing Council of the ECB decides that the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility will remain unchanged at 2.5%, 3.5% and 1.5% respectively. The Governing Council also decides to change the maturity of the longer-term refinancing operation scheduled to be settled on 30 September 1999. The redemption date of this operation will be brought forward from 30 December to 23 December 1999. Correspondingly, the longer-term refinancing operation which was originally scheduled to be announced on 27 December 1999 and to be allotted and settled on 30 December 1999 will be announced on 21 December, allotted on 22 December and settled on 23 December 1999. The rescheduling of operations is intended to alleviate the working procedures for financial market participants at the turn of the year.

# 2 June, 17 June, 1 July, 15 July, 29 July, 26 August, 9 September 1999

The Governing Council of the ECB decides that the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility will remain unchanged at 2.5%, 3.5% and 1.5% respectively.

### 23 September 1999

The Governing Council of the ECB decides that the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility will remain unchanged at 2.5%, 3.5% and 1.5% respectively.

The ECB releases to the public the indicative calendar for the Eurosystem's tender operations in 2000. It also announces that no new main refinancing operation will be initiated in the first week of the year 2000, and that no such operation will mature during that week. For this reason the maturity of the main refinancing operation of 21 December 1999 will be lengthened exceptionally to three weeks. To avoid two main refinancing operations maturing on 12 January 2000, the maturity of the operation of 30 December 1999 will also be lengthened to three weeks. These steps are taken to minimise any potential problem for counterparties and for the financial market which could result from the conduct and settlement of a large operation directly after the transition to the new century.

#### **7 October 1999**

The Governing Council of the ECB decides that the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility will remain unchanged at 2.5%, 3.5% and 1.5% respectively.

## 21 October 1999

The Governing Council of the ECB decides that the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility will remain unchanged at 2.5%, 3.5% and 1.5% respectively.

It also decides that for the longer-term refinancing operations to be settled on 28 October 1999, 25 November 1999 and 23 December 1999, the intention is to allot an amount of €25 billion per operation. This

amount is higher than the amount of  $\leqslant$ 15 billion allotted for all previous longer-term refinancing operations conducted in 1999. This decision takes into account the intention of the ECB to contribute to a smooth transition to the year 2000.

#### 4 November 1999

The Governing Council of the ECB decides to raise the interest rate on the main refinancing operations of the Eurosystem by 0.5 percentage point to 3.0%, with effect from the operation to be settled on 10 November 1999. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 0.5 percentage point to 4.0% and 2.0% respectively, both with effect from 5 November 1999.

## 18 November 1999

The Governing Council of the ECB decides that the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility will remain unchanged at 3.0%, 4.0% and 2.0% respectively.

#### 2 December 1999

The Governing Council of the ECB decides that the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility will remain unchanged at 3.0%, 4.0% and 2.0% respectively.

The Governing Council also decides to confirm the reference value for monetary growth, namely an annual growth rate of  $4\frac{1}{2}$ % for the broad monetary aggregate M3. This decision is taken on the grounds that the components underlying the derivation of the reference value, namely the Eurosystem's definition of price stability (an annual increase in the HICP for the euro area of below 2%), the estimate for the trend of real GDP growth (2% to  $2\frac{1}{2}$ % per annum) and that for

the trend decline in M3 income velocity (½% to 1% per annum), have basically remained unchanged. As before, the Governing Council will assess monetary developments in relation to the reference value on the basis of a threemonth moving average of annual growth rates. The Governing Council also decides to review the reference value henceforth on a regular annual basis. The next review will take place in December 2000.

With regard to the minimum reserve system of the Eurosystem, the Governing Council, after reviewing new statistical evidence, decides to increase from 10% to 30% the standardised deduction from the reserve base to be applied to debt securities issued with an agreed maturity of up to two years and to money market paper. This decision shall take effect as from the determination of the reserve requirement to be fulfilled in the maintenance period starting on 24 January 2000.

### 15 December 1999

The Governing Council of the ECB decides that the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility will remain unchanged at 3.0%, 4.0% and 2.0% respectively.

### 4 January 2000

The ECB announces that on 5 January 2000 the Eurosystem will conduct a liquidity-absorbing fine-tuning operation with sameday settlement. This measure aims at restoring normal liquidity conditions in the money market after the successful transition to the year 2000.

## 5 January 2000

The Governing Council of the ECB decides that the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility will remain unchanged at 3.0%, 4.0% and 2.0% respectively.

### 15 January 2000

At the request of the Greek authorities, the ministers of the euro area Member States, the ECB and the ministers and central bank governors of Denmark and Greece decide, following a common procedure, to revalue the central rate of the Greek drachma in the exchange rate mechanism (ERM II) by 3½%, with effect from 17 January 2000.

#### 20 January 2000

The Governing Council of the ECB decides that the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility will remain unchanged at 3.0%, 4.0% and 2.0% respectively.

It also announces that the Eurosystem intends to allot an amount of €20 billion for each of the longer-term refinancing operations to be conducted in the first half of 2000. This amount takes into consideration the expected liquidity needs of the banking system of the euro area in the first half of 2000 and the desire of the Eurosystem to continue to provide the bulk of its refinancing of the financial sector through its main refinancing operations.

## 3 February 2000

The Governing Council of the ECB decides to raise the interest rate on the main refinancing operations of the Eurosystem by 0.25 percentage point to 3.25%, starting from the operation to be settled on 9 February 2000. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 4.25% and 2.25% respectively, both with effect from 4 February 2000.

#### 17 February, 2 March 2000

The Governing Council of the ECB decides that the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility will remain unchanged at 3.25%, 4.25% and 2.25% respectively.

### 16 March 2000

The Governing Council of the ECB decides to raise the interest rate on the main refinancing operations of the Eurosystem by 0.25 percentage point to 3.5%, starting from the operation to be settled on 22 March 2000. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 4.5% and 2.5% respectively, both with effect from 17 March 2000.

# Documents published by the European Central Bank (ECB)

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## **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.

"The role of short-term economic indicators in the analysis of price developments in the euro area", April 1999.

"Banking in the euro area: structural features and trends", April 1999.

"The operational framework of the Eurosystem: description and first assessment", May 1999.

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"The international role of the euro", August 1999.

"The balance sheets of the Monetary Financial Institutions of the euro area in early 1999", August 1999.

"Inflation differentials in a monetary union", October 1999.

"ESCB preparations for the year 2000", October 1999.

"Stability-oriented policies and developments in long-term real interest rates in the 1990s", November 1999.

"TARGET and payments in euro", November 1999.

"Legal instruments of the European Central Bank", November 1999.

"The euro area one year after the introduction of the euro: key characteristics and changes in the financial structure", January 2000.

"Foreign exchange reserves and operations of the Eurosystem", January 2000.

"The Eurosystem and the EU enlargement process", February 2000.

"Consolidation in the securities settlement industry", February 2000.

### **Working Paper Series**

- I "A global hazard index for the world foreign exchange markets" by V. Brousseau and F. Scacciavillani, May 1999.
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- 14 "Assessing nominal income rules for monetary policy with model and data uncertainty" by G. D. Rudebusch, February 2000.

## Other publications

"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.
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- "European Union balance of payments/international investment position statistical methods", November 1999.
- "Money and Banking Statistics Compilation Guide, Addendum I: Money market paper", November 1999.
- "Money and Banking Statistics Sector Manual", second edition, November 1999.
- "Report on the legal protection of banknotes in the European Union Member States", November 1999.
- "Correspondent central banking model (CCBM)", November 1999.
- "Cross-border payments in TARGET: A users' survey", November 1999.
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#### Information brochures

- "TARGET", July 1998.
- "The euro banknotes and coins", July 1999.
- "TARGET: facts, figures, future", September 1999.

