



EUROPEAN CENTRAL BANK

ANNUAL REPORT 2003

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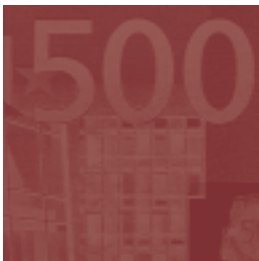
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EUROPEAN CENTRAL BANK



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# ANNUAL REPORT 2003

In 2004 all ECB publications will feature a motif taken from the €100 banknote.

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# ABBREVIATIONS

## COUNTRIES

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

## OTHERS

BIS	Bank for International Settlements
BPM5	IMF Balance of Payments Manual (5th edition)
c.i.f.	cost, insurance and freight at the importer's border
CPI	Consumer Price Index
ECB	European Central Bank
ECU	European Currency Unit
EEA	European Economic Area
EER	effective exchange rate
EMI	European Monetary Institute
EMU	Economic and Monetary Union
ESA 95	European System of Accounts 1995
ESCB	European System of Central Banks
EU	European Union
EUR	euro
f.o.b.	free on board at the exporter's border
GDP	gross domestic product
HICP	Harmonised Index of Consumer Prices
ILO	International Labour Organization
IMF	International Monetary Fund
MFI	monetary financial institutions
NCBs	national central banks
PPI	Producer Price Index
ULCM	Unit Labour Costs in Manufacturing

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



Since 1998 the ECB has organised a series of exhibitions entitled “Contemporary art from the Member States of the European Union”. Each exhibition aims to give ECB staff and visitors an insight into the art scene of a particular EU country. Contemporary art has been chosen since it reflects the period when Monetary Union became reality.

Some of the artworks are purchased for the ECB’s art collection, which is to be expanded. The eight pages which separate the chapters of this Annual Report show a selection of works from this collection.

<b>Artist: Hans Vandekerckhove</b> Title: Landschappeling, 2000 Material: Oil on canvas, Format: 200 × 160 cm	14
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<b>Artist: Gérard Garouste</b> Title: La duègne et le pénitent, 1998 Material: Oil on canvas, Format: 195 × 160 cm	148
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# FOREWORD



For most of last year, Wim Duisenberg was at the helm of the ECB and I wish to pay tribute to him. Under his presidency, the EMI, the ECB and the NCBs successfully dealt with all the challenges they had to meet: the changeover of all capital markets and cashless transactions to the euro on 4 January 1999, the century date change and the cash changeover on 1 January 2002. The Eurosystem was perceived as a highly credible central bank with a reliable policy and as a good guardian of the currency, preserving price stability and confidence in the euro. It is this legacy of an efficient steering of the united European monetary team that the other members of the Executive Board of the ECB and I are keen to preserve and reinforce in the years to come.

\*\*\*

In December 2002 the Governing Council of the ECB announced its decision to conduct a comprehensive evaluation of its monetary policy strategy in the first half of 2003. Since the inception of the ECB, the monetary policy strategy has provided a robust basis for internal decision-making and a consistent framework for external communication, thereby fostering

the ECB's accountability. Indeed, there is evidence that since 1999 long-term inflation expectations – which provide a measure of the central bank's credibility – have remained consistent with the ECB's definition of price stability. Less uncertainty about future inflation has helped to reduce the risk premia in interest rates, and thus real financing costs. It was only natural that, after more than four years of experience, the Governing Council wanted to look back and reflect in a systematic way on the experience gained and the comments made by external observers.

On 8 May 2003 the Governing Council announced the results of its evaluation of the strategy. It confirmed the definition of price stability that had been announced in October 1998 as a year-on-year increase of below 2% in the HICP for the euro area. At the same time, the Governing Council clarified that, in the pursuit of price stability within the definition, it aims to keep inflation rates below, but close to, 2% over the medium term. The Governing Council also confirmed that its monetary policy decisions would continue to be based on a comprehensive analysis of the risks to price stability, comprising an economic analysis and a monetary analysis. The Governing Council emphasised that, in seeking to make a unified judgement of the risks to price stability, it would continue to cross-check the information gained from the thorough economic analysis with the monetary analysis in a medium and long-term perspective. To underscore the longer-term nature of the reference value for monetary growth, the Governing Council decided to no longer review the monetary reference value on an annual basis. With its confirmation and clarification of the main elements of its stability-oriented monetary policy concept, the Governing Council has further improved the understanding of the ECB's strategy both in Europe and throughout the world.

\*\*\*

In the first half of 2003 economic activity was very weak in the wake both of the escalation of geopolitical tensions related to the situation in Iraq and of the uncertainty prevailing in financial markets. It was only as from the summer of 2003 that economic confidence in the euro area gradually improved and signs of global economic recovery strengthened. Overall, real GDP growth in the euro area was 0.4% in 2003, after 0.9% in 2002. Over recent months economic activity in the euro area has increased. The growth of euro area exports has remained robust as a consequence of the dynamic expansion of the world economy. In addition, the conditions for a recovery in domestic demand are in place, not least as a consequence of the low level of interest rates and the generally favourable financing conditions. The disappointing performance of real GDP growth over recent years illustrates the euro area economy's lack of flexibility and resulting vulnerability to external shocks. While some progress has been made in this respect, as must be acknowledged and welcomed, continued and very substantial efforts are still needed to implement the structural reforms that will increase employment growth and labour participation, raise productivity and enhance the potential for growth in the euro area. In addition, against the background of demographic developments, corrective action is needed to ensure that health care and pension systems are sustainable in the long run.

In 2003 annual inflation, as measured by the HICP, declined to 2.1% (from 2.3% in 2002). The persistence of inflation rates above 2% was mainly caused by unexpected increases in some volatile components of the HICP (such as oil and food prices in the second half of 2003), but increases in indirect taxes and administered prices in the course of 2003 also had some impact. In a medium-term perspective, inflationary pressures in 2003 had been expected to develop in line with price stability.

The picture of a favourable outlook for price stability was not jeopardised by the continued

strong monetary growth in 2003. Indeed, part of this strength was attributed to the high level of economic and financial market uncertainty prevailing during the first half of 2003, which prompted portfolio shifts into safer, short-term liquid assets included in M3. The accumulation of excess liquidity was therefore not regarded as alarming; however, vigilance is required in case this high level of liquidity continues to be observed when the recovery picks up pace.

In view of the moderation of inflationary pressures in the first half of 2003, the key ECB interest rates were reduced by 25 basis points in March 2003, and by 50 basis points in June. As a consequence, the minimum bid rate on the main refinancing operations reached the historically low level of 2.0%. These decisions were in line with the aim of maintaining inflation rates below but close to 2% over the medium term. The very low levels of interest rates also provided some counterweight to the various factors that were having an adverse effect on economic activity. In the second half of 2003 the key ECB interest rates were left unchanged, as the stance of monetary policy was considered appropriate to preserve price stability over the medium term.

As regards fiscal policies, most Member States failed to meet the targets set out in the stability programmes that had been submitted at the end of 2002 and the beginning of 2003. The average fiscal deficit for the euro area increased from 2.3% of GDP in 2002 to 2.7% of GDP in 2003. Moreover, the fiscal situation remained a source of concern in countries that had already recorded significant imbalances in 2002. On 25 November the ECOFIN Council decided not to act on the basis of the Commission recommendations regarding Germany and France, and agreed to hold the excessive deficit procedures for these countries in abeyance. The two countries concerned committed themselves to correcting their excessive deficits as soon as possible and by 2005 at the latest, while the Council indicated that it stood ready to take a decision under Article 104 (9) of the Treaty establishing the European Community – thereby

triggering the excessive deficit procedure again – if these two countries should fail to meet their commitments. Other countries that still face fiscal imbalances likewise need to make progress towards achieving budgetary positions close to balance or in surplus over the medium term.

It is crucial that confidence in the solidity both of public finances and of the economic and institutional underpinnings of EMU be maintained. In the view of the Governing Council, all parties involved need to live up to their responsibilities and commitments. Looking ahead, it is essential that fiscal consolidation and structural reforms take root. This should also have positive effects in the short term, as it may enhance public confidence in the credibility of the rules and long-term fiscal sustainability. Furthermore, reforms of expenditure and taxation, and a reprioritisation towards productive expenditure, would foster potential output growth.

\*\*\*

On 1 May 2004 ten further countries will be joining the EU, and ten new central banks will become members of the ESCB. This major political and economic event, which is taking place only some 14 years after the fall of the Berlin Wall and 12 years after the signing of the Maastricht Treaty, demonstrates how fast history is moving. In their field of competence, the ECB and the NCBs, in cooperation with the central banks of the acceding countries, have carried out a tremendous amount of preparatory work to ensure a smooth integration of the acceding country central banks (ACCBs) into the ESCB. In order to cope with this challenge, the ECB has recruited and is continuing to recruit new staff, notably experts from the acceding countries who will contribute – through their knowledge and specific background – to the efficiency and dynamism of the ECB. Moreover, the governors of the ACCBs have been invited to participate in the meetings of the General Council as observers since June 2003,

while experts from their institutions have been participating with the same status in ESCB committees since April 2003.

The accession of ten new countries is a major historical and institutional event for the EU, which induced the Europeans to prepare a new constitutional design through the work of the Convention on the future of Europe. The ECB followed the work of the Convention and the intergovernmental conference very closely and contributed to their deliberations on issues of relevance to the tasks and mandate of the ECB and the ESCB. The Governing Council of the ECB has welcomed the draft Treaty establishing a Constitution for Europe (draft Constitution) in general, on the understanding that it would not entail any changes to the substance of the tasks, mandate, status and legal regime of the ECB and the ESCB. The ECB's main request was to introduce a reference to "non-inflationary growth" or "price stability" in Article I-3 (3) on the EU's objectives. Such a reference of proper prominence was lacking in the text of the Convention. The ECB also suggested, in particular, recognising the independence of the NCBs in Article I-29, introducing a reference to the widely recognised term "Eurosystème" in the draft Constitution and adding an explicit reference to the responsibilities of the ESCB in Article III-90 on how the euro's place in the international monetary system should be ensured.

\*\*\*

Turning to the organisation and functioning of the ECB, 2003 was a very challenging year for the institution. At the end of the year the annual accounts of the ECB showed a net loss of €477 million. This loss, which is mainly due to write-downs of the euro value of the ECB's holdings of US dollar-denominated assets, arises after account has been taken of all income earned by the ECB, including income on euro banknotes in circulation, and of the release of provisions made in previous years against exchange and interest rate risks, amounting to €2.6 billion. The depreciation of the US dollar

in the course of 2003 has resulted in substantial unrealised losses that are treated – in accordance with the principle of prudence – as realised losses and entered in the profit and loss account, whereas unrealised gains are posted to revaluation accounts. Furthermore, the historically low levels of interest rates prevailing in 2003, and their evolution in respect of both the ECB’s main reserve currencies and the euro, have also led to a reduction of its interest income, including income on the counterpart assets to banknotes in circulation.

At the end of 2003 the number of staff employed by the ECB was 1,217, compared with 1,109 at the end of 2002. As from 1 January 2003 all vacant positions were opened to nationals of acceding countries, and the ECB successfully launched recruitment campaigns aimed specifically at recruiting such nationals as translators, lawyer-linguists and legal counsels. 39 staff members from acceding countries are currently employed on contracts of more than one year’s duration.

Since 1998 the ECB has grown steadily and the number of staff members has risen substantially, creating a need to permanently improve the functioning of the internal organisation. In this context, the Executive Board decided to launch a number of staff surveys on the issues of corporate principles, internal communications and organisational performance. On the basis of the survey results, the Executive Board decided to embark on a process of changes in management called “ECB in Motion”. Four project teams were established under the guidance of a project office and the Executive Board. In October 2003 the Executive Board approved a number of measures, most of which should be ready for implementation by July 2004. Our aim is to improve the functioning and efficiency of the ECB, to enhance the management of human resources and to reinforce central banking values such as efficiency, impartiality, discretion and high ethical standards among all staff. The fundamental spirit of ECB in Motion is to apply

more fully, more comprehensively and more efficiently the concept of the team to the different aspects of the functioning of the ECB, whether through a better empowerment of staff, through more direct rewards for performance of staff or through reinforcement of an open and cooperative environment.

Frankfurt am Main, March 2004



Jean-Claude Trichet

**Artist**  
Hans Vandekerckhove  
**Title**  
Landschappeling, 2000  
**Material**  
Oil on canvas  
**Format**  
200 × 160 cm



**CHAPTER I**

**ECONOMIC  
DEVELOPMENTS AND  
MONETARY POLICY**



# I MONETARY POLICY IN THE EURO AREA

## I.1 EVALUATION OF THE ECB'S MONETARY POLICY STRATEGY

After more than four years of conducting monetary policy for the euro area, the Governing Council of the ECB undertook a thorough evaluation of the ECB's monetary policy strategy in the first half of 2003 in order to take stock of the experience accumulated thus far. This evaluation took into account the public debate concerning the appropriate design of monetary policy and the results of a number of technical studies prepared by Eurosystem staff as background material for the evaluation exercise (see Box 1). On 8 May 2003 the Governing Council announced the outcome of its evaluation. That evaluation related to both the quantification of the price stability objective of the ECB and the framework for analysing the risks to price stability.<sup>1</sup>

### THE OBJECTIVE OF PRICE STABILITY

In October 1998 the Governing Council of the ECB announced a quantitative definition of its price stability objective. That objective was defined as "a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2%". By referring to an increase in the HICP of below 2%, the definition of price stability made it clear that both inflation and deflation are incompatible with price stability. The definition of price stability did not specify an explicit lower bound for inflation rates, reflecting uncertainty surrounding the size of a potential measurement bias in the HICP and its possible variation over time. The upper bound was set at a level clearly above zero in order to incorporate in the definition a safety margin to guard against the risks of deflation. At the same time, the upper bound of 2% was considered to be low enough for the benefits of price stability to be reaped.

The Governing Council also specified that "price stability is to be maintained over the medium term". This reflected the recognition that monetary policy is not suited to controlling prices or fine-tuning economic developments over short periods of time.

In its announcement of 8 May 2003, the Governing Council confirmed its definition of price stability. At the same time, it made clear that, within that definition, it aims to maintain the inflation rate below but close to 2% over the medium term.

In its quantification of the price stability objective, the Governing Council again explicitly took into consideration both the costs of inflation and the possible arguments for tolerating moderate positive inflation.

The costs associated with inflation are well understood. Recent studies suggest that they may actually be higher than previously thought, even in the case of moderate rates of inflation. In particular, inflation distorts the signalling function of relative price movements and diverts resources away from productive uses towards activities directed at protecting investors against inflation. Furthermore, inflation amplifies the distortionary effects of taxation and may increase uncertainty and thus risk premia, thereby hampering the accumulation of capital in the economy. From a redistributive point of view, inflation increases inequality, as it penalises the weakest groups in society, which are less equipped to protect themselves against the costs of inflation. On these grounds, barring further considerations, there would seem to be a strong case for literal price stability.

However, despite the significant costs of inflation, a number of considerations also suggest that maintaining a moderate positive rate of inflation would be desirable. The first argument concerns the presence of a zero lower bound for nominal interest rates and the risks of deflation. The lower bound problem stems from the fact that a central bank cannot force nominal interest rates to levels below zero. Any attempt to do so would probably fail, as the public would prefer to hold cash – which yields a zero nominal return – rather than lend or hold

<sup>1</sup> See also the article entitled "The outcome of the ECB's evaluation of its monetary policy strategy" in the June 2003 issue of the ECB's Monthly Bulletin.

deposits at a negative rate. In these conditions, a protracted period of deflation caused by a sequence of negative aggregate demand shocks may limit the central bank's ability to reduce real interest rates in order to stimulate demand and counteract deflationary pressures. Although alternative policy actions are available even when the interest rate is at zero, it is prudent to maintain a safety margin by aiming at a positive, but low, rate of inflation rather than at zero inflation.

The second argument for maintaining a moderate positive rate of inflation concerns the possible presence of a measurement bias in the price index, caused, for example, by a lack of adequate adjustment for changes in quality. This would mean that aiming at a measured inflation rate of zero could actually lead to declining prices. Although the size of the measurement bias in the euro area HICP is uncertain, available studies indicate that it is likely to be limited.

The third argument in favour of aiming for low positive inflation rates concerns the fact that a positive rate of change in the price level may have a beneficial effect in facilitating the real adjustment of the economy to various shocks in the presence of downward nominal rigidities. These rigidities may stem from producers' and workers' resistance to nominal reductions in prices and wages. While the practical importance of downward nominal rigidities is highly uncertain and the empirical evidence is not conclusive, particularly for the euro area, it is crucial that structural reforms seek to increase the flexibility of product and labour markets.

An additional consideration that might be put forward in favour of maintaining a low positive inflation rate in the medium term concerns processes of real convergence among heterogeneous regions in a currency union. If convergence across regions in terms of income and productivity levels is incomplete, structural inflation differentials may arise between regions to allow price (and income) levels in the

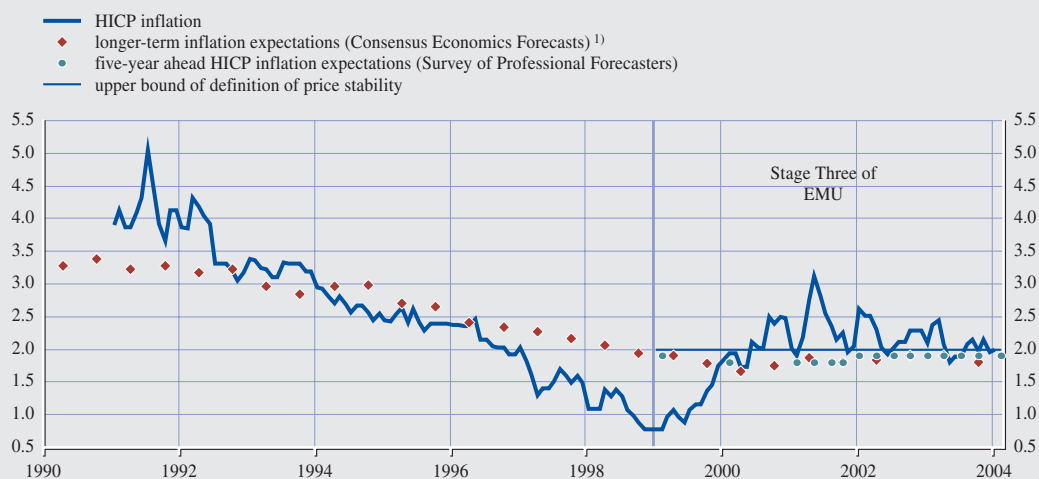
less developed areas to catch up with those in the more mature economies within the union. In these circumstances, it has been argued that monetary policy should aim at a union-wide inflation rate high enough to prevent regions with lower inflation rates from facing the significant costs associated with downward nominal rigidities or entering protracted periods of declining prices. While these considerations are theoretically sound, in practice they can be accommodated by a strategy that aims to maintain the inflation rate below but close to 2% over the medium term, as clarified by the Governing Council on 8 May. In fact, it should be noted that the present degree of convergence in the euro area is relatively high and does not seem to pose a significant problem at the current juncture. In view of the accession process, the overall relevance of this effect is also likely to remain limited in the future, given the small weight of the acceding countries' economies in an enlarged euro area. In addition, acceding countries will have to fulfil the convergence criteria in order to adopt the euro. This requires them to demonstrate that they have converged sufficiently and in a sustainable way and to meet the conditions necessary to sustain a low inflation environment prior to the adoption of the euro.

Regarding the index to be used for assessing whether price stability has been achieved, the Governing Council concluded that headline HICP remains appropriate. It most closely approximates – in a harmonised fashion across the countries of the euro area – the changes over time in the price of a representative basket of consumer goods. It is a credible and reliable statistic that helps to communicate, in a transparent manner, the ECB's commitment to full and effective protection against reductions in the purchasing power of money.

It is sometimes argued that central banks should use measures of "core" or "underlying" inflation to define their primary objective. These measures provide useful tools for analysis, as they remove the more volatile components and/or temporary factors from

**Chart 1 Longer-term inflation expectations**

(annual percentage changes)



Sources: Eurostat, Consensus Economics Forecasts, Survey of Professional Forecasters and ECB calculations.

1) Longer-term inflation expectations are market inflation expectations at a horizon of six to ten years. Until December 2002 these were constructed as a weighted average of the five largest euro area countries, accounting for more than 80% of euro area GDP.

headline inflation with a view to uncovering more fundamental trends in price movements. However, choosing a measure of underlying inflation to define price stability would involve significant drawbacks from the point of view of monetary policy, particularly regarding the loss of transparency. Furthermore, it would be rather arbitrary, as there is no single uncontroversial method for determining such measures. In any case, by defining the price stability objective in terms of headline inflation, the ECB is in no way paying excessive attention to short-term price developments in its monetary policy deliberations. The medium-term orientation of the ECB's monetary policy strategy ensures that the Governing Council duly discounts any short-term price volatility when taking decisions.

In conclusion, the Governing Council's decision of 8 May 2003 reflects the positive experience with the quantification of the ECB's price stability objective and ensures full continuity with the past conduct of its monetary policy. As Chart 1 shows, longer-term inflation expectations in the euro area have been firmly

anchored at levels in line with the definition of price stability since January 1999, remaining within a range between 1.7% and 1.9%. This is a remarkable result given the considerable adverse price shocks that have hit the euro area. This firm anchoring of inflation expectations allows the medium-term inflationary effect of adverse price shocks to be contained, thus avoiding possibly strong monetary policy reactions to such shocks, which could in turn have a negative effect on the variability of output.

#### THE ANALYSIS OF RISKS TO PRICE STABILITY

In October 1998 the Governing Council of the ECB announced that its approach to organising, evaluating and cross-checking the information relevant for assessing the risks to price stability would be based on two analytical perspectives, which subsequently came to be known as the "two pillars" of the ECB's monetary policy strategy. This framework is designed to ensure that no policy-relevant information is neglected in the formation of a comprehensive assessment of the outlook for price stability. Within one of the two pillars, which gives a prominent role to

money, a reference value for the growth rate of a broad monetary aggregate consistent with the ECB's price stability objective has been specified.

On 8 May 2003 the Governing Council announced that its monetary policy decisions would continue to be based on a comprehensive analysis of the risks to price stability made on the basis of the two pillars. The two pillars would henceforth be referred to as "economic analysis" and "monetary analysis". The Governing Council stated that, over time, both forms of analysis had been deepened and extended as the availability of euro area data had increased and technical tools had improved, and would continue to be developed in the future.

The Governing Council also clarified the way in which it integrates the indications stemming from these two complementary types of analysis as it seeks to come to an overall judgement on the risks to price stability. In particular, the Governing Council indicated that the monetary analysis serves mainly as a means of cross-checking, from a medium to long-term perspective, the short to medium-term indications derived from the economic analysis.

The economic analysis focuses mainly on the assessment of current economic and financial developments and the implied short to medium-term risks to price stability from the perspective of the interplay between supply and demand in goods, services and factor markets at those horizons. In this respect, due attention is paid to the need to identify the nature of shocks hitting the economy, their effects on cost and pricing behaviour and the short to medium-term prospects for their propagation in the economy.

However, economic analysis in isolation fails to capture the mechanisms by which monetary factors act over extended horizons and does not identify the longer-term trends underlying price developments. There is therefore a need for monetary policy to explicitly take into account the information contained in the medium-term

trend in money growth, which is empirically closely associated with the formation of prices at more extended horizons.

The undisputed relationship between money growth and inflation in the medium to long term provides monetary policy with a firm and reliable nominal anchor beyond the horizons conventionally adopted when constructing inflation forecasts on the basis of standard macroeconomic models. In this sense, the ECB's approach constitutes a commitment to ensuring that, while economic developments are responded to as they unfold, the fundamental factor driving prices over extended horizons – the rate of money growth – is consistently monitored.

The ECB's framework does not entail the partitioning of the information set relevant for the assessment of price prospects. Similarly, it does not allocate indicators rigidly to the economic analysis or the monetary analysis. On the contrary, it exploits all complementarities between relevant information variables in a consistent manner.

In order to properly reflect the cross-checking role of monetary analysis in its communication with the public, the Governing Council also decided that the President's Introductory Statement to the ECB's monthly press conferences would henceforth have a different structure, which would take into account the clarification of the ECB's monetary policy strategy.

To underscore the longer-term nature of the reference value for monetary growth as a benchmark for the assessment of monetary developments, the Governing Council decided to no longer conduct a formal review of the reference value on an annual basis. However, it also decided to continue to assess the conditions and assumptions underlying the reference value and communicate any changes to the underlying assumptions as soon as they become necessary.

**RESEARCH RELATED TO THE ECB'S MONETARY POLICY STRATEGY EVALUATION**

During the winter and spring of 2003 the Governing Council of the ECB conducted an evaluation of the ECB's monetary policy strategy. Ten background studies were prepared by Eurosystem staff, partly in consultation with external co-authors. The studies focused on technical issues which were considered relevant, such as the choice of the price index and the format used to define price stability, the indicator properties of monetary aggregates and the stability of euro area money demand. The technical studies were made available on the ECB's website immediately after the communication of the outcome of the strategy evaluation on 8 May 2003. In November 2003 the ECB published a book, which brought together those studies.<sup>1</sup>

Concerning the choice of price index, one of the studies concluded that the HICP continues to be a valid yardstick for prices in the euro area, but that there is still some room for improvement in the construction of the HICP. In particular, frequent re-basing of the national indices is important to ensure the accuracy and comparability of the HICP and to reduce substitution bias. Such bias occurs in a price index where it ignores the possibility that when prices of certain items rise, individuals may choose to replace more expensive goods with cheaper ones while still achieving the same level of utility.

The issue of the format used to define price stability concerns the importance of announcing a specific target, a range or a price stability objective formulated only in qualitative terms. One study focused on this by analysing survey data on long-term inflation expectations in 15 industrialised countries and found that these inflation expectations were well anchored in most of the countries. When comparing the evidence as regards the different formats of inflation objectives, the study concluded that the specific features of announcements have no visible effect on the ability to anchor inflation expectations.

An important topic that was analysed in two studies was the zero lower bound on nominal interest rates and the risks of prolonged deflation or a deflationary spiral. Whereas some costs related to inflation are also incurred in periods of deflation, there are particularly serious problems which are specific to deflation and which indicate that it may be desirable to maintain a small positive inflation rate as a safety margin. Based on somewhat different theoretical models, both studies of the zero lower bound issue concluded that the likelihood of the zero lower bound becoming binding did not represent a qualitatively important factor where the inflation objective was set at 1% or higher.

The decision by the Governing Council in 1998 to assign a prominent role to money was taken in recognition of the fact that inflation is a monetary phenomenon in the medium to long term. One of the background studies surveyed a large body of theoretical and empirical literature and concluded that a systematic monitoring of monetary developments can help a central bank to identify potentially destabilising shocks that would be difficult to detect using a real-sector model. Another study examined the potential for narrow money to improve forecasts of real GDP. Contrary to the findings for the United States, this study concluded that in the euro area M1 has better and more robust forecasting properties than yield spreads. One study conducted

<sup>1</sup> *Background Studies for the ECB's Evaluation of its Monetary Policy Strategy*, ECB, 2003.

formal tests on both the short and long-term stability of broad money demand for the euro area. It concluded that the stability of neither the long nor short-term parameters of money demand could be rejected. Another study reviewed the question of why broad money demand has been more stable in the euro area as a whole than in individual countries inside and outside the euro area. Among other things, the study suggested that stability has been enhanced by aggregating the money demand of individual euro area countries.

## CONCLUSION

With its announcement of 8 May 2003 the Governing Council confirmed and clarified the ECB's monetary policy strategy. The Governing Council's statement that it aims to maintain inflation rates below but close to 2% is fully consistent with the ECB's price stability definition announced in October 1998 and reflects full continuity with the past conduct of monetary policy. At the same time, the changes to the presentation of the two-pillar framework, now referred to as "economic analysis" and "monetary analysis", should help the public to understand more clearly the conduct of monetary policy.

## 1.2 KEY ECB INTEREST RATES REACHED HISTORICALLY LOW LEVELS IN 2003

The economic environment in which monetary policy was conducted in the euro area during the first half of 2003 was surrounded by considerable uncertainty related to the high degree of geopolitical tension in the Middle East and the associated turbulence in oil prices and financial markets. While real GDP growth stagnated in the first half of the year, prospects for economic activity gradually brightened over the summer following the end of the military operations in Iraq and the normalisation in financial market conditions. Overall, real GDP in the euro area increased by only 0.4% in 2003, a disappointing performance considering that the euro area had already recorded below potential real GDP growth in both 2001 and 2002 (with annual growth rates of 1.6% and 0.9% respectively).

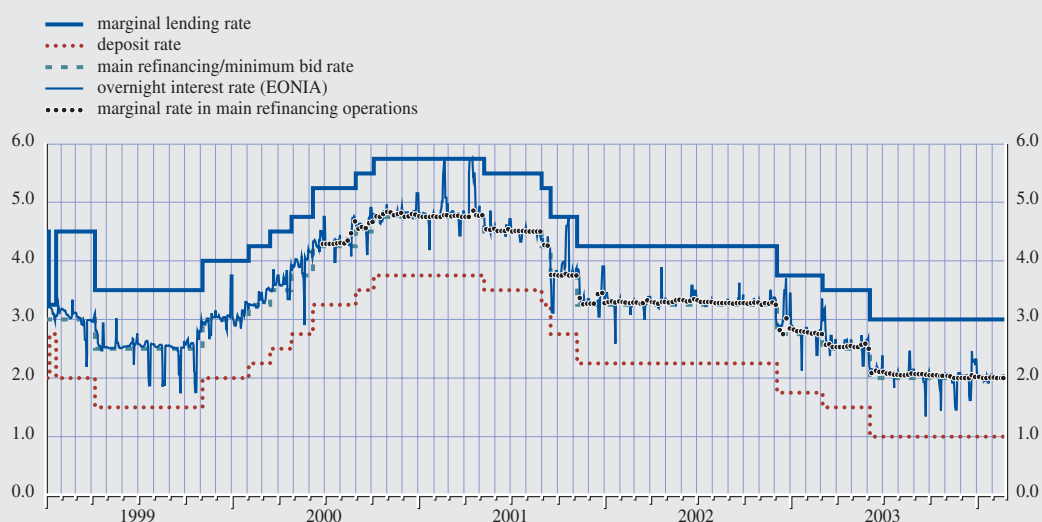
Despite weak economic activity, annual HICP inflation slowed only very moderately, from 2.3% on average in both 2001 and 2002 to 2.1% in 2003, thus remaining slightly above the upper limit of the ECB's definition of price stability. However, in 2003 the continued subdued pace of economic activity and the significant appreciation of the euro were expected to dampen inflationary pressures over the medium term.

In line with the ECB's monetary policy strategy, the Governing Council cross-checked the indications of risks to price stability derived from the economic analysis with those from the monetary analysis. Although, partly as a result of portfolio shifts, monetary growth remained strong in 2003 and there was a significant amount of excess liquidity which had built up after mid-2001, inflationary risks were considered to be low in view of the rather subdued economic activity and moderate credit growth.

The Governing Council lowered the key ECB interest rates in March and June 2003 by 25 and 50 basis points respectively. These decisions, which followed a 50 basis point reduction in December 2002, reflected the overall assessment in the first half of the year that medium-term inflationary pressures were moderating. These decisions put the minimum bid rate on the main refinancing operations at the historically low level of 2.0% and the interest rates on the marginal lending facility and the deposit facility at 3.0% and 1.0% respectively (see Chart 2). In the second half of 2003 these rates were kept unchanged, as the Governing Council considered them to be

**Chart 2 ECB interest rates and the overnight interest rate**

(percentages per annum; daily data)



Source: ECB.

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

compatible with the maintenance of price stability over the medium term.

Turning to a more detailed analysis of monetary policy decisions in 2003, in the first few months of the year the economic data increasingly supported the view that economic activity would remain subdued and evolve more weakly than had been expected in late 2002. Heightened geopolitical tensions in the Middle East sparked uncertainty about the economic outlook, led to sharp rises in oil prices and contributed to the increase in financial market volatility. In this environment, while the most likely scenario was one of a gradual increase in real GDP growth starting in the second half of 2003, risks were increasingly perceived to be on the downside. The accumulated macroeconomic imbalances in major economic areas of the world outside the euro area added to the uncertainty surrounding the global recovery.

HICP inflation remained above 2% in early 2003, as increases in oil prices and rises in indirect taxes and administered prices introduced some upward price pressures. The

fact that the annual growth rates of the less volatile components of the HICP remained relatively high despite the subdued economic activity, and the fact that nominal wage growth remained relatively strong despite the rise in unemployment and low productivity growth introduced some concern as regards the medium-term outlook for price stability.

Overall, however, the economic analysis indicated in early 2003 that the most likely outcome was that inflation would finally fall and eventually stabilise at a level below 2% over the medium term. The protracted period of weak economic growth was increasingly seen as a factor that would eventually limit the potential upward risks to price stability via its effects on wage and price-setting behaviour. In addition, the appreciation of the euro, witnessed since the spring of 2002, was expected to dampen consumer price inflation over time.

Monetary growth continued to be strong in early 2003, partly as a result of the high degree of economic and financial market uncertainty, which continued to give rise to portfolio

shifts into short-term liquid assets included in M3 and supported precautionary savings. Consequently, inflationary risks related to monetary developments were considered to be low. This assessment was supported by the continuing moderate rate of growth of loans to the private sector, notably of loans to non-financial corporations.

On balance, the Governing Council expected the factors dampening inflation over the medium term to prevail. Therefore, it decided on 6 March 2003 to reduce the key ECB interest rates by 25 basis points, taking the minimum bid rate on the main refinancing operations to 2.5%.

In the second quarter of 2003 it became increasingly clear that real economic activity was weak and that the downside risks to the scenario of a recovery remained. The possible effects of the military operations in Iraq were initially difficult to assess. Despite the abatement of the geopolitical tensions in the course of the spring, it gradually became evident that a strong recovery in confidence and economic activity was unlikely to materialise in the near future. Concerns about the impact of the SARS virus also clouded the outlook for economic growth in East Asia. In addition, other downside risks remained, related to the past accumulation of imbalances outside the euro area and uncertainty about the extent of the further adjustment still needed in the euro area corporate sector to enhance productivity and profitability after the protracted period of weak growth and the large decline in stock prices.

Oil prices declined as the uncertainty related to the outcome of the military operations in Iraq diminished. In view of the economic situation and the continued appreciation of the euro, there were reasons to expect in June 2003 that annual HICP inflation would reach levels comfortably below 2% over the medium term. This overall picture for inflation was also reflected in the June 2003 Eurosystem staff macroeconomic projections and in the forecasts of other international institutions produced in the second quarter of 2003.

Cross-checking the economic analysis with the monetary analysis, the strong M3 growth appeared increasingly to be related to the low levels of interest rates, as indicated by the strong growth in the most liquid components of M3. However, as a significant part of the accumulated excess liquidity was related to portfolio shifts and precautionary money demand, the overall monetary situation was assessed as being less of a concern for medium-term price developments, at least in a period of subdued economic activity.

Against this background, the Governing Council decided on 5 June 2003 to reduce the key ECB interest rates by 50 basis points. The reduction was in line with the aim of maintaining inflation rates below, but close to, 2% over the medium term and provided some counterweight to the various factors adversely affecting economic activity.

During the second half of 2003 economic confidence in the euro area first stabilised and then gradually improved amid signs of a global economic recovery. Uncertainty in stock markets declined significantly, supporting the pick-up in stock prices that had started in the second quarter of the year. In this context, the likelihood of a gradual economic upswing in the second half of 2003, strengthening further in 2004, increased.

The recovery in global demand was the main reason for the strong growth of euro area exports, compensating for the lower external price competitiveness associated with the pronounced appreciation of the euro witnessed since early 2002. In fact, in the second half of 2003 euro area exports increased significantly, after having declined in the first half of 2003. Domestic demand remained weak in the second half of 2003. However, the low level of interest rates and the generally favourable financing conditions, as well as positive terms-of-trade effects from the appreciation of the euro, were expected to support private demand. In addition, ongoing adjustment efforts in the corporate sector aimed



at enhancing productivity and profitability supported the expectation that business investment would recover gradually. Overall, all available forecasts and projections produced in the second half of 2003, including the Eurosystem staff macroeconomic projections published in December, pointed to a continued strengthening of euro area real GDP growth in 2004 and 2005.

The short-term downside risks to this scenario of a gradual economic recovery declined during the second half of the year. At the end of 2003 the Governing Council assessed these risks as being balanced. Over longer horizons, however, uncertainty remained in relation to the persistence of external imbalances in some other regions of the world and their potential effect on the sustainability of global growth.

As regards prices, in the second half of 2003 annual HICP inflation rates did not fall as quickly and strongly as previously expected. This was mainly a consequence of adverse food price developments and higher than expected oil prices after the end of the Iraq conflict, although this latter effect was attenuated by the appreciation of the euro. In addition, increases in indirect taxes and administered prices in late 2003 and early 2004 affected inflation rates. In January 2004 annual HICP inflation stood at 1.9%.

Nevertheless, in the second half of 2003 and early 2004 the Governing Council assessed that the outlook for price stability beyond the short term remained favourable. Given that the economic recovery was expected to be only gradual, it was considered that moderate wage developments in conjunction with a cyclical recovery in productivity would contain growth in unit labour costs. In addition, the renewed and significant appreciation of the euro was expected to continue contributing to subdued import price developments, moderating – both directly and indirectly – consumer price inflation. In fact, in the course of 2003 the euro appreciated by around 11% in nominal effective terms. At the same time, the Governing Council

recognised that the outlook for price stability prevailing at the end of 2003 and in early 2004 was conditional on a number of assumptions relating, inter alia, to global economic growth, oil prices, exchange rates, wage developments and fiscal measures. Furthermore, the Governing Council felt that the indications of increasing long-term inflation expectations from bond markets warranted close monitoring. With regard to monetary developments, M3 growth moderated only slowly in the second half of 2003. This indicated a rather gradual shift of portfolios away from monetary assets towards longer-term financial assets outside M3. In addition, the low level of interest rates contributed to the continued strong growth of very liquid assets. At the same time, the annual rate of growth of loans to the private sector increased in the second half of 2003.

In early 2004 there remained significantly more liquidity available in the euro area than was needed to finance non-inflationary growth. The Governing Council stressed that whether the accumulated excess liquidity would translate into inflationary pressures over the medium term depended very much on the extent to which portfolio shifts were reversed and on the future strength of economic growth. Indeed, should excess liquidity persist, it could lead to inflationary pressures over the medium term. In this context, the Governing Council emphasised that monetary developments needed to be carefully monitored.

Overall, in the second half of 2003 and early 2004 the Governing Council of the ECB assessed the monetary policy stance as being appropriate to maintain price stability over the medium term. As a consequence, the key ECB interest rates were kept unchanged in this period. At the same time, the Governing Council made it clear that it would continue to carefully monitor all developments that might affect its assessment of the risks to price stability over the medium term.

## 2 MONETARY, FINANCIAL AND ECONOMIC DEVELOPMENTS

### 2.1 MONETARY AND FINANCIAL DEVELOPMENTS

#### M3 GROWTH REMAINED STRONG

The trend of high monetary growth in the euro area, which started in mid-2001, continued in 2003. The average annual growth rate of the broad monetary aggregate M3 increased even further, to 8.0%, from 7.2% in 2002 and 5.4% in 2001. However, the first and second halves of the year showed diverging growth patterns. In the first two quarters annual M3 growth strengthened further, reaching a peak of 8.5% in the second quarter. It then moderated somewhat, to stand at 7.6% in the fourth quarter (see Chart 3).

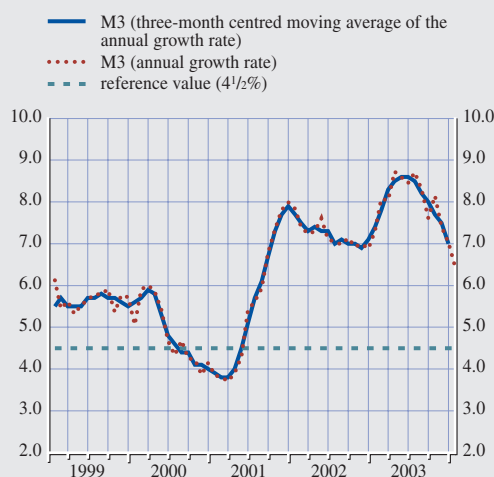
The continuing increase in M3 growth in the first half of 2003 reflected, to a large extent, a very strong liquidity preference on the part of euro area investors in response to high financial market and geopolitical uncertainties, the then rather uncertain outlook for economic growth and employment, and a rather flat yield curve. Monetary growth was also fuelled by the low level of interest rates.

In the second half of the year, monetary growth moderated only slowly. The improvement in financial market conditions and in the economic outlook only gradually induced economic agents to return to longer-term financial assets and reduce their precautionary savings. In addition, monetary growth continued to be supported by the low level of interest rates.

The strong M3 growth observed from mid-2001 resulted in the accumulation of significantly more liquidity in the euro area than needed to finance non-inflationary growth. This is illustrated by the sharp rise in the money gap measures in Chart 4, which show the cumulative deviations of M3 growth from its reference value since the beginning of 1999.<sup>2</sup> Both the nominal and the real money gaps continued to increase steeply in 2003, and by the fourth quarter they stood at their highest level since the start of Stage Three of EMU.<sup>3</sup>

Chart 3 M3 growth and the reference value

(annual percentage changes; adjusted for seasonal and calendar effects)



Source: ECB.

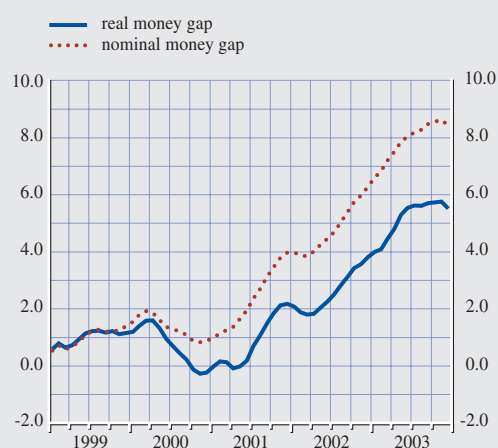
The main contribution to continued strong monetary growth during 2003 came from the most liquid components, i.e. those which form the narrow monetary aggregate M1 (see Table 1). Among them, the persistently strong annual growth rate of currency in circulation reflected the fact that both residents and non-residents of the euro area continued to increase their currency holdings in 2003. As a result, in the second half of the year the stock of currency in circulation reached a level in line with the long-term trend observed before the cash changeover. The growth of overnight deposits was also pronounced in 2003, reflecting the low opportunity costs of holding this type of deposit and, in the early part of the year, the climate of high uncertainty.

2 The measure of the nominal money gap is the difference between the actual level of M3 and the level of M3 that would have resulted from constant M3 growth at its reference value of 4½% since December 1998 (taken as the base period). The measure of the real money gap is the difference between the actual level of M3 deflated by the HICP and the deflated level of M3 that would have resulted from constant nominal M3 growth at its reference value of 4½% and HICP inflation in line with the ECB's definition of price stability, again using December 1998 as the base period.

3 It has to be kept in mind, however, that the choice of the base period is to some extent arbitrary. Therefore, caution is warranted when interpreting the level of these money gap measures.

**Chart 4 Estimates of the nominal and real money gaps**

(as percentages of the stock of M3; three-month centred moving averages)



Source: ECB.  
Note: For details see footnote 2 above.

The annual rate of growth of total short-term deposits other than overnight deposits was broadly stable during 2003, at 5.0% on average. Economic agents reduced their funds held in short-term time deposits (i.e. deposits with an

agreed maturity of up to and including two years), but holdings of short-term savings deposits (i.e. deposits redeemable at a period of notice of up to and including three months) increased substantially, in response to the gradual decline, in the first half of the year, of the typically positive spread between the interest rates paid by MFIs on these types of deposit.

Finally, the annual growth rate of marketable instruments fell to 8.4% in 2003, from 11.3% in 2002. This decline, which occurred mainly in the second half of 2003, suggests that economic agents slowly started to reduce their investments in safe short-term assets included in M3 as financial market uncertainty decreased and the yield curve steepened.

Annual M3 growth declined further, to 6.4% in January 2004, adding to the evidence that euro area investors were gradually shifting the structure of their portfolios towards longer-term and riskier financial assets outside M3. At the same time, the low level of interest rates continued to fuel the demand for monetary assets.

**Table I Summary table of monetary variables**

(annual percentage changes; annual and quarterly figures are averages; adjusted for seasonal and calendar effects)

	2002	2003	2002 Q4	2003 Q1	2003 Q2	2003 Q3	2003 Q4	2004 Jan.
<b>M1</b>	7.6	11.0	8.8	10.1	11.3	11.5	11.2	11.2
Currency in circulation	-11.8	32.2	12.9	39.1	35.7	29.6	26.2	25.0
Overnight deposits	10.9	8.2	8.2	6.6	8.1	8.9	9.1	9.1
M2 - M1 (= other short-term deposits)	5.7	5.0	4.8	4.3	5.5	5.7	4.7	3.7
Deposits with agreed maturity of up to and including two years	2.3	-1.0	1.5	0.4	0.0	-1.5	-3.2	-3.7
Deposits redeemable at notice of up to and including three months	8.5	9.9	7.6	7.5	9.9	11.4	10.9	9.4
<b>M2</b>	6.6	8.0	6.7	7.1	8.3	8.5	7.9	7.4
M3 - M2 (= marketable instruments)	11.3	8.4	8.5	10.5	9.8	7.4	6.0	1.1
<b>M3</b>	7.2	8.0	7.0	7.6	8.5	8.3	7.6	6.4
<b>Credit to euro area residents</b>	4.5	5.1	4.1	4.2	4.8	5.4	5.9	5.9
Credit to general government	1.6	4.3	2.0	2.1	3.5	4.9	6.6	6.2
Loans to general government	-1.0	0.2	-1.2	-1.2	-0.4	1.0	1.5	1.4
Credit to the private sector	5.3	5.3	4.7	4.8	5.1	5.5	5.7	5.8
Loans to the private sector	5.3	5.0	4.8	5.0	4.6	4.9	5.3	5.5
<b>Longer-term financial liabilities (excluding capital and reserves)</b>	4.4	5.6	5.2	5.1	5.2	5.6	6.4	7.1

Source: ECB.

## INCREASING GROWTH IN MFI CREDIT TO THE PRIVATE SECTOR

Chart 5 provides an overview of the annual flows of M3 and its counterparts in the consolidated balance sheet of the MFI sector. Increasing growth in M3 in the first half of 2003 was mainly driven by a rise in the annual increase of net external assets of the euro area MFI sector and increasing growth in total credit granted by MFIs to euro area residents, while the expansion of MFI longer-term financial liabilities (excluding capital and reserves) remained broadly stable in this period. In the second half of 2003 the moderation in M3 growth was accompanied by an increase in the growth rate of MFI longer-term financial liabilities (excluding capital and reserves) and a decline in the annual increase of MFI net external assets. It appears that investors started to again invest more in domestic and foreign longer-term assets, as the yield curve steepened and financial uncertainty lessened. However, the expansion of total MFI credit to euro area residents continued to increase.

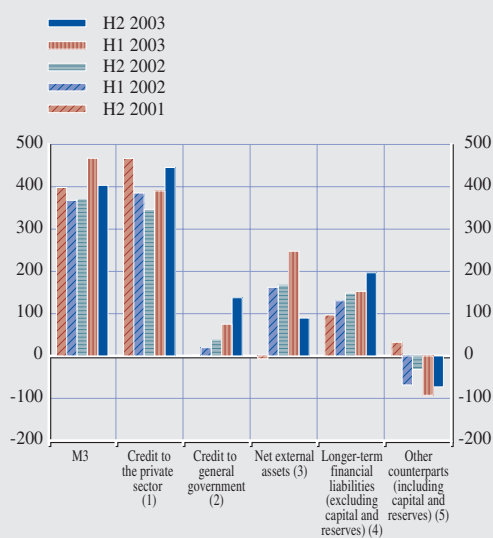
Looking in more detail at credit developments, the annual growth rate of MFI credit to euro area residents increased from 4.1% in the fourth quarter of 2002 to 5.9% in the last quarter of 2003. This rise reflected the higher borrowing needs of both the private and the government sector.

After declining between mid-2000 and the end of 2002, the annual growth of MFI loans to the private sector (accounting for 87% of MFI credit to the private sector) was relatively stable in the first half of 2003, before picking up in the second half of the year. Particularly in the first half, weak economic growth appears to have counterbalanced the impact of the low bank lending rates in the euro area. Thereafter, with the economic outlook improving, the demand for lending increased somewhat.

Seen from a long-term perspective, in 2003 the average annual growth rate of loans to the private sector was, in real terms, about 1¼ percentage points below its long-term

**Chart 5 Movements in M3 and its counterparts**

(annual flows; end of period; EUR billions; adjusted for seasonal and calendar effects)



Source: ECB.  
M3 = 1 + 2 + 3 - 4 + 5

average since 1980. However, compared with previous periods of sustained weak economic activity, loan dynamics remained relatively robust in 2003, reflecting the structurally lower interest rates prevailing since the introduction of the euro.

In 2003 the ECB introduced a quarterly bank lending survey for the euro area. The survey provides information on demand and supply conditions in the euro area credit markets and is designed to complement other statistics on MFI interest rates and credit.<sup>4</sup> At the beginning of 2003 almost half of the participating banks reported that they were tightening financing conditions for loans to enterprises. In the course of the year, however, the number of banks reporting a tightening of credit conditions fell continuously, indicating a certain stabilisation of credit conditions in the euro area. As regards lending to households, the number of banks reporting a tightening of

<sup>4</sup> See the article entitled "A bank lending survey for the euro area" in the April 2003 issue of the ECB's Monthly Bulletin.

credit standards remained low throughout the year, which may have supported a relatively robust expansion of loans (particularly those for house purchase) to households in 2003.

Credit to general government accelerated substantially in the course of 2003. This development reflected the rise in general government budget deficits, which was largely linked, in turn, to weak economic growth in the euro area.

#### LIQUIDITY REMAINED AMPLE

In summary, annual M3 growth remained strong in 2003, despite the moderation observed in the second half of the year. As a consequence, more liquidity has been accumulated in the euro area than needed to finance non-inflationary economic growth. However, the inflationary risks related to this high excess liquidity were considered low, given that the ample liquidity resulted, to a significant extent, from past portfolio shifts and that economic activity remained weak. The relatively moderate growth rate of MFI loans to the private sector in 2003 supported this assessment.

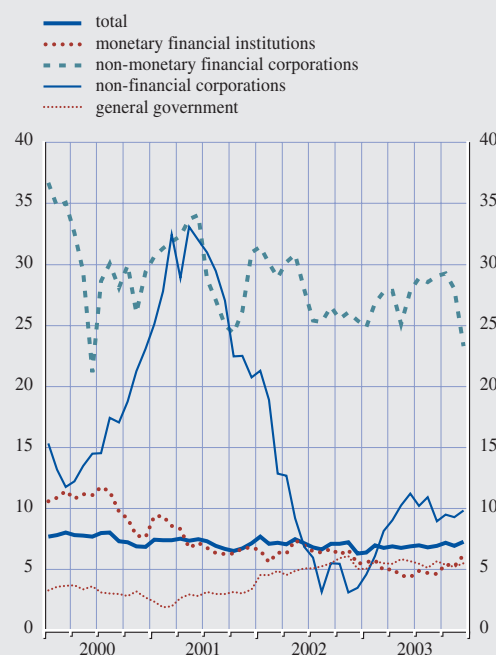
Looking ahead, should the unwinding of past portfolio shifts not gain momentum, there is a risk that once economic activity strengthens significantly the excess liquidity could translate into spending and lead to inflationary pressures in the medium term. For this reason, the Governing Council has repeatedly emphasised the need to monitor monetary developments closely.

#### ISSUANCE OF DEBT SECURITIES RISING

In 2003 the market for debt securities issued by euro area residents grew at a slightly higher pace than in 2002. The annual growth rate of the amount outstanding of debt securities increased to 7.3% at the end of 2003, compared with 6.3% at the end of 2002. The higher overall growth was largely driven by developments in the market for long-term debt securities, which represented 90.5% of the total amount outstanding of debt securities issued by euro

**Chart 6 Sectoral breakdown of debt securities issuance by euro area residents**

(annual percentage changes)



Source: ECB.

Note: Growth rates are based on financial transactions and are corrected for reclassifications, revaluations, exchange rate variations and other changes that do not arise from transactions.

area residents at the end of 2003. Gross issuance by euro area residents of euro-denominated debt securities accounted for around 94% of issuance in all currencies in 2003. The euro also remained an attractive currency for international issuers, with the amount outstanding of euro-denominated debt securities issued by non-residents of the euro area increasing by 17.4% during 2003, as compared with 12.9% during 2002.

As regards resident issuers, the annual growth rate of debt securities issued by the general government increased from 5.0% at the end of 2002 to 5.5% at the end of 2003 (see Chart 6). This was primarily due to an increase in issuance activity by the central government sub-sector, from 4.1% at the end of 2002 to 4.7% at the end of 2003. The annual growth rate of debt securities issued by the other government sub-sector, which primarily comprises local and

## Box 2

### THE CORPORATE DEBT SECURITIES MARKET IN EURO AREA COUNTRIES

A broad and deep corporate debt securities market opens up a viable alternative avenue of finance for corporations. This could have important implications for economic developments. A firm's decision to issue securities is primarily driven by its need for funding, and its choice of instrument involves a number of considerations, including taxes, bankruptcy and other costs.

For the purposes of this box, the corporate sector includes non-financial corporations and non-monetary financial corporations and excludes MFIs. Non-monetary financial corporations include insurance corporations and other financial intermediaries. The bulk of debt securities issuance by non-monetary financial corporations is, however, carried out by what are known as special financing vehicles. These are institutions which engage in financial activities, the main purpose of which is to raise money on behalf of a third party, such as a credit institution, a non-financial corporation, an investment fund or the general government. Such vehicles can be legally owned by the companies to which they are providing funds or can be without capital links to those companies, and can be established to facilitate a particular financial transaction. In the latter case, they are known as special purpose vehicles (SPVs). SPVs act as a conduit for the sole purpose of channelling funds from lenders to borrowers. They are precluded from engaging in activities other than the transaction for which they were established and they immunise the investor against the potential bankruptcy of the original owner of the assets (originator).<sup>1</sup>

The average annual growth rate of euro-denominated debt securities issuance by the corporate sector has largely outpaced the average annual growth in euro-denominated debt securities issued by all sectors considered together since the start of Stage Three of EMU. The amount outstanding of euro-denominated debt securities issued by non-financial corporations has grown at an average annual rate of 14% since January 1999, which is significantly higher than the 2% average annual growth rate for this sector during Stage Two of EMU. The same is true for euro-denominated debt securities issued by non-monetary financial corporations, the average annual growth rate of which has stood at 37% since January 1999, compared with 11% during Stage Two of EMU. Today's corporate debt securities market in the euro area has broadened to include a variety of issuers, from various economic sectors, with diverse financing needs and of variable credit standing. What used to be a corporate debt securities market limited to borrowers rated AA or higher has been able to accommodate a broadening spectrum of credit ratings. At the same time, the spectrum of economic sectors has broadened. Although non-financial debt securities issuance activity was dominated by the telecommunications, media and technology sector in 2000 and 2001, by 2003 this sector's share of issuance activity had returned to the levels seen before the introduction of the single currency.

Although growth in the corporate debt securities market has been very strong at the euro area level in the last three years (see Chart 6 in the main text), the trend towards increasing direct

<sup>1</sup> For more detailed information on securitisation, see the box in the article entitled "Recent developments in financial structures of the euro area" in the October 2003 issue of the ECB's Monthly Bulletin, pp. 47-49.

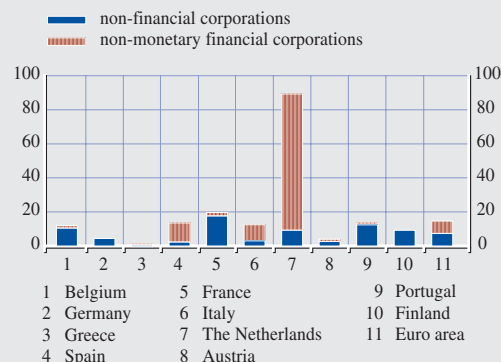
access to this market is anything but uniform across euro area countries.<sup>2</sup> The chart shows that the market for debt securities issued by non-financial corporations is relatively well developed in France, which accounted for more than half of the amount outstanding of such securities at the end of 2003. The corporate debt securities markets in Portugal, Finland, the Netherlands and Belgium are also relatively well developed. The cross-country differences are, however, to some extent accounted for by the fact that part of the corporate debt securities issues have been completed through financial subsidiaries.

In the euro area, the rapid growth of corporate bond issuance since 1999 has generally been closely linked to the wave of mergers and acquisitions, which may in part explain why financing through debt securities issuance differs quite significantly across the euro area economies. Another reason why corporate bond issuance is used to differing degrees across euro area countries is that the institutional and fiscal frameworks and other historically determined characteristics shaping the financial structure differ widely from one country to another.

The differences across euro area countries are even more pronounced in the case of the market for debt securities issued by non-monetary financial corporations (see the chart). According to ECB statistics, the most important market for these securities in terms of GDP is the Netherlands, followed by Italy and Spain somewhat behind. The Netherlands accounted for around 60% of the amount outstanding of euro-denominated debt securities issued by non-monetary financial corporations at the end of 2003. The situation prevailing in the Netherlands is to some extent attributable to taxation factors. The actual ultimate beneficiaries in many cases are residents of other euro area countries, which use special financing institutions in the Netherlands only as a dedicated financing vehicle. The domestic activity in the Netherlands is primarily driven by the securitisation of mortgage loans granted by MFIs.<sup>3</sup> These mortgage-backed securities, where the borrower or originator (e.g. the MFI) sells the loans to an SPV, are not the same as covered bonds, which are debt securities backed by loans that remain on the balance sheet of the borrower or issuer (e.g. the MFI). The latter are also known as Pfandbrief-style products. All in all, as is the case for debt securities issued by non-financial corporations, institutional, fiscal and historical factors largely explain the differences in the importance of debt securities issued by non-monetary financial corporations in the various euro area economies.

### Amounts outstanding of euro-denominated debt securities issued by euro area non-MFI corporations

(as percentages of national GDP, end-December 2003)



Sources: ECB and Eurostat.

Notes: The available ECB securities issues statistics are currently not harmonised at the euro area level, giving rise to differences in the data across countries. ECB securities issues statistics for amounts outstanding of debt securities issued by non-MFI corporations resident in Ireland and Luxembourg are not available. Data for GDP refer to 2002.

<sup>2</sup> See "Report on financial structures", ECB, 2002.

<sup>3</sup> See "Growing importance of securitisation and special purpose vehicles (SPVs)", De Nederlandsche Bank Statistical Bulletin, December 2003, pp. 31-35.

**Table 2 Sectoral shares of amounts outstanding of debt securities issued by euro area residents**

(as percentages; end of period)

	1998	1999	2000	2001	2002	2003
MFIs	37.2	38.6	39.0	38.6	38.4	38.0
Non-MFI corporations	8.1	9.5	11.2	12.9	13.4	14.5
<i>Non-monetary financial corporations</i>	3.1	4.2	5.1	6.1	6.9	7.8
<i>Non-financial corporations</i>	4.9	5.3	6.1	6.8	6.6	6.7
General government	54.7	51.9	49.8	48.5	48.1	47.5
<i>Central government</i>	53.1	50.3	48.1	46.7	45.9	45.0
<i>Other general government</i>	1.7	1.6	1.6	1.8	2.2	2.5

Source: ECB.

regional governments, decreased to 21.9% at the end of 2003 (from 28.0% at the end of 2002). The relatively high issuance activity in both government sub-sectors reflects less favourable budgetary developments in general and ongoing strong borrowing requirements outside central government in particular.

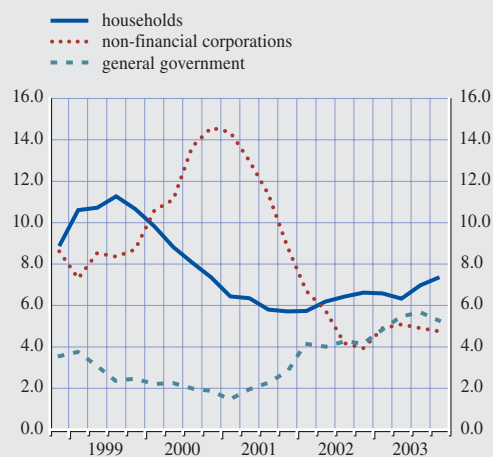
The annual growth rate of debt securities issued by MFIs increased from 5.4% at the end of 2002 to 6.2% at the end of 2003. By contrast, the annual growth rate of debt securities issued by non-financial corporations increased sharply to 9.8% at the end of 2003, from 3.5% at the end of 2002. The annual growth rate of debt securities issued by non-monetary financial corporations was 23.3% at the end of 2003, compared with 25.4% at the end of 2002. The strong overall issuance activity by the private non-MFI sector was supported by a further improvement in financing conditions and improved business confidence in the course of 2003 (see Box 2). The sharp increase in the growth rate of debt securities issued by non-financial corporations in the course of 2003 has to be seen against the background of subdued issuance activity during the second half of 2002, when many companies made efforts to reduce short-term liabilities in order to protect themselves from financial turbulence. Underlying the strong rebound in issuance activity in 2003 were increases in the annual growth rates of both short and long-term debt securities.

As a consequence of these developments, the proportion of debt securities outstanding issued

by non-monetary financial and non-financial corporations in the total amount outstanding of debt securities issued by euro area residents continued to increase, to 14.5% at the end of 2003, from 13.4% at the end of 2002. This was in line with the trend of an increasing non-MFI corporate sector share in total debt securities issuance that had prevailed over previous years (see Table 2). Mirroring this evolution in 2003 was a decrease in the share of the MFI sector, to 38.0% at the end of 2003, whereas the share of the general government sector in the stock of debt securities decreased to 47.5%.

**Chart 7 Debt financing of the non-financial sector**

(annual percentage changes)



Source: ECB.  
Note: For details, see Table 3.



**Table 3 Financing and financial investment of the euro area non-financial sector**

	Outstanding amount as a percentage of (sector) financing/financial investment <sup>1)</sup>	Annual growth rates (end of period) <sup>2)</sup>						
		2000	2001	2002	2003 Q1	2003 Q2	2003 Q3	2003 Q4 <sup>2)</sup>
<b>Financing</b>								
<b>Non-financial sector</b>	<b>100</b>	<b>6.2</b>	<b>4.5</b>	<b>3.9</b>	<b>4.3</b>	<b>4.7</b>	<b>5.0</b>	<b>5</b>
Debt financing <sup>3)</sup>	84.7	7.3	5.6	4.7	5.3	5.6	5.8	5 ½
<i>of which: short-term debt financing</i>	15.0	11.5	5.4	2.1	5.2	7.1	6.5	5
<i>of which: long-term debt financing</i>	69.7	6.4	5.6	5.3	5.3	5.2	5.6	5 ½
<b>Households <sup>3),4)</sup></b>	<b>23.2</b>	<b>7.4</b>	<b>5.7</b>	<b>6.6</b>	<b>6.6</b>	<b>6.3</b>	<b>7.0</b>	<b>7 ¼</b>
<i>of which: short-term debt financing</i>	7.3	6.3	-0.7	1.9	1.0	-1.0	-1.3	-1 ½
<i>of which: long-term debt financing</i>	92.7	7.5	6.3	7.0	7.1	7.0	7.7	8
<b>Non-financial corporations</b>	<b>43.4</b>	<b>8.4</b>	<b>5.1</b>	<b>2.5</b>	<b>2.9</b>	<b>3.3</b>	<b>3.5</b>	<b>3 ¼</b>
Debt financing <sup>3)</sup>	64.8	14.6	8.8	3.9	4.9	5.1	4.9	4 ¼
<i>of which: short-term debt financing</i>	19.3	20.6	4.7	-2.5	0.4	3.9	3.0	3
<i>of which: long-term debt financing</i>	45.5	11.8	10.9	7.0	7.0	5.6	5.7	5 ½
Quoted shares	35.2	3.4	1.5	0.7	0.4	0.8	1.0	¾
<b>General government <sup>3)</sup></b>	<b>33.4</b>	<b>1.9</b>	<b>2.8</b>	<b>4.1</b>	<b>4.8</b>	<b>5.5</b>	<b>5.7</b>	<b>5 ¼</b>
<i>of which: short-term debt financing</i>	14.8	-1.9	9.5	11.6	16.5	16.2	15.7	11 ¼
<i>of which: long-term debt financing</i>	85.2	2.5	1.8	2.9	3.0	3.7	4.0	4 ¼
<b>Financial investment</b>	<b>100</b>	<b>6.0</b>	<b>4.6</b>	<b>4.4</b>	<b>4.5</b>	<b>5.0</b>	<b>5.1</b>	<b>.</b>
<i>of which: short-term financial investment <sup>5)</sup></i>	43.1	3.8	5.8	5.3	5.3	5.9	5.4	.
<i>of which: long-term financial investment <sup>6)</sup></i>	55.7	7.2	4.3	4.0	4.0	4.1	4.5	.
Currency and deposits	37.9	3.4	4.6	4.9	5.9	6.5	6.7	.
Securities other than shares	13.3	9.2	7.7	4.2	0.7	-0.7	-1.8	.
Mutual fund shares	12.2	6.2	5.6	4.3	5.3	6.8	6.7	.
<i>of which: mutual fund shares excluding   money market fund shares</i>	9.6	7.0	3.7	3.1	4.2	5.6	6.3	.
<i>of which: money market fund shares</i>	2.7	0.1	21.1	11.3	11.2	12.9	8.7	.
Quoted shares	12.2	6.1	-0.4	1.0	1.6	2.4	3.3	.
Insurance technical reserves	24.4	8.5	7.2	6.5	6.4	6.5	6.5	.

Source: ECB.

1) As at the end of the third quarter of 2003. Figures may not add up due to rounding.

2) Figures for the most recent quarter shown in the table have been estimated on the basis of transactions reported in money and banking statistics and securities issues statistics.

3) Debt financing includes loans, debt securities issued, pension fund reserves of non-financial corporations and deposit liabilities of central government. Short-term debt financing (with an original maturity of up to one year) includes short-term loans, short-term debt securities issued and deposit liabilities of central government. Long-term debt financing (with an original maturity of over one year) includes long-term loans, long-term debt securities issued and pension fund reserves of non-financial corporations.

4) Including non-profit institutions serving households.

5) Short-term financial investment includes currency and deposits (excluding central government deposits), short-term debt securities and money market fund shares. Owing to the exclusion of central government deposits, short-term and long-term financial investment do not add up to 100%. When interpreting these figures, it should be kept in mind that both short-term and long-term deposits are included in short-term financial investment.

6) Long-term financial investment includes long-term debt securities, mutual fund shares excluding money market fund shares, quoted shares and insurance and pension products.

### OVERALL FINANCING OF THE NON-FINANCIAL SECTOR IN THE EURO AREA RECOVERED

The annual growth rate of financing of the euro area non-financial sector<sup>5</sup> recovered somewhat during 2003 (see Table 3). In particular, the annual growth rate of debt financing is estimated to have increased to 5 ½% in the fourth quarter of 2003, whereas that of

financing via quoted shares is estimated to have remained at a low level. These developments mirror a very favourable cost of debt financing and a relatively high cost of equity financing.

<sup>5</sup> The non-financial sector comprises households (including non-profit organisations serving households), non-financial corporations and general government.

Box 3

**DEVELOPMENTS IN THE FINANCIAL POSITION OF EURO AREA HOUSEHOLDS AND NON-FINANCIAL CORPORATIONS**

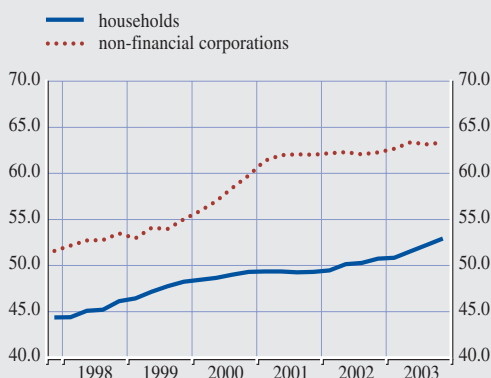
Between the mid-1990s and 2000 the indebtedness of the euro area private non-financial sector increased substantially, leading to relatively high debt-to-GDP ratios, particularly in the case of non-financial corporations. Chart A illustrates these developments.

As can be seen from Chart B below, non-financial corporations had a rising need for external finance in the second half of the 1990s as their net borrowing or financing gap (i.e. the gap between firms' income – gross saving plus capital transfers – and gross capital expenditure) increased. In addition, non-financial corporations' financing needs rose on account of large net purchases of financial assets as a consequence of the buoyant merger and acquisition activity over that period. Subsequently, the deterioration of their financial position in conjunction with a less favourable economic and financial market environment raised some concerns about the vulnerability of the non-financial corporate sector. However, when assessing the sustainability of current debt levels, the interest payment burden also needs to be taken into account. In fact, owing to the significant and sustained decline in the cost of debt financing over the 1990s, non-financial corporations' interest payments in relation to GDP have remained broadly stable since 1996.

Since 2001 non-financial corporations have adjusted their balance sheets in order to gradually reduce financial imbalances. Restructuring and cost-cutting measures as well as reductions in

**Chart A Debt of the private non-financial sector**

(as percentages of GDP)



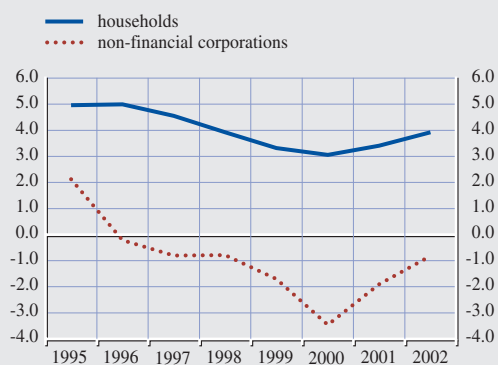
Source: ECB.

Notes: Debt refers to the sum of loans and debt securities and pension fund reserves in the case of non-financial corporations. Data for the last quarter of 2003 have been estimated on the basis of transactions reported in money and banking statistics and in securities issues statistics.

Compared with the annual data, quarterly debt-to-GDP ratios are somewhat lower, mainly because loans granted by the non-financial sector and by banks outside the euro area are not included. For a comparison with annual figures, see Chart 4 in the article entitled "Developments in private sector balance sheets in the euro area and the United States" in the February 2004 issue of the ECB's Monthly Bulletin.

**Chart B Net lending/borrowing position of the private non-financial sector**

(as percentages of GDP)



Source: ECB.

Notes: Annual data. The net lending/borrowing position is defined as gross saving plus capital transfers minus gross capital expenditure. Data for 2003 were not available at the date of publication.

both real and financial investments have resulted in a decline in the growth of financing and a gradual rebound in the generation of internal funds. As a consequence, the financing gap of euro area non-financial corporations gradually declined from a level of 3.5% of GDP in 2000 to 0.8% in 2002, and is estimated to have remained broadly stable in 2003. At the same time, the debt-to-GDP ratio grew at a slower pace from 2001 onwards, and has stabilised more recently. Taking due account, to the extent possible, of accounting differences, the level of indebtedness of euro area non-financial corporations in 2003 was broadly similar to that of the United States and below that of the United Kingdom and Japan.<sup>1</sup>

Since 2001 there has been an overall improvement in the financial position of euro area non-financial corporations. This is also reflected in the more positive perception of risks in this sector from the end of 2002 onwards, as illustrated by the significant decline in corporate bond spreads. Nevertheless, additional efforts to increase profitability and to improve balance sheet positions may still be needed in some corporate sectors.

With regard to the financial position of euro area households, their indebtedness has risen continuously since the second half of the 1990s, reflecting, in particular, strong growth in housing investment. Favourable financing conditions resulting from a considerable decline in mortgage interest rates fuelled the demand for housing loans and supported strong rises in house prices in some euro area countries. At the same time, developments in house prices bolstered the need for larger loans to purchase a house, while also resulting in wealth gains and higher collateral values. Notwithstanding the upward trend in household debt ratios, the interest payment burden on households measured as a percentage of GDP remained below the levels observed in the early 1990s because of the strong decline in the cost of debt financing. In addition, comparing household debt ratios across major industrialised countries, euro area households are significantly less indebted than households in the United States, the United Kingdom and Japan.<sup>1</sup>

Owing to a recovery in the household saving ratio since 2001 in the context of high economic uncertainty (especially in relation to employment), the net lending of the euro area household sector has risen. In 2002 it stood at levels slightly lower than those seen in the mid-1990s (see Chart B) and is estimated to have stabilised in 2003. Consequently, the financial position of euro area households appears relatively sound, although in some euro area countries some risks may exist in connection with rapid rises in house prices.

<sup>1</sup> See the article entitled "Developments in private sector balance sheets in the euro area and the United States" in the February 2004 issue of the ECB's Monthly Bulletin.

Household demand for debt financing continued to expand strongly in the course of 2003, despite weak economic growth (see Chart 7). This was related to ongoing robust demand for loans for house purchase, supported by a further rise – particularly in some countries – in residential property prices and by the low level of mortgage lending rates. The annual growth rate of short-term debt financing

gradually declined, to reach negative territory in the second quarter of 2003.

The annual growth rate of debt financing of non-financial corporations recovered somewhat in the first half of 2003, mainly in connection with short-term debt financing growth. By contrast, in the second half of the year the annual growth rate of debt financing of non-

financial corporations remained broadly stable. Overall, developments in debt financing of non-financial corporations have led to a broadly stable debt-to-GDP ratio of the sector in recent years (see Chart A in Box 3).

By contrast with the relatively robust growth of debt financing, the annual growth rate of quoted shares issued by non-financial corporations remained subdued in 2003. However, there was a slight recovery in the course of the year linked to a rise in stock prices, which tends to lower the cost of equity financing.

Finally, the annual growth rate of debt financing of general government rose during most of 2003, owing largely to weak economic growth putting strains on government finances.

#### **ONGOING RELUCTANCE OF THE NON-FINANCIAL SECTOR TO INVEST IN SHARES**

The annual growth rate of financial investment of the non-financial sector recovered somewhat during the first three quarters of 2003. In the first two quarters this was mainly driven by a rise in short-term financial investment growth, reflecting the then prevailing preference of economic agents for safe and liquid assets. In the third quarter, however, the annual growth rate of short-term financial investment declined somewhat in connection with the steepening of the yield curve and receding financial market uncertainty.

Long-term financial investment growth remained broadly stable in the first half of 2003 and rose in the third quarter. At the same time, the annual growth rate of investment in long-term debt securities fell in the first half of the year and remained subdued thereafter. The fall was probably related to the low level of interest rates, periods of relatively high bond market volatility and, from the second quarter onwards, a recovery in stock prices, which increased the relative attractiveness of equity over bond investments. The annual growth rate of investment in mutual fund shares (excluding money market fund shares) increased considerably during the first three quarters of

2003. Investment in quoted shares by the non-financial sector also recovered, although the annual growth rate remained subdued compared with the late 1990s. This points to ongoing, albeit declining, caution on the part of economic agents with regard to shares, following the losses made on equity holdings from early 2000 onwards.

#### **MARKET INTEREST RATES AT VERY LOW LEVELS**

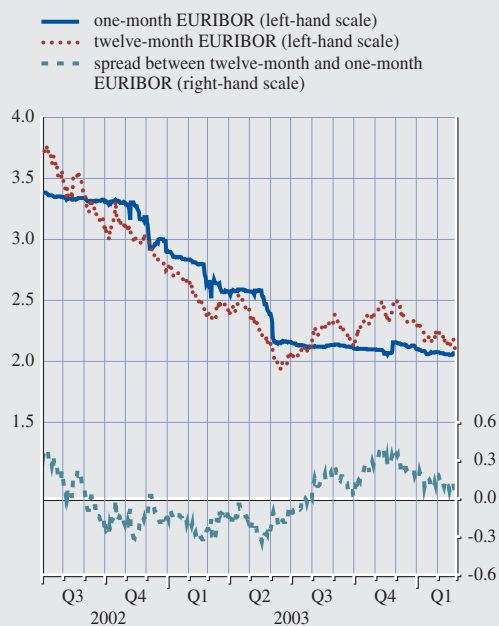
In line with the decisions of the Governing Council to reduce the key ECB interest rates in March and June 2003, money market interest rates decreased in the first half of the year, continuing the downward trend that started in mid-May 2002. After the reduction of the key ECB rates in June 2003 the downward trend in money market rates came to a halt. Money market interest rates at longer maturities subsequently rose in an environment in which the prospect of an economic recovery became more certain.

The market had broadly expected the reductions in key ECB interest rates in the first half of 2003. Longer-term money market interest rates fell early in the year against a backdrop of subdued economic growth and the appreciation of the exchange rate of the euro, which led to expectations of a decline in inflationary pressures. The slope of the money market yield curve, as measured by the difference between the twelve-month and one-month EURIBOR, remained broadly unchanged at negative values in the first half of 2003, as money market rates at different maturities declined by similar amounts (see Chart 8).

In mid-2003 the downward trend in money market rates started to reverse as pessimism subsided and market expectations gradually shifted towards an economic recovery in the euro area in an environment in which more liquidity was available than needed to support non-inflationary growth. Towards the end of the year, part of the increase in money market rates was reversed, as the appreciation of the euro dampened expectations of future increases in short-term interest rates. The one-month and

**Chart 8 Short-term interest rates in the euro area market**

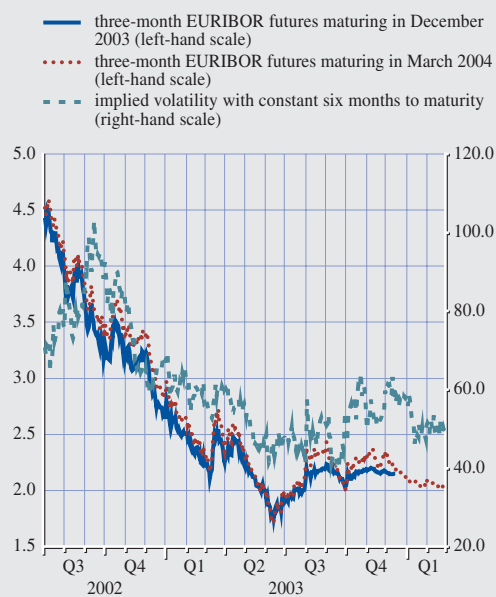
(percentages per annum; percentage points; daily data)



Source: Reuters.

**Chart 9 Three-month EURIBOR futures rates and implied volatility**

(percentages per annum; basis points; daily data)



Sources: Bloomberg, Reuters and ECB calculations.

Note: Implied volatility with constant six months to maturity is obtained from an interpolation of the term curve of implied volatility derived from options on three-month EURIBOR futures (see also the box entitled “Measures of implied volatility derived from options on short-term interest rate futures” in the May 2002 issue of the ECB’s Monthly Bulletin).

twelve-month EURIBOR stood at 2.10% and 2.31% respectively at the end of 2003, significantly lower than at end-2002 but somewhat higher than in mid-2003.

In the first two months of 2004 EURIBOR interest rates at longer maturities declined slightly, as market participants expected short-term interest rates during the course of 2004 to remain at lower levels than previously anticipated. On 27 February 2004 the one-month and twelve-month EURIBOR stood at 2.05% and 2.09% respectively.

Following the gradual reduction of economic, financial and geopolitical tensions towards the end of the first half of 2003, the implied volatility derived from options on three-month EURIBOR futures contracts declined

substantially. The low implied volatility in mid-2003 indicated that market participants attached a very low degree of uncertainty to future short-term interest rates at that point in time (see Chart 9). After remaining stable at relatively low levels for several months, implied volatility rebounded slightly towards the end of 2003 but remained well below the levels prevailing a year earlier.

At the very short end of the money market, for most of 2003 the overnight interest rate, as measured by the EONIA, fluctuated slightly above the level of the minimum bid rate on the Eurosystem’s main refinancing operations. The spread between the EONIA and the minimum bid rate increased slightly during the summer months, but it subsequently normalised in the course of September and October amid

comfortable liquidity conditions in the money market (see Chapter 2, Section 1.1).

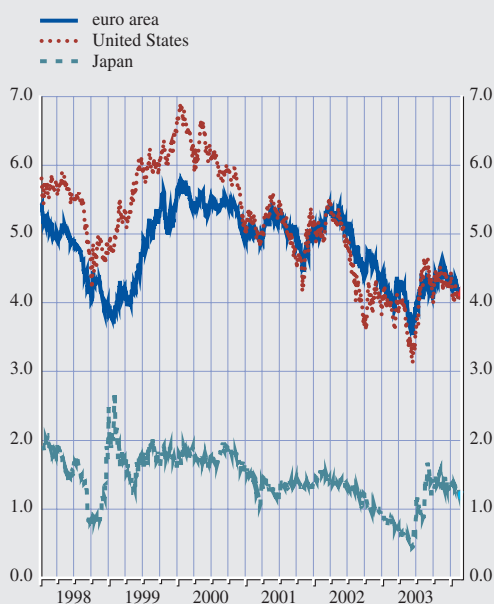
### PRONOUNCED FLUCTUATIONS IN BOND MARKETS THROUGHOUT 2003

Global bond markets were characterised by pronounced yield fluctuations in 2003, with bond yields in the major economies following broadly similar patterns. The volatility resulted from market participants' changing perceptions about the outlook for economic growth, inflation and the related monetary policy stance. Particularly during the first quarter of the year, uncertainties related to geopolitical tensions played an important role, as the high level of risk aversion triggered portfolio flows from equity to bond markets. The weakening of these uncertainties, as well as clear indications of a recovery in the major economies, prompted a partial reversal of these flows later in the year. All in all, ten-year government bond yields in the euro area and the United States increased by around 10 and 50 basis points respectively in 2003 and stood at around 4.3% at the end of the year in both cases (see Chart 10). The differential between US and euro area long-term bond yields hovered around zero throughout the last few weeks of the year, whereas it had been in negative territory for most of the year until then.

In the United States, government bond yields declined during the first half of the year, continuing the trend that started in 2002. These developments reflected market participants' more pessimistic perceptions about the short to medium-term outlook for economic activity amid tensions stemming from geopolitical uncertainty and disappointing macroeconomic data. In addition, bond yields declined as a result of investors' increasing concern about the risk of deflationary tendencies in the US economy. Consequently, ten-year government bond yields reached historically low levels of 3.1% by mid-June. The rebound in bond yields which started thereafter was mainly driven by upward revisions of market participants' expectations for economic growth and inflation, but may also have been related to their mounting

**Chart 10 Long-term government bond yields**

(percentages per annum; daily data)



Source: Reuters.

Note: Long-term government bond yields refer to ten-year bonds or to the closest available bond maturity. From 1 January 2001 euro area data include Greece.

concerns regarding the sustainability of the high fiscal and current account deficits in the United States. Hedging strategies of US housing agencies may have strengthened both the downward trend in US bond yields and the strong rebound over the summer. Despite this strong rebound, long-term bond yields in the United States ended the year at relatively low levels, partly reflecting perceptions among market participants that the Federal Reserve would keep short-term interest rates at very low levels for a considerable period.

Market participants' uncertainty regarding future bond yield movements in the US market remained relatively high throughout the year. This is suggested by the implied volatility on ten-year US Treasury futures, which reached fairly high levels from a historical perspective, in particular during the summer. The uncertainty seemed to reflect – to some extent –

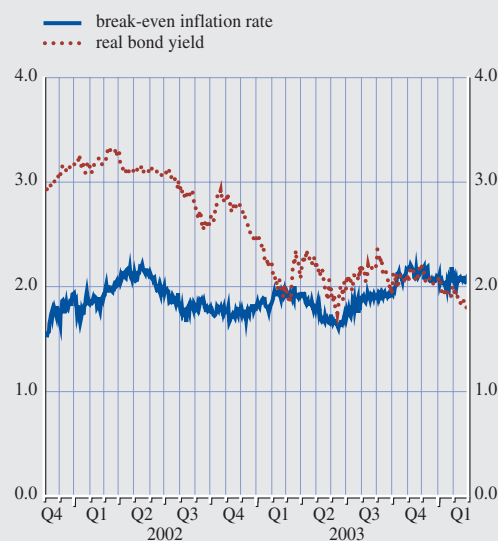
the ongoing debate among market participants over the sustainability of very low long-term bond yields in the United States.

In Japan, long-term bond yields broadly followed the same pattern as in the United States and the euro area, albeit remaining at much lower levels. In the first half of 2003 Japanese ten-year bond yields reached historical lows (around 0.4% in mid-June), reflecting investors' growing pessimism about the outlook for the Japanese economy. Market participants' concerns stemmed from the strong appreciation of the yen vis-à-vis the US dollar – which was perceived as negatively affecting Japanese exporters – as well as from the effects of the SARS epidemic. Ten-year bond yields rebounded sharply during the third quarter and then stabilised at the end of the year, to reach 1.4% on 31 December, which was close to the levels last seen at the beginning of 2002. Expectations of a swifter economic recovery, as well as portfolio shifts from bonds to stocks, contributed to a rise in long-term bond yields during the second half of the year.

In the euro area, bond market developments in 2003 to a large extent mirrored those in the United States, although euro area bond yields fluctuated somewhat less. In the first half of 2003 market participants gradually became less optimistic about growth prospects, which pushed long-term interest rates lower. The high degree of uncertainty surrounding the geopolitical situation was reflected in an increase in market participants' risk aversion and thus prompted "flight-to-safety" flows from the stock to the bond market. From mid-June onwards euro area bond yields began to rise, although less markedly than in the United States. These developments reflected market participants' upward revisions with regard to expected economic growth and – to some extent – upward revisions of inflation expectations. Indeed, the break-even inflation rate, measured as the difference between the yields on ten-year nominal and index-linked bonds, increased somewhat after mid-June, although this was partly also due to technical factors (see

**Chart 11 Euro area long-term real bond yield and break-even inflation rate**

(as percentages; daily data)



Sources: Reuters, French Treasury and ISMA.

Note: The euro area real bond yields are derived from the market prices of French government bonds which are indexed to the euro area HICP (excluding tobacco prices) and which mature in 2012. The methods used to compute the break-even inflation rate were outlined on page 16 of the February 2002 issue of the ECB's Monthly Bulletin.

Chart 11). The degree of uncertainty prevailing in euro area bond markets changed little overall in 2003 according to developments in implied bond market volatility. Moreover, and by contrast with the situation in the United States, implied bond market volatility in the euro area was, in general, not particularly high in 2003.

Financing conditions in euro area corporate bond markets improved significantly in the first part of the year and remained very favourable until the end of 2003. The relative cost of financing for BBB-rated corporations, for example, as measured by the differential between the yields on bonds issued by such corporations and comparable government bonds, declined markedly – by around 150 basis points – in 2003 and stood at around 80 basis points at the end of the year, which was very low by historical standards. These developments in financing conditions are attributable to an improved outlook for corporate credit risk as perceived by investors and to a

stronger preference for higher-yielding assets on the part of investors, reflecting the historically low levels of risk-free interest rates.

In early 2004 long-term bond yields declined somewhat in all major markets. Between the end of December 2003 and 27 February 2004 ten-year government bond yields in the euro area and in the United States fell by around 20 and 25 basis points respectively. The yield spread between BBB-rated corporate bonds and comparable government bonds in the euro area remained broadly unchanged over this period.

### MFI INTEREST RATES BROADLY FOLLOWED MARKET RATES

Short-term MFI interest rates<sup>6</sup> declined during the first half of 2003 and stabilised thereafter (see

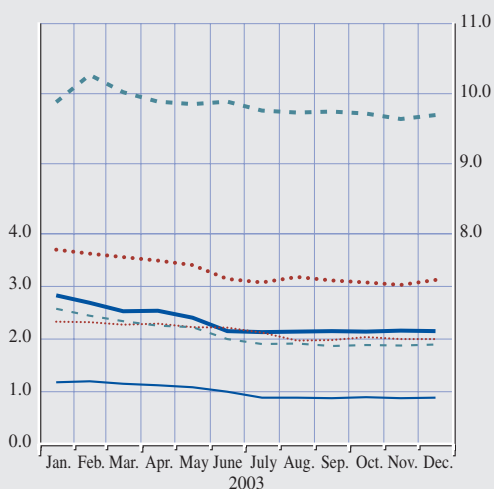
Chart 12). Between January and December the rates on short-term savings deposits by households (i.e. redeemable at a period of notice of up to three months) and overnight deposits by non-financial corporations both declined by around 30 basis points, to 2.0% and 0.9% respectively. Short-term lending rates also declined, although to varying degrees, depending on the borrower type. From the beginning of 2003 short-term lending rates to non-financial corporations (i.e. loans over €1 million with a floating rate or with an initial

6 The ECB released euro area MFI interest rate statistics for the first time in December 2003, which cover the period from January 2003 onwards. They replaced the previously published euro area retail interest rate statistics, which were produced on the basis of national interest rate statistics which already existed before 1999. The new MFI interest rate statistics are harmonised and thus generally comparable across countries.

**Chart 12 Short-term MFI interest rates and a short-term market rate**

(percentages per annum; rates on new business)

- three-month money market rate (left-hand scale)
- short-term loans to non-financial corporations<sup>1)</sup> (left-hand scale)
- - - overdrafts to households (right-hand scale)
- overnight deposits from non-financial corporations (left-hand scale)
- short-term savings deposits from households<sup>2)</sup> (left-hand scale)
- - - short-term time deposits from households<sup>3)</sup> (left-hand scale)



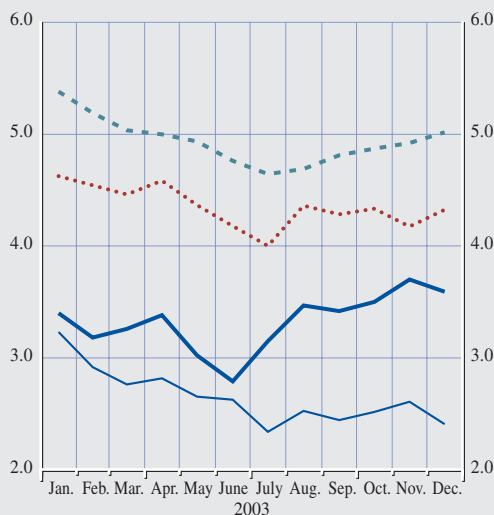
Source: ECB.

- 1) Include loans to non-financial corporations over €1 million with a floating rate or with up to one year initial rate fixation.
- 2) Include deposits from households redeemable at notice of up to three months.
- 3) Include deposits from households with an agreed maturity of up to one year.

**Chart 13 Long-term MFI interest rates and a long-term market rate**

(percentages per annum; rates on new business)

- five-year government bond yields
- long-term loans to non-financial corporations<sup>1)</sup>
- - - long-term loans for house purchase<sup>2)</sup>
- long-term time deposits from households<sup>3)</sup>



Source: ECB.

- 1) Include loans to non-financial corporations over €1 million with over five years' initial rate fixation.
- 2) Include loans to households with over five and up to ten years' initial rate fixation.
- 3) Include deposits from households with an agreed maturity of over two years.



rate fixation of up to one year) declined by around 60 basis points, to 3.1% in December, while the rates on bank overdrafts to households decreased only slightly, by around 20 basis points, to 9.7%. These developments in short-term MFI interest rates took place against the background of a decrease of around 70 basis points in the three-month money market rate in 2003. The pass-through of the marked drop in market rates to short-term bank interest rates was broadly in line with the historical pattern, in particular the fact that rates on overnight deposits and on typical short-term savings deposits tend to adjust particularly slowly to changes in market rates.

Long-term MFI interest rates on new business declined during the first half of 2003 but rebounded from August onwards, broadly reflecting the pattern in comparable government bond yields (see Chart 13). For the entire year, the rates on loans to households for house

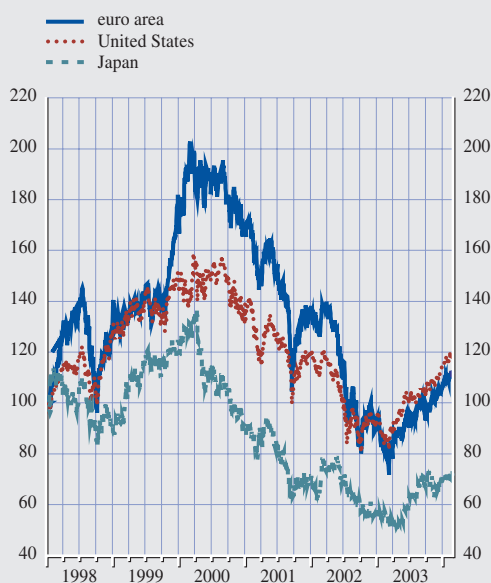
purchase with over five and up to ten years' initial rate fixation and on long-term loans to non-financial corporations (loans over €1 million with over five years' initial rate fixation) decreased by around 35 and 30 basis points, to 5.0% and 4.3% respectively. Thus, general developments in long-term MFI interest rates were another indication of the very favourable financing conditions that prevailed throughout 2003. As regards long-term MFI deposit interest rates, rates on long-term deposits by households (i.e. with an agreed maturity of over two years) fell by around 80 basis points between January and December 2003, to around 2.4%.

### GLOBAL STOCK PRICES INCREASED STRONGLY IN 2003

Putting an end to the downward correction that commenced in March 2000, stock prices in the major markets rose strongly in 2003, recording

Chart 14 (a) Stock price indices

(index: 1 January 1998 = 100; daily data)

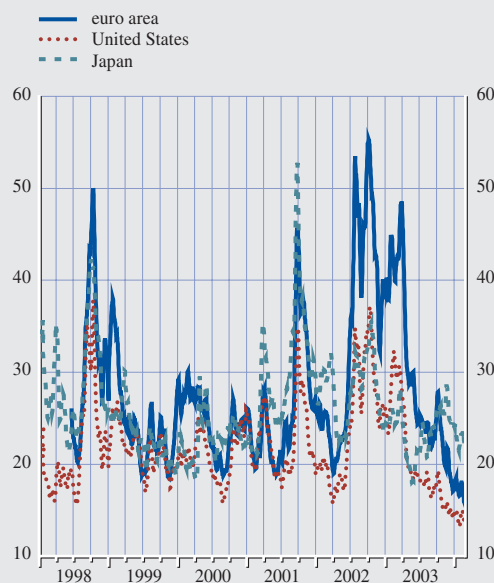


Source: Reuters.

Note: The Dow Jones EURO STOXX broad index for the euro area, the Standard & Poor's 500 for the United States and the Nikkei 225 for Japan. From 1 January 2001 onwards euro area data also include Greece.

Chart 14 (b) Implied stock market volatility

(percentages per annum; ten-day moving average of daily data)



Source: Bloomberg.

Notes: The implied volatility series reflects the expected standard deviation of percentage stock price changes over a period of up to three months, as implied in the prices of options on stock price indices. The equity indices to which the implied volatilities refer are the Dow Jones EURO STOXX for the euro area, the Standard & Poor's 500 for the United States and the Nikkei 225 for Japan.

their first annual increases since 1999 (see Chart 14a). Increasing stock prices were accompanied by significant drops in implied stock market volatility, which is a measure of market participants' degree of uncertainty (see Chart 14b).

In general, developments in broad stock market indices in the United States, Japan and the euro area followed similar patterns in the course of 2003. Up to mid-March stock prices declined in these markets on account of investors' more pessimistic outlook for the global economy, increased uncertainty and risk aversion. All of these factors appeared to be closely related to intensified geopolitical tensions and the prospects of war in Iraq. The apparent global "flight" from equities was also spurred by increased concerns about corporate earnings quality in the wake of repeated accounting scandals. For the rest of the year stock prices in the major markets followed a solid upward trend. Initially, the stock market rebound was set in motion by the normalisation of market conditions resulting from market participants' fading uncertainty at the outset of the military operations in Iraq. In the second half of the year stock prices were further bolstered by continuously improving corporate earnings, abating stock market uncertainty and a brighter outlook for the world economy.

Overall, between end-2002 and end-2003, stock prices in the United States, as measured by the Standard & Poor's 500 index, increased by 26%. In Japan, stock prices, as measured by the Nikkei 225 index, increased by 24%, while in the euro area the Dow Jones EURO STOXX index gained 18% over the same period.

In the United States, the strong increases in stock prices in 2003 might have also been bolstered by the economic stimulus package passed by the US congress at end-May, including a reduction in dividend and capital gains taxation rates. The improved corporate outlook was corroborated by corporate earnings reports that, for most of 2003, exceeded expectations. While the better than expected

earnings figures seemed mainly to reflect successful cost-cutting measures in the first half of 2003, they were further supported by the recovery in general business activity during the second half of 2003.

In Japan, stock prices declined during the first four months of 2003, following market concerns about non-performing loans in the Japanese banking sector that continued to negatively affect stock prices. In addition, the stock prices of export-oriented firms were adversely affected by the strengthening of the Japanese yen vis-à-vis the US dollar. Later, between April and mid-September 2003, Japanese stock markets rebounded strongly against the background of improved economic data and sounder corporate earnings reports, and possibly also as a result of spillover effects from the US stock market. From mid-September onwards stock prices broadly stabilised.

In the euro area, stock price developments tended to be strongly synchronised with movements in US stock markets. As with the United States, the overall rise in euro area stock prices reflected declining stock market uncertainty together with a market perception of a more favourable economic and corporate outlook. As regards the sectoral breakdown, the general increase in euro area stock markets was mainly driven by the technology, financial and consumer cyclical sectors, which had seen proportionally larger declines during 2002. In addition, in the financial sector, the improvement of financial market conditions after March 2003 together with cost-cutting efforts and lower loan loss provisions seemed to have a positive impact on the profitability of banks.

In the period from end-2003 to 27 February 2004 the Dow Jones EURO STOXX index, the Standard & Poor's 500 index and the Nikkei 225 index increased further, by 5%, 3% and 3% respectively. These increases seemed to reflect further indications of improved corporate profitability, lower long-term interest rates and further declines in stock market uncertainty.

## 2.2 PRICE DEVELOPMENTS

Despite subdued economic activity and the appreciation of the euro, overall HICP inflation in the euro area averaged 2.1% in 2003, which was only 0.2 percentage point lower than in the previous two years (see Table 4). The main reason for the decrease with respect to 2002 was lower average year-on-year growth rates in non-energy industrial goods and services prices, which also allowed for a decline in the average growth rate of the HICP excluding unprocessed food and energy to 2.0% from 2.5% in 2002. In this context, the pattern of overall HICP movements throughout 2003 reflected developments in the more volatile sub-components: energy and unprocessed food prices. Cost pressures were subdued over 2003 as producer prices showed moderate growth rates and nominal labour cost growth levelled off. However, the decline in labour productivity growth in the context of weak economic activity led to an increase in the growth rate of unit labour costs in the first half of 2003.

In January 2004 overall HICP inflation fell to 1.9%, down 0.1 percentage point compared with December 2003. This was mainly due to strong base effects in energy and tobacco prices, partly offset by the upward impact from

administered prices and indirect tax changes. The year-on-year rate of change of the HICP excluding energy and unprocessed food prices remained unchanged at 1.9%.

### HEADLINE INFLATION REFLECTED DEVELOPMENTS IN THE MORE VOLATILE COMPONENTS

Overall HICP inflation followed a rather erratic pattern over 2003 as a whole (see Chart 15). Headline inflation rose in early 2003, as geopolitical uncertainties related to the war in Iraq pushed up energy prices. Once these geopolitical uncertainties had lessened, and as the euro continued to appreciate against the US dollar, the contribution of energy developments eased and headline inflation resumed its downward trend to reach 1.8% in May, the lowest rate of increase in three years. In the second half of the year, however, headline inflation hovered around 2%, mainly reflecting two opposing influences. On the one hand, there was a rising contribution from food prices – unprocessed food prices rose as a result of the summer heatwave in Europe, while increases in tobacco taxation also pushed up processed food prices. On the other hand, the contribution from energy prices declined with respect to the first half of the year as a result of the euro appreciation, which attenuated the effects of the

**Table 4 Price developments**

(annual percentage changes, unless otherwise indicated)

	2001	2002	2003	2002 Q4	2003 Q1	2003 Q2	2003 Q3	2003 Q4	2003 Dec.	2004 Jan.
<b>HICP and its components</b>										
Overall index	2.3	2.3	2.1	2.3	2.3	1.9	2.0	2.0	2.0	1.9
Energy	2.2	-0.6	3.0	2.9	7.0	1.5	2.1	1.6	1.8	-0.4
Processed food	2.9	3.1	3.3	2.6	3.1	3.3	3.1	3.8	3.8	3.3
Unprocessed food	7.0	3.1	2.1	1.6	0.1	1.5	3.4	3.6	3.2	2.9
Non-energy industrial goods	0.9	1.5	0.8	1.2	0.7	0.9	0.7	0.8	0.7	0.6
Services	2.5	3.1	2.5	3.1	2.7	2.6	2.4	2.4	2.3	2.5
<b>Other price and cost indicators</b>										
Industrial producer prices <sup>1)</sup>	2.1	-0.1	1.6	1.2	2.4	1.5	1.2	1.1	1.0	0.3
Oil prices (EUR per barrel) <sup>2)</sup>	27.8	26.5	25.1	26.5	28.4	22.7	25.1	24.5	24.0	24.2
Commodity prices <sup>3)</sup>	-8.1	-0.9	-4.5	5.6	-3.2	-7.9	-5.8	-1.2	-0.2	5.1

Sources: Eurostat, Thomson Financial Datastream and HWWA (Hamburg Institute of International Economics).

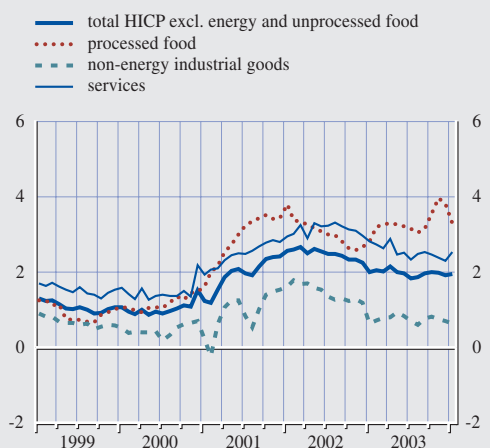
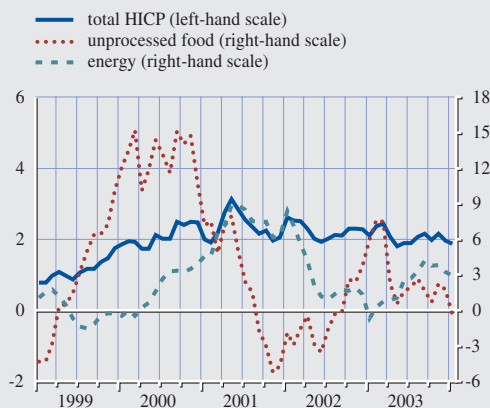
1) Excluding construction.

2) Brent Blend (for one-month forward delivery).

3) Excluding energy. In euro.

**Chart 15 Breakdown of HICP inflation: main sub-components**

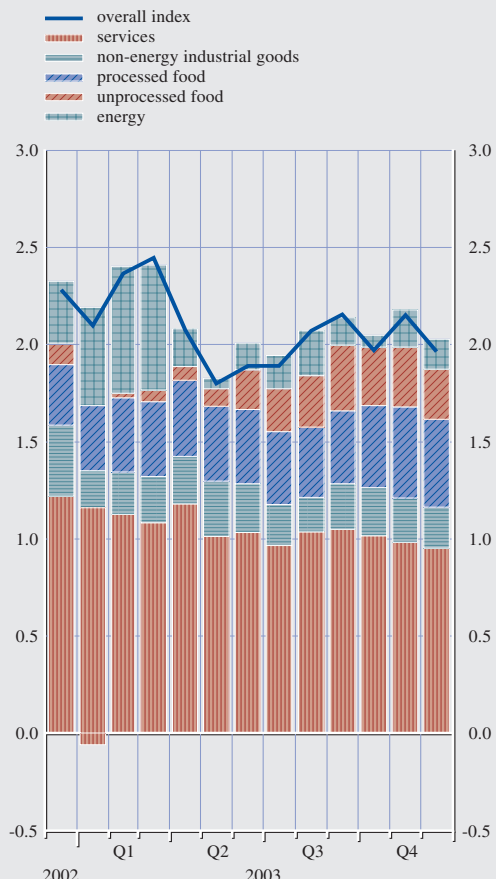
(annual percentage changes; monthly data)



Source: Eurostat.

**Chart 16 Contributions to HICP inflation from sub-components**

(annual percentage point contributions; monthly data)



Source: Eurostat.

rise in US dollar-denominated oil prices (see Chart 16).

In 2003 headline inflation was particularly resilient to the subdued economic activity and, despite some direct impact via energy prices, to the appreciation of the euro. This was also true for the HICP excluding energy and unprocessed food.

Processed food prices in 2003 were mainly influenced by increases in tobacco prices as a result of increases in indirect taxation in some countries both in the first few months of the year and, especially, in the latter part of the year. This translated into a contribution of this

main sub-component to overall inflation of around 0.4 percentage point.

Services prices growth in 2003 showed a gradual decline from the fairly high level reached in 2002. The year-on-year rate of growth of services prices followed a downward trend during the course of the year, reaching 2.3% in December, which was around 0.7 percentage point lower than in December 2002. As a result, the contribution of services price growth to overall inflation declined to around 1.0 percentage point, which was nonetheless almost half of the observed HICP inflation rate for most of 2003. By contrast, the annual rate of inflation of non-energy industrial

## Box 4

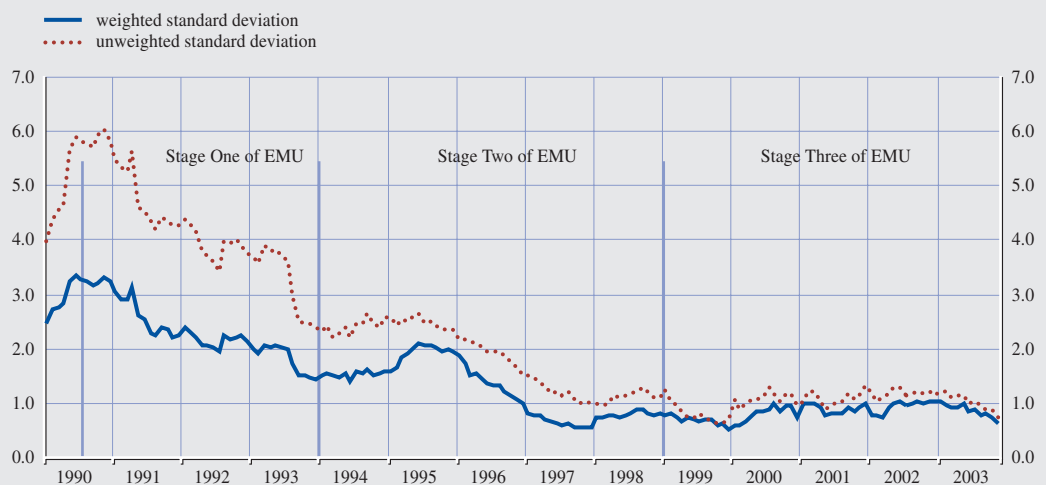
### INFLATION DIFFERENTIALS IN THE EURO AREA: POTENTIAL CAUSES AND POLICY IMPLICATIONS

The diversity of inflation developments among the euro area countries – as captured by various dispersion indicators – declined significantly over the 1990s. Following the start of Stage Three of EMU in 1999, inflation dispersion continued to decline, reaching its lowest level in the second half of 1999. However, it then picked up modestly until early 2001. Since then, inflation dispersion in the euro area has remained broadly stable, before declining again during 2003 to levels close to those seen in the second half of 1999. All in all, the extent of inflation dispersion observed at present in the euro area is not notably different from that in the United States.

Notwithstanding the currently low level, by historical standards, of inflation dispersion in the euro area, the euro area has witnessed relatively persistent inflation differentials over the past four years. With the exception of Belgium, France, Luxembourg and Finland, all euro area countries have experienced inflation persistently either above or below the euro area average since 1999<sup>1</sup>. In particular, five countries (Greece, Spain, Ireland, the Netherlands and Portugal) have experienced relatively large and persistently positive inflation differentials vis-à-vis the euro area, which however have started to narrow since 2002 in Portugal and in the course of 2003 in Spain, Greece and Ireland. In the Netherlands, meanwhile, the inflation differential vis-à-vis the euro area has actually turned negative recently. By contrast, Germany and Austria have observed persistently negative inflation differentials. This box briefly reviews the potential causes and the policy implications of inflation dispersion in the euro area.<sup>2</sup>

#### Inflation dispersion in the euro area

(standard deviation in percentage points)



Source: Eurostat.

1 Based on annual average inflation rates in 1999-2003.

2 For a more detailed analysis and discussion of inflation differentials in the euro area see the ECB report entitled "Inflation differentials in the euro area: potential causes and policy implications", published on the ECB's website ([www.ecb.int](http://www.ecb.int)) on 30 September 2003.

## Potential causes

With respect to the inflation differentials observed in the euro area, it needs to be stressed that the single monetary policy implied a regime shift, the effects of which on price formation processes would take several years to unfold. In particular, the move to Stage Three led to strong declines in interest rates in Ireland, Portugal and Spain and later in Greece, i.e. in countries where inflation rates had been systematically above the euro area average before the mid-1990s. In most of the other euro area countries, these nominal convergence effects were considerably less sizeable. However, the equilibrating effect of changes in national competitiveness triggered by inflation differentials is likely to limit the size and persistence of inflation differences emanating from the adjustment to the new monetary regime. In this respect, countries with below-average inflation rates should benefit from a gain in competitiveness and also, in the short term, from the relatively smaller adverse effect of inflation on real disposable income and real wealth. Meanwhile, other things being equal, countries with above average inflation rates should suffer from competitiveness losses and larger negative effects of inflation on real income and wealth.

In addition to the special effects related to the start of Stage Three, a combination of temporary and more persistent factors on inflation developments seems to have caused the observed inflation differentials. As for the temporary factors, one-off domestic policy measures, such as changes in administered prices and indirect tax measures, have varied across countries and have thus contributed to the inflation differentials. However, these measures do not seem to have accounted for much of the observed inflation differentials since the start of Stage Three and are unlikely to play a larger role unless domestic policy measures increasingly diverge across euro area countries in the future. Moreover, differences in the speed of implementing structural reforms across countries may temporarily translate into higher inflation differentials. Different levels of exposure to external shocks – because of national discrepancies in the degree of openness concerning extra-euro area trade and oil dependency – also appear to contribute, albeit temporarily, to inflation differentials.

Furthermore, there is a relationship between cyclical positions and inflation rates: euro area countries with above average inflation rates have seen the strongest average growth rates in domestic demand, alongside relatively large positive output gaps. The opposite applies to the euro area countries with below average inflation rates. Cross-country differences in the fiscal policy stance may have also played a role in explaining inflation differentials, notably in countries like Greece and Ireland, where fiscal policies have been relatively expansionary in the last few years.

Finally, with regard to more persistent factors, inflation differentials in Greece, Ireland, Portugal and, to a lesser extent, Spain may have been partially caused by price level and income convergence and/or what are known as Balassa-Samuelson (BS) effects<sup>3</sup>. Conversely, low

<sup>3</sup> The BS effect explains that prices of non-tradable goods normally rise faster than prices in the tradable goods sector because productivity growth is normally lower in the non-tradable goods sector. As wages in the tradable goods sector are driven up by productivity growth, wages in the non-tradable sector will tend to increase as well. As the latter wage increases are not matched by productivity gains, labour costs and prices will increase faster in the non-tradable goods sector. With prices in the tradable goods sector set internationally, countries with high productivity growth differences between sectors will tend to see a larger increase in the overall price index.

productivity growth differentials between the tradable and non-tradable goods sectors in Germany may have contributed to lower than average inflation in that country. However, the observed inflation differentials among some euro area countries have been significantly larger than would be implied by the BS model, according to available estimates. Other structural factors, such as wage and price rigidities or differing degrees of competition in key domestic markets, may also have contributed to the observed inflation differentials and their persistence. In this respect, empirical studies show that the relative degree of market competition seems to be an important parameter in explaining the size and volatility of relative price responses to shocks across euro area countries. In any event, the continuation of the convergence process among the euro area countries should lead to a decline in inflation dispersion owing to price level and income convergence in the long run. However, given the current heterogeneity of national economic structures and countries' exposure to idiosyncratic shocks, it is likely that some differences in inflation rates will continue to exist in the future.

### **Policy implications**

Since the start of Stage Three it has no longer been possible to deal with regional economic imbalances and (asymmetric) shocks in the euro area countries using monetary policy. On the contrary, the single monetary policy of the ECB can only be geared towards the objective of price stability for the euro area as a whole. Just as in any monetary union, inflation differentials within the euro area reflect different regional price dynamics and adjustments in relative prices and, as such, cannot be addressed by the single monetary policy. At the same time, the ECB's monetary policy strategy attributes a secondary role to unavoidable inflation differentials when calibrating the safety margin for admissible inflation in the euro area, since their existence might have implications for lower-inflation regions. Moreover, inflation differentials remain an important communication challenge for the ECB since monetary policy is often discussed from the viewpoint of national inflation rates and its implications for national economic policies.

Large and persistent inflation differentials may justify national remedies in some countries in order to prevent undue losses in competitiveness. National economic policies, such as fiscal and structural policies, need to be adjusted to counteract persistent and potentially damaging inflation differentials. Structural reforms, particularly measures aimed at removing nominal wage and price rigidities and leading to a more diversified wage-setting process within individual euro area countries, can speed up the wage and price adjustments necessary to deal with shocks, including a more synchronised response of national prices to shocks. Such policies would, in turn, lower the likelihood of persistent inflation differentials in the euro area. Finally, given its considerable time-lags, fiscal policy may be ill-suited to fine-tuning inflation developments in the short run, although it may be used to address inflation differentials over the longer term, particularly if a country experiences persistently positive inflation differentials.

goods remained roughly constant at around 0.8% throughout 2003, approximately half the rate of increase recorded in 2002, leading to a contribution to overall inflation of around 0.2 percentage point.

Inflation dispersion in the euro area declined during 2003 after having remained broadly stable over the previous two years. Box 4 reviews and analyses the potential explanations for the observed inflation differentials in the euro area.

Public perception of past inflation, as measured by the European Commission's qualitative indicator of perceived inflation over the past 12 months, showed a gradual decline in the first half of 2003. However, this decline was interrupted in the summer as unprocessed food prices rose as a result of the heatwave in Europe. This gives some support to the view that consumers' inflation perceptions are largely influenced by developments in frequently purchased items, which mostly belong to the out-of-pocket expenditure category. This also helps to explain the somewhat volatile pattern of inflation perceptions. In the second half of 2003 consumers' inflation perceptions seemed to have stabilised at fairly high levels by historical standards. By contrast, throughout 2003 consumers' inflation expectations for the next 12 months remained at very low levels by historical standards.

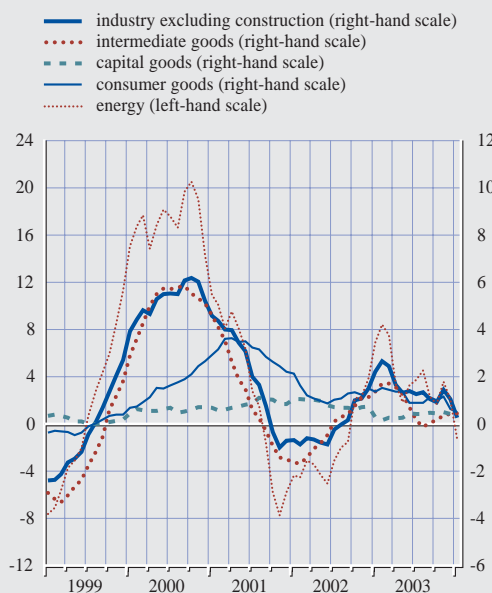
### MODERATE PRICE PRESSURES AT THE PRODUCER LEVEL

The annual rate of growth in total industrial producer prices (excluding construction) declined in the course of 2003, reflecting the effects of the appreciation of the euro exchange rate counterbalancing those of higher oil and non-oil commodity prices (see Chart 17). This led to an annual average increase in producer prices of 1.6% in 2003. Weak economic conditions may have also prevented firms from increasing producer prices for most of the year.

The pattern followed by the annual rate of growth of overall producer prices in 2003 was largely the result of developments in energy and intermediate goods prices. Reflecting developments in oil prices, the annual rate of change in industrial energy prices increased in the first few months of the year but eased thereafter, supported by the moderation of oil prices and the appreciation of the euro. The annual rate of growth in intermediate goods prices, which averaged 0.8% in 2003 as a whole, was higher in the first half of the year and declined in the second half as the impact of the exchange rate appreciation worked through.

**Chart 17 Breakdown of industrial producer prices**

(annual percentage changes; monthly data)



Source: Eurostat.

As usual, the two other main components of overall producer prices, capital goods and consumer goods prices, displayed much more stability in their year-on-year rates of growth. This suggests that the weak demand conditions may have prevented firms from passing on increases in energy and intermediate goods prices in early 2003 to later production stages. The annual average growth rates in consumer goods and capital goods prices were 1.1% and 0.4% respectively.

### NOMINAL LABOUR COST GROWTH LEVELLED OFF IN 2003

The gradual upward movement observed in the rates of growth of euro area-wide labour and wage cost indicators since 1999 levelled off at the beginning of 2003 (see Table 5).

Growth in compensation per employee showed a decline in the second half of 2002 and remained roughly unchanged in the first three quarters of 2003.



**Table 5 Labour cost indicators**

(annual percentage changes, unless otherwise indicated)

	2001	2002	2003	2002 Q4	2003 Q1	2003 Q2	2003 Q3	2003 Q4
Negotiated wages	2.6	2.7	2.4	2.7	2.7	2.4	2.5	2.2
Total hourly labour costs	3.3	3.5	.	3.5	3.1	3.2	2.9	.
Gross monthly earnings	2.9	3.0	.	3.1	2.9	2.8	2.6	.
Compensation per employee	2.8	2.6	.	2.5	2.6	2.7	2.6	.
Labour productivity	0.2	0.4	.	0.9	0.6	0.0	0.2	.
Unit labour costs	2.6	2.2	.	1.6	2.0	2.7	2.4	.

Sources: Eurostat, national data and ECB calculations.

Available information on compensation per employee shows some noticeable differences at the sectoral level in the first three quarters of 2003. The rate of growth in the construction sector rose in the first half of 2003 and eased thereafter, while in industry excluding construction there seemed to be a gradual decline over the year as a whole. As for services, growth in compensation per employee seemed to stabilise in 2003 for the sector as a whole. However, some counterbalancing effects were observed within sub-sectors: the increase in market-related services (which include trade, hotels and restaurants, finance and business services) in the first two quarters eased in the third quarter, whereas the growth rate in non market-related services increased in the third quarter. These developments suggest that the lower rates of growth in industrial activity may be behind the decline in labour cost growth in industry during the first three quarters of 2003. Labour cost developments in services may also help to explain some resilience of services prices over the year as a whole, given the higher share of labour costs in the services sector.

The rate of growth of negotiated wages fell in 2003 compared with 2002, and gross monthly earnings appeared to follow a similar trend. A noticeable moderation in labour cost growth was also observed when measured on the basis of hours worked, as the growth rate of hourly labour costs in the first three quarters of 2003 were lower than the average growth in 2001 and 2002.

Given that growth in compensation per employee was roughly unchanged in the first three quarters of the year, the lower productivity growth in the second and third quarters of 2003 led to an increase in unit labour costs from 2.0% year on year in the first quarter to 2.7% in the second and 2.4% in the third. Profit mark-up developments, as proxied by the gap between the annual rates of growth in the GDP deflator and unit labour costs, indicated that the delayed recovery in economic activity in the euro area continued to exert pressure on profits. However, in the second half of 2003 some improvement in productivity growth helped to moderate unit labour cost growth.

**Chart 18 Sectoral compensation per employee**

(annual percentage changes; quarterly data)



Sources: Eurostat and ECB calculations.

## 2.3 OUTPUT, DEMAND AND LABOUR MARKET DEVELOPMENTS

### RECOVERY IN ACTIVITY DURING 2003

Economic activity in the euro area picked up in the second half of 2003, having generally stagnated since the fourth quarter of 2002 (see Table 6). However, earlier expectations for growth in 2003 as a whole had to be scaled back. Real GDP grew by 0.4%, slowing further from a rate of growth of 0.9% in 2002 and remaining below the trend rate of growth in potential output for the third successive year. In addition, labour market developments were subdued throughout the year. This lacklustre performance emphasised the need to enhance the euro area's structural flexibility and resilience to shocks. Box 5 reviews the progress made with the EU's reform agenda.

At the start of 2003 a number of factors, such as the continued subdued activity in the world economy, were contributing to weak

economic conditions. Moreover, the decline in business and consumer confidence was reinforced by the high degree of uncertainty in the run-up to the Iraq war. Towards the middle of the year the geopolitical uncertainty gradually dissipated, giving rise to growing confidence and a pick-up in activity driven by foreign demand.

### EXPORTS TRIGGERING RECOVERY ON THE EXPENDITURE SIDE

The pick-up in activity in the second half of 2003 reflected the positive effects of improving foreign demand on euro area exports. However, this impact was dampened by the appreciation of the euro. The contribution to quarter-on-quarter growth from net exports, which had turned positive in the third quarter, turned negative again in the fourth quarter in the face of strong import growth (see Chart 19). In 2003 as a whole net exports made a negative contribution to growth of 0.6 percentage point.

**Table 6 Composition of real GDP growth**

(percentage changes, unless otherwise indicated; seasonally adjusted)

	Annual rates <sup>1)</sup>					Quarterly rates <sup>2)</sup>							
	2001	2002	2003	2002 Q4	2003 Q1	2003 Q2	2003 Q3	2003 Q4	2002 Q4	2003 Q1	2003 Q2	2003 Q3	2003 Q4
Real gross domestic product	1.6	0.9	0.4	1.1	0.7	0.1	0.3	0.6	0.0	0.0	-0.1	0.4	0.3
<i>of which:</i>													
Domestic demand	1.0	0.3	1.0	0.9	1.3	1.0	0.5	1.3	0.3	0.4	0.1	-0.2	1.0
Private consumption	1.7	0.1	1.0	0.6	1.3	1.0	0.9	0.7	0.3	0.4	0.0	0.2	0.1
Government consumption	2.5	2.9	1.9	2.2	1.9	1.7	1.8	2.3	0.1	0.5	0.6	0.6	0.6
Gross fixed capital formation	-0.3	-2.8	-1.2	-1.6	-1.9	-0.8	-1.2	-0.8	0.3	-0.9	-0.4	-0.2	0.6
Changes in inventories <sup>3),4)</sup>	-0.5	0.2	0.3	0.5	0.5	0.2	-0.1	0.5	0.0	0.2	0.1	-0.4	0.7
Net exports <sup>3)</sup>	0.7	0.6	-0.6	0.2	-0.5	-0.8	-0.2	-0.6	-0.2	-0.4	-0.2	0.6	-0.7
Exports <sup>5)</sup>	3.4	1.5	0.0	3.6	1.9	-1.5	-0.5	0.1	-0.4	-1.5	-0.9	2.3	0.2
Imports <sup>5)</sup>	1.7	-0.1	1.5	3.3	3.6	0.8	0.0	1.8	0.3	-0.6	-0.4	0.8	2.1
Real gross value added													
<i>of which:</i>													
Industry excl. construction	0.5	0.2	-0.1	1.4	0.7	-1.0	-0.6	0.7	-0.6	0.3	-0.8	0.5	0.7
Construction	-0.6	-1.1	-0.8	-1.5	-2.0	-0.4	-0.4	-0.4	0.0	-0.6	0.1	0.0	0.1
Purely market-related services <sup>6)</sup>	3.1	1.1	0.7	1.1	0.9	0.4	0.9	0.6	0.2	-0.1	0.1	0.7	-0.1

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.

6) Includes trade, transport, repairs, hotels and restaurants, communication, finance, business services, real estate and renting services.

**PROGRESS WITH STRUCTURAL REFORMS IN EURO AREA PRODUCT AND LABOUR MARKETS**

Structural reforms in product and labour markets are essential to enhance the euro area's economic growth potential and facilitate adjustment to economic change. Measures to raise the potential rate of economic growth are all the more important in view of the downward impact that population ageing is likely to have on labour supply. In March 2000 the Lisbon European Council focused on the importance of modernising the regulatory framework and introduced an ambitious reform agenda aimed at making the EU the most competitive and dynamic knowledge-based economy in the world by 2010. This box briefly reviews the progress made in implementing the EU's reform agenda over recent years and particularly in 2003.

The EU monitors and evaluates the functioning of product markets as part of the "Cardiff process", whereas labour market reform is assessed within the "Luxembourg process". Both processes examine reforms in each of the different countries and provide input into the Broad Economic Policy Guidelines (BEPGs), which define overarching priorities for various fields of economic policy. These priorities then form the basis of policy recommendations which are made for each EU Member State.<sup>1</sup>

In the field of *labour markets*, the BEPGs for the period 2003-05 stress the need to: (i) improve the combined incentive effects of taxes and benefits in order to make work pay, (ii) ensure efficient, active labour market policies targeted towards the most disadvantaged groups, (iii) promote a more flexible organisation of work and review employment contract regulations, (iv) facilitate geographical and occupational mobility and (v) ensure that wage bargaining systems allow wages to reflect productivity.

A number of countries have implemented reforms in their tax/benefits system in order to reduce non-wage labour costs and encourage labour supply. Tax rates have decreased for incomes at the bottom and the middle of the distribution; employees' and employers' social security contributions have been reduced, particularly for the low-paid. Moreover, progress has been made in increasing the participation rate among people at the margin of the labour market. Some Member States have strengthened the role of temporary work agencies, and some obstacles to part-time work have been removed.

All in all, most EU countries introduced labour market reforms in 2003. However, also considering the still high level of structural unemployment, reforms seem to lag behind what is implied in government announcements. Limited progress has been made in attracting more people into the labour market, investing in human capital accumulation, and increasing the adaptability of both workers and enterprises to changing macroeconomic conditions. Measures aimed at reducing long-term unemployment through retraining, as well as improving the employability of low-skilled and older workers, can be seen as priority areas for reforms. Moreover, further reforms are needed to encourage labour mobility by improving the

<sup>1</sup> Council Recommendation of 26 June 2003 on the broad guidelines of the economic policies of the Member States and the Community. The 2003 BEPGs were adopted for the period 2003-05.

transferability of pensions and healthcare rights as well as by allowing wage differentiation according to local, regional and sectoral differences in productivity.

The structural reform agenda for *product markets* covers a wide range of areas. Among other things, the BEPGs urge Member States to foster competition in goods and services markets by (i) transposing Internal Market directives more quickly into national legislation, (ii) further opening up public procurement, (iii) giving adequate powers and resources to competition and regulatory authorities and ensuring their independence, (iv) reducing state aid and (v) encouraging market entry and effective competition in network industries.

After many years of continuous progress, the percentage of EU Internal Market legislation which Member States had not yet transposed into national law (known as the “transposition deficit”) started to increase in 2002, and the deterioration continued in 2003. The European Commission has taken several initiatives to improve the functioning of the Internal Market. There are, nevertheless, still some significant barriers to this, particularly in the services sector. Many of these barriers appear to be due to national regulations, for example administrative procedures for setting up subsidiaries in other euro area countries. As far as the reinforcement of competition is concerned, there are indications that many euro area countries have taken steps to improve the efficiency and transparency of public procurement procedures. In addition, some countries have increased the powers of their competition and regulatory authorities. Moreover, over recent years the trend towards reducing and redirecting state aid seems to have continued, although it still plays an important role in some sectors, such as transport. Euro area countries have continued to implement regulatory reforms in network industries, albeit to varying degrees. Nevertheless, effective competition in these previously sheltered sectors could be increased further.

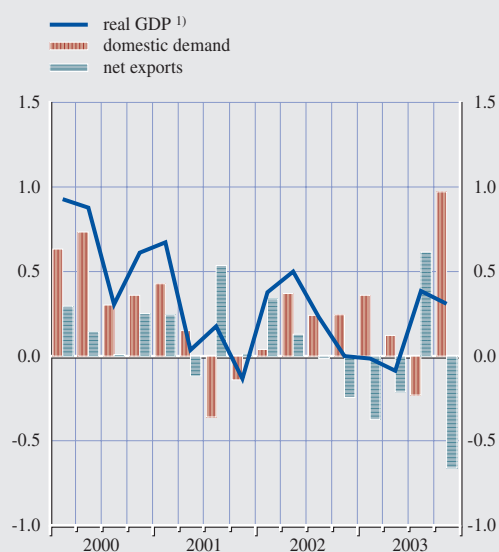
To sum up, the pace of reform continued to be rather slow in 2003. This adds to the concern that the EU may not be able to achieve the Lisbon targets unless Member States vigorously step up their efforts. Besides offering long-term growth benefits, renewed momentum in the process of structural reform would foster consumer and investor confidence, thus also entailing some shorter-term stimulus to growth.

Changes in the contribution to growth from domestic demand over the course of 2003 were largely explained by developments in inventory changes. The restocking in the first half of the year, which followed a two-year period of depleting inventories, was possibly induced by uncertainty regarding the supply of imported intermediate goods and unexpected declines in demand associated with the war in Iraq. This inventory build-up was partly unwound in the third quarter but resumed in the final quarter of the year. The contribution to real GDP growth from inventory changes in 2003 was 0.3 percentage point, slightly higher than in the previous year.

Final domestic demand (i.e. excluding changes in inventories) remained subdued for most of 2003, with only a slight pick-up in the second half of the year. Its overall contribution to real GDP growth in 2003 was 0.7 percentage point. Developments in fixed capital formation and private consumption diverged over the course of the year. Fixed capital formation declined in the first three quarters, but the pace of decline gradually became slower and in the fourth quarter fixed capital formation recovered to positive rates of growth. By contrast, private consumption grew at a rate of 0.4% quarter on quarter in early 2003 but almost stagnated for the remainder of the year.

**Chart 19 Contributions to quarterly real GDP growth**

(quarterly percentage point contributions; seasonally adjusted)



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

A common factor having a negative impact on fixed capital formation and private consumption in the first half of 2003 was the uncertainty associated with the war in Iraq and the outlook for the economy in its aftermath. This meant that households were hesitant to make major purchases and firms were reluctant to expand their production capacities. It also concealed the fact that the underlying conditions for consumption and investment were relatively favourable. In particular, the low level of interest rates alleviated the debt servicing burden of households and firms. Moreover, the terms-of-trade gains associated with the appreciation of the euro increased real income in the domestic economy.

The uncertainty about the general economic outlook coincided with ongoing efforts by corporations to consolidate their balance sheets. In this context improvements in profitability may have been used for further de-leveraging rather than capital spending. Continued uncertainty about labour market prospects and job security may have led

households to adjust their saving according to precautionary motives rather than to support consumption. In a number of countries the discussions on implementing reforms to social security and health systems may have added to household uncertainty and fuelled the motive for precautionary saving. With clearer signs of an upturn in economic activity in the second half of the year, firms became less hesitant to invest, although households' consumption spending remained subdued.

#### **INDUSTRY DRIVING RECOVERY ON THE OUTPUT SIDE**

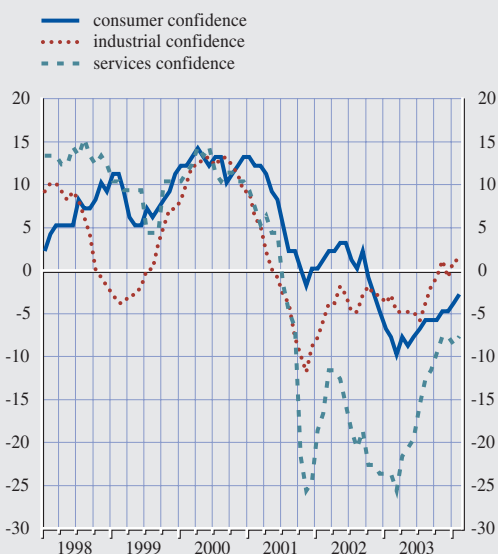
Both industry and market services contributed to the recovery in output in the course of 2003, but the contribution from industry was stronger. Output in purely market-related services, as measured by real value added, picked up somewhat earlier than in industry (excluding construction). This was broadly in line with the observation that services confidence had started to improve in the second quarter of 2003, whereas industrial confidence had started to improve in the third quarter (see Chart 20). However, developments diverged in the final quarter of the year, with output in industry accelerating further and output in market services declining somewhat.

When comparing the average rate of output growth in 2003 with the rates in previous years and over the business cycle, the performance of the services sector was relatively weak. Growth in real value added in market services was 0.7%, declining further compared with the previous two years and reaching a lower level than in the recession of 1993. By contrast, growth in industry (excluding construction) was -0.1%, somewhat lower than in the previous two years but in line with the rates of growth typically observed during economic downturns.

The pick-up in industrial activity in the second half of 2003 largely reflected the recovery in exports of goods, consistent with the pronounced cyclical sensitivity of production in euro area countries to external developments.

**Chart 20 Confidence indicators**

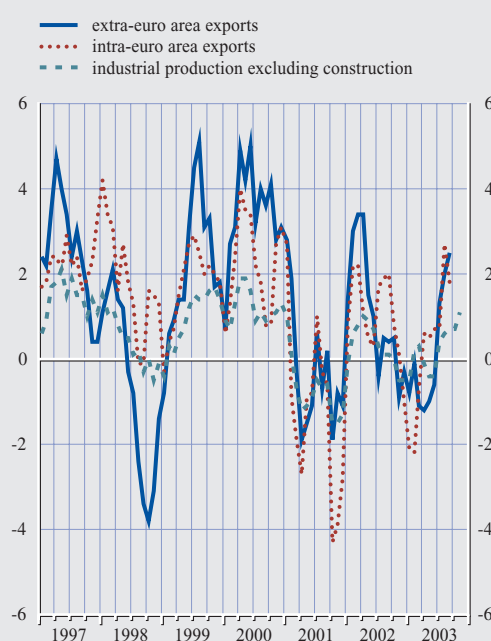
(percentage balances)



Sources: European Commission Business and Consumer Surveys. Note: All data are seasonally adjusted. Data shown are calculated as deviations from the average over the period since January 1985 for consumer and industrial confidence, and since April 1995 for services confidence.

**Chart 21 Exports of goods and industrial production**

(volumes; seasonally adjusted)



Sources: Eurostat and ECB calculations. Note: Data shown are calculated as three-month on three-month percentage changes.

Both intra- and extra-euro area exports appear to have provided impulses for the pick-up in industrial production (excluding construction) in the second half of 2003 (see Chart 21).

### LESS DISPERSION IN OUTPUT GROWTH ACROSS COUNTRIES

Various dispersion measures indicate that the divergence of real GDP growth rates declined among euro area countries in 2003. Reflecting in part the global economic slowdown, annual average real GDP growth decreased in most euro area countries in 2003 compared with the year before, except for Belgium, Spain and Greece, where growth increased moderately; in Italy growth remained virtually unchanged.

### EMPLOYMENT LARGELY STABLE DURING 2003

In some contrast with overall output, the level of euro area employment appears to have remained broadly stable throughout 2003 (see Table 7). This was also the case for most of

2002. The national data available for the fourth quarter of 2003 suggest that annual average growth in total employment was around 0.1-0.2% in 2003. Employment thus proved more resilient than might have been expected given the protracted period of subdued economic activity. However, while employment remained largely stable, the data available from labour force surveys suggest that hours worked per employed person have declined relatively strongly in the past few years and thus accounted for much of the labour market adjustment that is typically associated with an economic slowdown. To some extent this would contrast with developments observed in previous economic slowdowns, where employment rather than hours bore the brunt of the adjustment.

Adjustments in hours worked per employed person might partly reflect increased labour market flexibility, for example by allowing the

**Table 7 Labour market developments**

(annual percentage changes and percentages)

	2001	2002	2003	2001 Q3	2001 Q4	2002 Q1	2002 Q2	2002 Q3	2002 Q4	2003 Q1	2003 Q2	2003 Q3	2003 Q4
Labour force	0.9	0.9	.	0.8	0.8	0.9	0.9	0.9	0.7	0.6	0.6	0.5	.
Employment	1.4	0.4	.	1.2	0.8	0.7	0.5	0.4	0.2	0.1	0.1	0.2	.
Agriculture <sup>1)</sup>	-0.8	-2.1	.	-1.1	-1.5	-2.4	-2.1	-2.0	-2.0	-2.2	-1.9	-1.5	.
Industry <sup>2)</sup>	0.4	-1.3	.	0.1	-0.4	-1.0	-1.2	-1.4	-1.6	-1.5	-1.4	-1.5	.
– excl. construction	0.3	-1.4	.	0.0	-0.5	-1.1	-1.3	-1.4	-1.8	-1.8	-1.9	-1.9	.
– construction	0.4	-0.9	.	0.4	-0.1	-0.7	-0.8	-1.2	-1.0	-0.8	0.1	-0.2	.
Services <sup>3)</sup>	1.9	1.3	.	1.7	1.5	1.6	1.4	1.2	1.1	0.8	0.8	0.9	.
<b>Rates of unemployment<sup>4)</sup></b>													
Total	8.0	8.4	8.8	8.0	8.1	8.2	8.3	8.5	8.6	8.7	8.8	8.8	8.8
Under 25 years	15.7	16.2	16.8	15.7	15.8	16.0	16.2	16.3	16.4	16.8	16.8	16.7	16.7
25 years and over	7.0	7.4	7.7	7.0	7.1	7.2	7.3	7.4	7.6	7.7	7.8	7.8	7.8

Sources: Eurostat and ECB calculations.

1) Also includes fishing, hunting and forestry.

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

3) Excludes extra-territorial bodies and organisations.

4) Percentage of the labour force.

working time to be calculated and scheduled over full years rather than weeks or months, or by increased recourse to part-time jobs. Stable employment during 2003 implies that, measured per person employed, improvements in aggregate labour productivity only emerged in the second half of the year when activity started to pick up. Measured per hour worked, gains in labour productivity might fade out more quickly, given that the previous downward adjustment in average hours worked is likely to be reversed as the recovery unfolds.

The broadly unchanged level of total employment in the course of 2003 conceals opposite developments in industry and services. In the first three quarters of 2003 employment declined in industry, but this was offset by net job creation in services. However, in both industry and services average employment growth in 2003 was most likely lower than in 2002. Moreover, data from labour force surveys suggest that the adjustment in labour inputs via hours worked per employed person featured in both sectors.

### RISE IN UNEMPLOYMENT RATE CAME TO A HALT IN 2003

The rise in the euro area unemployment rate recorded since early 2001 came to a halt in the

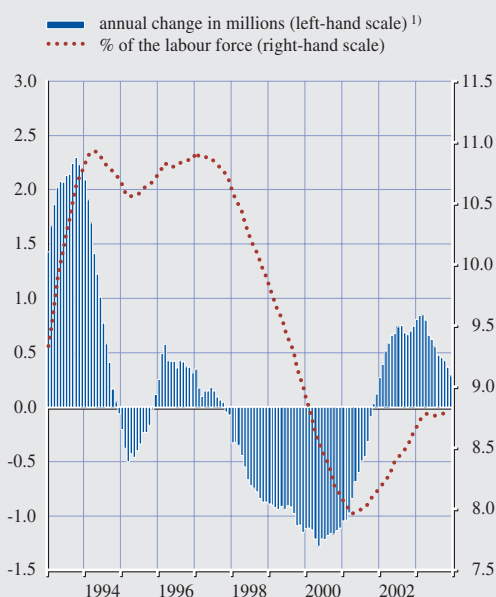
spring of 2003, with the rate remaining unchanged at 8.8% for the rest of the year. On average, the unemployment rate was 0.4 percentage point higher in 2003 than in 2002. This rise was broadly spread over the individual age groups and genders, although the gap between the unemployment rate for those below 25 and that for persons aged 25 and above rose somewhat further, while the gap between the unemployment rates for women and men continued to decline.

Most euro area countries suffered an increase in the unemployment rate between 2002 and 2003, with the exception of Greece and Italy, where unemployment declined, and Finland and Spain, which observed a broadly constant unemployment rate. All in all, the degree of dispersion in unemployment rates declined among euro area countries in 2003. However, in some countries, the unemployment figures recorded for 2003 partly reflect outflows from the official statistics due to changes in the recording of unemployed persons and/or as a consequence of labour market reforms.

While the euro area-wide rate of unemployment was broadly stable in the course of 2003, the number of unemployed increased somewhat further for most of the year. In December the

**Chart 22 Unemployment**

(monthly data; seasonally adjusted)



Source: Eurostat.

Note: Data refer to the Euro 12 (including periods prior to 2001).

1) Annual changes are not seasonally adjusted.

total number of unemployed was 12.3 million, an increase of around 270,000 persons compared with one year earlier (see Chart 22). With a broadly stable level of employment, the rise in the number of unemployed reflects continued growth in the labour force. However, labour force growth in 2003 was somewhat lower than in the previous year. The rise in the unemployment rate and a further fall in the vacancy rate most likely discouraged labour market participation, for example by delaying entry into the labour market.

## 2.4 FISCAL DEVELOPMENTS

### BUDGET BALANCES DETERIORATED FURTHER IN 2003

The euro area fiscal balance deteriorated in 2003 for the third year in a row. The latest available data from Eurostat show an average deficit of 2.7% of GDP in 2003, against 2.3% in 2002 (see Table 8). The marked deterioration

was mainly attributable to the operation of automatic stabilisers in a macroeconomic environment which was considerably less favourable than anticipated. Most Member States failed to meet the targets set out in the stability programmes that were submitted at the end of 2002 and the beginning of 2003. On average, targets were missed by nearly 1.0% of GDP.

Fiscal developments remained a source of concern in countries that had already recorded significant fiscal deficits in 2002. Deficits in Germany and France were close to or above 4% of GDP in 2003, while Portugal recorded a deficit close to 3% of GDP in spite of the implementation of large-scale temporary measures. The general government deficit in the Netherlands was 3% of GDP in 2003.

On the spending side, in 2003 the euro area ratio of government expenditure to GDP increased compared with 2002, with persistent upward pressure on current outlays largely originating from higher unemployment expenditure and related social transfers. Interest expenditure declined slightly in 2003. On the revenue side, slow tax revenue growth in 2003 can mainly be accounted for by the weakness in economic activity and by other unexpected shortfalls in tax revenues.

Unfavourable budgetary developments adversely affected the average government debt ratio. After several years of uninterrupted, albeit moderate, decline, the euro area debt-to-GDP ratio increased to 70.4% in 2003. This worsening reflects the protracted deterioration of the primary surplus and the moderate growth of nominal GDP. In 2003 the debt ratio exceeded 60% of GDP in France, while in Germany and Austria it remained above that reference value and in Belgium, Greece and Italy it stood above 100% of GDP.

The fiscal stance in the euro area was broadly neutral in 2003, when measured by the change in the cyclically adjusted primary balance according to European Commission estimates. This reflects the control of cyclically adjusted



**Table 8 Fiscal positions in the euro area**

(as a percentage of GDP)

**General government surplus (+) / deficit (-)**

	2000	2001	2002	2003
<b>Euro area</b>	<b>-0.9</b>	<b>-1.7</b>	<b>-2.3</b>	<b>-2.7</b>
Belgium	0.2	0.4	0.1	0.2
Germany	-1.2	-2.8	-3.5	-3.9
Greece	-2.0	-2.0	-1.4	-1.7
Spain	-1.0	-0.4	0.0	0.3
France	-1.4	-1.6	-3.3	-4.1
Ireland	4.4	1.1	-0.4	0.2
Italy	-1.8	-2.6	-2.3	-2.4
Luxembourg	6.3	6.3	2.7	-0.1
Netherlands	1.5	0.0	-1.9	-3.0
Austria	-1.9	0.2	-0.2	-1.1
Portugal	-3.2	-4.4	-2.7	-2.8
Finland	7.1	5.2	4.3	2.3

**General government gross debt**

	2000	2001	2002	2003
<b>Euro area</b>	<b>70.4</b>	<b>69.4</b>	<b>69.2</b>	<b>70.4</b>
Belgium	109.1	108.1	105.8	100.5
Germany	60.2	59.4	60.8	64.2
Greece	106.2	106.9	104.7	102.4
Spain	61.2	57.5	54.6	50.8
France	57.2	56.8	58.6	63.0
Ireland	38.4	36.1	32.3	32.0
Italy	111.2	110.6	108.0	106.2
Luxembourg	5.5	5.5	5.7	4.9
Netherlands	55.9	52.9	52.6	54.8
Austria	67.0	67.1	66.6	65.0
Portugal	53.3	55.6	58.1	59.4
Finland	44.6	43.9	42.6	45.3

Sources: Eurostat and ECB calculations.

Note: Data are based on the excessive deficit procedure definition. Budget balances exclude proceeds from the sale of UMTS licences.

primary expenditure and the increases in indirect taxes and social security contribution rates in some countries, which broadly compensated for the implementation of additional cuts in personal income taxation in several Member States.

**THE EUROPEAN FISCAL FRAMEWORK AT RISK**

On 25 November 2003 the ECOFIN Council decided not to act on the basis of the European Commission's recommendations in respect of Germany and France and to hold the excessive deficit procedure for these countries in abeyance. In its conclusions, the ECOFIN Council recommended that France achieve a reduction of 0.8% of GDP in its cyclically adjusted deficit in 2004 and a reduction of at least 0.6% in 2005 in order to bring the deficit

below 3% of GDP by 2005 at the latest. At the same time, the ECOFIN Council recommended that Germany reduce its cyclically adjusted deficit by 0.6% of GDP in 2004 and by at least 0.5% in 2005 in order to bring the deficit below 3% of GDP by 2005 at the latest (see Chapter 4). The ECOFIN Council's decision has led to uncertainty on the future implementation of the rules governing fiscal policy in euro area countries. It also sets a precedent of a lax implementation of the excessive deficit procedure that could weaken incentives for consolidation in the future.

It is essential that confidence in the solidity of the institutional underpinnings of EMU be maintained. Germany and France now have to live up to their responsibilities and to honour

their commitment to correct their excessive deficits as soon as possible and by 2005 at the latest. Countries that still face fiscal imbalances also need to make progress towards achieving budgetary positions close to balance or in surplus over the medium term, by reducing their underlying deficit by at least 0.5% of GDP per year.

The implementation of sound fiscal policies is in the interest of all countries. Close-to-balance or in-surplus budgetary positions create room for the free play of automatic stabilisers, which facilitates the smoothing of economic business cycles. Sound public finances also help individual countries to cope with the budgetary impact of population ageing by reducing public debt ratios. Lack of discipline, on the other hand, increases the uncertainty surrounding the future soundness of public finances, thus hindering the long-term decision-making of economic agents. It may also create externalities that could negatively affect other Member States.

According to the stability programmes submitted at the end of 2003 and the beginning of 2004, the euro area deficit is expected to decline by 0.3 percentage point in 2004 to 2.4% of GDP. Consolidation effects stemming from expenditure restraint, the fall in interest payments and the gradual recovery in economic activity should outweigh the expansionary effects associated with tax cuts in a number of countries. The cyclically adjusted balance in the euro area is forecast to improve in 2004. Deficits in Germany and France are expected to decrease but stay above 3% of GDP in 2004. According to the ECOFIN Council opinions, the adjustment path in France's stability programme seems insufficient to eliminate the excessive deficit by 2005, while Germany's adjustment path may also be insufficient to correct the excessive deficit by that year. Moreover, based on the Commission's calculations, as reported in the ECOFIN Council opinions, Greece, Italy and Portugal seem unlikely to reduce their cyclically adjusted deficit by at least 0.5% of GDP in 2004.

## **STRUCTURAL REFORM OF PUBLIC FINANCES REMAINS VITAL**

The pension reforms implemented or envisaged in some countries will improve the long-term sustainability of public finances. However, the significant ageing of the European population will make further adjustments necessary (see Box 6). Fiscal consolidation should be part of a credible medium-term reform package. The combination of consolidation and structural reforms may counteract the negative short-term demand effects of budget retrenchment by enhancing the credibility of euro area governments and public confidence in their ability to adhere to the agreed rules and to ensure long-term fiscal sustainability.

Structural reforms on the expenditure side are particularly important. To promote the quality of public finances, expenditure priorities should be shifted towards productive expenditures fostering potential output growth. The reduction of overall expenditure commitments will create scope for a decline in the tax burden, thereby contributing to economic growth.

## THE IMPORTANCE OF COMPREHENSIVE REFORMS FOR SUSTAINABLE PUBLIC FINANCES

To ensure long-term fiscal sustainability, euro area countries need to implement substantial fiscal and other reforms.

### Population ageing and fiscal sustainability

One of the most important risks to fiscal sustainability in the euro area economies arises from population ageing. Eurostat projects that the old-age dependency ratio, i.e. the population aged 65 years and older as a proportion of the population aged 15 to 64, will rise from about 25% in 2000 to more than 50% in 2050. This demographic shift will put pressure on public finances by pushing up old age-related expenditure, in particular in public pensions and health, as well as long-term care. Public pension systems in Europe are mostly based on the pay-as-you-go principle. As current contributions finance current expenditure, the rising number of pensioners will put these systems under strain. Healthcare expenditure is set to rise, as the demand for health services tends to increase in old age. Past experience suggests that technical developments may also contribute to rising health expenditure.

A recent study commissioned by the ECOFIN Council and carried out by the Working Group on Ageing of the Economic Policy Committee<sup>1</sup> has projected that in most euro area countries, the increase in public pension expenditure due to population ageing will be between 3 and 6 percentage points of GDP by 2050. A further 2 to 4 percentage points of GDP could relate to a rise in health and long-term care expenditure.

### The EU strategy for addressing the ageing problem

In light of the need for comprehensive reforms, the EU agreed in 2001 on a three-pronged strategy to tackle the pressures of population ageing. This strategy was first set out in the 2001 Broad Economic Policy Guidelines and prescribes: (i) measures to raise employment rates, (ii) a rapid reduction in government debt and (iii) further reforms of pension and health systems, including a greater reliance on funding. The EU fiscal framework provided by the Treaty establishing the European Community and the Stability and Growth Pact also addresses the fiscal challenges of population ageing by demanding medium-term budgetary positions close to balance or in surplus and by setting limits on deficit and debt levels.

### Current policies

Current fiscal policies in the euro area present a mixed picture as regards action taken to enhance sustainability. First, while the approaches taken to pension and health reform point in the right direction, the planned measures will generally not suffice to ensure the sustainability of those systems, and further changes are necessary. The thrust of most of the pension reform efforts is to raise effective retirement ages, e.g. by creating incentives to stay in the workforce and by increasing the contribution periods required to acquire full pension entitlements. Efforts in the

<sup>1</sup> The study is available from the website of the European Commission's Directorate General for Economic and Financial Affairs at [www.europa.eu.int/comm/economy\\_finance/epc\\_en.htm](http://www.europa.eu.int/comm/economy_finance/epc_en.htm).

health sector tend to focus on restraining short-term expenditure growth, for instance by raising awareness of the cost of medical treatments by increasing patient co-payments. Second, the current high fiscal deficits are, to a large extent, of a structural nature. This means that on top of meeting the fiscal requirements imposed by the projected demographic changes, the countries in question will need to pursue ambitious structural consolidation policies to achieve a sound budgetary position.

## **2.5 THE GLOBAL MACROECONOMIC ENVIRONMENT, EXCHANGE RATES AND THE BALANCE OF PAYMENTS**

### **WORLD ECONOMIC RECOVERY GAINED MOMENTUM IN 2003**

Following a period of uncertainty in the first half of 2003 – relating mainly to geopolitical tensions, terrorist threats, the SARS epidemic and deflationary fears – the recovery of the world economy gained momentum in the second half of the year. By the end of 2003 the upswing had broadened and strengthened, driven mainly by growth dynamics in the United States and Asia. While private consumption and expansionary economic policies supported the gradual upturn in global economic activity, business investment, in particular, remained relatively muted in some industrialised countries owing to overcapacity and the degree of corporate indebtedness. Inflationary pressures remained relatively low, given the strong growth in productivity, particularly in the United States, and the continuing significant overcapacity. Imbalances persisted throughout 2003. Most notably, the US current account deficit rose further, notwithstanding the considerable depreciation of the US dollar.

In the United States, the recovery broadened in 2003 with GDP growth amounting to 3.1%, up from 2.2% in 2002. In early 2003 high geopolitical uncertainty in the run-up to the Iraq war undermined investors' and consumers' confidence, thereby contributing to a delay in the US economic recovery. However, economic activity rebounded in the second quarter as these geopolitical uncertainties receded, leading to a significant strengthening of growth in the second half of the year. Household spending remained resilient and contributed substantially

to GDP growth. Real private consumption grew by 3.1% in 2003, experiencing a large surge especially over the summer months. An important factor driving household spending was the effect of tax cuts, which helped to maintain growth in disposable income (4.3% in 2003 compared with 5.2% the year before). Further support came from mortgage refinancing activity during the first half of the year. All these factors together outweighed the negative impact of low confidence and the unfavourable employment situation on household spending until the third quarter. In the context of a strong housing market and historically low mortgage rates, real residential investment accelerated vigorously to 5.2% in 2003.

One notable source of weakness through much of 2003 was a receding labour market, though in the third quarter some signs of improvement in labour market conditions emerged. Private payroll employment contracted significantly during the first half of 2003 and then picked up moderately. The unemployment rate started to decline in the summer after reaching a peak of 6.4% in June, falling to 5.6% in January 2004, an improvement partly due to a slowdown in the labour force.

After two years of contraction, business investment grew by 4.3% in 2003. Following the initial rebound in the second quarter, business investment growth increased throughout the rest of the year, reaching annualised double-digit numbers. The recovery in capital expenditure relied on favourable financing conditions, rising profits and strong demand prospects. This recovery was still narrowly based, since it was concentrated in hardware and software expenditure. With

regard to trade, growth in import volumes outpaced that in exports in 2003, in line with the higher growth of domestic demand in the United States than in its main trading partner countries. Accordingly, the current account deficit increased to more than 5% of GDP for 2003, reflecting, to a large extent, public sector imbalances.

Consumer price inflation and producer price inflation in the United States increased in 2003. However, correcting for the impact of energy prices, inflationary pressures remained generally weak in the course of the year owing to low capacity utilisation rates and strong productivity growth. Inflation, as measured by the consumer and producer price indices, increased to 2.3% and 3.2% respectively in 2003, up from 1.6% and -1.3% in 2002. Excluding food and energy, consumer price inflation was 1.4% in 2003, down from 2.4% in 2002, and producer price inflation (excluding food and energy) remained subdued.

Interest rates remained at historical lows in 2003. The Federal Open Market Committee (FOMC) of the Federal Reserve System reduced the target for the federal funds rate by 25 basis points in June 2003, to 1%. The accompanying statement of the FOMC meetings up to December stated that policy accommodation would be maintained for a “considerable period” given the risks of an unwelcome fall in inflation. At the January 2004 meeting, however, this statement was replaced by the reference to a “patient” approach by the FOMC in terms of removing policy accommodation. Fiscal policy was still markedly expansionary in 2003, with the federal budget deficit increasing to 3.5% of GDP in the fiscal year 2003, from 1.5% of GDP in the fiscal year 2002. This resulted most notably from discretionary budgetary measures and, to a lesser extent, from the automatic response of the budget to the business cycle.

In Japan, real economic activity expanded throughout 2003, supported by exports and private investment. After some initial

weakening of the export momentum, export growth increased in the second half of the year. In particular, exports to non-Japan Asia exhibited strong growth, with China accounting for more than half of the overall increase in exports in 2003. Against the background of historically low inventory levels, the export growth translated into a pick-up in industrial production in the second half of the year, with particularly strong gains in the export-oriented general and electrical machinery sectors. Private non-residential investment spending expanded strongly, supported by a recovery in firms’ profits and some structural improvements in corporate balance sheets. Reflecting continued weaknesses in the labour market and the income situation, private consumption spending was relatively sluggish. Owing to continued efforts to achieve medium-term fiscal consolidation, government spending contracted, reflecting large declines in public investment outlays.

Deflationary pressures eased somewhat in 2003. The CPI declined on average by 0.3%, compared with a decline of 0.9% in 2002. The Bank of Japan raised its target range for the outstanding balance of the current accounts held at the Bank of Japan from JPY 15-20 trillion at the beginning of 2003 to JPY 30-35 trillion in January 2004. In addition, the Bank of Japan decided to purchase asset-backed securities for a limited time, with the objective of promoting the smooth financing of small and medium-sized enterprises.

Non-Japan Asia’s economic performance was robust in 2003, consolidating the recovery in 2002. The region proved to be fairly resilient to some adverse shocks, including the geopolitical uncertainties (namely, the Iraq war and tension in North Korea) and the SARS epidemic. Strong output growth stemmed from the confluence of different factors. First, foreign demand benefited from an improvement in the global economy and the depreciation of effective exchange rates, as evidenced by the brisk pace of export activity in many countries of the region. Second, domestic demand – while decelerating markedly in the second quarter as a

result of the SARS outbreak – later grew more than initially expected. At the country level, China has remained by far the region's fastest-growing economy, with GDP expanding by 9.1% in 2003.

In the EU acceding countries, output growth remained resilient in 2003 despite the weak external environment. Real GDP growth was mainly driven by private consumption and net exports, while investments also showed signs of strength in some countries. Fiscal positions continued to deteriorate in several countries, posing serious challenges to the sustainability of public finances. Average HICP inflation in the acceding countries as a whole remained close to 2%, although sizeable differences prevailed at the country level (see Chapter 7 for further details).

In Latin America, there were some signs of overall economic improvement in 2003 as Argentina experienced a strong rebound from the previous year's crisis. Among the region's two largest countries, Brazil's GDP contracted and Mexico recorded rather sluggish output growth. The Brazilian economy exhibited negative growth on a year-on-year basis over the last three quarters of 2003, largely as a result of a downturn in domestic demand despite a slight decline in financing costs. The main drag on the Mexican economy was the manufacturing sector, whose exports have lagged behind the recovery in the United States.

Brent crude oil prices averaged USD 28.9 per barrel in 2003, 15.4 % higher than the previous year. The increase was the result of supply disruptions, pent-up demand, low inventory levels and geopolitical tensions. Non-oil commodity prices also strengthened considerably in 2003 owing to a pick-up in global economic activity. In particular, Chinese demand for raw materials had a strong impact on commodities markets.

### **EURO EXPERIENCED STRONG APPRECIATION IN 2003**

In 2003 the euro continued its appreciation against major currencies. This was most

pronounced against the US dollar and several Asian currencies, reflecting their formal or informal peg to the US dollar. The euro also strengthened against the Japanese yen, the pound sterling and the Swiss franc, albeit to a lesser extent, while it weakened against the Australian dollar.

In the first half of 2003 these developments took place against the background of relatively high economic and geopolitical uncertainty. The upward pressure on the euro was temporarily suspended in the summer amid positively revised market expectations about the economic recovery in major partner countries. Towards the end of 2003 the euro experienced renewed gains as market analysts became increasingly concerned about global external imbalances. Overall, at the end of 2003 the nominal effective exchange rate of the euro was almost 11% higher than at the beginning of the year and nearly 17% above its average level in 2002.

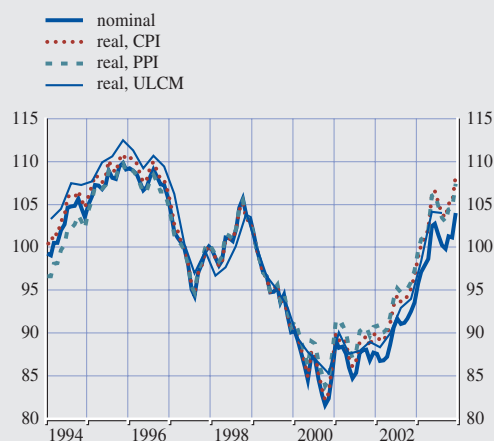
In the first two months of 2004 the effective exchange rate of the euro did not appreciate further. The developments in euro exchange rates over this period seem to have been affected by a combination of factors pointing in different directions, including market reactions to the communiqué issued by the G7 in early February 2004 on exchange rate movements. On 27 February 2004, the cut-off date for this Annual Report, the nominal effective exchange rate of the euro had appreciated by 3.8% compared with the average for 2003.

The real effective exchange rates of the euro, which take into account developments in price and unit labour cost differentials between the euro area and its main partner countries, tracked the nominal index fairly closely and stood, in the fourth quarter of 2003, somewhat above their levels in the first quarter of 1999 (see Chart 23).

In 2003 the strengthening of the euro was particularly strong against the US dollar, which faced broad-based depreciation pressures. In the first months of the year, uncertainty generated by

**Chart 23 Nominal and real effective euro exchange rates <sup>1)</sup>**

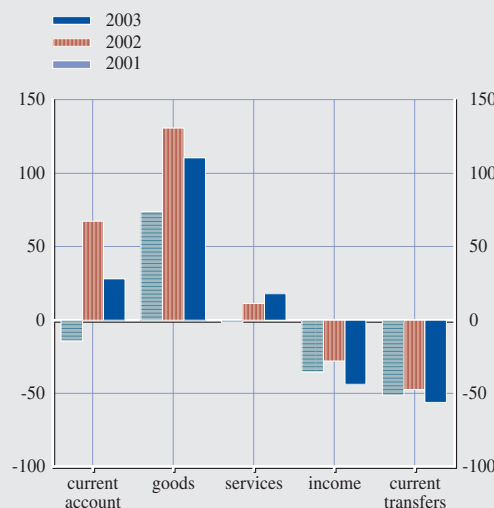
(monthly/quarterly data; index: 1999 Q1 = 100)



Source: ECB.  
1) An upward movement of the index represents an appreciation of the euro. In the case of the ULCM-based real EER, the latest observation is for the third quarter of 2003 and is partly based on estimates.

**Chart 24 Current account balance and its components**

(EUR billions; 12-month cumulated seasonally adjusted)



Source: ECB.

rising geopolitical tensions and their likely effects on the global economic outlook seem to have weighed on the US currency. Moreover, a number of weaker than expected economic data releases for the United States, the widening of the US current account deficit and a deteriorating fiscal position were identified by market participants as additional negative factors affecting the US dollar in the first half of 2003. Over the summer months the US dollar stabilised amid firming market expectations about improving prospects for US economic growth. Towards the end of the year, however, market concerns over the financing of the US current account deficit seemed to overshadow these positive factors, thereby exerting renewed downward pressure on the US currency. On 30 December 2003 the euro stood at USD 1.25, which was roughly 19½% stronger than at the beginning of the year and more than 32% above its average level in 2002. On 27 February 2004 the euro was quoted at USD 1.24, i.e. 9.8% stronger than the 2003 average.

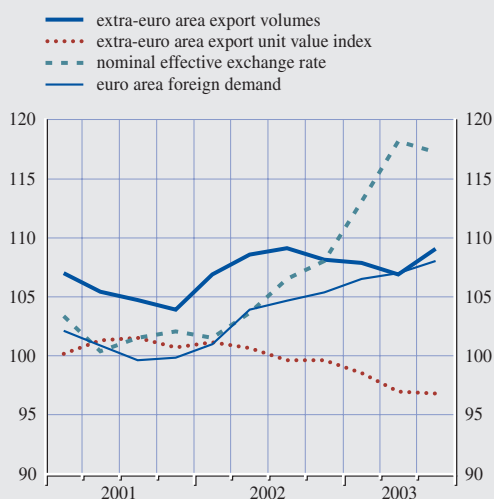
Against the Japanese yen, the euro showed a pattern similar to the one against the US dollar until September 2003. The developments in the

Japanese yen seem to have been mainly related to evidence of an improvement in economic activity in Japan together with the foreign exchange market interventions by the Japanese authorities in an attempt to stabilise the yen against the US dollar. In the aftermath of the G7 meeting in Dubai – where it was stated that more flexibility in exchange rates was desirable to promote smooth and widespread adjustments in the financial system based on market mechanisms – the yen came temporarily under strong and broad-based appreciation pressure. At the end of 2003 the euro was quoted at JPY 133.7, 7.5% higher than at the beginning of the year and more than 13% above the 2002 average. On 27 February 2004 the euro traded at JPY 135.6, 3.6% above its average in 2003.

Turning to other European currencies, the euro experienced an appreciation against the pound sterling, the Swiss franc and, more substantially, the Norwegian krone, while it was broadly unchanged against the Swedish krona and the Danish krone. The latter continued to fluctuate in a very narrow range close to its central parity in the exchange rate mechanism II (ERM II).

**Chart 25 Extra-euro area exports, foreign demand and nominal effective exchange rate**

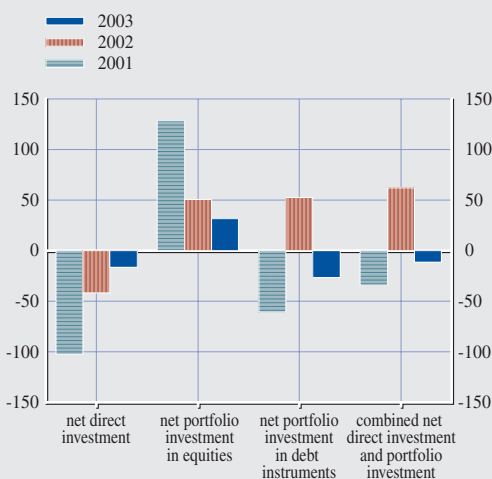
(index: 2000 = 100)



Sources: Eurostat and ECB calculations based on Eurostat data. Note: The latest observation refers to the third quarter of 2003.

**Chart 26 Financial account**

(EUR billions)



Source: ECB.

### CURRENT ACCOUNT SURPLUS DECREASED IN 2003

In 2003 the euro area current account surplus fell to €28.1 billion (0.4% of GDP), from €67.1 billion in 2002 (0.9% of GDP). The fall stemmed mainly from a €20.6 billion drop in the goods surplus and a €16.0 billion rise in the income deficit, while the current transfers deficit also increased. These developments were only partly offset by a small rise in the services surplus (see Chart 24). As imports of goods remained broadly unchanged in 2003 relative to a year earlier, the reduction in the goods surplus resulted from a fall in the value of euro area goods exports (by 2.2%) over the same period.<sup>7</sup>

The increase in the income deficit stemmed mostly from a reduction in income credits. The appreciation of the euro in 2003 largely explains this development, as the value of income credits received in foreign currencies is lower when expressed in euro.

A better understanding of export developments can be obtained through a breakdown of the value of euro area goods exports into volumes

and prices – based on External Trade Statistics data until the third quarter of 2003. Such a breakdown suggests that, compared with 2002 average levels, the fall in the value of exports in the first three quarters of 2003 stemmed from a decrease in export prices.<sup>8</sup> Euro area exporters lowered their prices in euro in an attempt to offset the loss in price competitiveness resulting from the appreciation of the euro (see Chart 25). Meanwhile, export volumes declined in the first half of 2003 and subsequently recovered in the third quarter. Sluggish foreign demand and the impact of the appreciation of the euro contributed to the initial fall in euro area export volumes, while the strong pick-up in foreign demand in the third quarter of 2003 seems to have been the key explanatory factor behind their recovery. Overall, in the first three quarters of 2003 export volumes were slightly

7 Here exports and imports always refer to extra-euro area trade.  
8 The breakdown of trade flows into volumes and prices is based on External Trade Statistics, prices being proxied by unit value indices. Owing to differences in definition, coverage and time of recording, trade data (as compiled by Eurostat) are not fully comparable with the goods item in the balance of payments statistics compiled by the ECB.



above their average in 2002, although they increased less strongly than foreign demand, thereby pointing to a loss in euro area export market share.

### **NET OUTFLOWS IN COMBINED DIRECT AND PORTFOLIO INVESTMENT IN 2003**

In the financial account, combined direct and portfolio investment experienced net outflows of €9.3 billion in 2003, compared with net inflows of €61.9 billion in 2002 (see Chart 26). This development largely reflected lower net inflows in portfolio investment (by €91.6 billion), which were only partly counterbalanced by declining net outflows in direct investment (by €20.3 billion) over the same period.

Transactions in debt instruments mainly dominated developments in net portfolio investment flows. More specifically, after recording net inflows of €52.8 billion in 2002, net investment in debt instruments turned negative in 2003 – showing net outflows of €27.4 billion (see Chart 26). This reflected primarily a sizeable switch in money market instruments from net inflows to net outflows, as foreign investors seem to have begun re-allocating their international portfolio in favour of riskier assets, particularly in the second half of 2003. The improvement in the global economic outlook over this period – also evidenced by the solid performance in global equity markets – is likely to have been the main driving factor behind this development. At the same time, net inflows in bonds and notes also declined somewhat in 2003 compared with a year earlier. However, much of this decline reflected disinvestment by non-residents in euro area bonds and notes that took place in July and August of 2003 amid expectations of capital losses as a result of a rise in long-term bond yields.

Both euro area direct investment and portfolio investment in equity securities moved, overall, towards a balanced position in 2003. Much of this related to economic and geopolitical uncertainty stemming from the war in Iraq and

the SARS epidemic that adversely affected investment decisions in the first half of the year (see Chart 26). As uncertainty receded and equity prices rebounded, cross-border activity in portfolio equity securities first stabilised and then gradually began to rise. Similarly, in the second half of 2003 euro area direct investment abroad also started a gradual recovery in the light of an improved global as well as domestic economic outlook, while foreign direct investment in the euro area remained subdued.

### 3 ECONOMIC AND MONETARY DEVELOPMENTS IN EU COUNTRIES OUTSIDE THE EURO AREA

The Eurosystem and the NCBs of the non-euro area EU countries cooperate closely in the context of the General Council of the ECB. A regular review of macroeconomic conditions and monetary and exchange rate policies forms an integral part of the coordination exercise between the Eurosystem and the three NCBs not currently participating in the single monetary policy. Although these NCBs conduct their monetary policies within different institutional and operational frameworks, the ultimate goal of monetary policy for all of them is the maintenance of price stability.

#### DENMARK

The Danish economy slowed in 2003, with the real GDP growth rate falling to 0.0%, down from 1.0% in 2002 (see Table 9). In the first half of 2003 domestic demand, most notably investment, remained subdued. However, domestic demand picked up again during the

remainder of the year in line with increasing consumer and industrial confidence. The upturn in private consumption was supported by low interest rates, the introduction of instalment-free mortgages, higher real disposable income and housing wealth. As a result of sluggish foreign demand, export growth declined in comparison with the previous year. Accordingly, imports grew slightly faster than exports in 2003. Over the same period the unemployment rate increased to 5.6%.

Annual inflation decreased to 2.0% in 2003 (see Chart 27). This development was due mainly to cuts in indirect taxes (a reduction in excise duties on alcohol, tobacco and soft drinks) and low energy prices resulting from the depreciation of the dollar. The decline in inflation was also supported by price falls in insurance and communications. Unit labour costs increased slightly in 2003, as wage increases were accompanied by slightly lower productivity growth.

**Table 9 Macroeconomic indicators for Denmark**

(annual percentage changes, unless otherwise indicated)

	1999	2000	2001	2002	2003	2003 Q1	2003 Q2	2003 Q3	2003 Q4
Real GDP	2.6	2.8	1.6	1.0	0.0	1.4	-1.2	-0.4	0.3
<i>Contribution to real GDP growth:</i> <sup>1)</sup>									
Real domestic demand including stocks	0.1	2.4	1.0	1.8	0.1	1.3	-1.5	-0.7	1.4
Net exports	2.6	0.5	0.6	-0.8	-0.1	0.1	0.3	0.3	-1.1
HICP	2.1	2.7	2.3	2.4	2.0	2.8	2.2	1.6	1.3
Compensation per employee	3.6	3.5	4.7	3.4	3.6	3.2	3.6	3.7	3.9
Unit labour costs, whole economy	2.4	1.4	3.7	2.0	2.2	0.5	3.0	2.7	2.7
Import deflator (goods and services)	-2.4	6.8	0.5	-3.2	-1.9	-2.9	-2.4	-1.2	-1.1
Current plus new capital account (% of GDP) <sup>2)</sup>	1.8	1.5	3.1	2.6	2.8	2.3	2.8	4.5	1.7
Total employment	1.2	0.5	0.4	-0.6	-1.4	-1.5	-1.8	-1.4	-0.8
Unemployment rate (% of labour force)	4.8	4.4	4.3	4.6	5.6	5.2	5.6	5.8	6.0
Fiscal balance (% of GDP) <sup>3), 4)</sup>	3.3	2.6	3.1	1.7	1.5	.	.	.	.
Consolidated gross debt (% of GDP) <sup>3)</sup>	55.8	50.1	47.8	47.2	45.0	.	.	.	.
Three-month interest rate (% per annum) <sup>5)</sup>	3.3	4.9	4.6	3.5	2.4	2.8	2.4	2.1	2.2
Ten-year government bond yield (% per annum) <sup>5)</sup>	4.9	5.6	5.1	5.1	4.3	4.3	4.1	4.3	4.5
Exchange rate against the euro <sup>5)</sup>	7.44	7.45	7.45	7.43	7.43	7.43	7.42	7.43	7.44

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

1) Percentage points.

2) Quarterly figures are neither seasonally adjusted nor working day adjusted.

3) Consistent with the Maastricht Treaty definition.

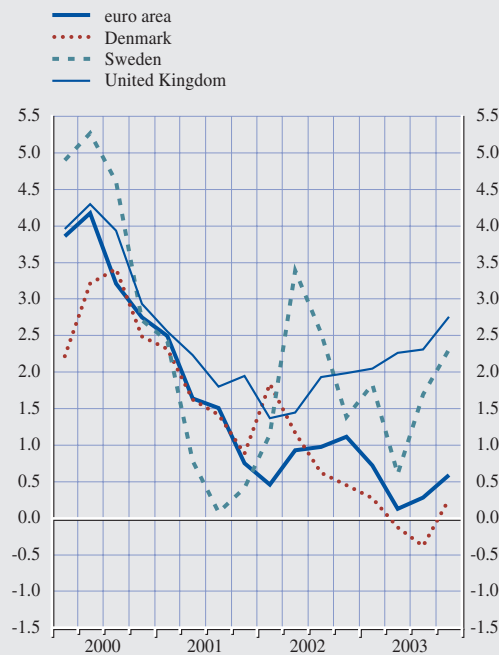
4) General government surplus (+)/deficit (-).

5) Average of period values.

**Chart 27 Economic and financial indicators for the non-euro area EU countries and the euro area**

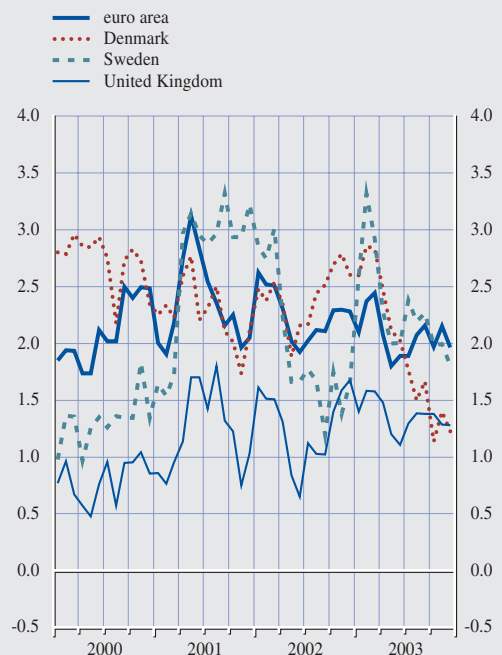
**Real GDP growth**

(annual percentage changes)



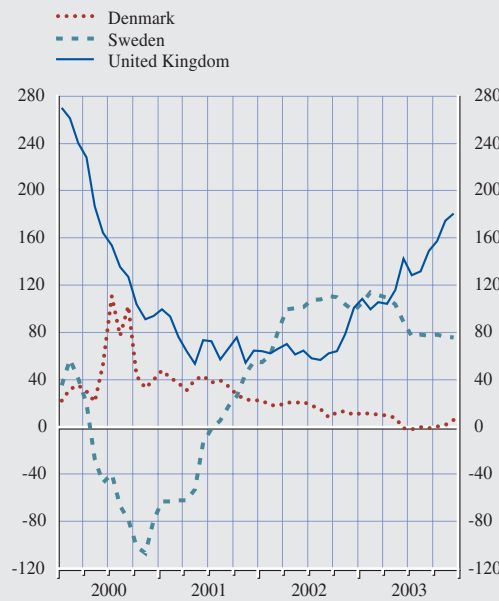
**HICP inflation**

(annual percentage changes)



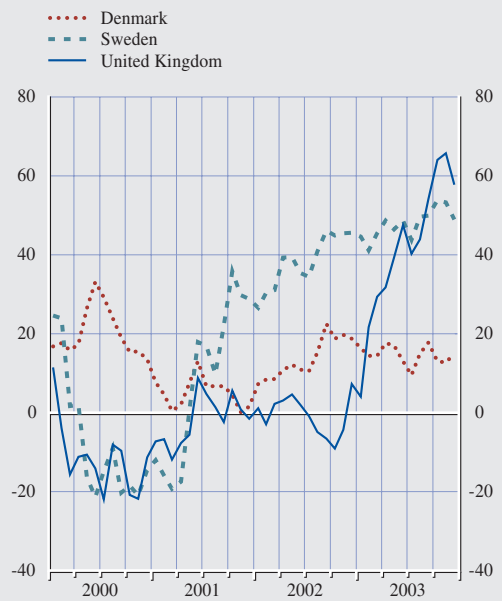
**Short-term interest rate spread vis-à-vis the euro area <sup>1)</sup>**

(in basis points)



**Long-term interest rate spread vis-à-vis the euro area <sup>2)</sup>**

(in basis points)



Sources: ECB and Eurostat.

1) For the non-euro area EU countries: three-month interbank rates; for the euro area: three-month EURIBOR.

2) Long-term government bond yields: ten-year bonds or closest available bond maturity.

The general government fiscal surplus decreased from 1.7% of GDP in 2002 to 1.5% of GDP in 2003. This was partly attributable to lower tax revenues and higher unemployment benefits paid to households on account of the cyclical downturn. Government debt declined from 47.2% of GDP to 45.0%. According to the updated Convergence Programme, public finances in Denmark are expected to remain sound, with general government surpluses projected to reach 1.3% and 1.8% of GDP in 2004 and 2005 respectively. Compared with the previous update of the Convergence Programme, the decline in projected surpluses can be attributed mainly to the phasing-in of income tax reductions in accordance with the 2003 Tax Agreement. The gross debt ratio is projected to fall to 41.2% of GDP in 2004 and to 38.7% in 2005.

Denmark is currently the only country participating in ERM II. It continues to pursue a fixed exchange rate policy vis-à-vis the euro, with a narrow band of  $\pm 2.25\%$  around its ERM II central rate of DKK 7.46038 against the euro. Developments in key official and short-term market interest rates should primarily be seen against the background of the ECB's interest rate decisions and developments in the exchange rate of the krone against the euro. During 2003 the Danish krone remained very close to its central parity in ERM II, holding a level marginally above its central rate. Foreign exchange reserves peaked in June 2003 before declining slightly towards the end of the year. The strength of the krone was due mainly to relatively low inflation and a considerable balance of payments surplus.

In 2003 Denmark's Nationalbank reduced its lending rate three times, lowering it to 2.15% where it stood at the end of the year. During the course of the year the spread over the minimum bid rate on the Eurosystem's main refinancing operations declined to 15 basis points, while the spread between Danish and euro area short-term market rates narrowed to around 5 basis points

(see Chart 27). Danish long-term bond yields increased, fluctuating around an average of 4.3%.

## SWEDEN

Real GDP growth in Sweden slowed somewhat in 2003, to 1.6%, compared with 2.1% in 2002 (see Table 10 and Chart 27). With the effects of earlier tax cuts levelling off and uncertainty remaining high owing to geopolitical events, private consumption and investment growth remained subdued in the first half of 2003. In addition, a public sector strike negatively affected real GDP growth in the second quarter of the year. Private consumption strengthened again in the second half of 2003, in line with increasing consumer confidence, while investment and industrial production remained subdued. Exports were relatively strong throughout the year and net exports contributed to real GDP growth, albeit not quite as much as in the previous year. Employment declined slightly in 2003, while the total number of hours worked declined more significantly, as in 2002. This led to relatively strong increases in labour productivity (especially if measured by hours worked) and, combined with moderate wage growth, to a subdued development of unit labour costs. The unemployment rate increased in the second half of the year to stand at around 6% of the labour force.

Inflation rates, as measured by the HICP, the CPI and UND1X,<sup>9</sup> rose to above 3% in early 2003 (see Chart 27), reflecting increases in energy prices resulting from low water supplies in the production of hydroelectric power and rising oil prices. As these price increases were

<sup>9</sup> UND1X is defined as the CPI excluding interest expenditure and direct effects of altered indirect taxes and subsidies. In Sweden headline CPI is the target variable of monetary policy. As transient factors have had an impact on the inflation forecast in recent years, monetary policy decisions have in practice been based on an assessment of UND1X or, as was the case in 2003, on UND1X excluding energy.

**Table 10 Macroeconomic indicators for Sweden**

(annual percentage changes, unless otherwise indicated)

	1999	2000	2001	2002	2003	2003 Q1	2003 Q2	2003 Q3	2003 Q4
Real GDP	4.6	4.3	0.9	2.1	1.6	1.8	0.6	1.7	2.3
<i>Contribution to real GDP growth: <sup>1)</sup></i>									
Real domestic demand including stocks	3.0	3.3	-0.2	0.7	0.7	2.1	0.3	-0.1	0.6
Net exports	1.5	1.1	1.1	1.4	0.9	-0.3	0.3	1.8	1.7
HICP	0.6	1.3	2.7	2.0	2.3	2.9	2.1	2.3	1.9
Compensation per employee	1.3	7.4	4.5	2.2	.	1.8	1.7	2.8	.
Unit labour costs, whole economy	-1.0	5.4	5.6	0.2	.	-0.4	1.2	0.9	.
Import deflator (goods and services)	1.1	4.9	4.1	0.0	-2.0	0.0	-2.5	-3.2	-2.5
Current plus new capital account (% of GDP) <sup>2)</sup>	2.6	3.8	3.8	4.3	5.4	5.4	4.6	6.2	5.5
Total employment	2.2	2.2	2.0	0.1	-0.2	-0.3	0.1	-0.3	-0.6
Unemployment rate (% of labour force)	6.7	5.6	4.9	4.9	5.6	5.3	5.5	5.6	6.0
Fiscal balance (% of GDP) <sup>3),4)</sup>	2.5	5.1	2.8	0.0	0.7	.	.	.	.
Consolidated gross debt (% of GDP) <sup>3)</sup>	62.7	52.8	54.4	52.6	51.8	.	.	.	.
Three-month interest rate (% per annum) <sup>5)</sup>	3.3	4.1	4.1	4.3	3.2	3.8	3.4	2.9	2.9
Ten-year government bond yield (% per annum) <sup>5)</sup>	5.0	5.4	5.1	5.3	4.6	4.6	4.4	4.6	4.9
Exchange rate against the euro <sup>5)</sup>	8.81	8.45	9.25	9.16	9.12	9.18	9.14	9.17	9.01

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

1) Percentage points.

2) Quarterly figures are neither seasonally adjusted nor working day adjusted.

3) Consistent with the Maastricht Treaty definition.

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

5) Average of period values.

only temporary, inflation decelerated rapidly to around 2% in mid-2003. While the CPI continued to decelerate thereafter, the HICP and UND1X remained close to 2%. This was mainly the result of declining interest expenditure, included in the CPI but not in the HICP or UND1X. On average, annual HICP inflation was 2.3% in 2003, up from 2.0% in 2002, while the CPI rose by 2.1%, compared with 2.4% in 2002.

The general government fiscal surplus improved from 0.0% of GDP in 2002 to 0.7% of GDP in 2003. The debt-to-GDP ratio decreased slightly from 52.6% in 2002 to 51.8% in 2003. According to the updated Convergence Programme, public finances in Sweden are expected to remain sound. General government surpluses are projected to reach 0.4% and 1.2% of GDP in 2004 and 2005 respectively. The development indicates some deviation in relation to the Swedish fiscal rule that a surplus of around 2% is to be maintained over the business cycle. The gross

debt ratio is expected to decline to 51.5% in 2004 and to 50.0% in 2005.

Sveriges Riksbank operates under a flexible exchange rate regime with the objective of monetary policy expressed as an explicit inflation target of a 2% annual increase in the CPI, with a tolerance margin of  $\pm 1$  percentage point. In 2003 Sveriges Riksbank reduced the repo rate by a total of 1 percentage point to 2.75%. This came against a background of a risk of undershooting the inflation target of 2% following prospects of weaker external demand and decelerating utilisation of domestic resources. On 5 February 2004 Sveriges Riksbank reduced the repo rate further by 0.25 percentage point in the context of expected lower domestic and international cost pressures. The spread between short-term market interest rates in Sweden and the euro area was broadly stable in the first half of 2003, at around 100 basis points, although it declined to around 70 basis points in the second half of the year (see Chart 27). Long-term interest rates

reflected developments in international bond markets, and the differential with the euro area widened slightly to stand at around 50 basis points at the end of 2003. The krona fluctuated around SEK 9.2 per euro until September 2003, before strengthening somewhat to around SEK 9 per euro. These developments possibly stemmed from receding uncertainty following the outcome of the referendum of 14 September on the adoption of the euro and the fact that the outlook for growth remained relatively favourable.

## UNITED KINGDOM

Average real GDP growth in the United Kingdom picked up in 2003, rising to 2.3%, compared with 1.7% in 2002 (see Table 11). In early 2003 the economy was affected by uncertainty associated with the conflict in the Middle East, high oil prices and volatility in financial markets, which undermined

confidence. Later in 2003 these uncertainties diminished and financial markets started to recover, supporting a pick-up in economic activity. As in previous years, growth was driven mainly by domestic demand, whereas net foreign trade made a negative contribution to real GDP growth.

Growth in real household consumption eased to 2.9% in 2003 as a result of reduced gains in real disposable income, moderating house price increases and slower rises in household wealth. At the same time, credit growth was strong and the housing market remained more resilient than had been generally expected. Public spending growth accelerated to 3.6%, up from 3.3% in 2002. Gross fixed capital formation increased by 2.6%, somewhat more than in 2002. Business investment was held back by financial restructuring in the corporate sector and by the fact that there was little sign of pressures on physical capacity. Notwithstanding the improvement in price competitiveness, the

**Table 11 Macroeconomic indicators for the United Kingdom**

(annual percentage changes, unless otherwise indicated)

	1999	2000	2001	2002	2003	2003 Q1	2003 Q2	2003 Q3	2003 Q4
Real GDP	2.8	3.8	2.1	1.7	2.3	2.0	2.3	2.3	2.8
<i>Contribution to real GDP growth:<sup>1)</sup></i>									
Real domestic demand including stocks	4.2	4.1	3.0	3.4	2.8	2.8	2.8	3.1	2.6
Net exports	-1.4	-0.3	-0.9	-1.7	-0.5	-0.8	-0.5	-0.8	0.2
HICP	1.3	0.8	1.2	1.3	1.4	1.5	1.3	1.4	1.3
Compensation per employee	4.6	5.8	5.0	3.3	.	3.3	4.3	4.7	.
Unit labour costs, whole economy	3.1	3.1	3.6	2.4	.	2.4	2.9	3.4	.
Import deflator (goods and services)	-1.2	3.1	0.1	-2.1	.	-1.2	-0.1	1.3	.
Current plus new capital account (% of GDP) <sup>2)</sup>	-2.6	-2.4	-2.2	-1.6	.	-0.2	-3.5	-2.6	.
Total employment	1.3	1.1	0.8	0.7	.	1.1	0.9	1.1	.
Unemployment rate (% of labour force)	5.9	5.4	5.0	5.1	.	5.0	5.0	4.9	.
Fiscal balance (% of GDP) <sup>3), 4)</sup>	1.1	3.8	0.7	-1.6	-3.2	.	.	.	.
Consolidated gross debt (% of GDP) <sup>3)</sup>	45.0	42.1	38.9	38.5	39.8	.	.	.	.
Three-month interest rate (% per annum) <sup>5)</sup>	5.4	6.1	5.0	4.0	3.7	3.7	3.6	3.5	3.9
Ten-year government bond yield (% per annum) <sup>6)</sup>	5.0	5.3	5.0	4.9	4.6	4.3	4.4	4.6	5.0
Exchange rate against the euro <sup>7)</sup>	0.66	0.61	0.62	0.63	0.69	0.67	0.70	0.70	0.70

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

1) Percentage points.

2) Quarterly figures are neither seasonally adjusted nor working day adjusted.

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

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

5) Average of period values. Three-month sterling interbank deposits.

6) Average of period values. Source: BIS.

7) Average of period values.

decline in exports seen in 2002 continued in 2003, with exports falling by 0.5%. This decline was associated with sluggish foreign demand. Despite a slowdown in import growth in 2003, foreign trade made a negative contribution to real GDP growth for the eighth year in a row. The labour market proved rather resilient, with unemployment remaining broadly flat at 5.0%. Total employment expanded at a rate similar to that recorded in 2002, helped by a strong increase in the number of jobs in the public sector.

Inflation pressures remained subdued in 2003. HICP inflation, which averaged 1.4% in 2003, was broadly stable compared with the previous year. RPIX inflation, which averaged 2.8% in 2003, was considerably higher than HICP inflation, partly reflecting the inclusion of the strongly increasing housing cost component in the RPIX.<sup>10</sup> Both domestic and external cost pressures remained subdued in 2003. Annual growth in unit labour costs in the economy as a whole was somewhat higher than in the previous year, although it remained moderate. Import prices increased only slightly, despite the depreciation of the pound during the first half of the year.

After recording a deficit of 1.6% of GDP in 2002, the general government balance deteriorated further, reaching 3.2% of GDP in 2003. This decline can be attributed mainly to the expansionary fiscal stance reflecting high primary public expenditure and shortfalls in revenue related to changes in the composition of GDP. As a result, the debt-to-GDP ratio increased from 38.5% in 2002 to 39.8% in 2003. The updated Convergence Programme targets budgetary deficits of 3.3% and 2.6% of GDP in 2003/04 and 2004/05 respectively. The gross debt ratio is expected to increase from 39.3% of GDP in 2003/04 to 40.2% in 2004/05.

The Bank of England conducts monetary policy within a flexible exchange rate regime with an explicit and symmetric inflation target. In June 2003 the government announced its decision to

postpone a referendum on the adoption of the euro, based on the evaluation of the Treasury's five economic tests, which concluded that there was still insufficient convergence and flexibility to cope with potential problems inside EMU. To help ensure that inflation expectations remain in line with those of the euro area, the UK Government announced a new inflation target in December 2003, redefining it in terms of the HICP (referred to as the CPI in the United Kingdom) instead of the previously used national RPIX index. The new inflation target is defined as a 12-month increase of 2% in the HICP.

In 2003 the Bank of England changed its official repo rate on three occasions. On both 6 February and 10 July the rate was reduced by 0.25 percentage point, leaving it at 3.5%, while on 6 November the rate was raised by the same amount to 3.75%. On 5 February 2004 the repo rate was increased by 0.25 percentage point to 4%. The decisions to raise the repo rate were taken against the background of a strengthening economic outlook, strong credit growth and a resilient housing market. The Bank of England expected these developments to put gradual upward pressure on future inflation. Both the short and long-term interest rate differentials vis-à-vis the euro area increased in the course of 2003, reflecting the relatively rapid improvement in the economic outlook and rising inflation expectations (see Chart 27). Following a depreciation during the first half of 2003, the pound's exchange rate against the euro fluctuated around GBP 0.70 until the end of the year.

<sup>10</sup> The RPIX is defined as the Retail Price Index excluding mortgage interest payments.





**Artist**

José María Sicilia

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**Format**

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## CHAPTER 2

# CENTRAL BANK OPERATIONS AND ACTIVITIES

# I MONETARY POLICY OPERATIONS, FOREIGN EXCHANGE OPERATIONS AND INVESTMENT ACTIVITIES

## I.1 MONETARY POLICY OPERATIONS

One of the pivotal tasks carried out through the Eurosystem is the implementation of the monetary policy of the euro area. For this purpose the Eurosystem has at its disposal an operational framework of monetary policy instruments and procedures.<sup>1</sup>

Based on an assessment of the liquidity conditions in the market and the needs of the banking sector, the ECB manages the liquidity situation in the euro area through its main refinancing operations (MROs), longer-term refinancing operations (LTROs) and, where necessary, its fine-tuning operations. Counterparties can use the standing facilities (i.e. the marginal lending facility and the deposit facility) to obtain overnight liquidity from, or make overnight deposits with, the NCBs. The Eurosystem requires credit institutions to hold minimum reserves on accounts with the NCBs. All Eurosystem credit operations have to be covered by adequate collateral provided by counterparties. Due to the importance of the money market for the implementation of monetary policy, the Eurosystem closely follows developments in this market.<sup>2</sup>

In 2003 the Eurosystem's operational framework for monetary policy continued to function well, providing stable money market conditions with low volatility for short-term market interest rates and a clear signalling of the monetary policy stance.

### ASSESSMENT OF THE LIQUIDITY CONDITIONS

The ECB's liquidity management relies on the daily assessment of the liquidity conditions in the euro area banking system to determine the liquidity needs of the system and thus the volume of liquidity to be allotted in the weekly MROs, and potentially through the conduct of other open market operations such as fine-tuning and structural operations. The liquidity needs of the banking system are defined by the sum of reserve requirements imposed on banks, funds held in excess of these requirements on

credit institutions' current accounts with their NCBs (excess reserves) and autonomous factors. The latter are a set of items on the Eurosystem's balance sheet which have an impact on banks' liquidity needs but are not under the direct control of the liquidity management of the ECB (e.g. banknotes in circulation, government deposits and net foreign assets).

In 2003 the daily liquidity needs of the euro area banking system amounted to €241.5 billion on average, an increase of 24% compared with 2002. On average, reserve requirements stood at €130.9 billion, broadly unchanged compared with 2002. Excess reserves amounted to €0.7 billion, which was also similar to 2002. Autonomous factors, by contrast, increased substantially, absorbing liquidity of €109.9 billion, almost twice as much as in 2002 (see the upper panel of Chart 28). This was the result of the strong increase in banknotes in circulation, which to a large extent still reflected the catching-up process following the temporary fall around the cash changeover.

To help credit institutions prepare their bids in the MROs, the ECB continued to publish on the announcement day of the weekly MRO a forecast of the average autonomous factors covering the period from the announcement day to the day preceding the settlement of the subsequent MRO. The absolute difference between the forecast and the actual outcome was, on average, €1.4 billion in 2003, compared with €1.8 billion in 2002 and €1.9 billion in 2001, providing some evidence of an improvement in forecasts over recent years.<sup>3</sup>

1 A detailed description of the operational framework can be found in the ECB publication entitled "The implementation of monetary policy in the euro area: General documentation on Eurosystem monetary policy instruments and procedures", February 2004.

2 Money Market Study 2002, ECB, November 2003 and Money Market Study 2003, ECB, January 2004.

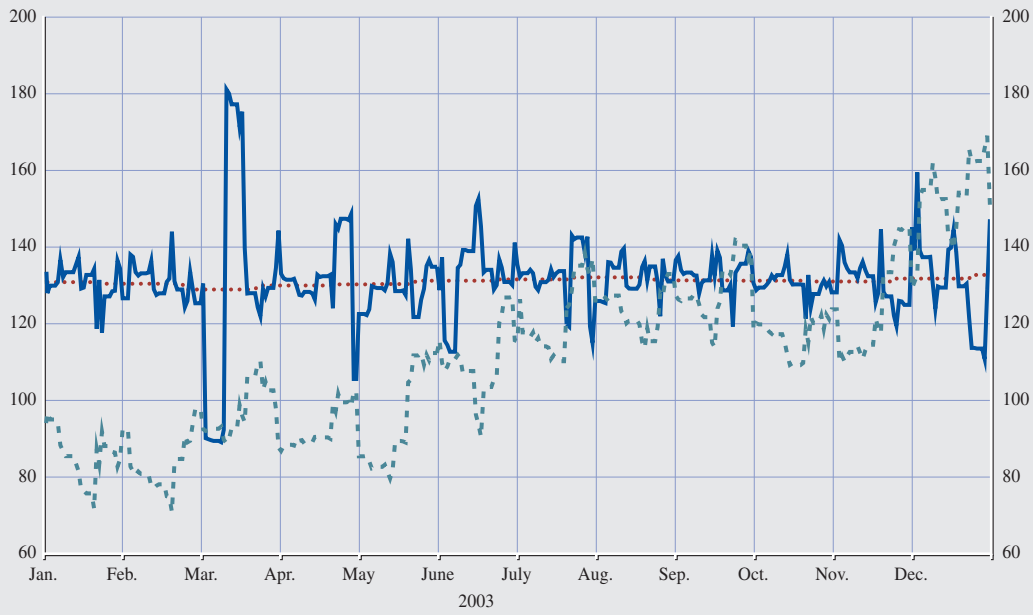
3 Among the autonomous factors, government deposits held with NCBs were the most volatile factor in 2003. The volatility of these deposits, measured by the standard deviation of the daily changes, amounted to €4.2 billion, against €3.9 billion in 2002. The volatility of banknotes in circulation was €1.3 billion in 2003, compared with €6.7 billion in 2002.

**Chart 28 Liquidity factors and the use of standing facilities in the euro area in 2003**

(EUR billions)

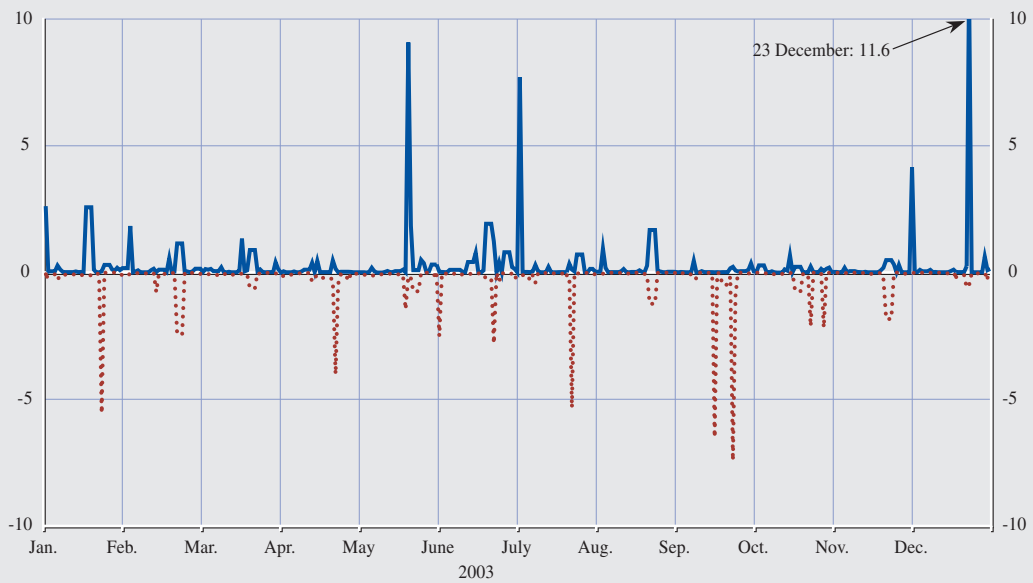
**Liquidity factors**

- current accounts
- required reserves
- - - autonomous factors



**Standing facilities**

- marginal lending facility
- deposit facility



Source: ECB.

### MAIN REFINANCING OPERATIONS

The MROs are the most important open market operations conducted by the Eurosystem. They are regular liquidity-providing operations with a weekly frequency and normally have a maturity of two weeks (from 9 March 2004 they have a maturity of one week; see the section below on the review of the operational framework). They play a pivotal role in steering interest rates, managing the liquidity situation in the market and signalling the stance of monetary policy through the level of the minimum bid rate. They also provide the bulk of refinancing to the banking system.

In 2003 the allotment volumes in MROs ranged from €38.0 billion to €150.0 billion, with an average volume of €95.9 billion. The outstanding liquidity provided through MROs amounted on average to €194.4 billion, which represented 81% of the overall net liquidity supplied by the Eurosystem through open market operations. As in 2002, MROs were conducted as variable rate tenders with a minimum bid rate following the multiple rate auction procedure. According to this procedure, the bids with the highest interest rate are satisfied first until the pre-defined allotted amount is exhausted. The lowest rate at which funds are allotted is the marginal rate. Bids at the marginal rate are allotted pro rata.<sup>4</sup>

The marginal rate and the weighted average rate are usually higher than the minimum bid rate. The average spread between the marginal rate and the minimum bid rate was broadly unchanged at 4.7 basis points, compared with 4.8 basis points in 2002. The average spread between the weighted average rate and the marginal rate stood at 1.5 basis points, compared with 1.4 basis points in 2002. Such narrow spreads show the high degree of homogeneity and precision among credit institutions in forecasting the allotment outcome as well as the tender rates. The percentage of bids which were satisfied in each MRO ranged between 36% and 100%, averaging 74% over the period under review,

compared with a range of 19% to 100% and an average of 60% in 2002.

The Eurosystem's operational framework for monetary policy was subject to only a few episodes of limited tension. These occurred mainly in relation to the three underbidding episodes in which the total amount of bids submitted by credit institutions fell short of the amount needed by them to allow for a smooth fulfilment of reserve requirements. On 3 March and 3 June 2003 underbidding occurred immediately prior to Governing Council meetings at which bidders expected a decision to lower the key ECB interest rates. These cases of underbidding resulted in tight liquidity conditions which temporarily drove up short-term market interest rates. By contrast, the underbidding episode of 25 November did not occur in an environment of expectations of an interest rate decrease. The underbidding came as a surprise to the bidders themselves, as revealed by the fact that the weighted average rate was 2.02%, i.e. two basis points higher than the marginal rate (which was equal to the minimum bid rate). If underbidding had been widely expected by the market, bids would have been clustered at the minimum bid rate, thus resulting in a weighted average rate of 2.00%.

Finally, over the summer, a relatively high spread between the EONIA (euro overnight index average) and the minimum bid rate was observed. In reaction to this, the ECB decided to provide the banking system for some time with slightly more liquidity than needed, which helped to bring the spread back down to more normal levels in the autumn.

### LONGER-TERM REFINANCING OPERATIONS

The LTROs are liquidity-providing operations with a monthly frequency and a maturity of normally three months. They provide

<sup>4</sup> The "pro rata" system works as follows: the total amount allotted at the marginal rate is divided by the total amount of bids at the marginal rate to give the percentage of bids satisfied. Each individual bidder's bid amount at the marginal rate is multiplied by this percentage to obtain the amount it is allotted.

counterparties with additional longer-term refinancing. In contrast to the MROs, the LTROs are not conducted with the intention of steering the liquidity situation or signalling the monetary policy stance. The Eurosystem acts as a rate-taker since LTROs are conducted as pure variable rate tenders with a pre-announced allotment volume. The Eurosystem conducted 12 LTROs in 2003, each having a pre-announced allotment volume of €15 billion. In January 2004 the volume was increased to €25 billion. On average in 2003, LTROs amounted to 19% of the total net liquidity provided through open market operations. As in previous years, the dispersion of bids in LTROs was slightly higher than in MROs. On average over the year, the weighted average rate exceeded the marginal rate by 1.7 basis points, compared with 1.9 basis points in 2002. The percentage of bids which were satisfied in each LTRO in 2003 ranged between 42% and 60%, averaging 51%, compared with a range of 36% to 72%, averaging 50%, in 2002.

#### OTHER OPERATIONS

On 23 May 2003 the Eurosystem conducted a liquidity-absorbing fine-tuning operation in order to restore balanced liquidity conditions. The large recourse to the marginal lending facility on the preceding two days had led to looser conditions on the last day of the maintenance period and to a decline in the overnight rate. The fine-tuning operation was conducted as a collection of fixed-term deposits with a fixed rate of 2.50% (which was the minimum bid rate in MROs at that time), overnight maturity and a pre-announced intended allotment amount of €5 billion. Of more than 100 eligible counterparties, 12 participated, and bids corresponded to an amount of €3.9 billion, all of which was allotted. The reserve maintenance period ended smoothly with a small net recourse to the deposit facility of €0.6 billion.

#### STANDING FACILITIES

The two standing facilities offered by the Eurosystem, i.e. the marginal lending facility and the deposit facility, aim to provide and absorb overnight liquidity, signal the general stance of monetary policy and bound overnight market interest rates by setting an upper and a lower limit for those rates. In 2003 the width of the interest rate corridor determined by the two standing facilities remained unchanged at 200 basis points, centred around the minimum bid rate of the MROs.

There are normally two reasons for credit institutions to have recourse to the standing facilities:

- Recourse to standing facilities may arise in the case of aggregate liquidity imbalances, i.e. if the banking system as a whole has either too little or too much liquidity relative to the aggregate reserve requirements. Aggregate recourse normally takes place only towards the end of the maintenance period, when the banking system must settle its position against any accumulated aggregate liquidity imbalances via recourse to the standing facilities. The bigger spikes in the recourse to standing facilities during 2003 shown in the lower panel of Chart 28 mostly reflect the offsetting of such aggregate imbalances.
- Unexpected payment flows between individual banks at the end of the day, when the money market is no longer liquid, may trigger individual recourse to the standing facilities. Individual recourse is normally spread fairly evenly across the maintenance period. Individual recourse may become substantial on days when payment system components fail, such as on 3 July 2003, when recourse to the marginal lending facility was €7.7 billion.

In 2003 the total average daily recourse to the marginal lending facility amounted to

€269 million, while total average daily recourse to the deposit facility amounted to €242 million. On the assumption that the aggregate recourse takes place on the last day of the maintenance period while individual recourse takes place in the remainder of the period, these amounts may be broken down into €49 million aggregate recourse and €221 million individual recourse for the marginal lending facility, and €107 million aggregate recourse and €135 million individual recourse for the deposit facility.

Total recourse to the standing facilities in 2003 remained at the low levels of the previous year, indicating the good quality of the forecasts of the autonomous factors and the high efficiency of the interbank market.

#### **PARTICIPATION OF CREDIT INSTITUTIONS IN MONETARY POLICY OPERATIONS**

The Eurosystem's monetary policy framework continued to enable a broad range of credit institutions to participate in monetary policy operations. Of the 6,593 euro area credit institutions which were subject to minimum reserves at the end of 2003 (a change of -5% compared with the previous year), 2,149 (-7%) were eligible to participate in open market operations, 3,083 (-5%) were eligible to use the deposit facility and 2,629 (-8%) were eligible to use the marginal lending facility.

In 2003 the average number of credit institutions participating in the MROs and LTROs continued the declining trend which had started in mid-2000. In 2003 the average number of bidders in the MROs was 267, compared with 307 in 2002. Similarly, the number of banks participating in the LTROs fell from 186 in 2002 to 133 in 2003. This trend seems to be the result of a combination of various factors, such as the competitiveness of the interbank market, the consolidation of the banking sector and the centralisation of treasury management in banking groups. There is no sign that this continuous decline in MRO and LTRO participation has jeopardised the smooth allocation of central bank liquidity within the euro area banking system. The Eurosystem

continued to have more counterparties in its open market operations than any other central bank in the world.

#### **MINIMUM RESERVE SYSTEM**

The Eurosystem's minimum reserve system applies to credit institutions in the euro area and primarily pursues the aims of stabilising money market interest rates and creating (or enlarging) a structural liquidity shortage. The reserve requirement of each institution is determined in relation to elements of its balance sheet. The averaging provision, which allows credit institutions to fulfil their reserve requirements on average over the one-month reserve maintenance period<sup>5</sup>, helps to dampen the impact of temporary liquidity shocks on short-term interest rates.

In 2003 reserve requirements represented 54% of the total liquidity needs of the euro area banking system. The average level of aggregate reserve requirements held by credit institutions in the euro area was €130.9 billion in 2003, representing a small increase of around €1 billion compared with 2002. Reserve requirements ranged from €128.9 billion in the maintenance period ending on 23 March 2003 to €132.1 billion in the maintenance period ending on 23 August 2003.

Banks' current account holdings covering reserve requirements fluctuated between €89.1 billion and €181.2 billion in the course of the year, indicating that a substantial further buffer against unexpected aggregate liquidity withdrawals was always available (see the upper panel of Chart 28). Mainly owing to the averaging provision of the minimum reserve system, and taking into account the low frequency of open market operations, the volatility of the EONIA continued to be low in 2003 by international standards. The standard deviation of daily changes in the EONIA was 14 basis points, 2 basis points higher than in 2002.

<sup>5</sup> From 10 March 2004 a reserve maintenance period no longer lasts one calendar month, but instead varies in length.

During 2003 an average of 19 cases of non-compliance with the obligation to hold minimum reserves were reported per reserve maintenance period, compared with 28 in 2002. The average daily shortfall amounted to €6.7 million, compared with €10.5 million in 2002. 58% of the cases led to relatively small penalties of below €500. There were, however, seven very large infringements, which led to fines in excess of €10,000.

### REVIEW OF THE OPERATIONAL FRAMEWORK

In reaction to some occasional disturbances recorded in previous years, the Governing Council decided in January 2003 to amend some of the features of the Eurosystem's operational framework with effect from March 2004:

- to modify the timing of the reserve maintenance period so that it always starts on the settlement day of the MRO following the Governing Council meeting at which the monthly assessment of the monetary policy stance is scheduled. Furthermore, as a rule, the implementation of changes to the standing facility rates is aligned with the start of the new reserve maintenance period;
- to shorten the maturity of the MROs from two weeks to one week.

Combining both these measures will help to remove market expectations of interest rate changes during any given maintenance period, given that changes in the key ECB interest rates will only apply, in general, to the forthcoming reserve maintenance period and that liquidity conditions will no longer spill over from one reserve maintenance period to the next. Consequently, within a maintenance period, the market overnight rate should no longer be affected by rate change expectations. Hence, given the generally neutral liquidity management policy of the ECB, the overnight rate should remain close to the minimum bid rate. This should eventually prevent speculative considerations from disrupting the bidding of credit institutions in MROs. The measures will

thus help to stabilise the conditions in which bidding takes place.

Owing to technical and legal lead times, it was decided that the changes would not enter into force until 10 March 2004.<sup>6</sup> To help credit institutions to achieve a smooth implementation of the changes to the operational framework for monetary policy, an extended transitional minimum reserve maintenance period (from 24 January to 9 March 2004) was agreed.

### ELIGIBLE ASSETS FOR MONETARY POLICY OPERATIONS

The Statute of the ESCB requires that all Eurosystem credit operations be covered by adequate collateral. The collateral framework of the Eurosystem is designed to protect the Eurosystem against incurring losses in its monetary policy and payment systems operations (see Box 7). It ensures the equal treatment of counterparties and enhances operational efficiency.

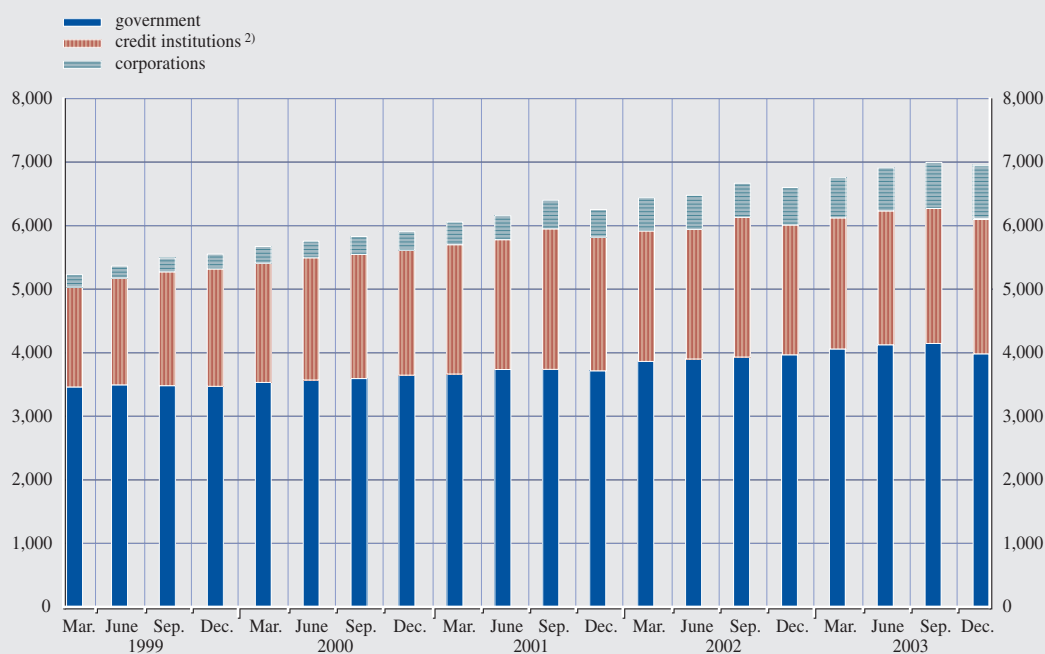
In order to take account of existing differences in the financial structure of euro area countries, assets eligible for Eurosystem credit operations include a large number of different instruments. A distinction is made between two categories of assets eligible for these credit operations: "tier one" and "tier two". This distinction has no bearing on their eligibility for the various types of Eurosystem monetary policy operations, except that tier two assets are not normally expected to be used by the Eurosystem in outright transactions (not conducted at present). Tier one consists of marketable debt instruments fulfilling uniform eligibility criteria specified by the ECB. Tier two consists of assets which are of particular importance for national financial markets and banking systems and for which eligibility criteria have been established by the NCBs, subject to minimum

<sup>6</sup> A new Regulation (ECB/2003/9) on the application of minimum reserves was adopted on 12 September 2003 (OJ L 250, 2.10.2003, p. 10). A revised version of the document entitled "The single monetary policy in the euro area: General documentation on Eurosystem monetary policy instruments and procedures" (see footnote 1) applies from 8 March 2004.



**Chart 29 Tier one eligible assets for Eurosystem credit operations <sup>1)</sup>**

(end-of-month data; EUR billions)



Source: ECB.

1) Securities issued by international and supranational institutions are not included.

2) This category includes Pfandbrief-style securities and uncovered bonds issued by credit institutions.

eligibility criteria established by the ECB. Tier two assets may be marketable or non-marketable debt instruments or they may be equities.

A substantial part of tier one assets is made up of government securities (assets issued by central, regional and local governments) and of Pfandbrief-style securities which are issued by credit institutions and backed by residential mortgages or by public sector debt. At the end of 2003 government and Pfandbrief-style securities represented 57% and 31% respectively of the total tier one assets. Other types of asset included in tier one are private sector securities (i.e. uncovered bonds issued by credit institutions, bonds issued by corporations and asset-backed securities other than Pfandbrief-style securities) and securities issued by international and supranational institutions (which accounted for less than 2% at the end of 2003). In particular, the value of

eligible bonds issued by corporations followed a continuously increasing trend in 2003.

Tier two consists of marketable assets and non-marketable debt instruments such as bank loans, trade bills and mortgage-backed promissory notes listed by some NCBs in that category.

The total value of tier one assets eligible as collateral for Eurosystem credit operations was €7 trillion at the end of 2003, compared with €6.6 trillion at the end of 2002 (see Chart 29). Overall, tier one assets accounted for an overwhelming proportion of eligible assets (96% at the end of 2003). The total value of marketable tier two assets remained stable, standing at €261 billion at the end of 2003, compared with €265 billion in 2002. (The absolute amount of eligible non-marketable tier two assets is not available.)

All Eurosystem credit operations are based on underlying assets provided by counterparties in

**Chart 30 Use of collateral in Eurosystem credit operations**

(end-of-month data; EUR billions)



Source: ECB.

the form of either a transfer of ownership of assets (earmarking system) or a pledge granted over relevant assets (pooling system).

The total value of marketable assets put forward by counterparties as collateral for Eurosystem credit operations was around €750 billion at the end of 2003, compared with just over €700 billion at the end of 2002 (see Chart 30).<sup>7</sup>

Overall, the share of debt instruments issued by credit institutions in the total amount of marketable assets put forward at the end of 2003 remained stable at 51%, compared with 52% at the end of the previous year. Government securities were similarly stable, standing at around 38%. A continuously increasing path was observed for the share of corporate bonds, from 4% (end-2002) to 6% (end-2003). The share of non-marketable bank loans has been relatively stable at around 4% of all assets put forward during the past five years.

Eurosystem counterparties may use eligible assets on a cross-border basis, i.e. they can obtain funds from the NCB of the country in which they are established by making use of assets located in another euro area country. The share of cross-border collateral in total collateral put forward by counterparties for Eurosystem credit operations continued to increase, from 33% at the end of 2002 to 40% at the end of 2003. This increase involved all types of assets, but particularly those issued by credit institutions and corporations (for more details see Section 2.3 of this chapter).

<sup>7</sup> The total amount of collateral deposited by counterparties in pooling systems was around €650 billion (end-2003), compared with approximately €600 billion at the end of 2002. With regard to earmarking systems, where it is possible to identify the individual transaction for which the underlying assets are used, the total amount used by counterparties for Eurosystem credit operations (monetary policy operations and intraday credit needs) was €107 billion at the end of 2003, compared with €115 billion at the end of 2002.

**Box 7****RISK MANAGEMENT RELATED TO THE PROVISION OF CREDIT IN MONETARY POLICY AND PAYMENT SYSTEMS OPERATIONS**

In policy operations (i.e. monetary policy or payment systems credit operations), when the Eurosystem enters into a transaction with a counterparty, it incurs the risk that the counterparty may be unable to meet its credit obligations. This credit risk is mitigated by the requirement that the counterparty provide adequate collateral to guarantee the credit provided.

The framework for managing the risks associated with the Eurosystem's policy operations has three main components, namely the risk control of collateral, valuation principles and the credit risk assessment of collateral.

In the context of risk control of collateral, a new haircut schedule was finalised in 2003. The new haircut schedule aims to better differentiate between collateral types on the basis of their perceived liquidity risk characteristics. The classification of collateral into liquidity groups is based on the examination of different liquidity indicators, such as yield curve differentials between bonds issued by issuer groups of the same credit quality, effective supply and average issue size as well as the bid-ask spread type of indicators. The classification of issuer segments into groups of varying levels of liquidity is then reflected in the level of risk controls or haircuts.

The new tier one risk controls apply as of March 2004. The main changes are as follows:

- Tier one assets are classified in four liquidity categories and each category is assigned a specific haircut schedule:

Category I	Category II	Category III	Category IV
Central government debt instruments	Local and regional government debt instruments	Traditional Pfandbrief-style debt instruments	Asset-backed securities
Debt instruments issued by central banks	Jumbo Pfandbrief-style debt instruments	Credit institution debt instruments	
	Agency debt instruments	Debt instruments issued by corporate and other issuers	
	Supranational debt instruments		

- The maturity sectors of the haircut schedules have been chosen in such a way as to achieve an even distribution of outstanding volumes across sectors. The new maturity sectors are 0-1 year, 1-3 years, 3-5 years, 5-7 years, 7-10 years and >10 years. The application of initial margins has been discontinued and trigger levels used in margin calls reduced from 1.0% to 0.5%. In order to guarantee coherence between the new valuation haircut schedules for tier

one eligible assets and those for tier two eligible assets, the latter have also been modified to take into account both the discontinuation of initial margins and the new maturity sectors.

- The valuation haircuts applied to tier two assets reflect the specific risks associated with these assets and are at least as stringent as the haircuts applied to tier one assets. The four different haircut groups for tier two assets, reflecting differences in their intrinsic characteristics and liquidity, have been maintained: equities, marketable debt instruments with limited liquidity, debt instruments with restricted liquidity and special features, and non-marketable debt instruments.

The management and publication of the complete list of assets eligible for Eurosystem credit operations are handled centrally at the ECB, where the Eligible Assets Database is kept. The NCBs submit information to the ECB on eligible assets issued in their respective national markets. Assets are only considered eligible for Eurosystem credit operations when they appear in the list updated on a daily basis on the ECB's website ([www.ecb.int](http://www.ecb.int)). In 2003 the Eurosystem enhanced the quality, efficiency and reliability of the service provided to its counterparties and also modified the content of the list of eligible assets, providing additional information on the issuer group and the asset types in line with the new risk control framework applied from March 2004 (see Box 7).

### THE SINGLE LIST OF COLLATERAL

During the first five years of Stage Three of EMU, a large amount of collateral encompassing a wide range of assets was available to counterparties for collateralising Eurosystem monetary policy and intraday credit operations. However, the heterogeneity of the assets included in the tier two lists of different euro area NCBs may not ensure a level playing-field for counterparties and may somewhat decrease the transparency of the collateral framework. The Eurosystem is therefore investigating whether and how this heterogeneity could be reduced and under what conditions the two tiers of assets could be merged in order to obtain a single list.

In June 2003 the Eurosystem launched a public consultation inviting market participants to submit their views on possible changes to the Eurosystem's collateral framework. The basic idea put forward to market participants was to gradually move from a two-tier system to a single list. The assets already accepted as collateral by the Eurosystem under tier one would be part of the single list. The main categories of currently eligible tier two assets were reviewed with a view to their potential inclusion in the single list. In addition, a new category of assets to be made eligible was investigated, namely euro-denominated debt instruments issued in the EEA by issuers established in non-EEA G10 countries.

Replies were received from various interested parties, including individual banks, associations of market participants and some national and supranational banking associations. Almost all replies supported the proposal to replace the two-tier system with a single list of eligible collateral. Support for the reform is largely based on the desire to establish a harmonised collateral framework that enhances the level playing-field between eligible counterparties. Market participants argued that the new collateral policy should favour greater availability of eligible assets because of the increased use of collateral in the market, e.g. in secured lending and repo markets, and for the purposes of Continuous Linked Settlement (CLS) (see Section 4 of Chapter 3). Some market participants

highlighted the need to make eligible in the whole euro area all categories of assets currently accepted in tier two by only some NCBs. Some of them also mentioned additional categories of assets that they would welcome as eligible (e.g. more “foreign” assets such as debt instruments denominated in foreign currencies).

The Eurosystem is aware that the revised collateral framework (if and when decided) will require gradual implementation over a number of years. This will be necessary in the light of the required adaptation of operational systems and procedures, both of the Eurosystem’s central banks and of counterparties, as well as legislative adjustments to be made in some countries.

#### **MARKET CONTACT GROUPS**

The ECB continued to use the Money Market Contact Group (MMCG) and the Foreign Exchange Contact Group (FXCG), both established in 1999, as well as the Operations Managers Group (OMG), established in 2002, as fora for discussing market developments, structural market issues and trading practices as well as operational issues related to money market and foreign exchange settlement. Among the issues discussed with market participants in the MMCG in 2003 were those related to the 2002 review of the euro money market, the European repo market, the ACI initiative on the Short-Term European Paper (STEP) project (see Section 3 of Chapter 3) and the ECB’s consultation on the Eurosystem’s collateral framework. The FXCG discussed issues such as the progress of the recently established CLS, developments in e-commerce and a possible review of market practices.

#### **1.2 FOREIGN EXCHANGE OPERATIONS**

In 2003 the ECB did not conduct any interventions in the foreign exchange market.

The standing agreement between the ECB and the IMF, signed in April 2001, to facilitate the initiation of special drawing rights (SDR)

transactions by the IMF on behalf of the ECB with other SDR holders was activated on one occasion in 2003.

#### **1.3 INVESTMENT ACTIVITIES**

##### **FOREIGN RESERVE MANAGEMENT**

The aim of the management of the ECB’s foreign reserves is to ensure that, at any given point in time, the ECB has an adequate amount of liquid resources at its disposal for any foreign exchange intervention, if and when the Governing Council decides that intervention is necessary. 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 in such a way as to maximise their return. A set of rules and procedures – known as a Chinese wall – have been established to prevent inside information, for instance originating from the areas responsible for monetary policy implementation, from reaching the areas responsible for the management of the ECB’s foreign reserves and own funds portfolio.

At the end of 2003 the ECB’s net foreign reserve assets amounted to €38.3 billion, compared with €43.2 billion at the end of 2002. The change in the size of the foreign reserve portfolio during 2003 reflects the interest income earned and the change in the market value of the assets in the portfolio, as a result of the depreciation of the US dollar. The ECB can make further calls on the euro area NCBs’ foreign reserve assets under the conditions defined in secondary Community legislation<sup>8</sup>.

The ECB’s foreign reserves mainly consist of US dollars but also include Japanese yen, gold and SDRs. The currency distribution, which is defined by the Governing Council, is based on optimal currency allocation studies and

<sup>8</sup> Council Regulation (EC) No 1010/2000 of 8 May 2000 concerning further calls of foreign reserve assets by the European Central Bank (OJ L 115, 16.5.2000, p. 2).

prospective operational needs, and the Governing Council may change it when it deems appropriate. In line with the Central Bank Gold Agreement of 26 September 1999, renewed on 8 March 2004, the ECB's gold assets are not managed actively.

### **OWN FUNDS MANAGEMENT**

The subscribed capital and general accounting reserve of the ECB form the basis of the ECB's own funds portfolio. The purpose of the own funds portfolio is to provide the ECB with a reserve to meet possible losses. The objective of portfolio management is to generate returns over the long term in excess of the average main refinancing rate of the ECB.

At the end of 2003 the ECB's own funds portfolio amounted to €5.9 billion, compared with €5.6 billion at the end of 2002. The change in the size of the own funds portfolio during 2003 reflects the interest income earned and the change in the market value of the assets in the portfolio. In 2003 further possible diversification opportunities were examined with the aim of improving the total return on the own funds portfolio.

### **RISK MANAGEMENT ISSUES**

The ECB's risk management function measures, monitors and reports all risks resulting from financial operations undertaken by the ECB directly or by the 12 NCBs of the Eurosystem on behalf of the ECB. The framework for managing the risks associated with the management of the ECB's foreign reserves and the ECB's own funds has three key interrelated components: (i) risk management measurement and compliance, (ii) the analysis and reporting of investment performance and (iii) the analytical framework for asset allocation.

The ECB's exposure to market, credit and liquidity risk is measured and compliance with agreed limits verified on a daily basis. In 2003 no serious breaches occurred. The monitoring of compliance in 2003 focused increasingly on ensuring the correct liquidity profile of investments. Liquidity limits for the ECB's

foreign reserves were formally introduced to ensure that adequate amounts of assets are held in cash or highly liquid securities. Clear procedures are in place for reporting and dealing with any breaches of these or other limits. 2003 also saw improvements to the procedures to verify the accuracy of the daily mark-to-market prices (the prices of securities, recorded on a daily basis and used for valuation purposes).

The measurement and analysis of the performance of all the relevant investment portfolios forms a large part of the risk management work. The current framework has 24 separate portfolios for foreign reserve management alone, as each of the euro area NCBs manages two portfolios of the ECB's foreign reserves. Techniques to attribute performance – i.e. to identify the sources of portfolio returns in relation to the investment benchmarks set by the ECB – were further developed in 2003 in order to provide useful feedback for portfolio managers. Aggregating these data over longer periods also allows more detailed conclusions to be drawn. This analysis of overall performance as well as the relative performance of portfolios against the relevant benchmark can also be useful for the decision-making bodies in deciding on any modification of the overall investment framework.

Asset allocation is the process of dividing investments among different kinds of asset to optimise, on the basis of the institution's goals, the trade-off between risk and reward. The key factor influencing the return on the investment portfolios is the asset allocation of the ECB's strategic benchmarks. These are designed to reflect the ECB's long-term risk-return preferences. In 2003 the ECB developed an econometric model to derive expected returns for the setting of benchmarks. In addition, several alternative optimisation techniques were used to enhance the robustness of the analysis.

## 2 PAYMENT AND SECURITIES SETTLEMENT SYSTEMS

The provision of payment and securities settlement facilities is one of the Eurosystem's main instruments for carrying out its task of promoting the smooth operation of payment systems. To fulfil its statutory task, the Eurosystem has created the TARGET<sup>9</sup> system, a real-time gross settlement (RTGS) system for very large payments in euro. Payments through TARGET are settled in the books of central banks, in central bank money, which greatly minimises the risk of failures with critical systemic consequences for the entire financial system. TARGET has been subject to enhancements over the past few years, and plans are under way to develop a second-generation system, TARGET2.

On the securities settlement side, the Eurosystem and the market offer various channels to facilitate the use of collateral across national borders. The use of these channels is increasing with the growing integration of EU markets.

### 2.1 THE TARGET SYSTEM

The present TARGET system is built on the 15 national payment systems of the EU. It also includes the payment mechanism of the ECB, the EPM, and an interlinking mechanism that enables the processing of cross-border payments. In 2003 TARGET contributed further to the integration of the euro money market and, because the Eurosystem's credit operations are processed via this system, continued to play an important role in the smooth implementation of the single monetary policy. On account of its real-time settlement service in central bank money and its broad market coverage, the TARGET system attracts a variety of other payments.

TARGET functioned smoothly and successfully in 2003, and continued its trend of settling increasingly more large-value euro payments in line with the Eurosystem's policy objective to promote settlement in central bank money. In 2003 87% of the total turnover of large-value

payments in euro was executed via TARGET. TARGET is available for all credit transfers in euro between banks in an EU Member State (intra-Member State traffic) and between banks in different EU Member States (inter-Member State traffic), including those that have not yet adopted the euro. In 2003 there were 3,351 participants in TARGET. 43,450 bank branches worldwide can be addressed through TARGET.

### TARGET OPERATIONS

TARGET processed a daily average of 261,208 payments with a total value of €1,650 billion a day in 2003. Compared with 2002, this is an increase of 3% in volume and 6% in value.

Out of the total TARGET traffic in 2003, inter-Member State traffic represented 33% in terms of value and 23% in terms of volume, compared with 31% and 21% respectively in 2002. Of the TARGET inter-Member State traffic, 95% in terms of value and 52% in terms of volume were interbank payments, the remainder being customer payments. The average value of an inter-Member State interbank payment was €17 million, and the average value of an inter-Member State customer payment was €0.8 million. Further information is provided in Table 12.

In 2003 the overall availability of TARGET, i.e. the possibility for participants to use TARGET during its business hours without incident, reached 99.79%. The TARGET Information System (TIS) was enhanced in 2003 so that TARGET users can be provided with more detailed and timely information in the event of an incident.

<sup>9</sup> TARGET stands for Trans-European Automated Real-time Gross settlement Express Transfer.

**Table 12 Payment traffic in TARGET <sup>1)</sup>**

Volume	2002	2003	Change (%)
<b>Overall</b>			
Total	64,519,000	66,608,000	3
Daily average	253,016	261,208	3
<b>Intra-Member State</b>			
Total	50,785,315	51,354,924	1
Daily average	199,158	201,392	1
<b>Inter-Member State</b>			
Total	13,733,685	15,253,076	11
Daily average	53,858	59,816	11
<b>Value (EUR billions)</b>			
<b>Overall</b>			
Total	395,635	420,749	6
Daily average	1,552	1,650	6
<b>Intra-Member State</b>			
Total	271,914	283,871	4
Daily average	1,066	1,113	4
<b>Inter-Member State</b>			
Total	123,721	136,878	11
Daily average	485	537	11

Source: ECB.

<sup>1)</sup> 255 operating days in 2002 and 2003.**PROVISIONS FOR SYSTEMICALLY IMPORTANT PAYMENTS IN TARGET**

Owing to the specific role the TARGET system plays in the market and the broad market coverage it provides, suitable protection against a wide range of threats is essential for the smooth functioning of the system. Consequently, security issues need to be properly addressed within the TARGET environment. A methodology for assessing the risk situation has been in place since the development phase of the TARGET system. In 2003 the existing risk management process was revised substantially. The new TARGET Risk Management Framework is based on international standards.

In abnormal circumstances it is of utmost importance that systemically important payments, i.e. those that could cause a systemic risk if not processed immediately, be carried out without delay. Established TARGET contingency measures have been further enhanced to ensure that this is the case. In 2003 a number of trials among central banks

(sometimes involving commercial banks) verified the operability and interoperability of all contingency measures alongside the whole TARGET payment processing chain.

As a result, the Eurosystem is today better positioned to ensure that payment systems and financial markets can continue to function smoothly in a crisis situation.

**OTHER CHANGES**

Changes in the communication network of SWIFT, such as the SWIFTNet FIN migration, are mandatory for the entire user community. The components of TARGET may implement the changes at their own pace, but must have completed the changeover by the end of 2004.

**NIGHT-TIME SETTLEMENT FACILITIES**

In 2003 the Eurosystem responded to a market move in securities settlement systems (SSS) towards settling transfers of financial instruments during the night, in what are known as overnight settlement cycles. In these settlement cycles, SSS operators bring forward to the previous night some of the activities that would typically occur on the following business day. However, the value date for those trades is the following business day. Overnight settlement has the advantage that SSS participants can have certainty with regard to their actual positions in cash and securities, and can operate on this basis at the start of daytime operations.

Meeting a specific market request, the Governing Council has approved a model which supports the cross-border settlement of the payment legs of overnight settlement cycles in central bank money for participants established outside the country of the system in which they participate. The model would be implemented only by interested NCBs on a voluntary basis. The solution developed by the Eurosystem relies on bilateral guarantees between euro area central banks. These guarantees involve the NCB of the country where the system is located and the NCBs of participants who are established outside that country. The bilateral



guarantees between NCBs make it possible for participants to use their central bank reserve balances at their home central bank for overnight settlement in an SSS outside their home country.

### **RELATIONS WITH TARGET USERS AND RTGS OPERATORS OF OTHER CURRENCY AREAS**

The ESCB maintains close relations with TARGET users so as to ensure that their needs are given due consideration and receive an appropriate response. As in previous years, regular meetings were held in 2003 between the EU central banks and the national TARGET user groups. In addition, joint meetings of the TARGET Management Working Group (TMWG) of the ESCB and the TARGET Working Group (TWG) of the European banking industry were held to discuss TARGET operational issues. Strategic issues were addressed in the Contact Group on Euro Payments Strategy (COGEPS), a forum in which the senior management of commercial and central banks is represented.

The Eurosystem, as operator of one of the largest RTGS systems in the world, maintains close contacts with the RTGS operators of other currency areas. Increasing interrelations, e.g. due to Continuous Linked Settlement (CLS) operations, have created the need for common discussions on operational issues.

## **2.2 TARGET2**

The current structure of TARGET was decided on in 1994 and was based on the principles of minimum harmonisation and interconnection of existing infrastructures. This was the best way of ensuring that the system would be operational from the very start of EMU. However, in view of increasing financial integration within the euro area and the fact that the business needs of TARGET users are becoming even more similar, the system needs to be enhanced.

On 24 October 2002 the Governing Council set out the principles which have since guided the preparation of the TARGET2 system. The new system must (i) provide an extensively harmonised service level, (ii) apply a single TARGET-wide price structure to these harmonised services and (iii) guarantee cost-effectiveness. At the same time, the NCBs will remain responsible for the accounts of, and business relations with, credit institutions in their respective Member States. As regards the technical infrastructure of TARGET2, central banks will be able to share a technical platform, the single shared platform (SSP), supporting the RTGS services that they offer to their banks.

The planning for the TARGET2 project is divided into three main phases: the pre-project phase, the project phase, and the testing and trial operations phase. 2003 was dedicated to the pre-project phase, in which three main work streams have to be addressed before technical development work can start in the course of 2004. The first work stream is the definition of the core features and functions offered by TARGET2 (e.g. payment processing and settlement services, interface issues, liquidity management, information services, business continuity and security). The second work stream on cost and pricing issues consists mainly of the finalisation of a common cost methodology for TARGET2. The third work stream focuses on issues specifically related to the SSP.

As a first step in the definition of the core features and functions of TARGET2, the Eurosystem launched a public consultation in December 2002 to collect the views of the entire community of TARGET users on the approach to be chosen for TARGET2 as well as on its service level.<sup>10</sup> A summary of all replies, together with the individual contributions, was made available on the ECB's website on 14 July 2003.<sup>11</sup> All respondents welcomed the

<sup>10</sup> "TARGET2: principles and structure", ECB, December 2002.

<sup>11</sup> "Summary of comments received on TARGET2: principles and structure", ECB, July 2003.

Eurosystem's initiative to improve the functionality and performance of TARGET. The banking industry also stressed the importance of users being involved in the TARGET2 project.

The ESCB will continue to consult the banking community on relevant TARGET2 issues throughout the project. In addition, the contributions received in the public consultation have served as a basis for determining the features and functions of TARGET2. Current preparations are also focused on ensuring the full compliance of the future TARGET2 system with the Core Principles for Systemically Important Payment Systems<sup>12</sup>, which were adopted as minimum standards by the Governing Council.

With regard to the second work stream, a common cost methodology for TARGET2 to be applied by all central banks had to be developed. It will serve as the basis for the determination of the single TARGET2-wide price structure and will also be used to establish whether the cost recovery requirement has been complied with.

As for the third work stream, which focuses on issues related to the SSP, the ECB has coordinated the discussions between the central banks interested in participating in the SSP. The Eurosystem has started to address issues related to the governance structure and financing of the SSP. The Banca d'Italia, the Banque de France and the Deutsche Bundesbank have launched a joint initiative for the development of the SSP.

In addition to these three work streams, an adequate project organisation will have to be established in 2004 to ensure both the effective organisation of the development work in the project phase and an appropriate level of involvement of, and control by, all central banks that intend to participate in the SSP. Preparations at the ESCB level aim to start TARGET2 operations on 2 January 2007. However, this deadline is very tight and will be

subject to a further feasibility analysis at a later stage in the pre-project phase.

### **2.3 USE OF ELIGIBLE ASSETS ACROSS NATIONAL BORDERS**

Eligible assets may be used across national borders to collateralise all types of Eurosystem credit operations by means of the correspondent central banking model (CCBM) or through eligible links between EU SSSs. The CCBM is provided by the Eurosystem, while eligible links are a market-led solution.

The amount of cross-border collateral held by the Eurosystem increased from €234 billion in December 2002 to €305 billion in December 2003. Overall, at the end of 2003 cross-border collateral represented 40% of the total collateral provided to the Eurosystem. This is a clear indication of the increasing integration of financial markets in the euro area. As a result of this process, counterparties are increasingly inclined to hold in their portfolio assets located in another euro area country.

#### **THE CORRESPONDENT CENTRAL BANKING MODEL**

The CCBM has remained the main channel for transferring cross-border collateral and has been enhanced further. Eurosystem counterparties may use eligible assets on a cross-border basis, i.e. they can obtain funds from the NCB of the country in which they are established by making use of assets located in another euro area country.<sup>13</sup> The CCBM accounted for 34% of the total collateral provided to the Eurosystem. Assets held in custody through the CCBM increased from €195 billion at the end of 2002 to €259 billion at the end of 2003.

<sup>12</sup> Report of the Committee on Payment and Settlement Systems on "Core Principles for Systemically Important Payment Systems", BIS, January 2001.

<sup>13</sup> For more details, see Chapter 6.6.1 of "The implementation of monetary policy in the euro area: General documentation on Eurosystem monetary policy instruments and procedures", ECB, February 2004.

## Box 8

### **BEST PRACTICES FOR MARKET PARTICIPANTS INVOLVED IN CCBM OPERATIONS AS AGREED BY THE EUROPEAN BANKING FEDERATION, THE EUROPEAN SAVINGS BANK GROUP AND THE EUROPEAN ASSOCIATION OF CO-OPERATIVE BANKS**

1. Custodians shall ensure that their customers are informed of their rules/procedures for CCBM-related instructions. These rules/procedures shall be based, to the largest extent possible, on the official local market practices. Customers must abide by these rules/procedures to ensure a swift and efficient processing of their instructions.
2. Whenever possible, the processing of CCBM instructions should rely on automatic procedures. In this respect, electronic communication channels between custodians and their customers shall be used to the largest extent possible and instructions shall be based on ISO 15022 standards.
3. Under normal circumstances and on a best effort basis, custodians shall submit their customers' CCBM-related instructions to the local SSS within 30 minutes of their receipt provided that the instructions are complete and correct, and that the customer has the securities to be delivered.
4. Custodian deadlines for same-day processing of their customers' CCBM-related instructions shall be 30 minutes before the deadline of the relevant local SSS (see the regularly updated country tables on the ECB's website at <http://www.ecb.int>). However, as good practice, customers are encouraged to submit their instructions well in advance of the custodian's deadline in order to avoid building up instruction queues and to provide the custodian with sufficient time to react to mistakes or unforeseen problems.
5. Market participants shall ensure that information is readily available to their customers to enable them to monitor the status of their CCBM instructions.
6. Custodians shall agree with their customers on solutions for recognising and prioritising (when necessary) CCBM-related instructions. These solutions should be based on ISO 15022 standards where available.
7. Provided that there are ways for custodians to recognise CCBM instructions as such, they shall inform their customers, on a best effort basis, of settlement problems within 15 minutes of their discovery.

In order to improve the service level provided by the CCBM, the Governing Council decided at the end of 2002 that, as of January 2004, NCBs would perform internal CCBM procedures within an hour, provided that counterparties (and their custodians) submit their instructions correctly. However, deviation

from this one-hour benchmark will be tolerated in certain circumstances, for instance in the case of peak traffic.

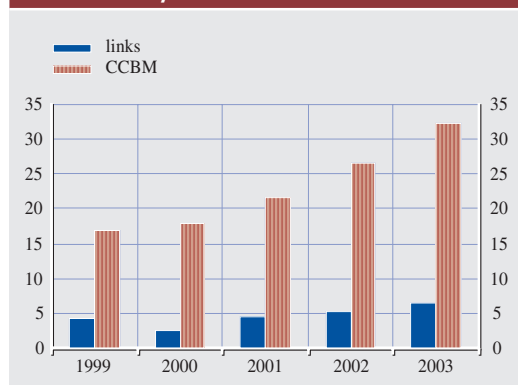
As custodian banks often play an important role in the CCBM processing chain by delivering the collateral on behalf of the counterpart, the major

European credit sector associations (the European Banking Federation, the European Savings Bank Group and the European Association of Co-operative Banks) have established “best practices” for custodian banks involved in CCBM transactions. These provide market participants with guidelines for optimising the efficiency of the CCBM. The best practices, presented in Box 8, apply as of January 2004.

### ELIGIBLE LINKS BETWEEN NATIONAL SECURITIES SETTLEMENT SYSTEMS

National SSSs can be linked by means of contractual and operational arrangements to allow the cross-border transfer of assets between systems.<sup>14</sup> Once securities have been transferred via such links to another SSS, they can be used through local procedures in the same way as any domestic collateral. 66 links are currently available to counterparties, of which only a limited number are actively used. Furthermore, these links only cover part of the euro area, and no new links were presented for assessment in 2003. Collateral held through links increased from €38 billion in December 2002 to €46 billion in December 2003, but represented only 6% of the total collateral, cross-border and domestic, held by the Eurosystem.

**Chart 31 Cross-border collateral as a percentage of the total collateral provided to the Eurosystem**



Source: ECB.

<sup>14</sup> For more details, see Chapter 6.6.2 of “The implementation of monetary policy in the euro area: General documentation on Eurosystem monetary policy instruments and procedures”, ECB, February 2004.

## 3 BANKNOTES AND COINS

### 3.1 THE CIRCULATION OF EURO BANKNOTES AND COINS AND THE HANDLING OF CURRENCY

#### DEMAND FOR EURO BANKNOTES AND COINS

The substantial increase in euro banknotes in circulation which was observed throughout 2002 after the initial cash changeover period continued during 2003. Between January and December 2003, the value of euro banknotes in circulation increased by 21.7%, from €358.5 billion to €436.2 billion. Only in January 2003 did the value of euro banknotes in circulation decrease markedly, by 5.3% compared with December 2002, due to the reduced cash needs of economic agents after the turn of the year in line with the normal annual cycle. In February the value of euro banknotes in circulation picked up again, rising constantly at an average monthly growth rate of around 2.1% during the rest of the year. The increase in demand for euro banknotes is a result of their increased use both as a store of value and as a parallel currency in countries outside the euro area. Statistical analyses have revealed that as at end-December 2003 some 9% of the value of euro banknotes in circulation was held by non-euro area residents.

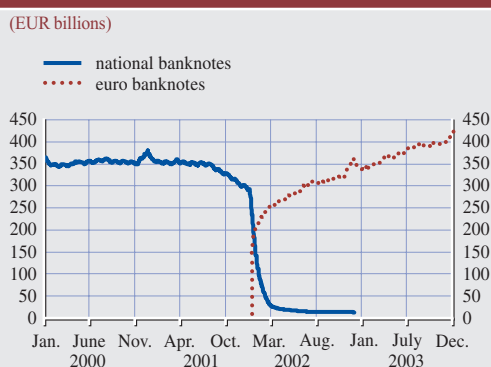
The number of euro banknotes in circulation also rose markedly, by 10.1%, in 2003. Following a drop of 8.6%, from 8.2 billion to 7.5 billion banknotes, in January 2003, the number rose

moderately throughout the year, with seasonal peaks around the summer and towards the end of the year, when a level of 9.0 billion banknotes was reached. Chart 32 shows the development of national banknotes and euro banknotes in circulation in terms of value from 2000 to 2003, while Chart 33 shows the development in terms of volume in 2002 and 2003.

No significant shifts between individual banknote denominations occurred in 2003, as can be seen in Chart 34. A closer look at the development of the annual growth rates for the individual denominations reveals significant growth for the higher banknote denominations. The increase in the issuance of €500 banknotes was strongest, with the number in circulation rising from 167 million to 238 million in 2003, an annual growth rate of 42.5%. The number of €50, €100 and €200 banknotes in circulation also increased significantly, with annual growth rates of 19.0%, 20.3% and 12.1% respectively, while the increase in the lower-value banknotes was moderate: 2.3% for the €5 banknote, 2.5% for the €10 banknote and 4.0% for the €20 banknote.

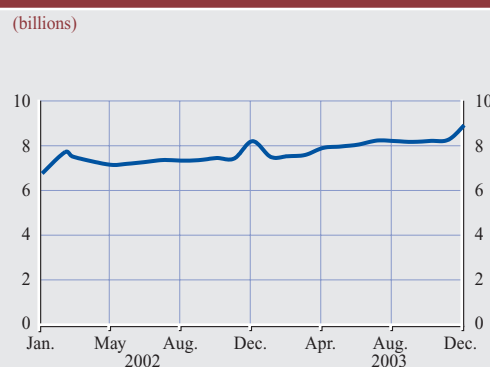
A lasting upswing in the demand for euro coins was observed in all euro area countries from January 2003 onwards, resulting in an increase in the value of coins in circulation of 13.7%, from €12.4 billion to €14.1 billion as at end-December 2003. The number of coins in

**Chart 32 Total value of banknotes in circulation between 2000 and 2003**



Source: ECB.

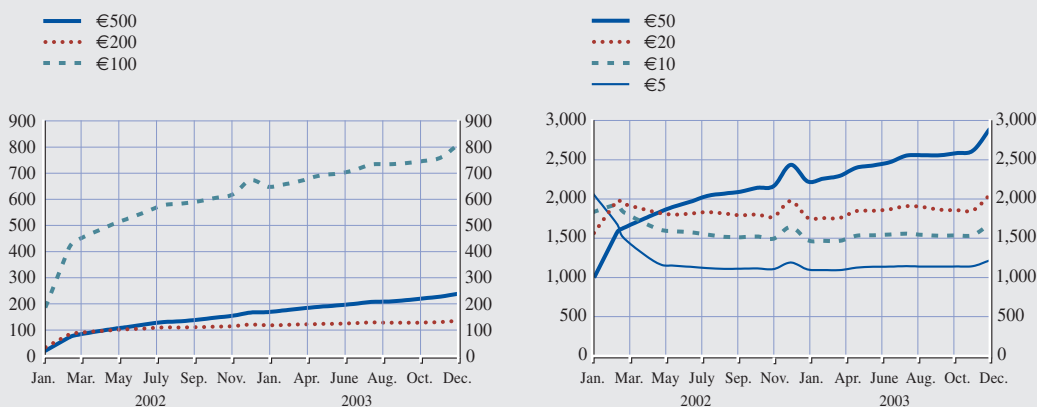
**Chart 33 Total number of euro banknotes in circulation between 2002 and 2003**



Source: ECB.

**Chart 34 Number of euro banknotes in circulation between 2002 and 2003**

(millions)



Source: ECB.

circulation increased by 9.1 billion in the course of the year, from 39.9 billion to 49.0 billion coins by the end of 2003. The significant rise was mainly due to the increased demand for low-value coins, i.e. 1 cent, 2 cent and 5 cent coins, which accounted for more than two-thirds of this increase. This can be explained by hoarding and the relatively high loss rates for these denominations.

#### BANKNOTE HANDLING BY THE EUROSISTEM

Banknotes returned to the NCBs are fully authenticated and quality checked with sophisticated banknote-processing machines to establish whether they are fit for further use. Between January and December 2003 the number of euro banknotes crossing NCBs' counters totalled 57.8 billion, with a face value of €1,744 billion, consisting of 28.5 billion banknotes deposited and 29.3 billion withdrawn by credit institutions and other clients. Some 2.7 billion banknotes needed to be destroyed because they were unfit for further use. This proportion is generally in line with NCBs' experience with the legacy banknotes after a similar period from their launch.

### 3.2 DEVELOPMENTS IN EURO BANKNOTE COUNTERFEITS AND COUNTERFEIT DETERRENCE

#### EURO BANKNOTE COUNTERFEITS

In 2002, when the euro banknotes were new, the level of counterfeiting was exceptionally low. This was partly because of the sophisticated security elements in the euro banknotes, but also because counterfeiters had not had much time to adjust to the new banknotes. In 2003, the banknotes' second year of use, the number of counterfeits detected was inevitably higher than in the previous year. The total number of counterfeits received by National Analysis Centres (NACs)<sup>15</sup> during 2003 was 551,287. The euro remains a well protected currency. However, the reproduction technology available to counterfeiters gets better and cheaper over time. In addition, the euro is a widely used international currency, which makes it more prone to counterfeiting. Overall, the counterfeiting rate did not show a steady increase in 2003, but there were some seasonal fluctuations coinciding with periods of high circulation of genuine banknotes, namely the Christmas and summer holiday seasons.

<sup>15</sup> Centres established in each EU Member State for the initial analysis of counterfeit euro banknotes at the national level.

The distribution of counterfeiting across the denominations was as follows:

	€5	€10	€20	€50
Quantity	2,733	5,476	152,061	321,623
Percentage	0.5	1.0	27.6	58.3
	€100	€200	€500	Total
Quantity	53,668	14,776	950	551,286
Percentage	9.7	2.7	0.2	100.0

Although the €50 banknote remains the counterfeiters' favourite target, by comparison with last year there has been a significant shift away from the €50 towards the €20 banknote.

The media have drawn attention to the existence of high-quality counterfeits, but the number of such counterfeits is extremely small and the "feel-look-tilt" test for counterfeits remains sufficient to detect almost all cases.

#### COUNTERFEIT DETERRENCE

In addition to the cooperation agreement concluded with Europol during 2002, the ECB concluded similar agreements in 2003 with Interpol and with several acceding country central banks (ACCBs). The ECB and the NCBs have also been active in training cash-handling professionals, both in the EU and beyond, in recognising and handling counterfeit banknotes.

The Counterfeit Analysis Centre at the ECB and the NACs collaborate with the police in the fight against counterfeiting, and technicians from the NACs provide, upon request, legal authorities with expert advice and technical reports.

Furthermore, the Eurosystem has increased its contribution to the global cooperation on counterfeit deterrence under the auspices of the G10 governors. The ECB has developed a technical support structure called the "International Counterfeit Deterrence Centre" (ICDC) for the international community. The ICDC updates the threat analysis through continuous evaluation of new reproduction equipment and counterfeit deterrence systems.

#### ENSURING THE FUTURE INTEGRITY OF THE EURO BANKNOTES

Security features "age" from the moment of issue. As counterfeiters' awareness of an initially sound security feature increases, so does the risk of that feature being reproduced. The euro, as other world currencies, experienced this phenomenon after its launch and increasingly during 2003. This threat increases as other banknote design authorities adopt the euro as a technical standard and opt for similar security features. Therefore, the research and development (R&D) of new security features play an important role in ensuring the future integrity of euro banknotes. In the pursuit of new security features that represent a paradigm change in the longer term, the Eurosystem has developed a methodology to assess and fund R&D proposals on the widest possible basis. The research on new security features is supplemented by development programmes that bridge the gap between research and production.

### 3.3 BANKNOTE ISSUANCE AND PRODUCTION

#### THE EUROSISTEM'S ROLE IN THE CASH CYCLE

The Governing Council has on various occasions underlined the importance of a level playing-field for cash services. A number of measures have already been taken with a view to contributing to a fair competitive environment. In 2002 a common Eurosystem fee policy was implemented for the cash transactions of professional clients at NCB counters and a common approach to opening hours and debiting/crediting rules for cash services at NCB counters was also defined. In addition, terms of reference for the use of cash-recycling machines<sup>16</sup> in the euro area were published. In 2003 a common procedure for testing such machines was established. Tests conducted according to this common procedure at any euro area NCB are valid in all euro area countries. The test procedures set a high standard for these

<sup>16</sup> Cash-recycling machines are stand-alone, customer-operated devices capable of receiving, processing and dispensing banknotes.

machines concerning the retention of counterfeit/suspected banknotes and the separation of unfit banknotes in order to contribute to the high quality of the banknotes in circulation. Due attention has also been paid to the feasibility and technical capabilities of such machines. Several manufacturers have already successfully completed these tests, thus contributing to high standards for banknote processing and recycling. In addition to the measures already in place, the Eurosystem continues to discuss further aspects of the cash cycle with the objective of ensuring a smooth and efficient supply of cash and maintaining the integrity of the euro banknotes.

The ECB and the European Commission jointly organise biannual meetings in which matters of interest related to the use of cash are addressed. Participants include representatives from the banking industry, from consumer and retail groups, as well as from the vending-machine and cash-in-transit industries. The ECB also participates, as an observer, in the Cash Working Group under the umbrella of the European Payments Council, which has been established by the European Credit Sector Associations and the major banks.

#### **PRODUCTION ARRANGEMENTS AND FUTURE BANKNOTE PRODUCTION**

In April 2001 the Governing Council decided that in the following few years production of euro banknotes would take place in accordance with a decentralised production scenario with pooling. This means that each euro area NCB is responsible for the procurement of an allocated share of the total requirement for selected denominations. Table 13 gives an overview of the allocation of the production to the NCBs according to this model.

The total production requirements for 2003 amounted to 3.1 billion banknotes (4.8 billion in 2002).

Significant work has been undertaken to develop a future banknote procurement policy. The Governing Council has carried out a

**Table 13 Allocation of euro banknote production in 2003**

Denomination	Quantity (millions of banknotes)	NCB commissioning production
€5	110	FR
€10	999.1	DE, GR, IE, AT
€20	1,071.1	FR, ES, NL, PT, DE
€50	657	IT, BE, ES, NL
€100	122	IT, FI
€200	133	DE, LU
€500	0 <sup>1)</sup>	
Total	3,092.2	

Source: ECB.

1) The logistical stocks of €500 banknotes resulting from the launch production were deemed to be sufficient to cover the needs for 2003.

thorough analysis of whether tender procedures might be applied in the medium term for the procurement of raw materials and the production of euro banknotes. The Governing Council has decided that a common Eurosystem competitive approach with tendering will be fully implemented by 2012 at the latest. The NCBs with in-house/public printing works will be allowed to opt out of this common approach.

#### **SUPPORT FOR THE PRODUCTION OF EURO COINS**

The Member States are responsible for the production of euro coins. The ECB continued to act as an independent assessor of the quality of minted coins. This included the continued support and maintenance of a common quality management system in all mints producing euro coins. The production of coins in 2003 was 4.8 billion (6.2 billion in 2002).

#### **SECOND SERIES OF EURO BANKNOTES**

The main aim of upgrading currency designs is to keep pace with technical developments in order to make sure that the banknotes have a continually high level of protection against counterfeiting, while containing security features that the public can recognise. Banknote-issuing authorities therefore tend to gradually upgrade banknotes after a few years of circulation. In line with this practice, the ECB has started planning a second series of euro banknotes, which will take several years to produce and issue.



An issue date for the second series of euro banknotes has not yet been defined, but it is expected to be towards the end of this decade. The banknotes will be issued denomination by denomination, with certain intervals between releases, so that it will take several years before all denominations have been introduced. The design of the second series will be based on the “ages and styles” theme of the current series in order to signal continuity.

#### **VERY LOW-DENOMINATION BANKNOTES**

Since the completion of the cash changeover, there have been suggestions that it would be useful to introduce very low-denomination banknotes, i.e. of €1 and/or €2. It has been argued that in some countries the population was accustomed to using low-value banknotes with their former currencies and has found it difficult to adapt to the comparably high banknote/coin boundary between the €2 coin and €5 banknote. It has also been argued that consumers tend to associate coins with low values.

The Governing Council has agreed to reassess the possible issuance of very low-denomination banknotes in autumn 2004, when more experience regarding the use of euro banknotes and coins has been gained, both inside and outside the euro area.

## 4 NEW AND IMPROVED STATISTICS

The ECB, assisted by the NCBs, collects a wide range of statistics which enable the ESCB to fulfil its tasks. As in previous years, the provision of statistics proceeded smoothly in 2003. However, the ECB and the NCBs consider that further improvements of the statistics are still necessary.

In 2003 numerous efforts were made to improve the availability and quality of statistics for the euro area, while aiming to minimise the reporting burden on reporting entities. Progress has also been made with regard to the statistics which are used intensively by the ECB and which are collected and compiled by the European Commission (Eurostat) and the national statistical institutes (NSIs).

### 4.1 NEW STATISTICS

In December 2003 the ECB published new harmonised statistics on the interest rates of monetary financial institutions (MFIs). These new statistics cover 45 indicators of euro area interest rates applied by MFIs to their deposit and lending business vis-à-vis households and non-financial corporations (see also Section 2.1 of Chapter 1). The monthly interest rate statistics cover both outstanding amounts and new business. They provide a comprehensive and harmonised picture of the level of interest rates applied by MFIs, how they change over time and the business volumes associated with these rates. The requirements for MFI interest rate statistics are laid down in Regulation ECB/2001/18. All information, including the manual on MFI interest rates and methodological notes, is available on the ECB's website.

Since September 2003 the ECB has published additional details on monetary aggregates and their counterparts. Seasonally adjusted estimates now cover the whole consolidated balance sheet of the MFI sector. In addition, the frequency of the data on the sectoral breakdown of deposits, loans and holdings of securities was increased from quarterly to monthly. Revaluations of selected MFI balance sheet

items, e.g. write-offs/write-downs of loans, used in the calculation of the credit counterpart to the monetary aggregates are now available separately on a harmonised basis.

Following the adoption of Guideline ECB/2002/7 on the statistical reporting requirements of the ECB in the field of quarterly financial accounts in 2002, supplementary data on both the transactions and the balance sheets of insurance corporations and pension funds have been made available to the ECB since February 2003.

In the field of statistics on non-MFIs other than insurance corporations and pension funds, data on the balance sheets of investment funds, including a detailed breakdown by type, were published for the first time in January 2003. These quarterly statistics are compiled on the basis of data currently available at the national level and are not yet fully harmonised across the euro area. In addition, since January 2003 monthly data on quoted shares issued by euro area residents, broken down by issuing sector, have been made available. An improved method for the calculation of growth rates for debt securities has also been used since January 2003.

For euro area statistics compiled by Eurostat, the most important new statistics were the first publication of GDP flash estimates, based on a sub-set of countries producing early estimates, and of industrial new order statistics.

As part of the further integration of statistics, the ECB published for the first time in June 2003 the monetary presentation of the balance of payments (b.o.p.). The monetary presentation provides an important link between the transactions in the external counterparts of M3 and those by non-MFIs in the b.o.p. As changes in the net external assets of the MFI sector to a large extent reflect foreign transactions of non-MFI euro area residents, this new presentation enhances the consistency between the monetary and the b.o.p. data. In this context, the collection of separate

information on loans and deposits within the other investment account will also make it easier to monitor developments in the liquid assets held abroad by the non-MFI sector.

#### 4.2 THE MEDIUM-TERM STRATEGY FOR STATISTICS

In 2003 the ECB statistical work followed a medium-term strategy to enhance statistics and improve their integration and dissemination. Core elements of this strategy are:

- Preparing and incorporating the data on acceding countries, first as EU members and in the future as members of the euro area.
- Creating an integrated system of quarterly financial and non-financial accounts for the euro area and enhancing the conceptual and numerical coherence of the data framework used for economic and monetary analysis. The quarterly system of accounts will be compiled both for the whole euro area economy and for various institutional sectors.
- Further expanding ECB statistics. This includes a Centralised Securities Database (CSDB) and a Financial Markets Database for the euro area, which will support the production of consistent and accurate statistics on securities markets and financial markets. The CSDB will also help to produce more accurate portfolio investment figures in the b.o.p. and international investment position (i.i.p.) statistics.
- Extending the statistical framework for the monitoring and analysis of financial stability.
- Monitoring and responding to financial innovations and other developments with potentially important implications for statistics, such as the new International Accounting Standards and the Basel Capital Accord.

- Improving the dissemination of statistics.
- Promoting timely and high-quality economic data for the euro area, as compiled by Eurostat on the basis of contributions by NSIs, e.g. by implementing the “first for Europe” principle, which encourages NSIs to give priority to their contribution to area-wide data, in particular the Principal European Economic Indicators, and to a better coordination of, for example, release calendars and revision policies.
- Actively participating in international standard-setting fora, with the aim of achieving greater consistency in basic data in the different types of statistics collected from companies.

As a way of improving the dissemination of statistics, since August 2003 the ECB has published a monthly Statistics Pocket Book, which provides the most important, up-to-date statistics on the euro area in a handy format.

#### 4.3 IMPROVEMENTS IN THE INSTITUTIONAL AND LEGAL FRAMEWORK FOR STATISTICS

The ECB, together with the NCBs and in cooperation with other European and international institutions, also works towards the strengthening of the legal and institutional framework for the collection, compilation and dissemination of statistics.

The ECB has updated the Guideline concerning certain statistical reporting requirements of the ECB and the procedures for reporting by the NCBs of statistical information in the field of money and banking statistics (published as Guideline ECB/2003/2). The ECB has also updated the Regulation concerning the provision of MFI balance sheet statistics (published as Guideline ECB/2001/13) to cover certain positions vis-à-vis the acceding countries and their currencies as from their accession on 1 May 2004. Furthermore, an update of the Guideline on b.o.p. and i.i.p.

statistics was published as Guideline ECB/2003/7 in May 2003. This update will further improve these statistics at the euro area level by providing, among other things, a more detailed geographical and sectoral breakdown of the b.o.p. flows and i.i.p. stocks.

sooner than at present, based on more timely contributions from Member States.

Regarding the institutional framework, in March 2003 the ECB and the European Commission (Eurostat) signed an updated Memorandum of Understanding on economic and financial statistics. It sets out the responsibilities of, and cooperation between, the two institutions, without prejudice to the legal provisions laid down in Article 285 of the Treaty and in Article 5 of the Statute of the ESCB. The ECB continues to have prime responsibility for money and banking statistics, including financial market statistics, whereas the European Commission continues to have prime responsibility for general economic statistics. Responsibilities for b.o.p. statistics continue to be shared. The ECB also has prime responsibility for statistics on international reserves, the nominal and real effective exchange rates of the euro, and the quarterly financial accounts for the euro area. Annual accounts by institutional sector for the Member States remain the prime responsibility of the European Commission, while the development of quarterly non-financial accounts for institutional sectors and the statistical infrastructure, such as seasonal adjustment and data transmission standards, is a shared responsibility.

Moreover, in 2003 a joint Task Force of the ECB and the European Commission (Eurostat) identified elements that were most relevant for the quality of b.o.p. statistics and developed quantitative indicators to monitor quality. These quantitative indicators for the euro area will be incorporated in an overall assessment of quality and published in annual quality reports. Finally, the ECB and the European Commission (Eurostat) have closely cooperated in the preparation of a list of monthly and quarterly Principal European Economic Indicators that should become available for the euro area much

## 5 ECONOMIC RESEARCH

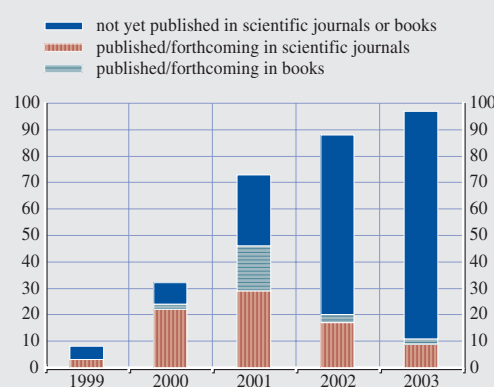
The goal of economic research at the ECB is to provide a strong conceptual and empirical basis for policy-making and to better communicate policy to the markets and the public. High-quality research is essential to ensure that the ECB is well equipped to cope with the unprecedented challenges associated with conducting a single monetary policy for a group of sovereign countries. The most important task of economic research within the Eurosystem is to increase knowledge of the functioning of the euro area economy and, more specifically, to provide models, tools and analyses relevant to the conduct of monetary policy and the fulfilment of other tasks of the Eurosystem. An example of this policy orientation is its role in the evaluation of the ECB's monetary policy strategy, where a number of background studies served as input to the Governing Council's evaluation (see Box 1).

### 5.1 RESEARCH TOPICS

The research agenda for 2003 can be broken down into six fields: monetary policy strategy, rules and indicators; the transmission of monetary policy; financial markets and institutions; international economics and finance; the macroeconomic modelling of the euro area; and general economic and structural issues. Most of the research is first presented in the ECB's Working Paper series and – to a more limited extent – the ECB's Occasional Paper series, as well as at conferences and workshops, before being published in academic journals or books.<sup>17</sup>

Chart 35 shows the growing volume of research produced since 1999 and the high number of papers already or soon to be published in academic journals or books.<sup>18</sup> Chart 36 illustrates the focus on policy-relevant research at the ECB. It categorises ECB Working Papers by topic, using the Journal of Economic Literature classification types. "Macroeconomics and monetary economics" is the most common topic in the series, followed by "mathematical and quantitative methods", "financial" and "international" economics.

Chart 35 Release of ECB Working Papers



Source: ECB.

### 5.2 RESEARCH NETWORKS

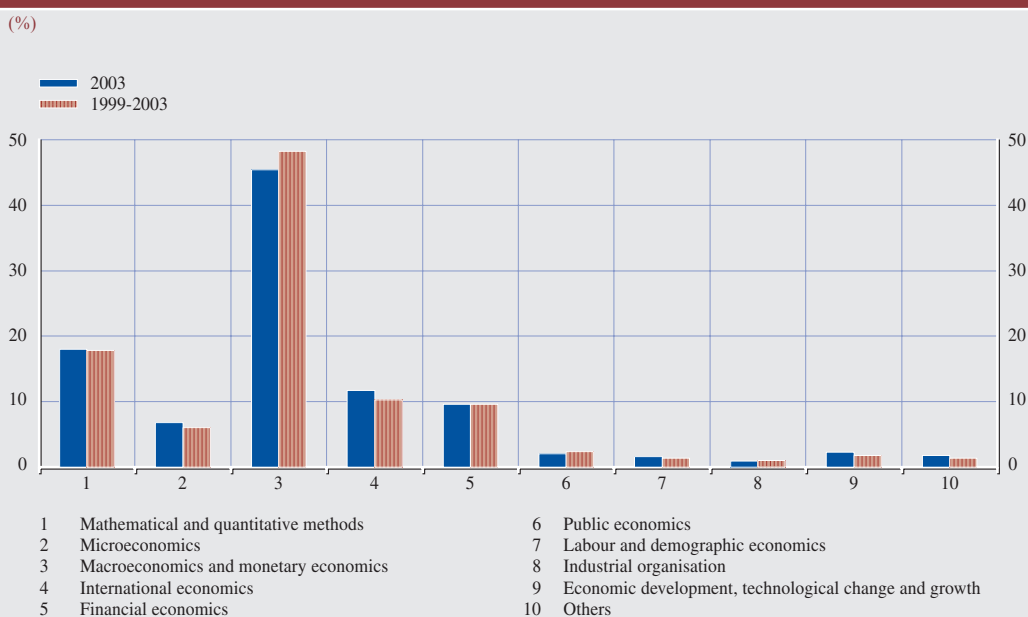
In many instances, ECB research is conducted within the framework of organised networks. These are groups of researchers jointly engaged in broad, multi-purpose projects. They may include economists from the ECB, euro area NCBs, other central banks and policy-making organisations, and academics. The ECB participates and provides coordination and organisational support, alone or with other institutions. In 2003 such research networks were particularly active: for instance, the ECB conducted research on capital markets and financial integration in Europe together with the Johann Wolfgang Goethe University's Center for Financial Studies in Frankfurt (see Box 10).

A major project completed in 2003 was the Eurosystem Monetary Transmission Network. Launched in 1999 by the ECB and the euro area

<sup>17</sup> For some descriptive statistics on the scope of the research produced at the ECB, see V. Gaspar and J. L. Vega, "Research at a policy making institution: launching research at the ECB", *Swiss Journal of Economics and Statistics*, vol. 138, issue 4, 2002, pp. 359-376.

<sup>18</sup> The ECB Working Paper series comprises research work by ECB staff and visitors. Papers by researchers not affiliated with the ECB can also be released in the series to the extent that they have been produced in the context of ECB-led research initiatives and/or presented at research conferences/workshops organised by the ECB.

Chart 36 ECB Working Paper series: Journal of Economic Literature classification



Source: ECB.

NCBs, it investigated how the single monetary policy affects the euro area economy. The project collected comprehensive evidence on the transmission mechanism. Participants conducted in-depth studies using both macroeconomic and microeconomic data with a focus on firm investment behaviour and on the role of banks in the transmission process. It also included a comparison of the transmission mechanism in the euro area and that in the United States. Several articles in journals and working papers resulted from the project, and a book containing the complete results was published in November 2003.<sup>19</sup> While the network conducted most of its research using data covering the period before the introduction of the euro, some of the follow-up evidence was extended in 2003 to cover the period since 1999.

In 2003, in order to gain a better understanding of the dynamics of inflation in the euro area and in the component countries, a Eurosystem Inflation Persistence Network was created, bringing together researchers from the ECB and all euro area NCBs. A wide range of data is

being used to study the phenomenon, including individual and sectoral data on consumer and producer prices, macroeconomic inflation rates and survey results. The results are expected in 2004 and 2005.

The Euro Area Business-Cycle Network, organised in collaboration with the Centre for Economic Policy Research, provides a forum for the study of the euro area business cycle. It brings together researchers from academia, central banks and other policy institutions. The Network held two workshops in 2003, and the ECB hosted the Network's first conference in December 2003, on the main sources of exogenous shocks for the G7 economies and the euro area.<sup>20</sup>

The International Wage Flexibility Project, sponsored by the ECB together with the Institute for the Study of Labour (IZA) in Bonn and organised by the Federal Reserve Bank of

<sup>19</sup> I. Angeloni, A. Kashyap and B. Mojon (eds.), *Monetary policy transmission in the euro area*, Cambridge University Press, 2003.  
<sup>20</sup> For more information on this network, see [www.eabcn.org](http://www.eabcn.org).

New York and the Brookings Institution, provides a discussion forum for researchers from 13 countries studying the extent and nature of wage rigidities using individual data. Special emphasis is placed on the comparability of methodologies and results. A panel session at the meeting of the American Economic Association was organised in 2003. The final conference will be held at the ECB in June 2004.

### 5.3 MACROECONOMETRIC MODELLING OF THE EURO AREA

Econometric models are used directly and indirectly in the monetary policy decision-making process, for example in preparing the macroeconomic projections, the main results of which are published twice a year in the Monthly Bulletin.<sup>21</sup> Furthermore, model-building has been a catalyst for the development of new statistical data. A major example is the Area-Wide Model macroeconomic database, available on the ECB's website and widely used by researchers worldwide.

In 2003 both the ECB and the NCBs were very active in the area of econometric modelling. The modelling framework for the euro area encompasses, for example, traditional macroeconomic and time-series models as well as state-of-the-art dynamic factor, structural vector auto-regressive and stochastic general equilibrium models. This line of work, and the related cooperation, is now being extended to cover the central banks of the acceding countries.

### 5.4 CONFERENCES AND VISITOR PROGRAMMES

As part of its broader commitment to a continuous and active exchange with the academic world, the ECB organises or co-organises a number of conferences and workshops related to its core interests. There are at present two main recurring events. The first is the ECB Central Banking Conference, an

event organised every two years on a topic of particular relevance to the ECB. This event targets high-level participants from central banks, international and European institutions, and academic institutions, as well as members of the financial press. The proceedings of the conference are published. The second recurring event is the series of conferences of the International Research Forum on Monetary Policy. Co-organised with the Board of Governors of the Federal Reserve System, the Center for Financial Studies at the Johann Wolfgang Goethe University (Frankfurt) and the Center for German and European Studies at Georgetown University (Washington D.C., United States), this initiative focuses on research on monetary policy issues that are relevant from a global perspective. The second conference in the series took place in November 2003 on the premises of the Board of Governors of the Federal Reserve System.<sup>22</sup>

Interaction with visitors is an important channel of external communication and collaboration for ECB researchers. To foster interaction between ECB staff and the international research community, the ECB organises a Research Visitors Programme which enables recognised researchers working on topics of interest to the ECB to spend a limited period of time conducting research while hosted by the Directorate General Research. Furthermore, in 2003 a number of colleagues from the ACCBs presented their analytical and research work to the ECB. On a junior level, the ECB continued to offer outstanding students enrolled in postgraduate courses at leading international universities the possibility to conduct part of their research at the ECB (see Section 2 of Chapter 8). Finally, external consultants advise on selected issues and external speakers contribute to the ECB's extensive seminar programme.<sup>23</sup>

21 For more information on the projection exercise, see "A guide to Eurosystem staff macroeconomic projection exercises", ECB, June 2001.

22 More information on ECB conferences and workshops can be found on the ECB's website.

23 More information on visitor programmes can be found on the ECB's website.

## 6 OTHER TASKS AND ACTIVITIES

### 6.1 COMPLIANCE WITH THE PROHIBITIONS OF MONETARY FINANCING AND PRIVILEGED ACCESS

Pursuant to Article 237 (d) of the Treaty, the ECB is entrusted with the task of monitoring the fulfilment by the 15 EU NCBs and the ECB of their obligations under Articles 101 and 102 of the Treaty and Council Regulations (EC) Nos 3603/93 and 3604/93. This task is performed by the General Council of the ECB. Article 101 prohibits the ECB and the NCBs from providing overdraft facilities or any other type of credit facility to governments and Community institutions or bodies, as well as from purchasing debt instruments directly from them. Article 102 prohibits any measure, not based on prudential considerations, which establishes privileged access by governments and Community institutions or bodies to financial institutions. In parallel with the General Council, the European Commission monitors Member States' compliance with the above provisions.

The General Council also monitors the EU central banks' secondary market purchases of debt instruments issued by both the domestic public sector and the public sector of other Member States. According to the recitals of Council Regulation (EC) No 3603/93, the acquisition of public sector debt instruments in the secondary market must not be used to circumvent the objective of Article 101 of the Treaty. Such purchases should not become a form of indirect monetary financing of the public sector.

In 2003 the General Council found two cases of non-compliance with the above Treaty requirements and the associated Council Regulations by NCBs of Member States. In both cases, the amount of coins held by the NCBs and credited to the public sector exceeded the limit of 10% of coins in circulation, as laid down in Article 6 of Council Regulation (EC) No 3603/93. In the context of the strong inflows of coins to NCBs prior to the introduction of euro coins on 1 January 2002,

Finland exceeded the limit from October 2001 and France from January 2002. In the case of France, the limit continued to be exceeded until April 2003, while in the case of Finland, the situation was only remedied in December 2003. Thus, at the end of 2003, the situation had been fully corrected in both countries.

### 6.2 ADVISORY FUNCTIONS

Article 105 (4) of the Treaty and Article 4 of the Statute of the ESCB require that the ECB be consulted by the relevant Community institution and the responsible national authorities,<sup>24</sup> as appropriate, on any proposed Community or national legislation which falls within the ECB's fields of competence. The limits and conditions applicable to the consultation of the ECB by national authorities in respect of draft legislation are set out in Council Decision 98/415/EC of 29 June 1998.<sup>25</sup> All ECB opinions are published on the ECB's website.<sup>26</sup>

In total, 32 consultations were initiated in 2003, 21 by a national authority and 11 by the EU Council. Of these 32, two concerned means of payment, four statistics and 11 rules which could influence the stability of financial institutions and markets. Three opinions adopted in accordance with Article 105 (4) of the Treaty warrant specific mention: one on the proposal for an EU directive on investment services and regulated markets, which is presented in more detail in Section 2 of Chapter 3, and the other two on the Finnish

<sup>24</sup> In accordance with the Protocol on certain provisions relating to the United Kingdom of Great Britain and Northern Ireland, as annexed to the Treaty, Article 105 (4) of the Treaty and Article 4 of the Statute of the ESCB shall not apply to the United Kingdom. Hence, the obligation to consult the ECB does not extend to the national authorities of the United Kingdom.

<sup>25</sup> Article 2 of this Decision elaborates the specific areas in which the ECB is to be consulted.

<sup>26</sup> In 2002 the Governing Council endorsed a disclosure policy entailing that, as a general rule, all ECB opinions issued upon the request of national authorities would be published on the ECB's website in the languages of adoption (i.e. both English and the language of the respective consulting authority) six months after their adoption, unless they were of policy relevance, in which case they would be made publicly available immediately after adoption.



Government's draft proposals to amend the Suomen Pankki Act.

The proposal to amend the Suomen Pankki Act, on which the ECB delivered its first opinion,<sup>27</sup> suggested limiting Suomen Pankki's ability to make financial provisions. It further suggested transferring the whole annual profit of Suomen Pankki to the State unless the Parliamentary Supervisory Council decides otherwise, as well as transferring around €740 million of the capital to the State, which would have forced Suomen Pankki to sell foreign reserve assets. The ECB objected to the proposal primarily because of the combined effect of the suggested amendments on the financial situation of Suomen Pankki and the lack of any statutory safeguards ensuring the performance of ESCB tasks, which together would undermine the financial independence of Suomen Pankki. In December 2003 the ECB was consulted on a revised government proposal to amend the Suomen Pankki Act. In its second opinion, the ECB welcomed the fact that the final legislative proposal submitted to the ECB did not reduce the capital of Suomen Pankki. However, the ECB noted that the requirements for financial independence were not fully satisfied and that the proposal was therefore still incompatible with the Treaty and its intentions. Following the second opinion, the legislative proposal was withdrawn.

In addition to the opinions adopted in accordance with Article 105 (4) of the Treaty, the ECB also delivered an opinion pursuant to Article 48 of the Treaty on European Union concerning the draft Treaty establishing a Constitution for Europe, which is presented in more detail in Section 1.1 of Chapter 4.

The ECB also delivered two opinions pursuant to Article 112 (2) (b) of the Treaty and Article 11.2 of the Statute of the ESCB. These opinions concerned recommendations from the EU Council on the appointment of the new President of the ECB and a new member of the Executive Board of the ECB.

A list of the opinions adopted in 2003 and early 2004 is included as an annex.

### **6.3 THE ADMINISTRATION OF THE BORROWING AND LENDING OPERATIONS OF THE EUROPEAN COMMUNITY**

In accordance with Article 123 (2) of the Treaty and Article 9 of Council Regulation (EC) No 332/2002 of 18 February 2002, the ECB continues to have responsibility for the administration of the borrowing and lending operations of the European Community under the Medium-Term Financial Assistance mechanism. During 2003, however, the ECB performed no administration tasks of this nature, as there was no outstanding balance at the end of 2002 and as no new operations were initiated during 2003.

### **6.4 RESERVE MANAGEMENT SERVICES**

In 2003 the Eurosystem started work on a new framework for the banking services that its members offer to non-EU central banks, monetary authorities, third countries and international institutions for reserve management purposes. At the core of this framework is a benchmark range of services that will allow customers to manage their euro-denominated reserve assets through any of the euro area central banks that have opted to provide this range of services. The new framework will offer customers the possibility of using the services concerned under harmonised conditions, irrespective of the Eurosystem central bank they have selected as service provider. Details of the new framework will be finalised in the first half of 2004 and then implemented in the second half of the year.

<sup>27</sup> CON/2003/22, published on the ECB's website.



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## CHAPTER 3

# FINANCIAL STABILITY AND INTEGRATION

## I FINANCIAL STABILITY

Throughout 2003 financial stability was an important item on the agenda of international and European institutions and fora. At the international level, the Financial Stability Forum continued to provide an important contribution to identifying sources of vulnerability for the financial system from a global perspective. At the EU level, following a decision taken by the ECOFIN Council in December 2002, the Economic and Financial Committee (EFC) started to hold regular discussions on financial stability issues relevant for the EU. Within the Eurosystem, the Governing Council also began holding regular discussions on financial stability conditions in the euro area/EU supported by work carried out by the ECB in collaboration with the ESCB's Banking Supervision Committee (BSC). The results of this work are also intended to contribute to international and European discussions on the matter.

### 1.1 FINANCIAL STABILITY MONITORING

The monitoring of financial stability developments and conditions conducted by the ECB in collaboration with the BSC is intended to identify potential sources of vulnerability in the financial system of the euro area/EU and to assess its resilience to potential shocks. While the financial system as a whole (banks, non-bank financial institutions, financial markets and the financial infrastructure) is monitored, the focus is on banks, given that they continue to represent the main component of the euro area/EU financial system. In order to conduct a proper assessment, both cyclical and structural developments must be taken into account.

#### CYCLICAL DEVELOPMENTS

The unwinding of financial imbalances which had accumulated in the EU in the 1990s continued to have an impact on the financial system in 2003. However, the system continued to prove its resilience to these imbalances, also reflecting the improved macroeconomic and financial backdrop as 2003 progressed (discussed in greater detail in Chapter 1).

Most of the risks to the stability of the European financial system were the legacy of remaining domestic financial imbalances, notably in the corporate sector (see also Box 2). Corporations in Europe made efforts to adjust their balance sheets, particularly in those sectors where relatively high indebtedness had been an earlier concern. They embarked upon cost-cutting programmes, scaled back investment and, in some sectors such as telecommunications, restructured their debt. While these efforts generally paid off in raising profitability, they were not sufficient to bring down debt ratios for the corporate sector as a whole. There were, however, sectoral differences, with financing conditions improving notably in the telecommunications sector.

As for European households, debt/income ratios rose further in the course of 2003, mostly reflecting an accumulation of mortgage debt in an environment of historically low interest rates and relatively stable labour market conditions. The relatively high demand of households for mortgages proved to be important in sustaining the interest income of banks in an otherwise challenging environment. However, in some countries it also led to relatively rapid increases in residential property prices, which could pose some risk for credit institutions in those countries in the event of a sudden downward movement in house prices. Overall, however, these risks appeared to be rather remote.

The stability of financial markets improved in 2003. After three years of almost continuous decline and exceptional volatility, equity markets started to recover in mid-March 2003 and volatility settled down as geopolitical risks receded and confidence in prospects for an economic recovery began to broaden. This provided scope for corporations to issue fresh equity and/or debt, with bond spreads diminishing significantly and bond activity improving. To some extent, these developments could also be explained by a "search for yield" by investors in an environment where long-term interest rates had reached low levels by

historical standards. Low interest rates in early 2003, however, strained in particular some financial institutions, notably insurance companies and pension funds, through their impact on these institutions' liabilities. These strains were eased by an upturn in long-term interest rates in the second half of the year.

In early 2003, following three years of profit erosion, EU insurance companies were confronted with significant pressures on their solvency positions that were the result of both the tumble in stock prices since 2000 and the more recent downward pressure on long-term interest rates. However, the subsequent rebound tended to ease balance sheet strains and some signs of improvement became evident by mid-2003. Nonetheless, some solvency and income pressures remained, as well as uncertainties surrounding the extent to which insurance companies had accumulated credit risk through the credit risk transfer market.

The EU banking sector remained resilient, albeit challenged for a third consecutive year by sub-par economic growth in 2003. It absorbed the adverse effects of a less benign than expected environment. Banks responded well to the challenging environment by cutting costs, reorganising businesses and improving their risk management policies. Large banks succeeded in maintaining, and even improving, profitability and solvency levels in the first half of 2003. Relatively low provisioning for loan losses, cost savings and an upturn in income from financial market-related activities all served to boost profitability in 2003. These developments were also reflected in the regulatory solvency ratios of EU banks, which remained favourable. However, the ratios of some banks benefited from asset sales and from a reduction in risk-weighted assets rather than from either new equity issuance or profit reserving.

In February 2003 the ECB published for the first time a report entitled "EU banking sector stability", which was followed by a second

report in November of the same year. The reports summarised the main findings by the BSC of the regular monitoring of the stability of the EU banking sector.

### **STRUCTURAL DEVELOPMENTS**

The difficult economic and financial market environment in recent years compelled banks to enhance efficiency, inter alia through cost-cutting and the shedding of non-core activities. This implied a slowing-down in, or discontinuation of, some of the longer-term trends apparent in earlier years, notably internationalisation, consolidation and disintermediation. Overall, these responses to difficult business conditions helped banks to withstand ongoing strains and also contributed to improving banking stability over the medium and longer term.

Internationalisation strategies, particularly in investment banking and trading activities, were frequently scaled back, although links to some regions, such as central and eastern Europe, continued to strengthen. A focus by banks on their "home markets" was apparent, particularly for retail operations. However, regional cross-border banking activities, regarded as a natural extension of business in the home market, were further expanded. It seems that competitive pressures in the home market have, to a large extent, driven recent internationalisation activities. Thus recent expansion was mainly aimed at improving profitability by entering markets with higher margins and where there was a clear comparative advantage.

Consolidation in the banking sector continued, albeit at a reduced speed, but competitive pressures in general remained high despite this increasing concentration. Banks continued to opt for a distribution strategy based on the simultaneous use of branches and remote channels, which could also be seen as part of banks' efforts to improve the quality of service to customers. However, branch networks remained at the core of banks' distribution strategies. They increasingly moved away

from the pure processing of transactions towards the provision of advice-intensive, more sophisticated and value-added services.

With regard to intermediation, i.e. the role of banks as intermediaries in channelling funds from depositors to borrowers, banks were faced with reduced corporate demand for funds and capital market issuance. However, retail activities proved to be a stable source of income. In particular, banks' retail customers tended to shed equity from their portfolios amid a volatile market environment, favouring relatively safe and liquid deposits. At the same time, household lending remained rather buoyant.

EU banks expanded their range of products and services, particularly to retail customers. Banks offered a greater number of new saving instruments comprising products that link returns to an index in combination with option features, for example by including a floor on losses. In some countries, high-risk investment alternatives such as hedge funds have been made available to retail investors through banks. Hence, consumers are being faced with ever-increasing product complexity. This has induced banks to increase their efforts to enhance investor confidence in securities-related products via organisational changes and improvements in their governance structures.

Finally, banks improved their risk management with a view to better controlling increased credit risk and also in response to the challenge posed by forthcoming changes in capital requirements (New Basel Capital Accord, or Basel II; see Section 2 of this chapter). Increasing participation in the credit risk transfer market was one avenue pursued to better manage risks. Credit risk transfer instruments enable banks to unbundle risks more easily and to shape their credit risk exposure more effectively. Banks mainly tended to use these instruments to reduce credit risk, although in some cases they were able to achieve better portfolio diversification by assuming additional credit risks. Banks also

stepped up their efforts to increase resilience to operational risks.

A more detailed analysis of the main structural developments in the EU banking sector can be found in the BSC's report entitled "Structural analysis of the EU banking sector" published by the ECB in November 2003.

## 1.2 COOPERATION IN CRISIS SITUATIONS

In early 2003 EU central banks and supervisory authorities agreed on a Memorandum of Understanding (MoU) concerning cooperation in crisis situations. This MoU consists of a set of principles and procedures for cooperation in crisis situations involving individual credit institutions or banking groups, or relating to disturbances in financial markets and/or market infrastructures which could have potential common implications for Member States. These principles and procedures deal specifically with the identification of the national authorities responsible for crisis management, the required flows of information between all authorities involved and the practical conditions for sharing cross-border information. In the course of 2003, a crisis management simulation was carried out with the aim of enhancing understanding of how the provisions of the MoU would assist the organisation of cooperation and information-sharing between authorities in practice. This exercise provided very useful insights into the different aspects of cross-border cooperation between banking supervisors and NCBs in the event of a financial crisis.

## 2 FINANCIAL REGULATION AND SUPERVISION

### 2.1 THE LAMFALUSSY FRAMEWORK

Following the results of the public consultation on the report by the EFC on “EU Arrangements for Financial Regulation, Supervision and Stability”, the ECOFIN Council recommended in December 2002 that the new Lamfalussy framework<sup>1</sup>, which was already in place in the securities sector, be extended to all other financial sectors. The adoption of the new framework is expected to enhance the flexibility and efficiency of the regulatory process, as it distinguishes between primary legislation, adopted by the ECOFIN Council and the European Parliament through the co-decision procedure (known as level 1 legislation), and secondary legislation, which consists of implementing measures that can be adopted more quickly and in a more flexible way. This will enable the regulatory process to respond more quickly and effectively to technological change and market developments. This new framework is also designed to meet the need for effective supervisory cooperation and convergence, and is thus expected to contribute to a more consistent implementation of EU rules across Member States.

The Lamfalussy framework relies in particular on the involvement of regulatory committees in the different financial sectors. These committees, which are also known as level 2 committees, are composed of representatives of the Member States nominated by the relevant ministers. In addition, supervisory committees, also known as level 3 committees, have been mandated to promote the convergence of supervisory practices, to enhance supervisory cooperation (including the exchange of information on supervised institutions) and to provide technical advice to the Commission on draft implementing measures.

In November 2003 the Commission adopted a series of measures to implement the Council’s recommendation. In the banking sector, the existing Banking Advisory Committee (BAC) has been transformed into the regulatory European Banking Committee (EBC) and a new

Committee of European Banking Supervisors (CEBS) has been set up. Close cooperation between the ESCB’s Banking Supervision Committee (BSC) and the CEBS will be sought to ensure that there is no overlap in activities. In the insurance sector, the existing Insurance Committee has been converted into the regulatory European Insurance and Occupational Pensions Committee (EIOPC). A new Committee of European Insurance and Occupational Pension Supervisors (CEIOPS) has also been established. In the area of financial conglomerates, the regulatory Financial Conglomerates Committee (FCC) was established in 2003 with no plans to set up a supervisory committee. The ECB participates as an observer or non-voting member in the regulatory and supervisory committees, with the exception of those in the insurance sector. Thus the ECB is able to contribute to the shaping of EU financial regulation and supervision in accordance with its institutional tasks.

### 2.2 BANKING

In the area of banking regulation, the review of the framework for minimum capital requirements and the preparation of the New Basel Capital Accord continued throughout 2003. The ECB, which participates as an observer in the relevant committees, continued to contribute to the shaping of the new framework.

At the international level, the Basel Committee on Banking Supervision (BCBS) made substantial progress in several areas. First, it finalised and published in May 2003 the results of the third quantitative impact study (known as the “QIS3”) aimed at gauging the overall impact of the new rules on banks’ minimum capital requirements. The study involved banks across 43 countries and thus went well beyond those countries represented in the BCBS. Its main

<sup>1</sup> “Final Report of the Committee of Wise Men on the Regulation of European Securities Markets”, 15 February 2001. This report is available on the European Commission’s website.



findings were encouraging as they were consistent with the BCBS's objectives to increase the risk sensitivity of capital requirements while keeping the overall amount of current capital requirements broadly unchanged. Second, the BCBS conducted two public consultations. The "third consultative paper" was released in April 2003 and comments were published in August. The public consultation confirmed the broad support for the structure of the new Accord and the need to adopt a more risk-sensitive framework. Another public consultation was launched in October on proposed amendments that would change the treatment of expected versus unexpected losses under the new Accord's internal ratings-based approach. In addition, the BCBS identified scope for further improvement in the areas of asset securitisation, credit card commitments and certain credit risk mitigation techniques, on which work continues. The third area in which the BCBS made substantial progress was the analysis of issues concerning the implementation of the new Accord, which will also be reflected in national legislation. These issues were increasingly taken into consideration by the BCBS through the work of the Accord Implementation Group. The BCBS also released a paper specifying high-level principles for the cross-border implementation of the new capital requirements.

In its response to the third consultative paper published on its website in September 2003, the ECB reiterated its overall support for the Basel reform and acknowledged the progress achieved. In addition to its input on several technical issues, the ECB focused on issues warranting particular attention for both finalisation of the new Accord and implementation of the new rules, as well as on future priorities. The ECB welcomed the proposals to tackle the potential pro-cyclical effects and pointed out that some improvements could still be made by strengthening the incentives for banks to opt for more advanced risk management policies. Special emphasis was given to the importance of the timely

completion and implementation of the new Accord. From a more forward-looking perspective, the ECB underlined the need for close monitoring of the new regime in order to develop a full understanding of all its possible implications. The ECB also stressed the need to prioritise work on accounting and provisioning, as well as on the definition of own funds and on the convergence of supervisory practices.

At the EU level, the reform of the regulatory capital framework conducted within the remit of the Financial Services Action Plan (FSAP, see Section 3 of this chapter) continued to follow the Basel reform process closely, while at the same time taking European particularities into account. In July 2003 the European Commission released a third working document for public consultation together with an analysis of the EU results of the third quantitative impact study. Significant features of the EU context include the scope of application of the new rules, the nature of the EU framework, the treatment of small and medium-sized enterprises and the suitability of the framework for small and less complex banks. Like the BCBS conclusions, the findings of the European Commission on the quantitative impact study, released in parallel with the third consultative proposals, were supportive of the reform's main objectives. In addition, in April 2003 the European Commission released two documents for consultation, one on real estate lending and one on the treatment of covered bonds, and it subsequently published the comments received on these two topics.

The ECB provided comments on the European Commission's proposals for the revision of the capital framework of banks and investment firms. The ECB supported the work being undertaken at the EU level and highlighted the importance of maintaining consistency between the New Basel Capital Accord and the revised EU framework and ensuring that they were completed and implemented at the same time.

## 2.3 SECURITIES

In 2003 good progress was made on several initiatives to fill the gaps in the European securities markets legislation and to update existing rules. The ECB contributed to the shaping of the relevant rules in the context of both the preparatory discussions in the appropriate EU committees and formal consultations.

Within the context of the FSAP, two directives were adopted and a further two came closer to completion. In January 2003 the Market Abuse Directive was adopted, providing for harmonised rules on the prevention of insider dealing and market manipulation, and in July 2003 the Prospectus Directive was introduced, providing for a single passport for European securities issuers. In March 2003 the European Commission set out in its draft transparency directive disclosure requirements for European issuers listed on regulated markets. A common position was adopted in December by the ECOFIN Council with regard to the proposal for a new directive on markets in financial instruments, which would replace the existing Investment Service Directive dating back to 1993.

In its opinion on this proposed new directive, the ECB welcomed the principles underlying the revised regulatory framework. An effective implementation of the proposed directive clearly has the potential to foster the integration of European securities markets. More specifically, as regards the new regulatory framework on trade execution, the ECB welcomed the proposed strengthening of transparency rules as a tool to avoid market fragmentation and to allow investors to choose the most efficient trading venues. However, the ECB emphasised that the new transparency rules should be applied to debt securities as well as to shares, and that the means for a full comparison of all market prices should be provided for.

## 2.4 OTHER ISSUES

The EU accounting framework has been at the centre of debate owing to the legal requirement that all listed European companies, including banks, prepare their consolidated financial statements in accordance with International Accounting Standards (IAS) by 2005. The ECB has a keen interest in this debate as the accounting reforms will have a profound impact on the banking and financial industry. Furthermore, harmonised and high quality standards will provide a significant contribution to the integration and efficiency of financial markets in the euro area.

The ECB's interest also stems from concerns that the wider use of fair value for financial instruments, mentioned in the IAS proposals, might have significant effects on financial stability. The Governing Council, particularly in the light of analyses conducted in this area since 2001, has reiterated in letters to the IAS Board and the European Commission its concerns about the potential implications for financial stability of the introduction of fair value accounting for all financial instruments, particularly in relation to the completion of IAS 39, which deals with the recognition and measurement of financial instruments.

Finally, given the increasing number of reforms being made to national supervisory structures, the ECB published a report entitled "Developments in national supervisory structures" in June 2003 in order to provide a "snapshot" of the main changes which had recently occurred in this area, together with the resulting institutional settings within the EU and the acceding countries.

### 3 FINANCIAL INTEGRATION

The ESCB is committed to the integration of European financial markets and market infrastructures because of their key role in the transmission of monetary policy and in financial stability, and because their integration should help to create a level playing-field for all agents regardless of their location within the EU. In addition, Article 105 of the Treaty states that without prejudice to the objective of price stability, the ESCB shall support the general economic policies in the Community, among which financial integration occupies a prominent position. This support takes the form of direct action, catalysis of collective action and contributions towards raising the level of awareness of the need for integration and the means for achieving it.

In 2003 the ECB intensified its activities to help to achieve a broad-based integration of Europe's financial system, both by means of its own activities and by contributing to the work of other European bodies within various committees and fora.

#### THE ECB'S CONTRIBUTION TO THE EU STRATEGY FOR FINANCIAL SERVICES

The current framework for achieving a more integrated and efficient financial system in the EU is based on the 1999 Financial Services Action Plan (FSAP) and on a regulatory process inspired by the 2001 Lamfalussy Report. The first high-level assessment of this framework is expected to take place in the summer of 2004.

As agreed by the Heads of State or Government at the Brussels European Council in March 2003, most legislative measures initially considered in the FSAP will have been adopted by April 2004. The European Parliament will then go into recess and further legislative work will be suspended. Work is still under way on several important initiatives. The Lamfalussy process is now being extended to other financial sectors (see Section 2.1 of this chapter). Full and successful implementation of the Lamfalussy process should provide the European financial system with a faster and

more efficient regulatory structure than is currently the case.

While fundamental progress has been made in recent years, there is still a considerable amount of work to be done to further integrate Europe's financial system. New EU initiatives have recently been launched to define the "post-FSAP" strategy, which will require the close cooperation of all those involved.

The ECB has been closely involved in this work and has provided its views in the form of ECB opinions, for example on the proposal for the new directive on markets in financial instruments (see also Section 2.3 of this chapter), and in the different fora where the various issues are discussed. In particular, the ECB considers that the measures of the FSAP provide the core legislative framework for the single market in financial services. The potential for further financial integration within this framework offers opportunities and poses challenges to public authorities as well as market participants.

The ECB is of the opinion that it is important for public authorities to implement the FSAP measures in a coherent manner across Member States. The extension of the Lamfalussy process will allow for more uniform technical rules in this respect. This should contribute to the establishment of a common regulatory framework for market players which may also be quickly adjusted if needed. Furthermore, as integration proceeds, the transmission channels for systemic risk are likely to change, which justifies increased cooperation and information exchange between supervisors and central banks in order to promote a robust supervisory and financial stability framework.

To complement public sector initiatives, market participants also need to enhance their contribution to EU financial integration through collective action in two main areas. First, they need to participate effectively in the policy-making process in the context of enhanced consultation procedures at the EU level.

Second, collective action by market participants, possibly with the support of public authorities, is equally warranted in the area of market conventions and product standardisation.

### **THE ECB'S ROLE IN FOSTERING COORDINATION AMONG MARKET PARTICIPANTS**

Beyond its cooperation with other public authorities, the ECB also acts in collaboration with the private sector in order to foster collective action. The Short-Term European Paper (STEP) initiative and the activities of the European Financial Markets Lawyers Group (EFMLG) are two examples of the ECB's involvement in private sector initiatives.

The ECB welcomes and encourages the STEP initiative, which is currently being carried out by a group of market participants under the auspices of the ACI, the Financial Markets Association. This initiative aims to integrate the fragmented European markets for short-term debt instruments and to promote their development.

The ECB was requested to play the role of facilitator in this initiative, a role similar to that played when it established the EONIA. In particular, the ECB has already hosted, at the request and on behalf of private sector participants, a public consultation on means of further integrating this particular market segment.

STEP undertakes to create a de facto integrated wholesale market for short-term debt instruments through the convergence of existing European markets. The aim is to help market practices to converge under the existing European and national legislative frameworks by means of market convention. This initiative would rely on the voluntary participation of issuers prepared to meet certain conditions specified in the market convention in order to have their issuance programmes granted a STEP label. The above-mentioned conditions would not substitute or change existing national regulations, but would be supplementary to

those already in existence. Credit institutions, other financial intermediaries (including issuers of asset-backed securities), corporations and public authorities would all be entitled to apply for the STEP label for their issuance programmes.

The EFMLG was established in 1999 and aims to discuss and promote initiatives leading to greater harmonisation of European financial market activities (laws and market practices) following the introduction of the euro. The EFMLG is composed of senior lawyers from credit institutions based in the EU and selected on the basis of their personal expertise. Recently, the EFMLG provided support and assistance to the ACI with regard to the legal aspects of the STEP initiative. The group has also focused on the removal of legal barriers to the cross-border use of collateral, the legal aspects of netting arrangements in the EU, the harmonisation of the legal framework for rights in securities evidenced by book entries and the dematerialisation of securities, i.e. the process of issuing a security under an electronic scheme rather than issuing physical certificates.<sup>2</sup>

### **SINGLE EURO PAYMENTS AREA**

In 2002 the Eurosystem agreed on a cooperation model with the European Payments Council (EPC), i.e. the governance structure of the European banking sector set up with the aim of creating a Single Euro Payments Area (SEPA) in which differences between the levels of service for national and cross-border retail payments are to be eliminated by 2010.

The ECB participated as an observer in the EPC plenary, which is the decision-making body of the EPC, and the EPC working groups for cash, cards, straight-through processing (STP) and infrastructure. The Eurosystem formally assessed the banking sector's achievements in terms of the SEPA in a progress report entitled "Towards a Single Euro Payments Area" published in June 2003. In this report, the Eurosystem expressed strong support for the

<sup>2</sup> For further details on the EFMLG see [www.efmlg.org](http://www.efmlg.org).

decisions taken and the general commitments made by the EPC. One milestone was the launch of STEP 2 in April 2003 by the Euro Banking Association, a cooperative undertaking between EU-based commercial banks and EU branches of non-EU banks. STEP 2 is a new retail cross-border system for the processing of bulk payments (currently only credit transfers). It is the first service provider for a pan-European automated clearing house (PE-ACH). STEP 2's receiver capability – which is a bank's capability to receive a payment through the PE-ACH – was gradually extended to all EU banks, thereby increasing its market share of intra-EU credit transfers.

However, the progress report also made it clear that should banks backtrack on their promised deliverables to achieve a SEPA, the Eurosystem would consider regulatory measures in addition to its catalyst role. The Eurosystem specifically stressed the importance of implementing pan-European standards for STP as a prerequisite for accomplishing a SEPA for all payment instruments.

In the progress report, the Eurosystem listed specific indicators (known as “SEPA indicators”) for measuring progress made towards a SEPA against the EPC's own objectives and milestones. In the second half of 2003, the EPC and the Eurosystem agreed on a reporting framework for these SEPA indicators, including quarterly reports by the EPC to the Eurosystem. The first report, delivered at the end of 2003, showed progress in different areas, such as the implementation of International Bank Account Numbers (IBAN) and the introduction of a basic credit transfer service (Credeuro) with a guaranteed speed of execution of three days.

In October 2003 the ECB, in cooperation with the EPC, arranged a workshop on the SEPA targeted specifically at involving acceding countries in the SEPA process. Moreover, meetings were held in the course of the year with EU market participants in the Contact Group for Euro Payments Strategy (COGEPS)

on the subject of large-value payments issues, as well as retail issues. Throughout 2003 the Eurosystem also continued to cooperate closely with the European Commission in view of the complementary roles played by the two institutions in terms of facilitating the SEPA. In this respect, the ECB responded to the public consultation launched by the European Commission on a “New Legal Framework for Payments in the Internal Market”.

#### **CONSOLIDATION OF THE EUROPEAN SECURITIES INFRASTRUCTURE**

The Eurosystem has a keen interest in the integration of the securities infrastructure at the EU level in order to ensure a level playing-field across national boundaries. The process of consolidation of the EU securities clearing and settlement industry continued in 2003 with the merger between two major central counterparty clearing houses, Clearnet and the London Clearing House. The merger in 2002 of the securities settlement systems Euroclear and CrestCo, which settle transactions for the stock exchanges served by Clearnet and the London Clearing House, marked another important step towards a more integrated securities infrastructure in the EU.

#### **STATISTICAL DATA ON THE DEGREE OF FINANCIAL INTEGRATION IN THE FINANCIAL SYSTEM OF THE EURO AREA**

In 2003 further statistical data were provided to assess the level of financial integration in the euro area's financial system. Box 9 describes some of the measures used to assess the level of integration achieved in financial markets in the euro area. Furthermore, the Eurosystem – together with academics – has promoted policy-relevant research on the level of integration in the financial system of the euro area (see Box 10).

### MEASURES OF FINANCIAL MARKET INTEGRATION IN THE EURO AREA

Several quantitative measures can be used to measure the level of integration in euro area financial markets. This box briefly describes some of these measures and assesses the level of integration observed in different financial markets of the euro area.<sup>1</sup>

Measures of financial integration make it possible to assess the extent to which geographical considerations affect the price of financial instruments and the behaviour of market participants. Some of these measures are based on the law of one price. They test whether assets which are comparable and available in all euro area countries trade at the same price throughout the euro area. Other measures estimate the relative importance of factors common to the euro area in the pricing of assets as opposed to idiosyncratic factors (notably country-related factors). Finally, some measures are used to quantify the effects of frictions on cross-border investment.

In general, most measures show that the degree of integration in the various financial markets is still heterogeneous. While integration is quite advanced in many segments of the money market, it is less advanced in the bond and equity markets.

Yields on government bonds with similar, or in some cases identical, credit risk, maturity and issuing characteristics have not yet entirely converged. Differences in primary and secondary market liquidity or in the degree of development of derivatives markets connected to the various individual bond markets may partly account for this.

In the equity markets, the level of integration is not particularly high, although equity returns appear to be increasingly determined by factors common to the euro area. At the same time, the home bias in equity holdings (i.e. the fact that investors seem to allocate a disproportionately large fraction of their equity holdings to domestic stocks) has decreased considerably over the past few years. However, there are still a number of significant barriers to further integration in the equity markets. Examples include cross-country regulatory differences and the considerable fragmentation of the euro area's clearing and settlement systems.

In credit markets, there remains significant market fragmentation. For example, there are persistent home biases in lending to and borrowing from non-financial corporations and households. Some of these home biases are "natural", that is, explained by proximity advantage and information asymmetries; others are mainly due to regulatory obstacles, such as tax regulations, bankruptcy law, etc.

<sup>1</sup> For further details of these measures, see the article entitled "The integration of Europe's financial markets" in the October 2003 issue of the ECB's Monthly Bulletin.

### RESEARCH NETWORK ON CAPITAL MARKETS AND FINANCIAL INTEGRATION IN EUROPE

In April 2002 the ECB and the Center for Financial Studies (CFS) launched a Research Network to promote research on capital markets and financial integration in Europe. This Network aims to stimulate and coordinate policy-relevant research by academic scholars and researchers from policy institutions, contributing significantly to the ECB's understanding of the current and future structure and integration of the financial system in Europe and its links to the financial systems of the United States and Japan. Further information can be found on the Network's website ([www.eu-financial-system.org](http://www.eu-financial-system.org)). The Network's first workshop was held at the ECB in April 2002 and concentrated on agenda-setting, identifying five topics of priority for research: (i) bank competition and the geographical scope of banking activities, (ii) international portfolio choices and asset market links between Europe, the United States and Japan, (iii) European bond markets, (iv) European securities settlement systems (SSSs) and (v) the emergence and development of start-up financing and new markets in Europe. In March 2003 the second workshop, hosted by Suomen Pankki – Finlands Bank in Helsinki, addressed the first two of these topics. In November 2003 the third workshop, hosted by the Bank of Greece in Athens, focused on the third topic, as well as discussing the fourth and fifth topics.<sup>1</sup> Within the context of this Network, the ECB also established the "Lamfalussy Fellowship" programme, named after the first President of the EMI. This programme sponsors young researchers to conduct valuable research on the above-mentioned topics. Two years of work on the Network will be concluded with a symposium at the ECB in Frankfurt in May 2004, presenting the most important results found. Some of these results reveal first of all that some of the inherent characteristics of traditional loan and deposit business constrain the cross-border expansion of commercial banking, even in a common currency area. Second, some theoretical research suggests that supervisory structures may not be neutral towards further European banking integration. Third, there is increasing evidence that the introduction of the euro has contributed to a reduction in the cost of capital in the euro area. Fourth, too strong a vertical integration between trading and securities settlement platforms can be an obstacle to the efficient consolidation of SSSs. Finally, the growing globalisation of firms' activities is one factor behind the increasing correlation of equity returns observed around the world.

<sup>1</sup> In October 2002 the ECB also held its Second Central Banking Conference. The proceedings are available on the ECB's website, see V. Gaspar, P. Hartmann, O. Sleijpen (eds), *The transformation of the European financial system*, June 2003.

With regard to the euro area banking system, the ECB is developing a set of key indicators to measure the degree of integration in the system. These indicators are constructed on the basis of quarterly stock data provided by MFIs. They provide direct measures of cross-border banking business within the euro area. In addition to traditional measures of the share of cross-border activity, these indicators also focus on the distribution of activity, the role played by national banking systems as the hub and the disparities between national banking

systems in terms of access. Indicators show that the share of cross-border activity is modest for the retail segments of the banking business (see Box 9), while it is more important and growing in the interbank market for deposits. It is worth noting, however, that when conducting these cross-border activities, banks are becoming increasingly neutral as regards the geographical location of counterparties within the euro area for retail and wholesale segments alike.

New harmonised MFI interest rate statistics published for the first time in December 2003 allow for a comparison of retail bank interest rates on deposits and loans across the euro area on a harmonised basis (see Section 4 of Chapter 2). These new monthly statistics contribute to the assessment of the convergence towards a single European financial market for deposits and loans and will increase the transparency of banking business in the euro area. Financial market statistics produced by the ECB also include price and volume indicators for the money, bond and equity markets as well as volatility and convergence measures across all euro area market segments.



## 4 OVERSIGHT OF MARKET INFRASTRUCTURE

One of the statutory roles of the Eurosystem is to exercise oversight over payment and clearing systems. This function aims to ensure that the general organisation of the payment flows within the economy is efficient and safe. In particular, systemic risks arising either from the malfunctioning of payment and clearing systems or from the contagion effects of a failure of a participant in the system should be minimised.

Furthermore, the Eurosystem takes a general interest in other infrastructures which are used for the transfer of securities, such as securities clearing and settlement systems, because failures during the settlement of collateral could jeopardise the implementation of monetary policy and the smooth functioning of payment systems. Disruptions in securities settlement systems (SSSs) can spread to payment systems owing to the existence of delivery versus payment (DVP) mechanisms for the transfer of securities and cash payments. Similarly, central counterparties' inability to clear transactions can hinder the settlement of securities transactions. In view of this general interest, the ECB met with the European Central Securities Depositories Association in 2003 to discuss recent developments affecting settlement service providers. Furthermore, the Eurosystem discussed its collateral framework, which was subject to a public consultation in 2003, as well as developments concerning short-term securities, relayed links<sup>3</sup> and securities transactions with market participants at the Contact Group on Euro Securities Infrastructures. Detailed information on the market infrastructure is given in the ECB's publication entitled "Payment and securities settlement systems in the European Union", also known as the "Blue Book".<sup>4</sup>

The Eurosystem's oversight function extends from systems for the exchange of very large payments ("large-value payment systems") and the network providers on which those systems rely to retail payment services as well as to other activities that could affect the smooth functioning of payments in the euro area.

### 4.1 OVERSIGHT OF LARGE-VALUE EURO PAYMENT SYSTEMS AND INFRASTRUCTURE

#### THE TARGET SYSTEM

The oversight role of the Eurosystem comprises all euro payment systems including those managed by the Eurosystem itself, e.g. the Trans-European Automated Real-time Gross settlement Express Transfer (TARGET) system. With regard to the latter, the minimum oversight standards applied are as strict as those applied to privately operated payment systems.

According to the framework decided by the Governing Council at the beginning of 2003, there are two major operational objectives for the oversight of TARGET. First, overseers of TARGET (i.e. the NCBs for the domestic components, the ECB for the EPM) are to review the various aspects of the TARGET system and assess its compliance with the "Core Principles for Systemically Important Payment Systems"<sup>5</sup> adopted by the Governing Council in 2001 as the basis for its oversight policy on systemically important payment systems. Second, overseers are to inform those responsible at the NCBs and the Governing Council of the results of this assessment so that, if necessary, measures are considered and implemented to ensure full compliance with the Core Principles.

In 2003 TARGET overseers assessed all components of TARGET against the Core Principles.<sup>6</sup> The overall outcome of this

3 With a relayed link SSSs no longer have to establish a link with all other SSSs, but can limit themselves to one link with an intermediate SSS that is connected to many other SSSs.

4 In September 2003 the ECB published an addendum to the Blue Book with data on all 15 EU Member States from 1997 to 2001. This publication was prepared in cooperation with the NCBs. In addition, a two-day seminar for central bankers entitled "Payment and securities settlement systems" was held at the ECB in the same month.

5 Report by the Committee on Payment and Settlement Systems entitled "Core Principles for Systemically Important Payment Systems", BIS, January 2001. This report also includes an outline of the responsibilities of the central banks in this respect. Responsibility B states that central banks should ensure that any systemically important payment system they operate complies with the Core Principles.

6 As part of the same assessment, overseers also evaluated the other euro large-value payment systems, namely the French Paris Net Settlement (PNS), the Finnish Pankkien On-line Pikasiirrot ja Sekit-järjestelmä (POPS) system, and the Spanish Servicio de Pagos Interbancarios (SPI) against the Core Principles.

assessment was positive, although issues for further improvement were identified. The results of this assessment will be made public.

## EURO 1

The Euro Banking Association (EBA) is a cooperative undertaking between EU-based commercial banks and EU branches of non-EU banks. The EBA created a multilateral large-value EU-wide payment system for euro credit transfers, called EURO 1. In April 2003 the EBA established a new retail cross-border system, known as “STEP 2” (see also Section 3 of this chapter). STEP 2 settles in EURO 1, making it necessary to implement some technical changes to the latter. In November 2003 the EBA also introduced a new function called the “Flexible Settlement Mechanism” allowing banks to settle their STEP 2 positions in EURO 1 without becoming direct members/shareholders of EURO 1.

As overseer of EURO 1, the ECB evaluated the changes to the system in respect of its compliance with the Core Principles. The ECB found only minor issues for concern, which did not have any significant impact on the safety and efficiency of EURO 1. The ECB will address these findings in cooperation with the EBA in due course.

## CONTINUOUS LINKED SETTLEMENT SYSTEM

The Continuous Linked Settlement (CLS) is a system designed to settle foreign exchange transactions on a simultaneous, final and irrevocable basis. Prior to the introduction of the CLS, each side of a trade was paid separately. The systemic risk in the event of default was high considering the time interval which typically elapsed between the settlement of the two sides of the trade. The CLS was established as a market response to the pressure exercised by central banks to reduce foreign exchange settlement risk (known as “Herstatt risk”).<sup>7</sup> The ECB performs a dual role with regard to the CLS. It is involved in the oversight of the system and it provides settlement services. Oversight of the CLS is carried out by means of close collaboration

between the G10 central banks and the Federal Reserve System as the lead overseer.

In September 2002 the CLS began settling foreign exchange transactions in seven major currencies on a payment versus payment (PVP) basis.<sup>8</sup> In September 2003 four additional currencies were added to the list of eligible currencies.<sup>9</sup> Following the start of live operations, banks quickly increased the values and volumes settled through the system. In December 2003 the CLS settled, on average, 37,000 trades per day to the value of USD 550 billion. After the US dollar, the euro is the second most important currency settled in this system, accounting for about one-quarter of all gross payments settled in the system.

Thanks to the PVP mechanism, the CLS strongly reduces foreign exchange settlement risk. The Eurosystem welcomes this risk-reducing factor. At the same time, however, the CLS introduces a certain degree of liquidity risk, as banks are required to make substantial payments into the CLS at a specific time of the day (between 7 a.m. and 12 noon C.E.T.) and, in the event of a malfunctioning of the system, may not receive corresponding currencies as expected. Banks have thus far handled these liquidity requirements well. Their liquidity management procedures seem to be well developed, such that the liquidity demand necessary to make CLS pay-ins has not had a negative impact on the overall market.<sup>10</sup>

7 The ECB cooperates with the other G10 central banks with regard to oversight and, more specifically, systemically important settlement infrastructures, the smooth functioning of which is of vital importance beyond the euro area.

8 These currencies are the US dollar, the euro, the Japanese yen, the pound sterling, the Swiss franc, the Canadian dollar and the Australian dollar.

9 These currencies are the Danish krone, the Swedish krona, the Norwegian krone and the Singapore dollar.

10 Average funding requirements fall in the range of several hundred millions of euro. The largest pay-ins account for, on average, around €1 billion, while the largest pay-in by any single bank thus far amounted to €5.9 billion. None of these pay-ins resulted in a negative impact on the euro money markets.

## SWIFT

The Society for Worldwide Interbank Financial Telecommunication (SWIFT) is a cooperative organisation created and owned by banks which operates a network to facilitate the exchange of payment and other financial messages between financial institutions throughout the entire world. The ECB contributes to the oversight of SWIFT, which is carried out by means of cooperation between the G10 central banks and the Nationale Bank van België/Banque Nationale de Belgique as the lead overseer.

In addition to SWIFT's resilience to crises, much oversight attention was paid to the changeover to a new network generation (the SWIFTNet migration), completion of which is scheduled by the end of 2004. SWIFT has kept the overseers regularly informed of the status of the network roll-out, of any incidents or of any envisaged changes to the SWIFTNet migration plan.

## CORRESPONDENT BANKING

Banks often have arrangements to provide payments and related services to each other primarily for payments across national borders. Such arrangements are referred to as correspondent banking. In the EU, euro correspondent banking is a highly concentrated activity among a few players. A recent survey conducted by the ECB among a sample of banks in the EU showed that the top 10% of reporting banks accounted for almost 80% of the value (34% of the volume) of the reported correspondent banking payments in euro. There are even some indications of further concentration of the correspondent banking business.

At this stage, the Eurosystem does not see any immediate systemic risk in this high degree of concentration, as the share of correspondent banking constitutes only a fraction of the overall payment flows in euro. The large majority of the payment flows are executed via interbank funds transfer systems (e.g. TARGET). However, in view of the Eurosystem's interest in the stability of the

financial system as a whole, it will continue to monitor developments in this particular area of business.

## 4.2 RETAIL PAYMENT SERVICES

### OVERSIGHT OF RETAIL PAYMENT SYSTEMS

In order to carry out its statutory task of promoting the smooth operation of payment systems, the Eurosystem also refined its policy stance on retail payment systems.

Following a public consultation initiated in 2002, the Governing Council adopted "Oversight standards for euro retail payment systems" on 26 June 2003, which can be found together with the accompanying press release on the ECB's website. These retail standards are based on the Core Principles for Systemically Important Payment Systems. The adoption of standards in the field of retail payment systems is aimed at fostering safety and efficiency in this sector as well as at ensuring the harmonised oversight of retail payment systems in the euro area.

The retail standards provide indicators for categorising retail payment systems as systemically important retail payment systems, retail systems of prominent importance and other retail payment systems. All Core Principles will be applied to systemically important retail payment systems, whereas only a selection of six Core Principles will be applied to systems of prominent importance. Other retail payment systems will have to comply with other applicable standards (e.g. Eurosystem standards for e-money schemes<sup>11</sup> or standards adopted at the national level).

### E-MONEY SYSTEMS

A common oversight approach by the Eurosystem with regard to e-money was described in its report entitled "Electronic money system security objectives" in May

11 "Report on electronic money", August 1998; "Electronic money system security objectives", May 2003.

2003. These security objectives should ensure the overall reliability and technical safety of the schemes and should also increase public confidence in these systems. These objectives were also designed with a view to achieving a level playing-field for the different schemes from a regulatory point of view. All relevant e-money schemes will be assessed against these standards by the NCBs in the course of 2004.

### E-PAYMENTS

In recent years, the increasing use of new communications technologies and the need for specific payment mechanisms for e-commerce have created opportunities for new intermediaries to facilitate the sending and processing of payment instructions. At the same time, banks have also developed new means for customers to access their accounts and to originate payments.<sup>12</sup> The ECB aims to provide a forum for cooperation between stakeholders and to offer analyses and statistics to support the work of the markets in further developing more efficient and secure payment mechanisms. Its oversight activities vis-à-vis the provision of payments via the internet and mobile networks will initially focus on the security of the corresponding instruments and systems. In order to achieve these objectives, in May 2003 the ECB relaunched the electronic Payment Systems Observatory (ePSO). The ePSO project was initially launched in 2000 under the auspices of the European Commission. It consists of a website used for sharing information on innovative electronic payment systems and instruments ([www.e-pso.info](http://www.e-pso.info)) and contains an electronic discussion forum, an inventory of e-payment schemes and articles on topical subjects of interest.

### 4.3 SECURITIES CLEARING AND SETTLEMENT SYSTEMS

The Eurosystem has thus far played two roles in the field of securities clearing and settlement systems. First, the Governing Council assesses the compliance of EU SSSs with specific user standards.<sup>13</sup> These standards were established

in January 1998 with a view to mitigating the risks to the Eurosystem when it conducts its monetary policy operations. Second, the Eurosystem cooperates with other authorities responsible for the regulation and oversight of securities clearing and settlement systems at the EU level. Contributions to the Giovannini Group, a forum of financial experts which advises the European Commission on financial sector issues, were made and included in the second Giovannini Report<sup>14</sup>. As regards international cooperation, the ECB also took part in projects initiated by the Committee on Payment and Settlement Systems (CPSS) and the International Organization of Securities Commissions (IOSCO) with a view to developing recommendations for central counterparties. Finally, the ECB contributed to the CPSS “Report on the role of central bank money in payment systems”<sup>15</sup>.

### ASSESSMENT OF SECURITIES SETTLEMENT SYSTEMS

The Eurosystem assesses EU SSSs eligible for the settlement of its credit operations on an annual basis. These assessments are aimed at limiting the risks to which the Eurosystem is exposed during the settlement process. The criteria used for these assessments can be found in the report entitled “Standards for the use of EU securities settlement systems in ESCB credit operations”, which was endorsed by the EMI in November 1997 and comprises nine standards.

As part of the exercise carried out in 2003, 22 SSSs were assessed (including four systems located in the three EU countries which have not

12 For further details see the article entitled “Electronification of payments in Europe” in the May 2003 issue of the ECB’s Monthly Bulletin.

13 In the absence of EU harmonised oversight standards, the user standards have been regarded as de facto common standards for EU SSSs and, therefore, are dealt with in this chapter. Nevertheless, the user standards are not intended to be a comprehensive set of standards for the oversight or supervision of SSSs.

14 “Second Report on EU Clearing and Settlement Arrangements”, the Giovannini Group, Brussels, April 2003, published on the European Commission’s website at [www.europa.eu.int](http://www.europa.eu.int).

15 BIS, August 2003.

yet joined the euro). By and large, those SSSs which were assessed complied with the standards. However, in some cases improvements are still necessary to achieve full compliance. The Eurosystem acknowledges and is monitoring the efforts being made by the system operators to enhance compliance with the standards. For example, efforts have been made to increase operational reliability with a special focus on business continuity in the event of a disaster. Some systems have increased the number of contingency sites and enhanced back-up facilities. Furthermore, in some countries amendments have been made to the legal framework to enhance the legal soundness of their systems. Finally, efforts to reduce the unwinding risk that can arise when transactions are settled on a net basis have also been made.

#### **COOPERATION WITH THE COMMITTEE OF EUROPEAN SECURITIES REGULATORS**

In 2001 the Governing Council approved a framework for cooperation on securities clearing and settlement systems between the ESCB and the Committee of European Securities Regulators (CESR). In particular, a working group was set up, composed of a representative from each central bank of the ESCB and from each securities regulator from the CESR.

The work of the group focused mainly on developing European standards for clearing and settlement, based on the recommendations of the CPSS and the IOSCO (referred to as “CPSS-IOSCO”). When developing these standards, the working group also took into account the need to remove the barriers to efficient cross-border clearing and settlement processes in the EU, as identified in the above-mentioned Giovannini Group reports.

In 2003 the working group finalised a consultative report consisting of a set of 19 standards aimed at increasing the safety, soundness and efficiency of securities clearing and settlement systems in the EU. A public

consultation on these standards was conducted jointly by the ESCB and the CESR.

In its report, the working group sought to adopt a functional approach, i.e. to apply the standards to all relevant functions related to the securities clearing and settlement business, without regard to the legal status of the institutions exercising these functions. Thus the future ESCB-CESR standards will apply to securities market infrastructures and, in particular, to central counterparties and national and international central securities depositories. It is envisaged that some standards will also apply to major custodian banks (“systemically important custodians”) which are very active in the field of clearing and settlement. Since preventing distortion is important when identifying “systemically important” entities, the public consultation included a specific questionnaire on the appropriateness of including custodians and on how to identify major custodians. The results of the public consultation have been published on the websites of the ECB and the CESR. The report on the ESCB-CESR standards is expected to be finalised by mid-2004.



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## CHAPTER 4

# EUROPEAN AND INTERNATIONAL ISSUES



## I EUROPEAN ISSUES

In 2003 the ECB continued to maintain its regular contacts with Community institutions and bodies. ECB representatives attended meetings of the ECOFIN Council when matters relating to the tasks and objectives of the ESCB were discussed. The President of the ECOFIN Council and the relevant Commissioner also made use of their right to participate in meetings of the Governing Council when they deemed it appropriate. The President of the ECB and the governors of the NCBs participated in two informal meetings of the ECOFIN Council, which took place in Athens (Greece) and Stresa (Italy) in April and September respectively. The President of the ECB also participated regularly in meetings of the Eurogroup, which has continued to serve as a particularly important forum for an open and informal policy dialogue between the ECB, the finance ministers of the euro area countries and the Commission. Moreover, the ECB continued to attend the biannual meetings of the Macroeconomic Dialogue, which brings together representatives of the Member States, the Commission, the ECB, the non-euro area central banks and the EU-level social partners.

In addition to these relations at the political level, the ECB continued to participate in meetings of various European bodies at senior expert and working levels, including, most notably, the Economic and Financial Committee (EFC), the Economic Policy Committee (EPC) and the newly created Financial Services Committee (FSC). The ECB closely followed all discussions at the European level that were of relevance for the pursuit of its tasks, taking part, in particular, in discussions concerning the draft Treaty establishing a Constitution for Europe (draft Constitution), the Broad Economic Policy Guidelines and the Stability and Growth Pact.

### I.1 POLICY ISSUES

#### CONSTITUTION FOR EUROPE

In July 2003 the European Convention on the future of Europe (Convention) finalised the

draft Constitution and transmitted it to the European Council. In accordance with Article 48 of the Treaty on European Union (TEU), the Italian Presidency of the Council convened an Intergovernmental Conference (IGC) to discuss and formally adopt changes to the existing Treaties. The IGC started its proceedings in October. At the European Council meeting on 12 and 13 December 2003, the Heads of State or Government could not reach an overall agreement on the draft Constitution. The European Council invited the Irish Presidency to make an assessment of the prospects for progress and report to the European Council in March 2004.

The ECB followed the progress of both the Convention and the IGC very closely and contributed to their deliberations on issues of relevance to the tasks and mandate of the ECB and the ESCB. These contributions included two letters sent by the President of the ECB to the Chairman of the Convention in May and June 2003 to convey suggestions of the Governing Council for improvements to preliminary drafts of the Constitution. Both letters were made public on the ECB's website.

In the summer of 2003 the Italian Presidency of the Council transmitted the Convention's draft Constitution to the Council as a formal proposal for the amendment of the Treaties and formally invited the ECB to deliver an opinion. The competence of the ECB to deliver an opinion is based on Article 48 of the TEU, which requires the consultation of the ECB in the event of institutional changes in the monetary area. On 19 September the ECB delivered its opinion to the Presidency of the Council.<sup>1</sup> In this opinion, the ECB welcomed the draft Constitution as simplifying, streamlining and clarifying the legal and institutional framework of the European Union. The ECB reaffirmed its understanding that the necessary transfer of the provisions on the ECB and the ESCB from the present Treaty to the Constitution would not entail any changes to the substance of their

<sup>1</sup> CON/2003/20, OJ C 229, 25.9.2003, p. 7.

tasks, mandate, status and legal regime. While attaching great value to institutional and operational stability in the monetary domain, the ECB also signalled its awareness of the fact that a new Constitution had necessary implications for the institutional framework. However, it considered that the adjustments and updates that the constitutional process was envisaging did not affect that stability.

Despite this generally positive assessment, the ECB's opinion identified some articles in the draft Constitution which were of relevance for the exercise of the ECB's and ESCB's functions and tasks and would benefit from further clarification and adjustment.

The ECB's principal suggestions were to introduce a reference to "non-inflationary growth" or "price stability" in Article I-3 (3) on the Union's objectives, to clarify the ECB's status in the institutional framework, to add a reference to the ESCB and the Eurosystem in the heading of Article I-29, which deals with the ECB, the Eurosystem and the ESCB, to recognise the independence of NCBs in this Article, to introduce a reference to the widely recognised term "Eurosystem" in the draft Constitution and to add an explicit reference to the responsibilities of the ESCB in Article III-90 on the external representation of the euro.

The ECB intervened formally in the negotiations of the IGC on one occasion. The Council Presidency had proposed to significantly extend the current simplified amendment procedure for changes to Article 10.2 of the Statute of the ESCB (for further details regarding the current procedure, see Chapter 8). The new procedure would have covered any change to the basic provisions governing the decision-making bodies of the ECB and allowed for amendments to be made without ratification by the Member States. In a letter to the President of the EU Council dated 26 November 2003, the ECB's President emphasised that the Governing Council had serious concerns about this proposal, regarding

it as a far-reaching change to the current constitution of the ESCB. As a result, the Council Presidency decided to drop the proposal.

### **2003 BROAD ECONOMIC POLICY GUIDELINES**

The Broad Economic Policy Guidelines adopted in 2003 by the ECOFIN Council not only called for continued sound public finances but also placed considerable emphasis on structural reforms. In line with the Lisbon strategy, Member States were urged to pursue policies aimed at integrating capital markets and to increase competition in goods and services markets. In addition to recommendations to improve the functioning of labour markets through sound wage bargaining arrangements and effective tax and benefit systems, the Broad Economic Policy Guidelines also paid special attention to the long-term sustainability of public finances in view of the ageing of the population of the EU. From a procedural point of view, the 2003 Broad Economic Policy Guidelines were for the first time adopted for a three-year period, from 2003 to 2005 (as were the Employment Guidelines). This new procedure reflects a desire to pay greater attention to the implementation of policies, rather than to the frequent adoption of new guidelines.

The ECB was involved in the discussions on the Broad Economic Policy Guidelines through its participation in the EFC and the EPC. In this context, the ECB welcomed the focus of the Guidelines on stability-oriented macroeconomic policies and structural reforms as well as the increased emphasis on their implementation. In its public statements and publications, the ECB continuously stressed that the implementation of structural reforms needed to be accelerated in order to enhance the growth potential of the euro area. In particular, the ECB sought to raise awareness of the need to reform labour markets and integrate financial markets (see also Box 5).

### **ECOFIN COUNCIL REPORT ON STRENGTHENING THE COORDINATION OF BUDGETARY POLICIES**

In November 2002, in response to a request by the European Council, the Commission

presented proposals to strengthen the coordination of budgetary policies. The ECOFIN Council subsequently reviewed the Commission's proposals and, in March 2003, adopted its own "Report on strengthening the coordination of budgetary policies". In its report, the ECOFIN Council agreed with the Commission that there was no need to change either the Treaty or the Stability and Growth Pact, or to introduce new budgetary objectives or rules. At the same time, the ECOFIN Council shared the Commission's view that there were areas where implementation could be improved. For example, the ECOFIN Council felt that, while the monitoring of nominal balances continued to be essential, compliance with the close-to-balance-or-in-surplus requirement of the Stability and Growth Pact should be assessed in cyclically adjusted terms. Moreover, the ECOFIN Council considered that, when assessing Member States' budgetary policies, attention should be paid to country-specific circumstances, such as the quality and long-term sustainability of public finances and the safety margin needed to prevent a breach of the deficit reference value of 3% of GDP. The ECOFIN Council also stressed that countries with deficits exceeding the close-to-balance-or-in-surplus requirement of the Stability and Growth Pact must improve their cyclically adjusted budget position. In this context, the ECOFIN Council recalled the Eurogroup agreement of 7 October 2002 that euro area countries whose deficits exceed the close-to-balance-or-in-surplus requirement should reduce their underlying deficits by at least 0.5% of GDP per year.

Throughout the discussions on the Commission's proposals, the ECB stressed that the rules and procedures of the Stability and Growth Pact provide an appropriate framework for fiscal policies in EMU. The ECB therefore fully supported the view of the ECOFIN Council that changes to the Stability and Growth Pact were not warranted.

## **IMPLEMENTATION OF THE STABILITY AND GROWTH PACT**

In 2003 the implementation of the Stability and Growth Pact was at a critical juncture. In an economic environment that was less favourable than previously expected, those Member States that had failed to reach sound budgetary positions during the previous upturn found it increasingly difficult – and, in some cases, were already seen to have failed – to respect the deficit reference value of 3% of GDP. In 2002 the ECOFIN Council had decided that an excessive deficit existed in Portugal and issued a recommendation to Portugal with a view to bringing the situation of an excessive deficit to an end by 2003 at the latest. During 2003 the excessive deficit procedure for Portugal was held in abeyance pending this correction (see Box 11 for an overview of the excessive deficit procedure).

In January 2003 the ECOFIN Council adopted a decision on the existence of an excessive deficit in Germany and issued a recommendation to Germany with a view to bringing the situation of an excessive deficit to an end. The ECOFIN Council recommended that the German authorities adopt the corrective measures foreseen in their budgetary plans amounting to 1% of GDP in 2003 and that the excessive deficit be corrected as rapidly as possible and by 2004 at the latest.

The deficit and debt figures certified by Eurostat in March 2003 subsequently showed that France's budget deficit also exceeded the 3% of GDP reference value in 2002. As a consequence, the ECOFIN Council adopted a decision in June 2003 on the existence of an excessive deficit in France and issued a recommendation to France with a view to bringing the situation of an excessive deficit to an end. The ECOFIN Council recommended that the French authorities achieve a significantly larger improvement than planned at the time in the cyclically adjusted deficit in 2003, and that the excessive deficit be corrected as rapidly as possible and by 2004 at the latest.

In view of continued adverse fiscal developments in France and Germany, the Commission decided in October and November to initiate the next steps of the excessive deficit procedures for these countries. To this end, the Commission issued recommendations for Council decisions on whether effective action had been taken or was proving adequate, and recommendations for Council decisions giving notice to France and Germany to take the necessary measures to reduce their deficits. The Commission expressed the view that France had not taken effective action, while the action taken by Germany was deemed inadequate. The Commission recommended extending the deadline for France and Germany to correct their excessive deficits from 2004 to 2005, citing worse than expected economic conditions in these countries.

At its meeting on 25 November 2003, the ECOFIN Council decided not to adopt the decisions recommended by the Commission, explaining this action on the basis of both the worse than expected economic climate and the budgetary commitments made by the French and German governments. Instead, it adopted Council conclusions in which it decided to hold the excessive deficit procedures in abeyance and called on France and Germany to take measures that would ensure the correction of their excessive deficits by 2005.

In a statement issued immediately after the ECOFIN Council meeting on 25 November, the Governing Council expressed its deep regret regarding the decisions taken by the ECOFIN Council. The Governing Council warned that the failure of the ECOFIN Council to follow the rules and procedures foreseen in the Stability and Growth Pact risked undermining the credibility of the institutional framework and confidence in the soundness of the public finances of countries across the euro area. Noting the budgetary commitments by France and Germany, the Governing Council urged the governments concerned to live up to their responsibilities, pointing out that it was imperative that action be taken to limit negative

effects on confidence. The Governing Council also reassured the public that it remained committed to maintaining price stability.

On 28 January 2004 the Commission brought an action before the European Court of Justice, challenging the ECOFIN Council conclusions of 25 November 2003 with a view to seeking legal clarity regarding the application of the relevant provisions of the Stability and Growth Pact. The ECB shares the concerns of the Commission regarding the ECOFIN Council conclusions and respects the Commission's decision to seek legal clarity in this matter.

On the same day the Commission announced that it would put forward proposals to strengthen economic governance in the euro area, including improvements to the implementation of the Stability and Growth Pact. In this regard, the Governing Council does not see a need for changes to the Treaty, and the Stability and Growth Pact in its current form is appropriate in its view. The ECB is in agreement with the Commission that the implementation of the Stability and Growth Pact could be further improved, in particular as regards the analysis of structural balances and strengthening incentives for sound fiscal policies in good times. The clarity and enforceability of the fiscal rules should also be enhanced.

## **1.2 INSTITUTIONAL CHANGES RELATING TO RELEVANT EUROPEAN BODIES**

On 16 April 2003 the Accession Treaty was signed, paving the way for the entry of ten new Member States into the EU as of 1 May 2004. As is customary following the signing of an accession treaty, representatives of the acceding countries have been granted observer status in those Community institutions and bodies in which Member States are represented. They will become full members of these institutions and bodies on the date of accession.

### THE EXCESSIVE DEFICIT PROCEDURE

The excessive deficit procedure lays down the steps to be taken to assess and decide whether an excessive deficit exists and to ensure its timely correction. It is based on Article 104 of the Treaty and on Council Regulation (EC) No 1467/97 of 7 July 1997 on speeding up and clarifying the implementation of the excessive deficit procedure. The latter is part of the Stability and Growth Pact.

When the ratio of the planned or actual government deficit to GDP exceeds a reference value of 3% and this excess is not small and temporary, or if the ratio of government debt to GDP exceeds a reference value of 60% and is not diminishing at a satisfactory pace, the Commission prepares a report. The EFC prepares an opinion on this report and, if the Commission considers that an excessive deficit exists, the Commission addresses an opinion to the ECOFIN Council. On the basis of a recommendation by the Commission, the ECOFIN Council adopts a decision on whether or not an excessive deficit exists. If an excessive deficit is deemed to exist, the ECOFIN Council recommends that the Member State concerned correct its excessive deficit and sets a deadline of no more than four months for the Member State to adopt corrective measures. The ECOFIN Council also sets a deadline for the correction of the excessive deficit, which should be completed in the year following its identification unless there are special circumstances. If the Member State adopts the recommended measures, the procedure is held in abeyance and the Commission and ECOFIN Council monitor their implementation. If the measures are not adopted, the ECOFIN Council takes a decision to this effect and, within one month, gives notice to the Member State to take measures to reduce the deficit. The content of the notice may or may not differ from that of the earlier recommendation depending on developments in the meantime. If these measures are adopted, the procedure is again held in abeyance and the Commission and the ECOFIN Council monitor their implementation. If, however, the necessary measures are not adopted within a period of no more than two months, as set by the ECOFIN Council, the ECOFIN Council takes a decision to impose sanctions. When the ECOFIN Council decides to impose sanctions, as a rule, a non-interest-bearing deposit is required. If the excessive deficit is not corrected after two years, the deposit is, as a rule, converted into a fine.

In summary, the excessive deficit procedure consists of three main steps. First, the decision that an excessive deficit exists and the issuing of recommendations by the ECOFIN Council to the Member State concerned. Second, a notice by the ECOFIN Council to the Member State to take measures to reduce the deficit. And, third, the imposition of sanctions. If it emerges at any point in time that the measures adopted by the Member State are not being implemented or are not effective, the ECOFIN Council proceeds to the next step of the procedure. The potential imposition of sanctions provides the ultimate incentive for the Member State to correct its excessive deficit in a timely manner.

In order to ensure that they will continue to function effectively after enlargement, both the EFC and the EPC reviewed their composition and working methods in the first half of 2003. Following these reviews, on 18 June 2003 the ECOFIN Council amended the statutes of these two committees. In the case of the EPC, it was decided to reduce the number of members that each delegation appoints to the committee. Whereas previously the Member States, the Commission and the ECB could each appoint up to four members, the number of members per delegation has been reduced to two under the new statutes. In the case of the EFC, by contrast, it was decided to leave the membership of the committee unchanged. The Member States, the Commission and the ECB will continue to appoint two members each. Moreover, the two members appointed by each of the Member States will continue to be selected from among senior officials from, respectively, the administration and the NCB. However, it was decided to vary participation in meetings of the committee depending on the issues discussed. Whenever the committee discusses issues related to the tasks and expertise of NCBs, the committee will meet in its “full composition”, with all members present. Otherwise, the committee may meet in its “restricted composition”, with only the members from administrations, the Commission and the ECB attending. The committee deems it important to retain the expertise and analytical insight of the NCBs, and to keep them involved in issues for which they bear responsibility.

The review of the EFC’s working methods took place not only in view of enlargement, but also against the background of the new EU arrangements for financial stability, regulation and supervision (see Section 2 of Chapter 3). In this regard, at its meeting on 3 December 2002 the ECOFIN Council asked the EFC to report to it on financial stability issues. In response to this mandate, the EFC now undertakes regular reviews of financial stability. Relevant non-members, including the Chairman of the ESCB’s Banking Supervision Committee, attend the meetings dedicated to this review.

In February 2003 the ECOFIN Council established the FSC, which replaced the former Financial Services Policy Group. It reports to the EFC and has the task of providing advice to the ECOFIN Council and the Commission on a wide range of policy issues affecting financial markets. The ECB has been granted observer status in the FSC.

## 2 INTERNATIONAL ISSUES

The ECB and NCBs continued to participate in the process of monetary, financial and economic cooperation at the international level. The arrangements for the international representation of the ECB remained unchanged. Within the EU, the coordination of international macroeconomic and financial issues continued in the context of the EFC, as well as among the IMF Executive Directors representing the EU Member States, including the ECB Observer.

On 29 May 2003 the President of the United States issued an executive order extending to the ECB the privileges, exemptions and immunities provided to public international organisations under the “International Organizations Immunities Act” of 1945. This followed the passage by the US Congress in November 2002 of legislation providing for the applicability of this Act to the ECB. The new legal framework should not only ensure better protection of the ECB’s assets held in the United States, but also facilitate a further strengthening of bilateral relations with relevant US institutions.

### 2.1 INTERNATIONAL MONETARY AND FINANCIAL SYSTEM

#### MULTILATERAL AND BILATERAL SURVEILLANCE OF MACROECONOMIC POLICIES

The ECB regularly exchanged information and views on economic developments and policies with policy-makers outside the euro area and with international institutions. The President of the ECB, together with the Eurogroup Presidency, participated in the global surveillance and exchange rate sessions of the meetings of G7 finance ministers and central bank governors. The President of the ECB also participated in the discussions on the state of the world economy in other fora, such as the meetings of the G10 governors, which he currently chairs, and those of the ministers and governors of the G10 and the G20. At the IMF, the ECB Observer took part in the IMF Executive Board’s discussions on the world economic outlook and its regular reviews of

world economic and market developments. Finally, at the OECD, the ECB participated in the activities of the Economic Policy Committee, which focused on global economic developments, prospects and policy requirements.

The IMF and the OECD conducted their regular reviews of the monetary, financial and economic policies of the euro area. The IMF decided to streamline, from 2003 onwards, its surveillance of euro area policies by reducing the number of fully-fledged Article IV consultations on those policies from two to one per year. The IMF also decided that IMF staff would continue to carry out two missions per year to the euro area authorities, including the ECB, but that the IMF Executive Board would discuss the outcome of the second mission only informally. The fully-fledged Article IV report on euro area policies, prepared by IMF staff, was published in September 2003.

In July 2003 the OECD published its Economic Survey of the Euro Area, which reviewed recent developments and short-term prospects, as well as fiscal, monetary and structural policies, and included a study on product market competition policies. The survey, prepared by an OECD team on the basis of, inter alia, a visit to the ECB, was finalised by the Economic and Development Review Committee of the OECD in which the Eurogroup Presidency, the European Commission and the ECB jointly represented the EU.

#### MONITORING OF DEVELOPMENTS IN GLOBAL FINANCIAL MARKETS

A number of international organisations and fora monitor global financial market developments. In 2003 the ECB and NCBs participated in these monitoring activities, providing their own analysis and views, particularly in the Financial Stability Forum (FSF), the BIS-based Committee on the Global Financial System (CGFS) and the OECD’s Committee on Financial Markets.

The ECB Observer participated in the IMF Executive Board discussions on the IMF's Global Financial Stability Reports. The ECB also participated as a member or observer in the work of a number of international institutions and fora on specific aspects of the functioning of international financial markets. The FSF reviewed issues related to the reinsurance industry, credit risk transfers, audit practices, accounting standards, corporate governance and offshore financial centres. The Basel Committee on Banking Supervision continued its work on the new Capital Accord (see Section 2 of Chapter 3). The CGFS published reports on "Credit risk transfer" and "Incentive structures in institutional asset management and their implications for financial markets" and launched work on studying the role of rating agencies in the area of structured finance and foreign direct investment in the financial sectors of emerging market economies. The ECB also took part in the activities of the Committee on Payment and Settlement Systems (CPSS), which is chaired by a member of the ECB's Executive Board (see Section 4 of Chapter 3).

### **INTERNATIONAL FINANCIAL ARCHITECTURE**

The ESCB contributed with its own assessment and analysis to the ongoing discussions on the architecture of the international financial system in the IMF and related fora, both through direct participation and through its involvement in EU coordination.

This included work on the promotion of economic and financial stability, inter alia through improved debt sustainability assessments and greater attention to potential balance sheet weaknesses in emerging market economies.

The international community also studied the contribution of institution-building to economic performance. In that context, the G20 held a discussion on the role of institution-building in the financial sector on the basis of case studies prepared by a number of G20 members,

including an ECB contribution on experience with financial integration in the EU.<sup>2</sup>

With regard to the orderly resolution of financial crises in emerging market economies, the IMF completed its review of access policy, i.e. the rules for determining the volume of financial assistance to be given to a member country that is experiencing balance of payment difficulties. The IMF Executive Board agreed on a number of procedural requirements and substantive criteria governing access to its resources beyond the normal limits, which are proportional to the quota assigned to each IMF member country.

The debate continued on procedures to facilitate orderly sovereign debt restructuring. The ESCB took the view that further progress was desirable with respect to the three broad groups of instruments that had been proposed.<sup>3</sup> One proposal involved modifying the contractual framework by including collective action clauses (CACs) aimed at facilitating coordination among creditors. This proposal is already being implemented. In the course of 2003 there was significant progress towards a more widespread inclusion of CACs in sovereign bonds issued under foreign jurisdictions. In an effort to lead by example, the EU Member States committed themselves to including such CACs in their relevant issues. A second proposal was the establishment of a Sovereign Debt Restructuring Mechanism (SDRM), a type of international bankruptcy procedure which would have been embedded in international law. At the spring meeting of the IMFC in April 2003, however, it became clear that there was insufficient political support for the creation of even a soft version of such a mechanism. Nevertheless, it remains to be explored to what extent specific features of the SDRM – such as the enhancement of transparency and disclosure,

2 "Globalisation: The role of institution building in the financial sector – The EU experience", ECB, November 2003.

3 For more details see the article entitled "Crisis resolution in emerging market economies – challenges for the international community" in the November 2003 issue of the ECB's Monthly Bulletin.



aggregation across debt issues and the creation of a dispute resolution forum – could be replicated outside an international legal framework. A third proposal was to develop a code of conduct to be implemented on a voluntary basis, which would set out best practices and guidelines for borrowers, lenders and the international official community. Work is currently ongoing on the drafting of such a code.

### THE INTERNATIONAL ROLE OF THE EURO

In 2003 the ECB continued its analysis of the international role of the euro.<sup>4</sup> It undertook work to improve its statistical framework and its analytical understanding of the use of the euro by non-euro area residents. New data were made available, in particular on the currency breakdown of the external trade of selected euro area countries, on daily foreign exchange transactions settled through Continuous Linked Settlement (CLS) and on the euro's role in the international loan market.

The ECB also launched work in 2003 on analysing at the microeconomic level the markets where the euro is mostly used by non-euro area residents. Particular attention was paid to the City of London's contribution to the role of the euro in financial markets outside the euro area. Overall, the results of this review confirmed that the international role of the euro continues to grow gradually, that it is characterised by a strong regional focus and that it is, to a certain extent, driven by the euro area itself.

The results also provided a clearer picture of both the geographical distribution of the users of the euro and the extent of its global role. In countries that are geographically remote from Europe, agents have thus far used the euro primarily to borrow funds (issuance of debt securities) and in foreign exchange transactions. Large US corporations have been very active issuers of euro-denominated bonds since the start of Stage Three of EMU, in particular to diversify their investor base. Financial centres in the United States and Asia

together accounted for a not insignificant proportion of foreign exchange activity in euro. There are indications that financial market participants from some of these countries tend to use the City of London as an entry point for their euro-denominated financial activities. In addition, according to market sources, demand from Asian investors for euro-denominated bonds issued by non-euro area residents increased in 2003, which points to a broader role of the euro as an international investment currency. However, the use of the euro as an international currency remains most prominent in countries neighbouring the euro area. In financial markets outside the euro area, a major role is played by the City of London. The share of the City of London in financial activity in euro by non-euro area residents typically ranges from one-third to two-thirds. Finally, additional evidence gained in 2003 suggests that the euro area is itself an important determinant of the international role of its currency, as it is a large and financially open economy. Since the start of Stage Three of EMU, euro-denominated bonds issued by non-euro area residents have to a significant extent been targeted at and purchased by euro area investors. Moreover, work conducted in 2003 highlighted that euro area-owned banks are among the largest players in euro-denominated markets in the City of London, thereby contributing substantially to the euro's role in financial markets outside the euro area.

### 2.2 COOPERATION WITH COUNTRIES OUTSIDE THE EU

As part of its international activities, the ECB continued in 2003 to develop a broad range of bilateral relations as well as contacts in multilateral frameworks with countries in various other regions of the world. In the EU's broad geographical neighbourhood, the ECB extended cooperation with Russia, Turkey, the Mediterranean region, the Middle East and

<sup>4</sup> See "Review of the international role of the euro", ECB, December 2003.

Africa. Furthermore, relations with key emerging market economies in Asia and the Pacific and in Latin America were deepened.

In November 2003 the Eurosystem started implementing a two-year project to provide technical assistance to the Central Bank of Russia (CBR), funded by the European Union within the framework of its programme of Technical Assistance for the Commonwealth of Independent States (TACIS programme). The project covers banking supervision and regulation, inspection and licensing, as well as bank rehabilitation. It draws on the vast experience which NCBs and supervisory authorities in the EU have in the field of banking supervision. Nine NCBs<sup>5</sup> and three EU non-central bank supervisors<sup>6</sup> will assign experts to provide training to around 400 members of the staff and management of the CBR over 24 months. The training will consist of courses and seminars, most of which will take place in Moscow at the CBR premises, as well as study visits by CBR experts to EU countries. The ECB is coordinating the project. With this project, the Eurosystem intends to contribute to further strengthening the CBR's banking supervision function as a key measure to foster a more stable financial environment.

The ECB continued its high-level policy dialogue with the Central Bank of the Republic of Turkey (CBRT). Turkey currently has the status of a candidate country for EU accession.<sup>7</sup> The discussions with the CBRT focused on Turkey's macroeconomic stabilisation process, the planned introduction of a formal inflation-targeting framework by the CBRT and the economic situation in the euro area. In addition to the policy dialogue, technical cooperation between various business areas of the ECB and the CBRT continued throughout 2003.

Over the past few years, the ECB has established bilateral relations with central banks in the Mediterranean region. In October 2003 the ECB, in cooperation with the Banca d'Italia, organised a technical workshop for representatives of the central banks of the

Barcelona partner countries.<sup>8</sup> The workshop was in preparation for a high-level Eurosystem seminar involving governors of Mediterranean central banks, which took place in January 2004 in Naples. This seminar focused on economic and financial relations between the euro area and the Mediterranean countries, on exchange rate arrangements and on financial sector reforms highlighted by the workshop participants.

In the Middle East, the ECB further developed its relations with the Gulf Cooperation Council (GCC) in view of the intention of the six GCC member states<sup>9</sup> to launch a single currency by 2010. In June the ECB participated in a meeting in Qatar of the GCC technical committee tasked with preparing for monetary union.

In 2003 bilateral relations with central banks in Africa continued to focus on issues related to monetary unions. Several events provided the ECB with the opportunity to contribute to the discussions in the region on the basis of the experience of EMU. The ECB was invited to participate in meetings of the Committee for the Institutional Reform of the West African Monetary Union,<sup>10</sup> which were held at the Banque Centrale des Etats de l'Afrique de l'Ouest (BCEAO) in Dakar, Senegal. The Committee, which includes experts from the BCEAO, other central banks, governments and academia, is mandated to examine the BCEAO

5 The Deutsche Bundesbank, the Banco de España, the Banque de France, the Central Bank & Financial Services Authority of Ireland, the Banca d'Italia, De Nederlandsche Bank, the Oesterreichische Nationalbank, the Banco de Portugal and Suomen Pankki – Finlands Bank.

6 Rahoitustarkastus from Finland, the Finansinspektionen from Sweden and the Financial Services Authority from the United Kingdom.

7 The European Council in Helsinki in 1999 granted Turkey the status of a candidate for EU membership. The European Council in Copenhagen in 2002 indicated that if the European Council in December 2004 decided that Turkey fulfilled the Copenhagen political criteria, the EU would open accession negotiations with Turkey without delay.

8 Algeria, Cyprus, Egypt, Israel, Jordan, Lebanon, Malta, Morocco, the Palestinian Authority, Syria, Tunisia and Turkey.

9 Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates.

10 Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal and Togo.

statutes and the institutional set-up of the monetary area without prejudice to the existing exchange rate arrangement. Moreover, the ECB participated in the forum for finance ministers of the West African Monetary Zone<sup>11</sup> that was held in Accra, Ghana, to follow progress towards monetary integration between English-speaking countries in the region. The ECB additionally attended the annual governors' forum of the Macroeconomic and Financial Management Institute of Eastern and Southern Africa, which brought together, in Basel, central bank governors from 12 African countries. The forum discussed existing regional monetary union projects in Africa, as well as the lessons on monetary integration to be drawn from EMU.

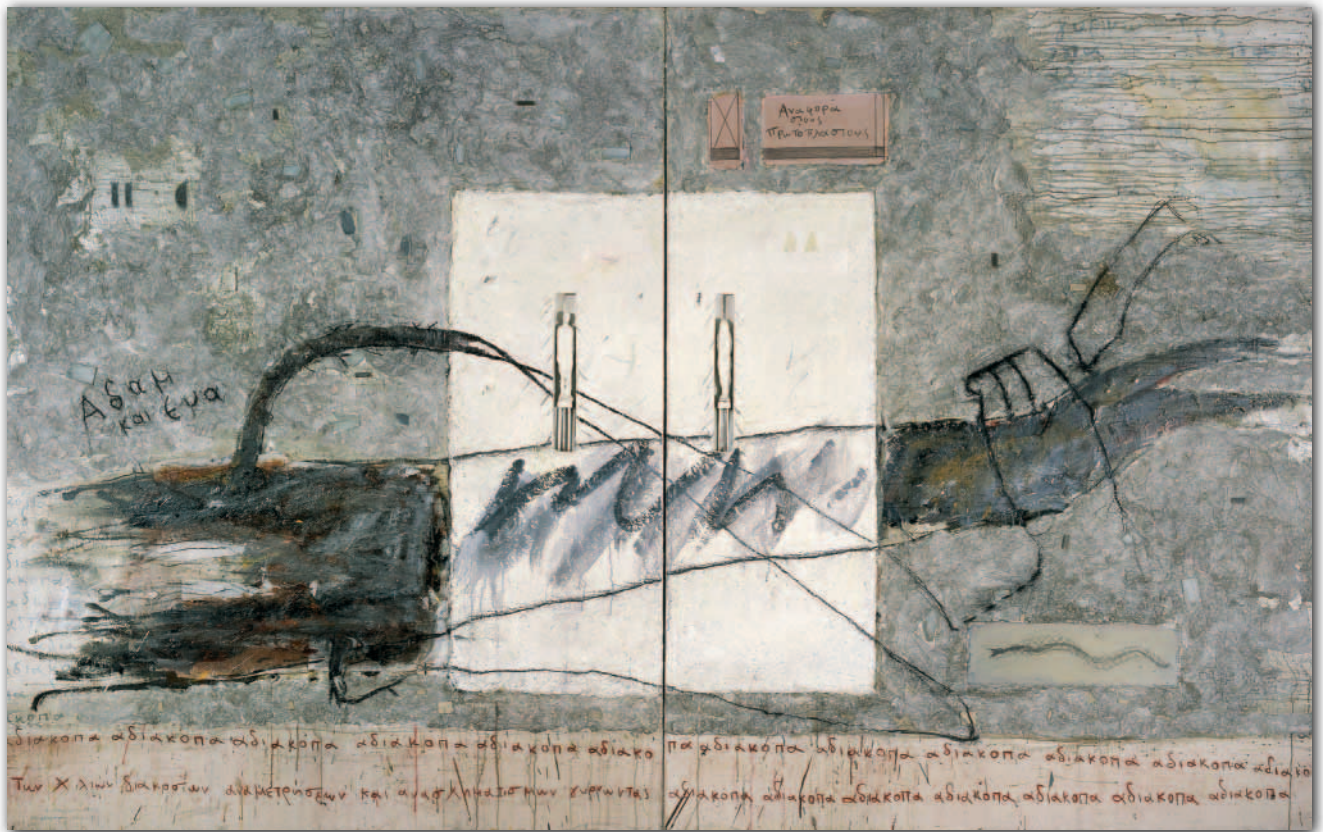
In the course of the year, bilateral relations with East Asia were further strengthened, not least by a visit by a member of the Executive Board to Korea, Japan and Indonesia. The ECB also participated in the fifth Asia-Europe (ASEM) Finance Ministers' Meeting in Bali, Indonesia, in July 2003. The contribution of the ECB focused on economic integration in the East Asian region, the role of central banks in crisis management and European experience with regulation and cooperation in pursuing financial stability.

In 2003 the ECB became a "collaborating member" of the Centre for Latin American Monetary Studies (CEMLA), after having participated in an increasing number of CEMLA conferences and meetings since 1999. One of the main objectives of CEMLA is to promote a better understanding of monetary and banking matters in Latin America and the Caribbean, as well as to inform on developments in regional and international monetary and financial policies. CEMLA also initiated a project to promote convergence at a sub-regional grouping level.

<sup>11</sup> Gambia, Ghana, Guinea, Nigeria and Sierra Leone.



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**Format**  
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## CHAPTER 5

# ACCOUNTABILITY

## I ACCOUNTABILITY VIS-À-VIS THE GENERAL PUBLIC

Over the past decades, central bank independence has emerged as a key institutional feature of the economic policy frameworks of industrialised countries. The decision to grant central banks independence from political influence is firmly grounded in historical experience, economic theory and empirical evidence, which shows that central bank independence is conducive to maintaining price stability and thus contributes to overall economic welfare.

At the same time, it is a fundamental principle of democratic societies that public authorities need to be accountable to the general public, from which their mandate and independence ultimately derive. Accountability can be understood as the legal and institutional obligation of an independent central bank to explain its decisions clearly and thoroughly to citizens and their elected representatives, thereby holding the central bank responsible for achieving its objectives.

The Treaty establishing the European Community, which lays down the tasks and objectives of the ESCB, has been ratified by all EU Member States in line with their national constitutional requirements. Thus, the European citizens have endowed the ESCB with the mandate to maintain price stability and, without prejudice to this primary objective, to support the general economic policies of the Community. At the same time, the Treaty contains precise reporting requirements, which allow the European public and their elected representatives to hold the ECB responsible for attaining these objectives. This institutional set-up has been reconfirmed by the Convention on the future of Europe and included in the draft Treaty establishing a Constitution for Europe (see Section 1 of Chapter 4).

From its inception, the ECB has acknowledged the fundamental importance of its accountability obligations and therefore maintains a regular dialogue with European citizens and their elected representatives. This commitment is reflected, *inter alia*, in the numerous public speeches held by members of the Governing

Council throughout the euro area in 2003. Such contacts with European citizens allow the Eurosystem to explain the Governing Council's policy decisions and to directly address any issues or concerns.

Beyond such direct contacts with European citizens, the Treaty lays down a number of reporting obligations for the ECB, of which the Annual Report – addressed to the European Parliament, the EU Council, the Commission and the European Council – is one example. Other reporting requirements include the publication of a quarterly report and a weekly financial statement. The ECB exceeds these requirements by publishing comprehensive bulletins on a monthly basis. At the institutional level, the Treaty assigns a prominent role to the European Parliament with regard to the accountability of the ECB (see Section 2 of this chapter).

In several respects, accountability is closely related to transparency. Transparency means not only releasing information, but also structuring that information in such a way that the public can understand it. Transparency facilitates the process of holding central banks accountable for their actions. The ECB regards transparency as a crucial component of its monetary policy framework. Transparency requires central banks to clearly explain how they interpret and implement their mandates. This helps the public to monitor and evaluate a central bank's performance. It also requires an explanation both of the analytical framework used for its internal decision-making and assessment of the state of the economy and of the economic rationale underlying its policy decisions. Transparency is strongly enhanced by means of a publicly announced monetary policy strategy. In line with these considerations, the ECB announced its monetary policy strategy in 1998. This strategy was confirmed and clarified in May 2003, following a thorough evaluation by the Governing Council (see Section 1 of Chapter 1). The ECB thereby provided the general public with a clear benchmark against which the ECB's performance can be assessed.

Transparency can render monetary policy more effective for several reasons. First, a central bank can foster credibility by being clear about the interpretation of its mandate and how it goes about achieving it. When a central bank is perceived as being determined and capable of achieving its policy mandate, it helps to anchor expectations about future price developments. If, in turn, expectations are well anchored at levels compatible with price stability, there is less reason for economic agents to deviate from the assumption of price stability when setting wages or prices and there is also a lower risk of an inflationary or deflationary wage-price spiral developing.

Second, a strong commitment to transparency imposes self-discipline on policy-makers, which, in turn, helps to ensure that their policy decisions and explanations are consistent over time. Facilitating public scrutiny of monetary policy decisions enhances the incentives for decision-making bodies to fulfil their mandates in an appropriate and consistent manner.

Third, by publicly announcing its monetary policy strategy and communicating its regular assessment of economic developments, the central bank provides guidance to the markets so that expectations can be formed more efficiently and accurately. This helps financial markets to better understand the response pattern of monetary policy to economic developments and thus to anticipate the broad direction of monetary policy over the medium term. This, in turn, should contribute to smoothing financial market developments.

In order to ensure that it is both accountable and transparent, the ECB uses a variety of communication tools, which go far beyond the reporting requirements laid down in the Treaty and which are explained in more detail in Chapter 6.<sup>1</sup>

<sup>1</sup> For a more detailed discussion of accountability and transparency, see the November 2002 issue of the Monthly Bulletin.



## 2 ACCOUNTABILITY VIS-À-VIS THE EUROPEAN PARLIAMENT

### 2.1 OVERVIEW OF RELATIONS WITH THE EUROPEAN PARLIAMENT IN 2003

In line with the provisions of Article 113 of the Treaty, the ECB continued to report regularly to the European Parliament on the decisions taken in the field of monetary policy and its other tasks. As in past years, the main forum for the exchange of views between the ECB and the European Parliament were the quarterly testimonies by the President of the ECB before the Committee on Economic and Monetary Affairs. The President was also invited to present the ECB's Annual Report 2002 at the plenary session of the European Parliament.

Moreover, in line with common practice, other members of the Executive Board were also invited to appear before the European Parliament for an exchange of views on a variety of topics. In April 2003 the Vice-President presented the ECB's Annual Report 2002 to the Committee on Economic and Monetary Affairs. In March the Committee on Economic and Monetary Affairs heard Mr Issing's views on the economic environment and on the draft Broad Economic Policy Guidelines for 2003-2005.

Beyond the scope of its Treaty obligations, the ECB continued its voluntary practice of replying to written questions submitted by members of the European Parliament on issues regarding the fulfilment of the ECB's mandate.

Finally, the role of the European Parliament in the appointment of a new President and other members of the Executive Board should also be mentioned. Article 112 of the Treaty stipulates that the European Parliament shall give its opinion on candidates prior to their appointment by common accord of the governments of the Member States at the level of Heads of State or Government. In order to prepare its opinions, the European Parliament invited Mr Trichet and Mrs Tumpel-Gugerell to appear before the Committee on Economic and Monetary Affairs to present their views and answer questions from Committee members. Following these

hearings, the plenary of the European Parliament endorsed both appointments.

### 2.2 VIEWS OF THE ECB ON SELECTED TOPICS RAISED AT MEETINGS WITH THE EUROPEAN PARLIAMENT

While the testimonies before the Committee on Economic and Monetary Affairs covered a wide range of policy areas, the main focus was on the ECB's monetary policy decisions and its assessment of the economic and monetary developments underlying these decisions. The following sub-sections deal with other important issues raised by the European Parliament and recall the views presented by the ECB. Many of these issues are also addressed in the European Parliament resolution of 3 July 2003 on the Annual Report presented by the ECB last year.

#### REFORM OF THE VOTING MODALITIES OF THE GOVERNING COUNCIL

In accordance with Article 10.6 of the Statute of the ESCB, on 3 February 2003 the ECB submitted a recommendation to the EU Council for a reform of the voting modalities of the Governing Council (see Section 1 of Chapter 8 for further details). The above-mentioned Article also stipulates that the European Commission and the European Parliament shall be consulted prior to any decision by the EU Council. In February 2003 the President of the ECB presented the recommendation to the Committee on Economic and Monetary Affairs. During the debate, the recommendation met with criticism.

In its opinion of 13 March 2003, the European Parliament rejected the ECB's recommendation and suggested maintaining the existing rules, whereby all NCB governors of the Eurosystem have the right to vote in the Governing Council.

In March 2003 the EU Council meeting in the composition of the Heads of State or Government unanimously adopted the new voting modalities of the Governing Council,

endorsing the ECB's recommendation. The reform of the voting modalities will enter into force following ratification by all Member States in accordance with their respective constitutional requirements. The new voting modalities will apply once the number of NCB governors in the Governing Council exceeds 15.

### **EVALUATION OF THE ECB'S MONETARY POLICY STRATEGY**

The President reported to the European Parliament on the outcome of the Governing Council's evaluation of the ECB's monetary policy strategy (for further details, see Section 1 of Chapter 1). A number of members of the Committee on Economic and Monetary Affairs welcomed the confirmation and clarification of the strategy, in particular as regards the definition of price stability, and said it ensured the continuity of the ECB's policy. Other Committee members raised the issue of whether the ECB's monetary policy strategy was symmetric in terms of avoiding both inflation and deflation, and whether the ECB's definition of price stability would take sufficient account of a potential measurement bias in the HICP.

The President explained that the ECB would continue to remain vigilant in terms of avoiding both inflation and deflation. In this respect, the recent clarification that, in the pursuit of price stability, the Governing Council would aim to maintain inflation rates below, but close to, 2% of an annual increase in the HICP over the medium term, ensured a significant and adequate safety margin to guard against the risk of deflation. He added that, although the size of the measurement bias in the euro area was still uncertain, available studies indicated that it was likely to be limited. By making it clear that price stability should be maintained over the medium term, the ECB took account of the fact that it was impossible for a central bank to fine-tune short-term price developments and that these could therefore temporarily exceed the level of price increases regarded as compatible with price stability.

In its resolution on the ECB's Annual Report 2002, the European Parliament welcomed the evaluation of the ECB's monetary policy strategy and expressed its belief "that the clarifications will strengthen the appropriateness of the policy strategy for the years to come".

### **ACCOUNTABILITY AND TRANSPARENCY**

Accountability and transparency once again figured prominently in the exchanges between the ECB and the European Parliament. The views of both institutions remained, in substance, unchanged. In its resolution on the ECB's Annual Report 2002, the European Parliament reiterated its call for both the publication of summary minutes and the balance of votes in Governing Council meetings.

The President recalled that the ECB's policy on these issues reflected the specific institutional environment in which the ECB operated, with monetary policy decisions being taken at the euro area level and economic policies remaining largely the responsibility of the individual Member States. Given that this arrangement ran the risk of making Governing Council members seem like national representatives, the ECB had decided not to provide any indications that could reveal – or lead to speculations about – individual voting behaviour. This would help to ensure that Governing Council decisions continued to be taken exclusively from a euro area perspective. The ECB's approach also helped to focus public attention on the outcome of policy deliberations rather than on individual voting behaviour. Thus it ensured that its messages were clear, thereby enhancing the effectiveness and predictability of its monetary policy decisions. Finally, the President recalled that the communication channels chosen by the ECB, in particular the monthly press conferences held immediately after the Governing Council meetings, were more effective in terms of timeliness than the publication of minutes.

On a more general level, the President emphasised the fact that the exchanges of views

with the European Parliament were carefully assessed and taken into account in the deliberations of the ECB's decision-making bodies. For example, the President mentioned the publication of the staff economic projections, which had come about as a result of a request from the European Parliament. Indeed, the ECB would continue to seek ways of enhancing its accountability and transparency wherever the accomplishment of its policy objectives allowed.

#### **INTERNATIONAL ROLE OF THE EURO AND EXTERNAL REPRESENTATION OF THE EURO AREA**

Another policy area considered in much detail by the European Parliament in 2003 was the international role of the euro and the external representation of the euro area. Several members of the Committee on Economic and Monetary Affairs called for more active policies in order to contribute to a greater use of the single currency at the international level, for instance as an invoicing currency for the import of commodities and energy supplies to the euro area. Moreover, in its resolution on the international role of the euro area and its first assessment of the introduction of banknotes and coins, adopted on 3 July 2003, the European Parliament suggested the appointment of a single representative for the euro area, who would be given "broad powers to speak and act on behalf of euro zone countries in all important multilateral financial and economic fora". In the European Parliament's view, this role could be performed by a Vice-President of the European Commission responsible for Economic and Monetary Affairs.

The President recalled that, in the view of the ECB, the international role of the euro was essentially market-driven. Against this background, the ECB would neither encourage nor discourage non-euro area residents to use the euro. At the same time, the President also said that the international role of the single currency had gradually increased over the past few years. He shared the European Parliament's view that there was a need to improve the statistical framework for monitoring the use of

the euro at the international level, an objective to which the ECB was actively contributing and which was also addressed in its legal opinions.

As regards the external representation of the euro area, the President emphasised that as far as the euro was concerned, the ECB would continue to act as the institution expressing the euro area's positions internationally, in line with its responsibilities, as set out in the Treaty. According to its mandate, the ECB, as represented by members of its decision-making bodies, was the single external voice of the euro area for all matters related to the single monetary policy, a role that had also been endorsed by the Convention on the future of Europe.



**Artist**

G rard Garouste

**Title**

La du gne et le p nitent, 1998

**Material**

Oil on canvas

**Format**

195 x 160 cm



## CHAPTER 6

# EXTERNAL COMMUNICATION

## I COMMUNICATION POLICY

Communication is an integral part of the ECB's monetary policy and the performance of its other tasks. In its communication with the public, the media and specialised audiences – such as financial market participants – the ECB seeks to contribute to the effectiveness, efficiency and credibility of its monetary policy. A further objective is to give full account of its actions, as explained in more detail in Chapter 5. In order to achieve these objectives, the ECB must be open and transparent. It must enhance the public's knowledge and understanding of its tasks and policies as well as its close collaboration with the NCBs in the Eurosystem.

The ESCB's communication efforts are targeted at audiences in the EU with particular focus on the euro area. It is therefore important for the ESCB to be able to address a variety of regional and national audiences in their own languages and environments. In this context, the decentralised framework of the ESCB is instrumental in ensuring the proper dissemination of information to the general public and to interested parties. Communication experts from the ECB and the NCBs regularly exchange views in order to coordinate their efforts.

In view of the forthcoming enlargement of the EU, the ESCB's communication efforts have also been increasingly directed towards audiences in the acceding countries. The ECB closely cooperates with the acceding country central banks, thus broadening the geographical scope of its external communication.

## 2 COMMUNICATION TOOLS

The ECB uses a number of communication tools in order to meet the above-mentioned objectives. The most important channels of communication are the monthly press conferences held by the President and the Vice-President, which are an essential tool for real-time communication, the Monthly Bulletin and the Annual Report. The press conferences and the Monthly Bulletin are used to present the ECB's assessment of economic developments and explain monetary policy decisions in a transparent and timely manner. The ECB remains one of the most transparent central banks in the world. The concept of a regular, real-time and detailed explanation of the ECB's policy, assessments and decisions, introduced in 1999, represents a uniquely open and transparent approach to central bank communication.

The Annual Report is also particularly important, as it is one of the statutory publications of the ECB and is addressed to the European Parliament, the EU Council, the European Commission and the European Council. It presents the activities of the ESCB and the monetary policy of both the previous and the current year, and thus helps to hold the ECB accountable for its actions.

The Monthly Bulletin also contains articles providing information on longer-term developments, general central banking topics and the analytical tools used by the Eurosystem for the monetary policy strategy. A list of articles published in 2003 can be found in the annex on documents published by the ECB. In January 2004 the Monthly Bulletin was published for the first time in its new format. This new format provided the basis for a review of the format of other publications and will eventually lead to the adoption of a new corporate design for all ECB publications.

The President of the ECB makes quarterly appearances in the form of testimonies before the European Parliament's Committee on Economic and Monetary Affairs and once a year before the European Parliament at its plenary

session. Other members of the Executive Board of the ECB are also invited to appear before the Committee (see Section 2 of Chapter 5).

Speeches and interviews given by members of the ECB's decision-making bodies also constitute an important means of communication.

Furthermore, as part of its regular reporting to the financial sector and the general public, the ECB publishes press releases on relevant Governing Council decisions, on special studies conducted by the ECB and on other topics of interest.

Dialogue with financial market participants and with other interested parties is sometimes formalised through public consultation procedures. In 2003 this instrument was used to receive their views on issues related to payment and securities settlement systems, as well as to the collateral framework of the Eurosystem (see Chapter 2).

In addition, the ECB contributes to the dissemination of research findings on the whole range of central bank activities by publishing Working Papers and Occasional Papers and organising academic conferences, seminars and workshops. In 2003 the main events of this kind included the "Seminar on Banknote Substrates", the conference on "Private and public sector challenges in the payment system", organised by the ECB and the G10 Committee on Payment and Settlement Systems, the "Insolvency Symposium", jointly sponsored with the BIS, the conference on "Prices, Productivity and Growth" organised in collaboration with the Banco de España, the conference on the "Euro Area Business Cycle Network", the "International Research Forum on Monetary Policy" in Washington D.C., and a number of other workshops organised in collaboration with various academic associations and euro area NCBs.

All documents published by the ECB are available on the ECB's website ([www.ecb.int](http://www.ecb.int)),



which also serves as a contact point for queries from the public and as a platform for the launch of public consultations. The use of the website has grown rapidly over recent years. In particular, the “Statistics”, “Press releases” and “Job opportunities” sections are frequently visited. In 2003 the ECB began redesigning its website to facilitate searches for specific documents and to aid navigation between the various sections. Another important objective was to enhance the accessibility of the website not only for experts, but also for the general

public and disabled users. The launch of this new website is scheduled for the second quarter of 2004.

The ECB also practises openness in a literal sense, by welcoming visitor groups to its premises in Frankfurt. In 2003 more than 7,000 visitors received first-hand information in the form of lectures and presentations given by ECB staff. Students of economics and other social sciences make up the majority of visitors.

### 3 COMMUNICATION ISSUES IN 2003

Among the most important communication issues in 2003 were:

- The evaluation of the monetary policy strategy. The Governing Council confirmed the monetary policy strategy and clarified some of its elements (see Section 1 of Chapter 1).
- The monetary policy stance (see Section 2 of Chapter 1).
- The Governing Council’s view on fiscal developments in the euro area (see Section 2 of Chapter 1).
- Monetary policy operations. Following a public consultation procedure, a number of changes to the operational framework were adopted to take effect in the first quarter of 2004 (see Section 1 of Chapter 2).
- Counterfeiting of euro banknotes. The ECB continued to regularly inform the public of developments in the area of euro counterfeits (see Section 3 of Chapter 2).
- The ECB’s view on the draft Treaty establishing a Constitution for Europe (see Section 1 of Chapter 4).
- Supervisory issues and financial stability, in particular the ECB’s participation in the preparations for the introduction of the New Basel Capital Accord (“Basel II”) (see Chapter 3).
- The Governing Council’s policy position on exchange rate issues relating to the acceding countries (see Section 1 of Chapter 7).
- Cooperation with the central banks of the acceding countries and development of working relationships with the media in those countries (see Chapter 7).
- Development of new and improved money and banking statistics (see Chapter 2).
- Organisational matters of the ECB, in particular the preparations for the ECB’s future premises as well as the efforts to strengthen the functioning of its internal organisation (see Box 12 and Section 2 of Chapter 8).

### THE ECB'S MISSION STATEMENT

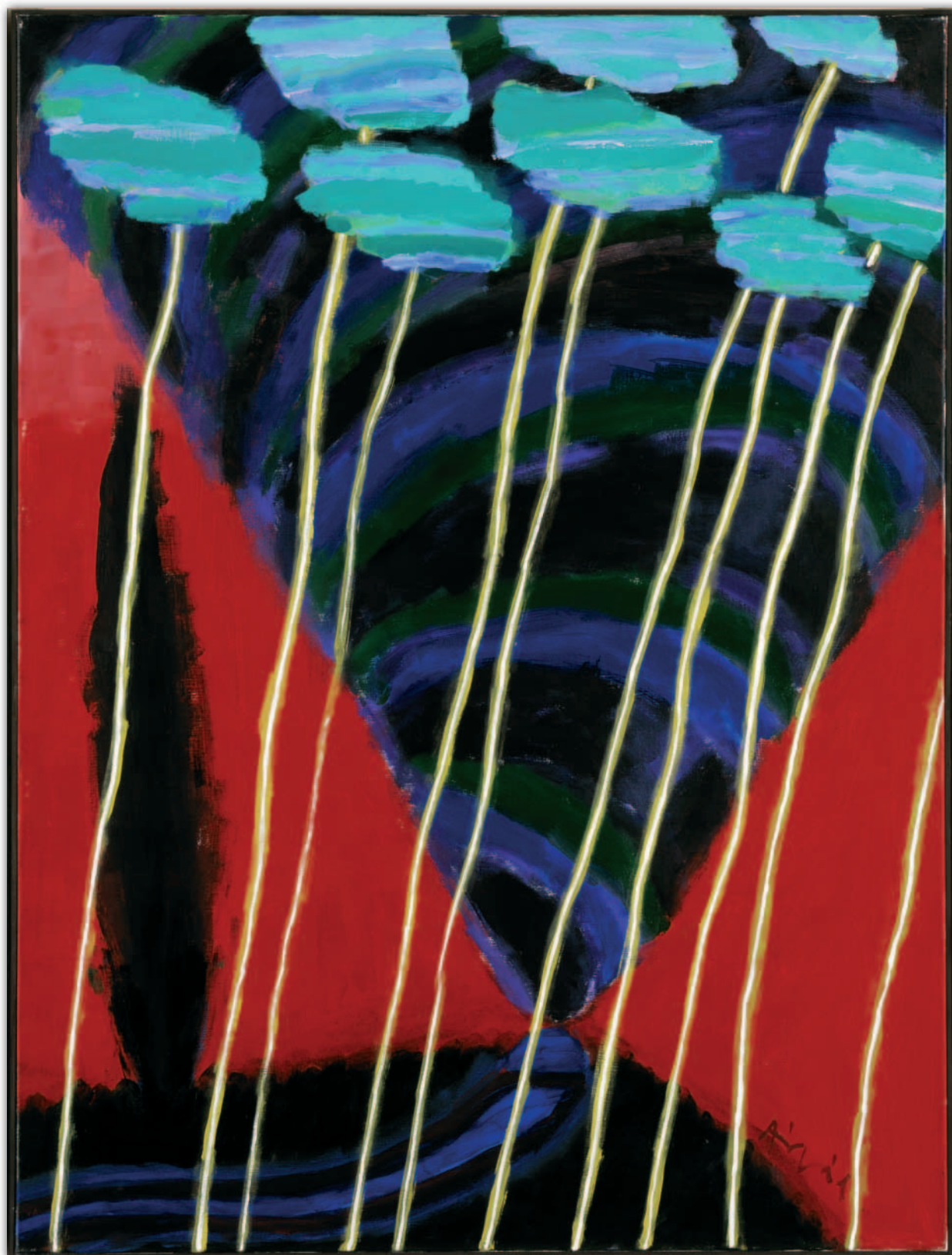
In August 2003 the Executive Board adopted the ECB's mission statement. It is regarded as fundamental in both the internal and external communication of the ECB. Its adoption should be seen as part of the efforts to strengthen the functioning of the ECB's internal organisation (see Section 2 of Chapter 8). The mission statement reads as follows:

*'The European Central Bank and the national central banks together constitute the Eurosystem, the central banking system of the euro area. The main objective of the Eurosystem is to maintain price stability: safeguarding the value of the euro.'*

*'We at the European Central Bank are committed to performing all central bank tasks entrusted to us effectively. In so doing, we strive for the highest level of integrity, competence, efficiency and transparency.'*

In four short sentences the mission statement captures the "what, why and how" of the ECB. The first sentence recognises the ECB's vital relationship with the NCBs of the euro area. The second sentence emphasises the primary objective assigned to the Eurosystem by the Treaty. In addition to this primary objective, the ECB also carries out a wide range of other tasks and activities in the pursuit of its mandate, as reflected in the third sentence. The fourth and final sentence illustrates the values which the staff and management of the ECB regard as important for the performance of their duties. In a survey, the staff of the ECB were given the opportunity to influence the choice of values which should be given particular prominence. All staff members were asked to rank a number of values according to their importance for the work of the ECB. The results of this survey served as direct input for the formulation of the mission statement.

**Artist**  
Árpád Szabados  
**Title**  
Untitled, 1995  
**Material**  
Mixed media on canvas  
**Format**  
120 × 90 cm



## CHAPTER 7

# ENLARGEMENT OF THE EUROPEAN UNION

The ten acceding countries – the Czech Republic, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Slovenia and Slovakia – and the 15 current EU Member States signed the Accession Treaty at the informal European Council meeting in Athens on 16 April 2003. Two additional countries – Bulgaria and Romania – have not yet concluded accession negotiations but were given the prospect of joining the EU in 2007.<sup>1</sup> The Accession Treaty sets out the framework and conditions for enlarging the EU to 25 Member States. All the current and new Member States have ratified the Treaty. As part of the ratification process, all of the acceding countries except Cyprus held public referendums: these nine countries voted in favour of joining the EU, eight of them by a large majority.

Upon accession, the ten countries will join EMU with the status of “Member States with a derogation” (countries which have not yet adopted the euro) and their central banks will become part of the ESCB. Once these countries are deemed to have achieved sustainable convergence in compliance with the Maastricht convergence criteria<sup>2</sup>, they will adopt the euro and their central banks will become part of the Eurosystem.

In 2003 the Eurosystem continued to be involved in the accession process in all its areas of competence. It conducted policy and technical dialogues to help prepare the central banks of the acceding countries for integration into the ESCB and, subsequently, the Eurosystem. As regards the policy dialogue, a number of bilateral contacts were made with the acceding country central banks to discuss monetary and exchange rate policies and other central banking issues. The main aim was to try to enhance mutual understanding of the challenges ahead. In addition, the ECB continued to be involved in the “Economic Dialogue” between the EU and the candidate countries<sup>3</sup> and, in November 2003, it presented a report on macroeconomic and financial stability challenges in acceding countries to the Economic and Financial Committee. Finally, in

March 2004 a high-level seminar on the accession process was held in Paris with all ESCB and accession country central banks. Among other topics, this seminar covered monetary and exchange rate policies and the practical functioning of the Exchange Rate Mechanism II (ERM II).

As far as technical cooperation in 2003 was concerned, the Eurosystem intensified its support for the acceding country central banks to help them prepare for membership of the ESCB and the Eurosystem. These activities focused primarily on statistics, legal issues, payment systems, monetary policy and operational issues, but also involved other areas of central banking, such as financial stability and supervision, banknotes, internal audit and information technology.

This chapter gives an overview of recent economic, financial and legal developments in the acceding countries and describes in more detail some of the accession-related preparatory activities carried out by the Eurosystem.

1 The term “accession countries” is used to refer to the ten acceding countries and Bulgaria and Romania.

2 See Article 121 (1) of the Treaty establishing the European Community.

3 The term “candidate countries” is used to refer to the 12 accession countries and Turkey.

# I KEY ECONOMIC AND FINANCIAL DEVELOPMENTS AND POLICY ISSUES

In 2003 the Eurosystem continued to monitor economic and financial developments in the acceding countries. The most relevant economic issues for the Eurosystem were inflation developments, monetary and exchange rate policies, economic growth and real convergence, balance of payments developments and fiscal policy. The monitoring of financial markets included recent developments in both the banking sector and bond and stock markets.

## I.1 ECONOMIC DEVELOPMENTS

### INFLATION

Inflation rates in the acceding countries have fallen remarkably quickly in recent years. Average inflation has now fallen from double-digit rates at the end of the 1990s to a level close to that of the euro area. In early 2003 average inflation was even below the euro area level. Towards the end of 2003 a pick-up in inflation rates to slightly above euro area levels was recorded. However, progress with disinflation continued to vary across individual countries. While some countries recorded very low inflation and, in a few cases, even temporary decreases in general price levels, the disinflation process is not yet complete in others.

The strong general decline in inflation rates was largely the result of policy frameworks with a clear focus on fighting inflation. However, temporary factors also played an important role, in particular cyclical developments, the lagged effects of strong exchange rate appreciation against the euro, some easing of energy prices and a decline in food prices. Alongside diminishing inflationary pressures, policy interest rates continued to decline in most acceding countries in 2003.

It will, however, be a real challenge to keep inflation at such low levels. Several factors could lead to higher inflationary pressures, which in turn would make the economies vulnerable to rising inflation expectations and

wage-price spirals. First, cyclical conditions are beginning to improve in some countries. Second, temporary factors such as declining food prices are fading out. Third, temporary inflationary pressures may also arise from accession-related factors, such as price deregulation, an adjustment of food prices as the acceding countries adopt the Common Agricultural Policy, and indirect tax adjustments required by EU law. Finally, the catching-up process is likely to affect to some extent the inflation performance in the coming years as a result of the “Balassa-Samuelson effect” (see Box 4) and wage pressures, the impact of which is likely to depend on the behaviour of nominal exchange rates.

### MONETARY AND EXCHANGE RATE POLICIES

The acceding countries maintain a variety of monetary policy strategies, reflecting the heterogeneity among them in nominal, real and structural terms. Some countries with fixed exchange rate regimes have an exchange rate target in place, while other countries operate inflation-targeting frameworks or mixed strategies. Two countries peg their currency unilaterally to the euro within a  $\pm 15\%$  fluctuation band. During 2003 exchange rate regimes in the acceding countries remained unchanged, although some refinements were made to the monetary policy frameworks of several acceding countries, mostly with a view to gearing monetary policy more towards future monetary integration.

Monetary and exchange rate strategies in place made a significant contribution to macroeconomic stabilisation in the acceding countries by providing a credible anchor for inflation expectations, taking into account the high degree of openness that most of these countries display. More recently, however, some countries with more flexible exchange rate arrangements have experienced an increase in nominal exchange rate volatility. These developments reflected a number of factors, including changes in investor sentiment following new macroeconomic and fiscal developments and, in some cases, possibly

external shocks. High exchange rate volatility may complicate monetary policy, have adverse effects on trade and make it more difficult to assess equilibrium exchange rates.

When the new Member States join the EU, they will be required to treat their exchange rate policies as a matter of common interest and to pursue price stability as the primary objective of monetary policy. Moreover, they will be expected to join ERM II at some point in time. Although ERM II can accommodate different exchange rate regimes, it is not compatible with free floating (or managed floats without a mutually agreed central rate), crawling pegs or pegs against anchors other than the euro. This means that, in some cases, exchange rate policy frameworks must be brought into line with the features of the mechanism. Several acceding countries are currently reviewing their monetary and exchange rate strategies in the light of future participation in ERM II.

On 18 December 2003 the ECB published a policy position of the Governing Council on exchange rate issues relating to the acceding countries. This position aims to help to guide the process of monetary integration in the prospective Member States.

#### **ECONOMIC GROWTH AND REAL CONVERGENCE**

In an environment of slow global growth, economic growth showed significant resilience in most acceding countries in 2003, with real GDP growth projected to be around 3.5% on average. Output developments were particularly strong in the Baltic States, and Poland, the largest acceding country, experienced a solid economic recovery after two years of low growth. The key engine of growth in most acceding countries was strong domestic demand, fuelled in some countries by fiscal loosening and strong increases in wages. In most acceding countries real export growth moderated but still displayed robust momentum considering the weak global environment and the countries' strong trade integration with the euro area. In some countries the contribution of

net exports to real GDP growth actually increased considerably.

At present, the GDP-per-capita gap with the current EU Member States is still large for most acceding countries. Expressed in purchasing power parity terms, the acceding countries' estimated per capita GDP stood on average at around 49% of the EU average in 2002. In terms of nominal exchange rates, however, it reached only 26% on average. Moreover, real convergence in income levels with the EU is a gradual process, with growth differentials between the acceding countries and the current EU Member States usually having been in the range of around 2 percentage points in the past few years.

In the years to come, a key challenge for acceding countries will be to advance real convergence without putting current achievements in terms of macroeconomic stability at risk. For most acceding countries, an average medium-term growth rate of between 4% and 6% seems within reach, provided that structural reforms proceed and stability-oriented policies are kept in place. Real GDP growth is expected to rise as a number of growth-enhancing factors increasingly come into play, in particular EU accession. Although structural changes and high investment will be conducive to growth, they might also imply increased output volatility, especially as investment tends to be more cyclical than consumption. This factor will therefore continue to pose challenges for policy-makers.

#### **BALANCE OF PAYMENTS DEVELOPMENTS**

Real convergence was accompanied by sizeable current account deficits in most acceding countries. The average current account deficit for the ten countries is estimated to have been around 3.9% of GDP in 2003, with deficits being particularly high in some of the smaller countries. To the extent that the widening of the current account deficit reflects savings and investment decisions based on incorrect perceptions of economic conditions – for

example, an overestimation of potential output growth or an underestimation of the probability of adverse shocks – the sustainability of the external position may come under pressure in the medium to longer term and external vulnerabilities may increase. Up to now, empirical findings have suggested that most of the acceding countries do not face major competitiveness problems. Despite the global economic slowdown, most countries have witnessed sustained rates of export growth over the past few years and, in many cases, have enlarged their market shares in the EU.

Looking ahead, risks to external competitiveness could arise if countries were to be confronted with strong pressure to align their wage and price levels too quickly with those of the EU. Moreover, an inappropriate mix of loose fiscal policy and tight monetary policy could trigger a strong, albeit temporary, appreciation of the currency. Potential risks to current account sustainability relate also to possible future changes in the financing pattern. Although capital inflows are generally expected to contribute to real convergence – for example, through imported technology and management skills – they might imply some destabilising effects. This would be the case if the scale and nature of capital flows were to change substantially from the current pattern where net foreign direct investment (FDI) inflows essentially cover the current account deficits in many countries. Following the end of the privatisation process in most of the acceding countries, a potential slowdown in FDI inflows might pose a challenge within this context, although EU accession may boost greenfield FDI inflows, i.e. investments in new projects, which may well compensate for diminishing privatisation-related FDI. Managing highly volatile capital flows might become even more challenging as macroeconomic policies focus increasingly on preparing the ground for ERM II and, subsequently, the adoption of the euro. Furthermore, capital flows largely in excess of the countries' absorption capacity could lead to overheating and more accentuated output volatility.

## FISCAL DEVELOPMENTS

Despite the recent pick-up in economic activity, fiscal deficits in the acceding countries remained on average at high levels in 2003: in the order of 5% of GDP for the ten countries as a whole. At the same time, fiscal performance continued to vary across countries. In most acceding countries fiscal deficits are largely of a structural nature, while the strength of automatic stabilisers (the automatic reactions of the budget to economic fluctuations) seems to be limited. To consolidate the fiscal situation, the acceding countries will need to further reform their public expenditure and revenue structures in a sustainable and forward-looking manner. Although the average debt level is comparatively low in the acceding countries, running continuously high deficits at a time when privatisation receipts are coming to an end could trigger unfavourable public debt dynamics, with possible repercussions for capital flows and exchange rate developments. Moreover, implicit fiscal liabilities related to the ageing of societies might pose an additional challenge, at least for some of the acceding countries.

Fiscal consolidation is all the more challenging as the acceding countries will be confronted with expenditure pressures in the coming years. These will arise as a result of the completion of the transition process, contributions to the EU budget, the continuing implementation of the *acquis communautaire* and budgetary requirements related to NATO membership. Moreover, forthcoming reforms of health and pension systems, as well as public investments during the catching-up process, may have an important bearing on fiscal accounts in the acceding countries. At the same time, the implementation of the EU competition laws may lead to cuts in selected subsidies, which may alleviate some of the fiscal strain.

Upon EU accession, the new Member States will be subject to the provisions of the Stability and Growth Pact that apply to all EU Member States, including the requirements to avoid excessive fiscal deficits and to aim for



budgetary positions that are close to balance or in surplus over the medium term. A credible fiscal consolidation path is also needed in view of the prospective future monetary integration of acceding countries. While entry into ERM II is not subject to a set of pre-established criteria, to ensure smooth participation in the mechanism, major policy adjustments should be made before countries join and a credible fiscal consolidation path followed.

## **1.2 FINANCIAL MARKET DEVELOPMENTS IN THE ACCEDING COUNTRIES**

### **BANKING SECTOR**

Most financial markets in the acceding countries are shallow, reflecting the size of these economies and the low stock of credit and deposits. While financial markets in the acceding countries are largely dominated by the banking sector, the degree of financial intermediation (the role of banks as intermediaries in channelling funds from depositors to borrowers) is still rather low. This is not, however, the case in Cyprus and Malta as these countries did not have to undergo a transition from a centrally planned economy to a market economy. In the acceding countries of central and eastern Europe, the level of financial intermediation amounts to only one-third of the euro area average and is lower than in emerging market economies with comparable income levels. This is largely because of i) the initial conditions of the transition process, ii) the disruptive effects brought about by banking crises in the early 1990s in these countries, iii) the relatively short track record of domestic enterprises, which translates into heavy reliance on financing coming from own sources, and iv) large FDI inflows into some countries.

Nevertheless, despite their limited size, banking sectors in the acceding countries appear to be relatively consolidated and sound, with an overall satisfactory level of capitalisation, profitability and asset quality. Moreover, the bulk of the banking sector in the acceding

countries is foreign-owned: at the end of 2002, foreign ownership of the banking sector in the acceding countries (excluding Cyprus and Malta) amounted to around 70% of registered capital and 80% of total assets.<sup>4</sup> Restructuring and consolidation in the banking sector through privatisation and opening up to foreign ownership have contributed to the soundness of the sector by increasing capital and funding and enhancing technology, governance and risk management expertise. Nevertheless, some acceding countries still have sizeable non-performing loans, even if these are on a declining trend and provisions against related risks appear to be relatively good. Moreover, the foreign-currency exposure of the enterprise sector is comparatively high in some countries. If the domestic currency were to weaken substantially in any of these countries, credit risks for the banking sector could emerge, which could in turn have implications for the conduct of monetary and exchange rate policies.

As the catching-up process to higher income levels proceeds, the main challenge for policy-makers will be to manage the deepening of financial intermediation and a dynamic expansion of financial institutions' activities without risking the stability of the sector or the economy as a whole. For example, it is likely that domestic enterprises will rely increasingly on external sources of finance, rather than on internal funds. Likewise, as their income prospects and creditworthiness improve, households may increasingly engage in intertemporal consumption smoothing. In most acceding countries financial intermediation has grown substantially in recent years, albeit starting from a very low base. In 2002 and 2003 credit growth to private firms and households was particularly strong in Cyprus, Hungary, Slovakia and the three Baltic States. Loans to households grew particularly quickly, outpacing the overall credit growth rate. Regarding the distribution of loans among economic activities,

<sup>4</sup> Latvia and Slovenia stand out in this respect, as foreign ownership of the banking sectors in these countries is considerably below the average.

mortgage loans are one of the fastest growing credit segments, having taken off from negligible levels. In 2002 and early 2003 mortgage lending growth was particularly strong in Hungary, Latvia and Poland.

Although the stock of credit remains low in most acceding countries, and much of it is secured by mortgages, the rapid deepening of financial intermediation and the expansion of financial sector balance sheets may entail higher volatility in financial performance both in individual financial institutions and the sector as a whole. This highlights the need to maintain a credible and well-run prudential supervision and regulatory framework in acceding countries and calls, with regard to the financial sector structure, for greater cooperation between home supervisors and those responsible for supervising foreign parent banks.

### **BOND AND STOCK MARKETS**

The size of bond markets differs across acceding countries, while government is the main issuer of debt securities in most of the countries. The stock markets of most acceding countries are relatively small, particularly in international terms, and the information and research coverage of these markets is selective.

Compared with key emerging markets, such as Brazil, Russia or Turkey, external debt markets are small in all the acceding countries except Poland. Foreign debt levels differ across countries and in some countries – such as Estonia and Latvia – there is a substantial difference between net and gross debt levels. An acceleration of debt dynamics was also observed in some countries.

In this context, the bond markets are the segment that has developed most over the past few years, especially in the Czech Republic, Hungary and Poland. Macroeconomic stabilisation – in particular, disinflation and lower interest rates – and the prospect of EU membership have helped to reduce country risk and attract investors, resulting in a significant fall in long-term yields on domestic bonds in

most of the acceding countries. However, in the second half of 2003, increasing concerns about the course of fiscal policies and overall policy consistency in some countries led to a reversal of some of the compression in yield spreads vis-à-vis the euro area witnessed in previous periods.

Yields of acceding countries' sovereign bonds denominated in key currencies remained at low levels. Yield compression vis-à-vis the euro area was partly due to the global emerging market bond rally, although the prospect of EU membership, together with the improvement of sovereign ratings, also appears to have lowered spreads. More generally, the acceding countries seem to have disconnected themselves from developments in other emerging markets. The benevolent effects of EU membership should continue to play a key role in macroeconomic and structural developments in this respect. However, conclusions about yield developments should be drawn with caution since many acceding countries have rather illiquid bond markets.

Stock markets in the acceding countries performed, on average, favourably in 2003 and broadly in line with stock markets in other emerging market regions, while outperforming euro area stock markets. The stock markets in Latvia and Lithuania performed particularly strongly, with share prices roughly doubling during 2003. In Estonia and many central European acceding countries, stock markets also recorded solid gains. However, in a few countries, stock exchanges recorded a less favourable performance in 2003: in Cyprus stock prices fell, and in Malta the gains were only relatively moderate.

## 2 LEGAL DEVELOPMENTS

The Eurosystem has a crucial interest in ensuring that acceding countries adopt and implement in time the parts of the *acquis communautaire* (the body of EU law) that relate to its fields of competence. This refers to the Treaty and ESCB Statute provisions on central banks, and in particular central bank independence, as well as EU legislation in the financial field. In 2003 the Eurosystem worked closely with the acceding country central banks (ACCBs) to analyse the level of compliance with these requirements.

As regards central bank independence, the statutes of the ACCBs were analysed on the basis of the criteria – institutional, personal, functional and financial independence – defined in the legal convergence reports prepared by the EMI and the ECB. The analysis was also conducted in the light of EMI and ECB opinions on draft national legislation in their field of competence and, in particular, on the draft statutes of the NCBs of the EU Member States. These opinions have helped the acceding countries to revise their central bank acts to comply with the Treaty requirements, thus laying the foundations for independent institutions.

Central banks and financial institutions must operate within a sound legal environment. The *acquis communautaire* includes important rules for the financial sector and central banking activities. It is crucial for the new Member States to comply with these rules as soon as they join the EU (except where the Accession Treaty provides for transitional arrangements). This is why the Eurosystem's analysis also focused on legislation in the financial field, especially in the areas of freedom of movement of capital, prohibition on monetary financing and privileged access, regulation of the financial markets, collateral, payment systems, insolvency and banknotes.

The analysis gave an overview of the laws enacted and legislative drafts that had been presented for adoption to the respective national parliaments by 1 October 2003. Movement

towards central bank independence has started in all of the acceding countries and in most of them it has been completed or is well advanced. In some cases, where the wording of the national act was not yet fully in line with that of the Statute, the analysis suggested further adaptation of the national act. The implementation of the *acquis* in the Eurosystem-relevant areas will take place, at the latest, when these countries join the EU, subject to any agreed transitional arrangements.

The results of this analysis were presented to the ACCBs and to the EU Council and the European Commission. This analysis was not part of an assessment leading to the adoption of the convergence reports for the new Member States, which the ECB will have to prepare under Article 122 (2) of the Treaty. Its purpose was to provide background information on the preparations for implementing the Eurosystem's legal regime in the acceding countries, which are to join EMU as Member States with a derogation. In addition, it helped the ACCBs to better define their role in the accession process at the national level. It has also helped the Commission in further strengthening the in-depth analysis of issues relating to central bank independence.

## 3 PREPARATIONS FOR ACCESSION

In 2003 the Eurosystem intensified its multilateral and bilateral cooperation with the acceding countries. Since May 2003 the governors of the ACCBs have been attending the meetings of the General Council as observers and ACCB experts have also participated as observers in meetings of ESCB committees and working groups (see Section 1 of Chapter 8). This has made it much easier for all parties to carry out detailed work on a wide range of enlargement-related issues. In addition, technical consultations were held regularly and a comprehensive programme of visits was implemented for senior experts from ACCBs.

In general, preparations for EU enlargement are on track, which should enable the ACCBs to integrate smoothly into the ESCB as planned.

In 2003 the ECB set out an Accession Master Plan with a view to guiding the planning, implementation and monitoring of all ECB activities for ESCB and Eurosystem enlargement. The Master Plan was inspired by the EMI Master Plan, which had laid down the organisational and logistical framework necessary for the ESCB to perform its tasks in Stage Three of EMU. Regular monitoring ensures that all relevant issues are dealt with in a timely manner. This will enable the ACCBs to integrate smoothly into the ESCB framework without affecting the overall operational integrity of the ESCB's systems. Regular updates of the Master Plan are communicated throughout the ESCB and to the ACCBs. All activities are being implemented according to the Plan.

### 3.1 CENTRAL BANK OPERATIONS

In the area of central bank operations, the preparations for accession were directed mainly towards those central bank tasks that will be affected by the enlarged ESCB membership as of May 2004, in particular those concerning eligible assets and ERM II.

As regards eligible assets for the Eurosystem's credit operations, certain assets listed only in acceding countries will be included in the list of eligible assets from the day the ACCBs join the ESCB. Therefore, from May 2004, the ACCBs will start performing the collateral management functions of identification, assessment and reporting of eligible assets. In preparation, the ECB organised a workshop for acceding countries on these functions in November 2003.

The ESCB studied in detail the operational functioning of an enlarged ERM II. In February 2004 it held a workshop for acceding countries on related aspects. This preparatory work, together with testing to be conducted in spring 2004, should guarantee the smooth operational functioning of ERM II.

In addition to the areas affected by ESCB enlargement, significant steps were also taken in operational areas related to Eurosystem enlargement. For example, studies were launched on the implications of enlargement for monetary policy implementation and the management of the ECB's foreign reserves.

### 3.2 PAYMENT AND SETTLEMENT SYSTEMS

In 2003 the ECB defined the modalities for integrating the acceding countries into TARGET, essentially offering them the possibility of connecting to TARGET when they join the EU. However, most acceding countries only plan to join the system when they adopt the euro. Work has also been carried out on developing a fall-back solution to be used if the shared platform of TARGET2 (see Section 2.2 of Chapter 2) is not available when the first acceding countries join the euro area.

As a follow-up to the 2002 assessment of the safety and efficiency of market infrastructures and the related oversight functions, ACCBs reported on the progress they had made in 2003 in implementing the ECB's general and country-specific recommendations. Substantial progress has been made and the ACCBs are continuing

their efforts to complete outstanding issues, where necessary, in close cooperation with other national parties concerned.

The ECB also organised a series of workshops for the ACCBs aimed at providing assistance in the preparations for accession to the EU and, subsequently, the euro area. One workshop in Warsaw focused on the preliminary results of work carried out jointly by the ESCB and the Committee of European Securities Regulators on standards for EU securities clearing and settlement systems. Another workshop in Prague addressed the collateral framework of the Eurosystem with a view to enabling the ACCBs to adjust to the key features of this framework as soon as possible. And a third workshop in Ljubljana examined cost, benefit and risk issues relating to central counterparty clearing. Furthermore, the “Repo conference for central banks – the landscape of the European market” held in Rome focused on recent developments as well as requirements for the establishment of an efficient and integrated repo market, particularly in the light of EU enlargement. All these events were organised by the ECB in cooperation with the local central bank.

Moreover, during 2003 the Eurosystem helped the ACCBs to carry out self-assessments of their securities clearing and settlement systems against the “Standards for the use of EU securities settlement systems in ESCB credit operations”. These standards have provided the necessary framework for the efficient and safe execution of central bank credit operations (see Section 4.3 of Chapter 3). The objective of the assessment was to identify, at an early stage, issues that needed to be addressed to ensure the smooth functioning of the Eurosystem credit operations. A total of 20 securities settlement systems and one arrangement operated by an ACCB were assessed and a list of recommendations was produced for each system. These recommendations will have to be implemented to make the system fully eligible for use in Eurosystem credit operations.

The ECB met for the fifth time with the Central and Eastern European Central Securities Depositories and Clearing Houses Association in October 2003. At this meeting the ECB provided information on a wide range of accession-related issues to representatives of ACCBs, securities regulators, central securities depositories and clearing houses.

The ECB and the European Payments Council, which was established by the European Credit Sector Associations and the major banks, organised a special workshop for selected ACCB representatives and their respective banking communities. The purpose of this workshop, which was also attended by the European Commission, was to share important information on how to successfully integrate the acceding countries into the Single Euro Payments Area.

### 3.3 BANKNOTES

In 2003 the ECB supported the ACCBs in establishing the infrastructure for handling euro counterfeits. The infrastructure must be in place when the acceding countries join the EU. Moreover, in view of the long lead time for preparing the cash changeover in these countries after adoption of the euro, the ECB organised workshops for the ACCBs addressing, in particular, the arrangements for the issuance and handling of euro banknotes and the procurement of banknote launch requirements in the acceding countries.

### 3.4 STATISTICS

At a high-level meeting in Copenhagen in October 2002, the ministers for economics and finance from the EU Member States and the candidate countries invited the European Commission (Eurostat) and the ECB to provide an Action Plan for economic, monetary and financial statistics for candidate countries. This Action Plan was prepared and subsequently endorsed at a high-

level meeting with the candidate countries in May 2003. The participants noted that the completeness and timeliness of statistical information had been steadily improving. However, the Action Plan also revealed that, unless major efforts were made in the run-up to accession, the acceding countries would not be in a position to meet all requirements, i.e. data timeliness, level of detail and other quality aspects.

The Action Plan puts emphasis on the supply of statistics required for the purpose of assessing convergence and on structural statistics. It is made up of two main parts: the first part refers to statistics which fall under the responsibility of the European Commission (Eurostat), namely annual national accounts, government deficit and debt, the HICP, structural indicators and short-term statistics. Most action points aim at improving i) the availability of statistics and conceptual compliance by May 2004 and ii) compliance with EU statistical regulations in general. The second part of the Action Plan covers issues under the responsibility of the ECB in the fields of balance of payments (b.o.p.) and international investment position (i.i.p.) statistics, money, banking and financial market statistics and quarterly financial accounts. These statistics are mainly collected via the ACCBs. The action points in this part aim at ensuring compliance with the requirements of the ESCB.

Both parts of the Action Plan are subject to regular review. A high-level progress report drafted by the European Commission (Eurostat) and the ECB is to be published in mid-2004. In addition, the Executive Board of the ECB has set up a biannual progress review for the indicators for which the ECB has primary or shared responsibility.

### 3.5 IT INFRASTRUCTURE AND APPLICATIONS

Significant progress was made in 2003 in preparing the IT infrastructure and applications for ESCB enlargement. Three major elements

are being enhanced to provide the necessary network and communications infrastructure.

The core network is the physical connection between the ESCB central banks for data and voice communication. A new core network is being set up to connect all members of the enlarged ESCB. The detailed technical design work for this network began in July 2003.

In October 2003 the ECB started to implement a project to extend the ESCB-wide data communications infrastructure (the “ESCB-Net”) to the ACCBs. The ESCB-Net is a data communications platform which hosts the majority of ESCB-wide applications. These include the applications required for supporting monetary policy, carrying out ECB foreign reserve operations, exchanging statistical and non-statistical data, and monitoring currency information.

The “ESCB Teleconference System” is also being extended to the ACCBs. New teleconference equipment is being installed to allow all current and new ESCB members to participate in teleconferences via the same secure infrastructure.

Preparations were also made for the significant enhancements to IT applications that are necessary for the enlargement of the ESCB and, subsequently, the Eurosystem. IT applications for the exchange of statistical data were updated. The necessary changes to the application for combating euro counterfeiting are ongoing and will be completed before the ACCBs join the operational framework of the ESCB.

**Artist**  
Koen Vermeule  
**Title**  
Untitled (detail), 2002  
**Material**  
Oil on canvas  
**Format**  
210 × 210 cm



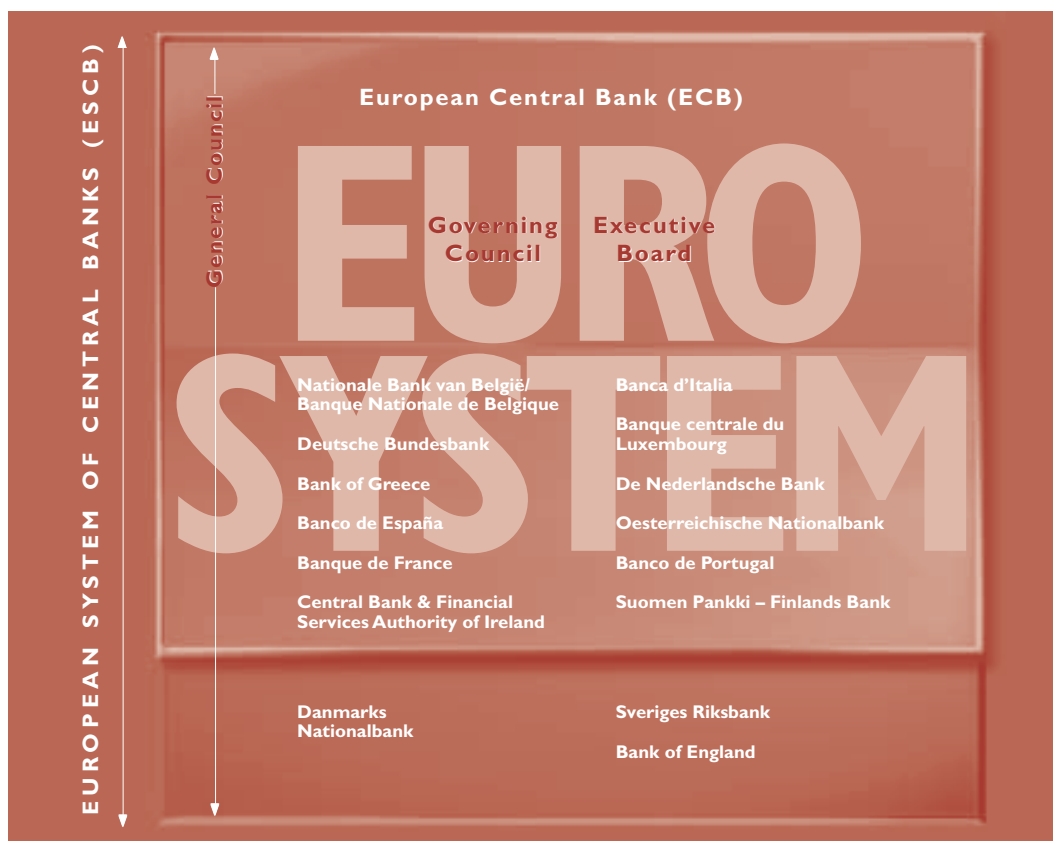
## CHAPTER 8

# INSTITUTIONAL FRAMEWORK, ORGANISATION AND ANNUAL ACCOUNTS



# I DECISION-MAKING BODIES AND CORPORATE GOVERNANCE OF THE ECB

## I.1 THE EUROSISTEM 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 EU Member States (currently 15, 25 as of 1 May 2004), i.e. it includes the 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 euro area, the Governing Council has adopted the term “Eurosistem”, which 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 Eurosistem and the ESCB.

The ECB has legal personality under public international law. It was established as the core of the Eurosistem and the ESCB and ensures

that their respective tasks are carried out either through its own activities or via the NCBs.

Each of the NCBs has legal personality according to the national law of its respective country. The euro area NCBs, which form an integral part of the Eurosistem, carry out the tasks conferred upon the Eurosistem in accordance with the rules established by the ECB’s decision-making bodies. The NCBs also contribute to the work of the ESCB through their participation in the various ESCB committees (see Section 1.5 of this chapter). They may perform non-Eurosistem functions on their own responsibility, unless the Governing Council finds that such functions interfere with the objectives and tasks of the Eurosistem.

The Eurosystem and the ESCB are governed by the decision-making bodies of the ECB: the Governing Council and the Executive Board. Decision-making within the Eurosystem and the ESCB is centralised. However, in taking its decisions on the way in which the above tasks should be carried out, the ECB is committed to the principle of decentralisation in accordance with the Statute of the ESCB. 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. The functioning of the decision-making bodies is governed by the Treaty, the Statute of the ESCB and the relevant Rules of Procedure.<sup>1</sup>

## 1.2 THE GOVERNING COUNCIL

The Governing Council 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, its main responsibilities are:

- to adopt the guidelines and take the decisions necessary to ensure the performance of the tasks entrusted to the Eurosystem; 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.

The Governing Council meets, as a rule, twice a month at the ECB's premises in Frankfurt am Main, Germany. Specifically at its first meeting in the month it, *inter alia*, conducts an in-depth assessment of monetary and economic developments and takes related decisions, while the second meeting usually focuses on issues related to other tasks and responsibilities of the ECB and the Eurosystem. In 2003 two meetings were held outside Frankfurt: one was hosted by

the Banca d'Italia in Rome and the other by the Banco de Portugal in Lisbon.

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

In December 2002 the Governing Council decided unanimously on the contents of its proposal on the future adjustment of its voting modalities, which will become necessary in the wake of future expansions of the euro area in an enlarged EU. The proposal was made in accordance with the ECB "enabling clause" contained in the Treaty of Nice. Following the entry into force of the Treaty of Nice on 1 February 2003, the ECB formally adopted a recommendation on the adjustment of the voting modalities in the Governing Council.

The ECB recommendation was submitted to the EU Council in February 2003. On the basis of the recommendation, and after taking into account the opinions of the European Commission and the European Parliament, the EU Council, meeting in the composition of Heads of State or Government, unanimously adopted a Decision to amend Article 10.2 of the Statute of the ESCB (voting modalities in the Governing Council) on 21 March 2003. In order to enter into force, this Decision needs to have been ratified by all Member States, which is not yet the case.

<sup>1</sup> See Decision ECB/2004/2 of 19 February 2004 adopting the Rules of Procedure of the European Central Bank, OJ L 80, 18.3.2004, p. 33; 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 ECB/1999/7 of 12 October 1999 concerning the Rules of Procedure of the Executive Board of the European Central Bank, OJ L 314, 8.12.1999, p. 34. These rules are also available on the ECB's website.

According to this Decision, all members of the Governing Council will continue to attend meetings and participate in the deliberations. However, the number of NCB governors holding a voting right at any one time will not exceed 15. The 15 voting rights will rotate among the governors according to pre-established rules. The six members of the Executive Board will each maintain a permanent voting right. In order to ensure that at any particular time the governors with a voting right are from countries which, taken together, are representative of the euro area economy as a whole, governors will hold a voting right with different frequencies. However, this differentiation between governors will apply exclusively to the prior determination of the frequency with which each governor has a voting right. For all governors having a voting right at any point in time, the “one member, one vote” principle will apply.

Governors will be allocated to different groups, according to a ranking of the weight of the economies of their countries within the euro area, derived from an indicator which in addition to gross domestic product also reflects the size of their financial markets. When the number of euro area countries exceeds 15, there will be two such groups. When there are 22 euro area countries, the system will be based on three groups. The governors within each group will have a voting right for equal periods of time. The new voting system is designed to be capable of accommodating any sequencing of euro area enlargement up to 27 countries, i.e. the current EU Member States and the 12 accession countries listed in the Declaration on the enlargement of the European Union annexed to the Treaty of Nice. The rotation system will allow the Governing Council to maintain its capacity for timely and efficient decision-making while at the same time retaining the principle of *ad personam* participation of the members of the Governing Council and the “one member, one vote” principle.

## THE GOVERNING COUNCIL



**Willem F. Duisenberg**

(until 31 October 2003)

President of the ECB

**Jean-Claude Trichet** (as from 1 November 2003)

President of the ECB

**Lucas D. Papademos**

Vice-President of the ECB

**Jaime Caruana**

Governor of the Banco de España

**Vítor Constâncio**

Governor of the Banco de Portugal

**Eugenio Domingo Solans**

Member of the Executive Board of the ECB

**Antonio Fazio**

Governor of the Banca d'Italia

**Nicholas C. Garganas**

Governor of the Bank of Greece

**Sirkka Hämäläinen** (until 31 May 2003)

Member of the Executive Board of the ECB

**John Hurley**

Governor of the Central Bank & Financial Services Authority of Ireland

**Otmar Issing**

Member of the Executive Board of the ECB

**Klaus Liebscher**

Governor of the Oesterreichische Nationalbank

**Yves Mersch**

Governor of the Banque centrale du Luxembourg

**Christian Noyer** (as from 1 November 2003)

Governor of the Banque de France

**Tommaso Padoa-Schioppa**

Member of the Executive Board of the ECB

**Guy Quaden**

Governor of the Nationale Bank van België/Banque Nationale de Belgique

**Jean-Claude Trichet** (until 31 October 2003)

Governor of the Banque de France

**Gertrude Tumpel-Gugerell**

(as from 1 June 2003)

Member of the Executive Board of the ECB

**Matti Vanhala**

Governor of Suomen Pankki – Finlands Bank

**Nout Wellink**

President of De Nederlandsche Bank

**Ernst Welteke**

President of the Deutsche Bundesbank

**Back row (left to right):**

Guy Quaden, Matti Vanhala, Nicholas C. Garganas, Ernst Welteke, Jaime Caruana, Nout Wellink, Klaus Liebscher, Eugenio Domingo Solans, Tommaso Padoa-Schioppa

**Front row (left to right):**

Vítor Constâncio, Yves Mersch, Otmar Issing, Lucas D. Papademos, Jean-Claude Trichet, Gertrude Tumpel-Gugerell, Antonio Fazio, John Hurley, Christian Noyer

### I.3 THE EXECUTIVE BOARD



**Back row (left to right):**  
Eugenio Domingo Solans,  
Tommaso Padoa-Schioppa,  
Otmar Issing

**Front row (left to right):**  
Lucas D. Papademos,  
Jean-Claude Trichet,  
Gertrude Tumpel-Gugerell

**Willem F. Duisenberg**

(until 31 October 2003)

President of the ECB

**Jean-Claude Trichet**

(as from 1 November 2003)

President of the ECB

**Lucas D. Papademos**

Vice-President of the ECB

**Eugenio Domingo Solans**

Member of the Executive Board of the ECB

**Sirkka Härmäläinen**

(until 31 May 2003)

Member of the Executive Board of the ECB

**Otmar Issing**

Member of the Executive Board of the ECB

**Tommaso Padoa-Schioppa**

Member of the Executive Board of the ECB

**Gertrude Tumpel-Gugerell**

(as from 1 June 2003)

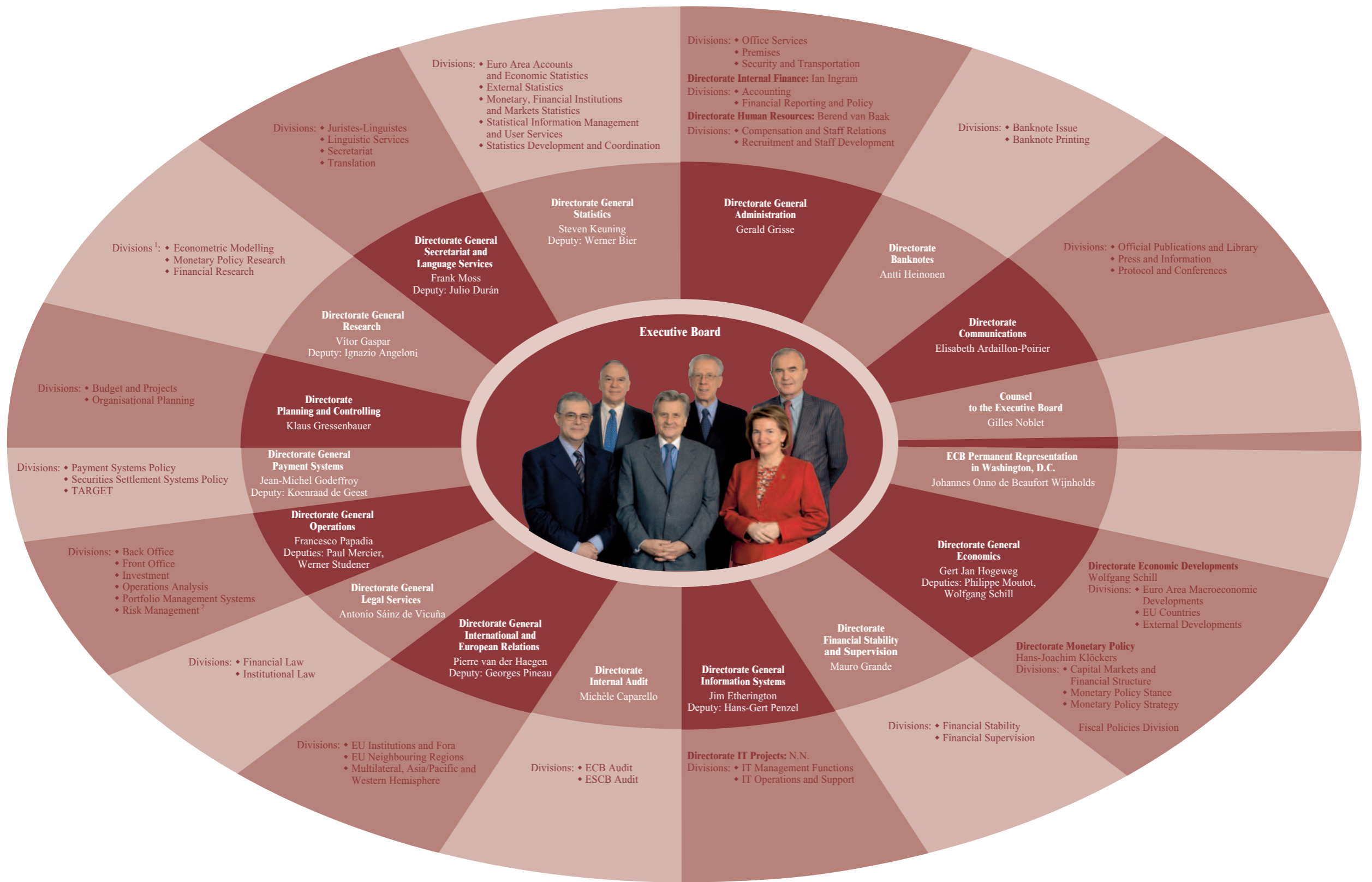
Member of the Executive Board of the ECB

The Executive Board comprises the President, the Vice-President and four other members, appointed by common accord, at the level of the Heads of State or Government, of the governments of the Member States which have adopted the euro. The main responsibilities of the Executive Board, which as a rule meets once a week, are:

- to prepare the meetings of the Governing Council;
- to implement the monetary policy of the euro area in accordance with the guidelines and decisions laid down by the Governing Council and, in doing so, to give the necessary instructions to the euro area NCBS;

- to manage the current business of the ECB; and
- to exercise certain powers delegated to it by the Governing Council, including some of a regulatory nature.

A Management Committee, which is chaired by a member of the Executive Board and reports to the Executive Board, has been established with effect as of 1 October 2003 (see Section 2.2 of this chapter). The new Committee is expected to ease the workload of the Executive Board and allow it to focus on strategic issues.



**Executive Board**

Back row (left to right): Eugenio Domingo Solans, Tommaso Padoa-Schioppa, Otmar Issing  
 Front row (left to right): Lucas D. Papademos (Vice-President), Jean-Claude Trichet (President), Gertrude Tumpel-Gugerell

<sup>1</sup> Effective as of 1 May 2004.

<sup>2</sup> Reports on specific issues directly to the Executive Board.

#### 1.4 THE GENERAL COUNCIL

The General Council is composed of the President and the Vice-President of the ECB and the governors of the NCBs of all EU Member States. It carries out those tasks taken over from the European Monetary Institute which still have to be performed by the ECB on account of the fact that not all the Member States have adopted the euro. In 2003 the General Council met four times, in line with its

regular schedule. With a view to enhancing cooperation with the acceding country central banks (ACCBs) in preparation for enlargement of the ESCB, the General Council decided in September 2002 to invite the governors of the ACCBs to attend, as from the date of the signing of the Accession Treaty, the meetings of the General Council in an observer capacity. On 26 June 2003 the governors of the ten ACCBs participated for the first time as observers in a meeting of the General Council.

**Back row (left to right):**

John Hurley, Nout Wellink,  
Ernst Welteke, Klaus Liebscher,  
Nicholas C. Garganas,  
Bodil Nyboe Andersen

**Middle row (left to right):**

Antonio Fazio, Matti Louekoski,  
Guy Quaden, Lars Heikensten,  
Christian Noyer, Jaime Caruana

**Front row (left to right):**

Yves Mersch,  
Vítor Constâncio,  
Jean-Claude Trichet,  
Lucas D. Papademos,  
Mervyn King



**Willem F. Duisenberg** (until 31 October 2003)  
President of the ECB

**Jean-Claude Trichet** (as from 1 November 2003)  
President of the ECB

**Lucas D. Papademos**  
Vice-President of the ECB

**Bodil Nyboe Andersen**  
Governor of Danmarks Nationalbank

**Jaime Caruana**  
Governor of the Banco de España

**Vítor Constâncio**  
Governor of the Banco de Portugal

**Antonio Fazio**  
Governor of the Banca d'Italia

**Nicholas C. Garganas**  
Governor of the Bank of Greece

**Edward A. J. George** (until 30 June 2003)  
Governor of the Bank of England

**Lars Heikensten**  
Governor of Sveriges Riksbank

**John Hurley**  
Governor of the Central Bank & Financial  
Services Authority of Ireland

**Mervyn King** (as from 1 July 2003)  
Governor of the Bank of England

**Klaus Liebscher**  
Governor of the Oesterreichische Nationalbank

**Yves Mersch**  
Governor of the Banque centrale du  
Luxembourg

**Christian Noyer** (as from 1 November 2003)  
Governor of the Banque de France

**Guy Quaden**  
Governor of the Nationale Bank van België/  
Banque Nationale de Belgique

**Jean-Claude Trichet** (until 31 October 2003)  
Governor of the Banque de France

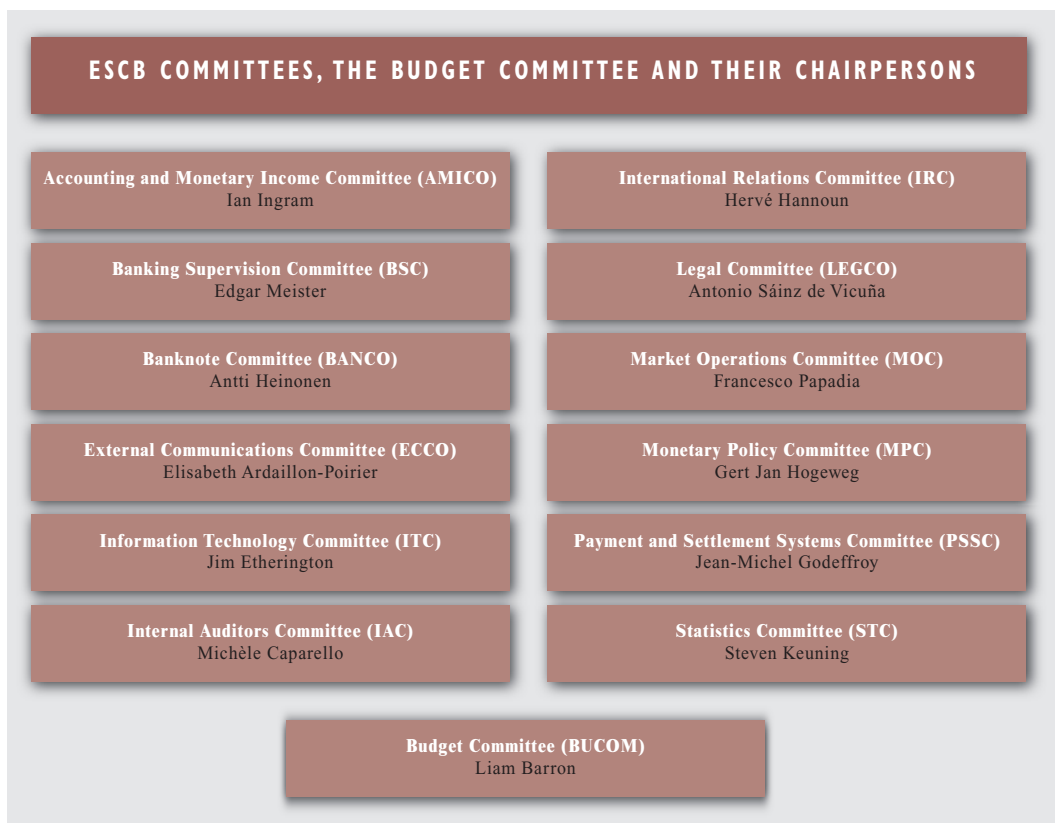
**Matti Vanhala**<sup>2</sup>  
Governor of Suomen Pankki – Finlands Bank

**Nout Wellink**  
President of De Nederlandsche Bank

**Ernst Welteke**  
President of the Deutsche Bundesbank

<sup>2</sup> Replaced in the photo by Matti Louekoski, Deputy Governor of Suomen Pankki – Finlands Bank.

## I.5 ESCB COMMITTEES AND THE BUDGET COMMITTEE



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, the ESCB committees have provided expertise in their fields of competence and have facilitated the decision-making process. Membership of the ESCB committees is usually restricted to staff of the Eurosystem central banks. However, the NCBs of the Member States which have not yet adopted the euro take part in the meetings of an ESCB committee whenever it deals with matters that fall within the field of competence of the General Council. Where appropriate, other competent bodies may also be invited, such as national supervisory authorities in the case of the Banking Supervision Committee. Since the signing of the Accession Treaty in April 2003, and in line with the decision to invite ACCB governors to participate in the meetings of the

General Council, experts from the ACCBs are invited to attend the meetings of ESCB committees in an observer capacity whenever they deal with matters that fall within the field of competence of the General Council. At present there are 12 ESCB committees, all of which were established under Article 9 of the Rules of Procedure of the ECB.

The Budget Committee, which was established under Article 15 of the Rules of Procedure of the ECB, assists the Governing Council in matters related to the ECB's budget.



## 1.6 CORPORATE GOVERNANCE

In addition to the decision-making bodies, the corporate governance of the ECB also encompasses a number of external and internal control layers.

### EXTERNAL CONTROL LAYERS

The Statute of the ESCB provides for two layers, namely the external auditor, which audits the annual accounts of the ECB (Article 27.1 of the Statute of the ESCB), and the European Court of Auditors, which examines the operational efficiency of the management of the ECB (Article 27.2).

In August 2002 the Governing Council decided that, in order to give the fullest public assurance as to the independence of the ECB's external auditor, the principle of audit firm rotation should be applied. This decision was implemented as part of the procedure for the appointment of the ECB's external auditor (under Article 27.1 of the Statute of the ESCB). The new external auditor commenced its duties in September 2003.<sup>2</sup>

The annual report of the European Court of Auditors, together with the ECB's reply, is published on the ECB's website and in the Official Journal of the European Union.

### INTERNAL CONTROL LAYERS

In 2003 the ECB's internal audit continued to perform audit missions under the responsibility of the Executive Board. Its mandate is defined in the ECB Audit Charter.<sup>3</sup> The internal audit assesses and evaluates, on an ad hoc basis, the adequacy and effectiveness of the ECB's system of internal control and the quality of the ECB's performance in carrying out assigned responsibilities. As endorsed by the Executive Board, the internal audit adheres to the International Standards for the Professional Practice of Internal Auditing established by the Institute of Internal Auditors.

The Internal Auditors Committee, an ESCB committee established under a mandate from the

Governing Council, is composed of the heads of internal audit at the ECB and the NCBs. It is responsible for ensuring the coordination of audit coverage for joint projects and joint operational systems at the ESCB level.

The internal control structure of the ECB is based on a functional approach, whereby each organisational unit (division, directorate or directorate general) is responsible for its own internal control and efficiency. In performing this task, organisational units implement a set of operational control procedures within their area of responsibility. For example a set of rules and procedures – known as a Chinese wall – are in place to prevent inside information, for instance originating from the areas responsible for monetary policy implementation, from reaching the areas responsible for the management of the ECB's foreign reserves and own funds portfolio. In addition to these controls, the Directorate Planning and Controlling, the Risk Management Division and the Directorate Internal Audit advise and make proposals to the business areas and to the Executive Board on specific control issues affecting the organisation as a whole.

The members of the Governing Council adhere to a Code of Conduct, which reflects their responsibility to safeguard the integrity and reputation of the Eurosystem and to maintain the effectiveness of its operations.<sup>4</sup> The Governing Council has also appointed an adviser to provide guidance to its members on some aspects of professional conduct. The Code of Conduct for the members of the Governing Council is comparable with the Code of Conduct of the European Central Bank, which gives guidance to, and sets benchmarks for, the staff of the ECB and the members of the

2 Following a tender procedure, KPMG Deutsche Treuhand-Gesellschaft AG Wirtschaftsprüfungsgesellschaft was appointed as the ECB's new external auditor with a five-year mandate.

3 The ECB Audit Charter is published on the ECB's website to foster the transparency of audit arrangements in place at the ECB.

4 See the Code of Conduct for the members of the Governing Council, OJ C 123, 24.5.2002, p. 9 and the ECB's website.

Executive Board, all of whom are expected to maintain high standards of professional ethics in the performance of their duties.<sup>5</sup>

The ECB has detailed rules preventing the abuse of sensitive financial market information (“insider trading rules”). The staff of the ECB and the members of the Executive Board are thereby prohibited from taking advantage, whether directly or indirectly, of inside information to which they have access when conducting private financial activities at their own risk and for their own account, or at the risk and for the account of a third party.<sup>6</sup> An Ethics Adviser appointed by the Executive Board ensures a consistent interpretation of these rules.

#### **ANTI-FRAUD MEASURES**

In 1999 the European Parliament and the EU Council adopted Regulation (EC) No 1073/1999 concerning investigations carried out by the European Anti-Fraud Office<sup>7</sup> (“OLAF Regulation”) in order to step up the fight against fraud, corruption and any other illegal activity detrimental to the Communities’ financial interests. It provides inter alia for the internal investigation of suspected fraud by OLAF within the Community institutions, bodies, offices and agencies.

While fully recognising and accepting the need for strong measures to prevent fraud, the Governing Council was of the view that the ECB’s independent position and statutory tasks precluded the application of the OLAF Regulation to the ECB. Instead, it adopted the separate Decision ECB/1999/5 of 7 October 1999 on fraud prevention, which provided for the establishment of a comprehensive anti-fraud scheme under the ultimate control of an independent Anti-Fraud Committee. The creation of this independent committee enhanced the original layers of control within the ECB. In 2003 the Anti-Fraud Committee held one meeting and was regularly informed by the Directorate Internal Audit of all issues related to the performance of its tasks.

The European Commission, supported by the Kingdom of the Netherlands, the European Parliament and the EU Council, subsequently challenged this stance (Case C-11/00). On 10 July 2003 the European Court of Justice ruled on the submissions of these parties and annulled Decision ECB/1999/5.

The Court ruling unambiguously placed the ECB “within the framework of the Community”. At the same time it stated that the legislator had wanted to ensure that the ECB could independently carry out the tasks conferred on it. However, the Court ruled that this independence does not have the consequence of separating the ECB entirely from the Community and exempting it from every rule of Community law. This is in line with the approach taken by the ECB. The application of the OLAF Regulation should not impair the independent performance of the ECB’s tasks.

The ECB is now in the process of finalising a new Decision that will take full account of the judgement delivered by the Court.

- 5 See the Code of Conduct of the European Central Bank in accordance with Article 11.3 of the Rules of Procedure of the European Central Bank, OJ C 76, 8.3.2001, p. 12 and the ECB’s website.
- 6 See Part 1.2 of the ECB Staff Rules containing the rules on professional conduct and professional secrecy, OJ C 236, 22.8.2001, p. 13 and the ECB’s website.
- 7 Regulation (EC) No 1073/1999 of the European Parliament and of the Council of 25 May 1999 concerning investigations conducted by the European Anti-Fraud Office (OLAF), OJ L 136, 31.05.1999, p. 1. See also the identical Regulation (Euratom) No 1074/1999 of 25 May 1999 concerning investigations conducted by the European Anti-Fraud Office (OLAF), OJ L 136, 31.05.1999, p. 8.

## 2 ORGANISATIONAL DEVELOPMENTS

### 2.1 HUMAN RESOURCES

#### STAFFING

The total number of budgeted staff positions for 2003 was 1,271.5 full-time equivalent (FTE) positions. At the end of 2003 the number of staff employed by the ECB was 1,217 (1,213.5 FTE positions), compared with 1,109 (1,105.5 FTE positions) at the end of 2002. The average number of staff employed by the ECB in 2003 was 1,160, compared with 1,080 in 2002. In 2003 151 new staff were recruited and 41 members of staff left the service of the ECB. The number of FTE positions for 2004 has been set at 1,362.5, representing a 7.1% increase over 2003.

From 1 January 2003 all vacant positions were opened up to acceding country nationals. The ECB successfully launched recruitment campaigns aimed specifically at recruiting such nationals as translators, lawyer-linguists and legal counsels. 39 staff members from acceding countries are currently employed on contracts for more than one year.

In 2003 90 experts from NCBs came to the ECB for short periods of approximately four months on average. Of these experts, 48 came from ACCBs. These short-term assignments proved particularly useful for both the ECB and the ACCBs in the preparations for the enlargement of the EU.

In 2003 the ECB offered 113 short-term contracts (including extensions) to replace staff on maternity, parental and unpaid leave, compared with 60 in 2002.

The ECB provided traineeships to 166 students and graduates, mainly with an economics background, for an average duration of three to four months. 135 such traineeships were offered in 2002. In 2003 48 of the trainees were nationals of an acceding country.

Under the Research Visitors Programme, which focuses on specific high-level research projects in the field of monetary policy, 24 research

visitors were welcomed in 2003 compared with 20 in 2002 (see Section 5 of Chapter 2).

The Graduate Research Programme, which is aimed at highly talented research students at an advanced stage of their doctoral studies, attracted 12 participants in 2003, the same number as participated in 2002.

#### INTERNAL MOBILITY

In 2003 93 staff members changed jobs permanently after successfully applying for internal vacancies for permanent positions. In addition, the ECB encouraged temporary internal mobility. 12 staff members took on another job for a limited period in order to gain work experience or to address an urgent but temporary business need, before returning to their previous position.

#### EXTERNAL MOBILITY

At the beginning of the year the External Work Experience Scheme was introduced to support staff development. In the framework of this scheme, staff may be seconded to NCBs and other relevant international and European institutions. Three staff members participated in this scheme during 2003 for a period of two to five months.

#### CHILDCARE FACILITIES AND THE EUROPEAN SCHOOL

The ECB childcare facilities have been enlarged by a third permanent facility offering approximately 90 additional places for the children of ECB staff. This brings to 221 the total number of places available for children aged three months and above.

The secondary school of the European School Frankfurt opened in September 2003 with five grades. Like the primary and pre-primary levels, the secondary school has four language sections: English, French, German and Italian.

## **2.2 MEASURES TO STRENGTHEN THE FUNCTIONING OF THE INTERNAL ORGANISATION**

Since 1998 the ECB's priorities have been the establishment of its functions, the formulation and implementation of the single monetary policy and the introduction of the euro. At the same time, however, the ECB has steadily grown, and the number of staff members substantially increased, creating a need to reinforce the functioning of its internal organisation. Following the successful completion of the euro cash changeover, the Executive Board therefore decided to improve the organisational set-up, further develop the management structure and processes and reinforce human resources policies, in particular with regard to recruitment and career development.

### **ECB IN MOTION**

In the context of the increased focus on strengthening the internal organisation of the ECB, the Executive Board also decided, in early 2003, to launch staff surveys on the issues of corporate principles, internal communication and organisational performance. On the basis of the survey results, the Executive Board decided to embark on a process aimed at improving the functioning of the ECB called "ECB in Motion". The process, which involved staff to the largest extent possible, addressed the issues raised in the surveys. Four project teams were established, under the guidance of a project office and the Executive Board. The teams developed proposals regarding management, professional development, internal communication and measures aimed at reducing bureaucracy. In October 2003 the Executive Board endorsed the bulk of the proposals made by the four project teams and set up a programme office that will oversee the further development and implementation of the measures endorsed. Most of the approved ECB in Motion measures should be ready for implementation by July 2004.

### **ESTABLISHMENT OF A MANAGEMENT COMMITTEE**

The Executive Board also reviewed its own functioning and its role in the management of the ECB. It decided to establish a Management Committee which will advise and assist the Executive Board with regard to the management of the ECB, its strategic planning and the annual budget process. This will enable the Executive Board to increase the attention it devotes to the preparation and discussion of strategic issues, with regard to both the tasks and policies and the internal structure and functions of the ECB. The Management Committee, which reports to the Executive Board, is chaired by a member of the Executive Board and composed of members of senior management. The committee began its work in October 2003.

### **RESTRUCTURING OF THE DIRECTORATE GENERAL INFORMATION SYSTEMS**

Since 1994 significant work has been devoted to establishing the core infrastructures and applications required for the start of Stage Three of EMU and the introduction of the euro. During this time, the IT departments of both the EMI and the ECB have successfully met the deadlines set, and the information systems of the ECB and the ESCB have proven to be sound and robust.

At the beginning of 2002 the ECB decided to review the way in which information systems services are delivered at the ECB. The aim was to assess the existing organisation, structure and effectiveness of the ECB's information systems delivery and to give guidance on its future direction.

In July 2003 the Executive Board approved four main recommendations which had been made in cooperation with an external consultant chosen to assist in the review. These recommendations will result in the strategic redirection of information systems delivery and include the following measures:

- The project portfolio management, focusing on prioritisation and the allocation of IT and financial resources, will be strengthened.

- The Directorate General Information Systems (DG-IS) has been reorganised in order to focus on enhancing project management and delivery capabilities. Accordingly, the staff in DG-IS will concentrate more on in-house project management and delivery skills to cope with the growing IT project demand from the business areas of the ECB and from the ESCB.
- The ECB will focus more on the establishment and enforcement of common IT architecture standards in order to reduce the complexity and maintenance costs of the IT landscape.
- Finally, the ECB will reassess the sourcing options for the IT operational, support and infrastructure activities.

The new organisational structure is being established around three areas: an IT Projects Directorate, an IT Operations and Support Division and an IT Management Functions Division. The implementation of the other recommendations has started and should be completed by the end of 2004.

### **RESTRUCTURING OF THE DIRECTORATE GENERAL STATISTICS**

During 2003 a restructuring of the Directorate General Statistics (DG-S) took place. Since the establishment of the ECB, the output and staff of DG-S had more than doubled, but the organisational structure had remained essentially the same. The medium-term strategy for statistics, as adopted by the ECB in early 2003 (see Section 4 of Chapter 2), could only be implemented following an organisational review of the Directorate General. This review started in February 2003 and was carried out by a team including an NCB expert. Based on the team's proposals, the Executive Board approved a new organisational structure, effective as of 1 February 2004.

One of the main features of the reorganisation is the strengthening of the user-orientation of

DG-S, e.g. through a centralised user information service. Furthermore, the new set-up serves to increase efficiency and effectiveness in the development of new statistics and statistical standards by combining previously scattered positions allocated to these tasks in a separate new division.

### **2.3 NEW ECB PREMISES**

Being currently located in several different rented buildings, the ECB decided to have new premises built. For this purpose it acquired a site, the Grossmarkthalle area, from the City of Frankfurt. Within the framework of the "New ECB Premises" project, a worldwide call was issued for candidates to participate in the architectural design competition, with a deadline for applications of 20 January 2003. The ECB received applications from more than 300 architects from 31 nations and five continents. In April a Pre-Selection Committee, consisting of five ECB experts supported by five architects, chose 80 candidates, 70 "established" and 10 "emerging young" architects. All 80 candidates were invited to a question and answer session in Frankfurt am Main, which included a site visit to the Grossmarkthalle area. Many of the questions raised by the architects related to the technical specifications of the old Grossmarkthalle building, which dates from 1928, and to the requirements stemming from its status as a listed building. The architects were then asked to anonymously submit a design proposal for the first phase by 7 July.

The competition was judged by an international jury chaired by the ECB's Vice-President and consisting of 12 members: three members from the ECB, three members from NCBs, the five external, internationally renowned architects who had participated in the Pre-Selection Committee and one representative of the City of Frankfurt am Main. On 28 and 29 August the jury shortlisted 12 candidates to be admitted to the second phase of the competition. The ECB asked the 12 candidates to present a more

detailed architectural design concept by 12 December. The jury chose the three prize-winning designs on 13 February 2004.<sup>8</sup> All design proposals submitted in both phases of the competition were subsequently displayed to the public in a three-week exhibition at the Deutsches Architektur Museum in Frankfurt am Main.

The ECB may ask the prize-winning candidates to revise their design concepts in line with the recommendations of the jury and adjusted functional and technical requirements set by the ECB. After examining and evaluating the final design concepts, the ECB will award the contract for the ECB's new premises to the candidate who in the opinion of the ECB best meets the selection criteria. The planning process will start thereafter and construction is scheduled to begin in 2006.

<sup>8</sup> A press release and pictures are available on the ECB's website.

### 3 ESCB SOCIAL DIALOGUE

In 2003 two meetings of the ESCB Social Dialogue were held, in which employee representatives from all the central banks of the ESCB and European trade union federations met with the ECB to discuss developments in the ESCB which have an impact on the situation of NCB employees. Employee representatives of the ten ACCBs were invited to attend as observers.

As in previous years, the main items discussed were developments in banknotes, payment systems, and financial stability and supervision.

In the field of banknotes, the focus was on the arrangements for banknote printing in the long term (see Section 3 of Chapter 2). Employee representatives argued that banknotes were a public good and highlighted that the quality and security of the banknotes were crucial for public confidence. They also felt that the job security of printing works' staff should be safeguarded for various reasons, in particular in acknowledgement of the major efforts involved in having the euro banknotes printed in time for the cash changeover. Therefore, central banks should continue to be involved in all processes related to banknotes, in particular their printing.

Regarding payment systems, the focus was on the progress in the preparations for TARGET2 (see Section 2 of Chapter 2). The ECB informed the participants in the ESCB Social Dialogue on an ongoing basis of the progress made. The employee representatives commented on the possible solutions and expressed a preference for a decentralised solution along the lines of the current system.

As regards financial stability and supervision, the ECB provided the participants with information on the reform of EU arrangements for financial regulation, supervision and stability, the process of implementation of the Lamfalussy framework in the banking sector, the process of revision by the Basel Committee on Banking Supervision of the capital adequacy requirements for banks (the New Basel Capital

Accord), and reforms of national supervisory structures (see Section 2 of Chapter 3). Employee representatives reiterated their preference for tasks relating to financial stability and supervision to be allocated to the central banks.

The ESCB Social Dialogue meetings also provided opportunities to discuss other more general issues such as the development of common training programmes and a corporate culture for the ESCB, the preparations of the ECB for the enlargement of the ESCB in 2004 and the restructuring in some NCBs following the establishment of the Eurosystem. With regard to the latter issue, the factors underlying such reorganisations were discussed and the employee representatives expressed their concern about maintaining employment levels in the NCBs.

The views and concerns expressed by the trade union representatives were conveyed to the Governing Council and the General Council.

At the meetings of the ESCB Social Dialogue the ECB emphasised that the Governing Council, in taking its decisions, applies the principles of efficiency, effectiveness, security, high quality and high standards of service. Furthermore, the impact of its decisions on employment and social conditions is taken into account.

In October 2003 the ECB launched an ESCB Social Dialogue Newsletter in order to enhance both the flow of information to the participants between meetings and the common understanding of the topics covered. Finally, participants stressed the need to strengthen the corporate culture within the ESCB. To this end common training programmes are being organised.

## 4 ANNUAL ACCOUNTS OF THE ECB



## BALANCE SHEET AS AT 31 DECEMBER 2003

ASSETS	NOTE NUMBER	2003 €	2002 €
<b>Gold and gold receivables</b>	<b>1</b>	<b>8,145,320,117</b>	<b>8,058,187,254</b>
<b>Claims on non-euro area residents denominated in foreign currency</b>	<b>2</b>		
Receivables from the IMF		211,651,948	164,788,323
Balances with banks and security investments, external loans and other external assets		28,593,384,857	37,151,511,287
		<b>28,805,036,805</b>	<b>37,316,299,610</b>
<b>Claims on euro area residents denominated in foreign currency</b>	<b>2</b>	<b>2,799,472,504</b>	<b>3,047,976,497</b>
<b>Claims on non-euro area residents denominated in euro</b>	<b>3</b>		
Balances with banks, security investments and loans		474,743,402	183,237,923
<b>Other claims on euro area credit institutions denominated in euro</b>	<b>4</b>	<b>25,000</b>	<b>0</b>
<b>Intra-Eurosystem claims</b>	<b>5</b>		
Claims related to the allocation of euro banknotes within the Eurosystem		34,899,471,205	28,681,074,010
Other claims within the Eurosystem (net)		4,599,894,403	5,468,478,796
		<b>39,499,365,608</b>	<b>34,149,552,806</b>
<b>Other assets</b>	<b>6</b>		
Tangible fixed assets		128,911,950	112,624,758
Other financial assets		5,573,756,258	5,529,030,465
Accruals and prepaid expenses		590,646,023	1,260,718,561
Sundry		37,791,421	609,968,394
		<b>6,331,105,652</b>	<b>7,512,342,178</b>
<b>Loss for the year</b>		<b>476,688,785</b>	<b>0</b>
<b>Total assets</b>		<b>86,531,757,873</b>	<b>90,267,596,268</b>

LIABILITIES	NOTE NUMBER	2003 €	2002 €
<b>Banknotes in circulation</b>	<b>7</b>	<b>34,899,471,205</b>	<b>28,681,074,010</b>
<b>Liabilities to other euro area residents denominated in euro</b>	<b>8</b>	<b>1,065,000,000</b>	<b>1,036,000,000</b>
<b>Liabilities to non-euro area residents denominated in euro</b>	<b>9</b>	<b>146,867,501</b>	<b>227,805,777</b>
<b>Liabilities to non-euro area residents denominated in foreign currency</b>	<b>10</b>		
Deposits, balances and other liabilities		<b>1,452,432,822</b>	<b>5,192,380,656</b>
<b>Intra-Eurosystem liabilities</b>	<b>11</b>		
Liabilities equivalent to the transfer of foreign reserves		<b>40,497,150,000</b>	<b>40,497,150,000</b>
<b>Other liabilities</b>	<b>12</b>		
Accruals and income collected in advance		1,162,299,071	1,417,939,194
Sundry		174,890,973	75,191,137
		<b>1,337,190,044</b>	<b>1,493,130,331</b>
<b>Provisions</b>	<b>13</b>	<b>87,195,777</b>	<b>2,644,780,685</b>
<b>Revaluation accounts</b>	<b>14</b>	<b>2,176,464,065</b>	<b>4,404,834,096</b>
<b>Capital and reserves</b>	<b>15</b>		
Capital		4,097,229,250	4,097,229,250
Reserves		772,757,209	772,757,209
		<b>4,869,986,459</b>	<b>4,869,986,459</b>
<b>Profit for the year</b>		<b>0</b>	<b>1,220,454,254</b>
<b>Total liabilities</b>		<b>86,531,757,873</b>	<b>90,267,596,268</b>

## PROFIT AND LOSS ACCOUNT FOR THE YEAR ENDING 31 DECEMBER 2003

	NOTE NUMBER	2003 €	2002 €
Interest income on foreign reserve assets		541,294,375	990,618,897
Interest income arising from the allocation of euro banknotes within the Eurosystem		698,245,187	726,917,226
Other interest income		1,449,963,923	1,965,003,344
<i>Interest income</i>		<i>2,689,503,485</i>	<i>3,682,539,467</i>
Remuneration of NCBs' claims in respect of foreign reserves transferred		(807,683,148)	(1,140,963,789)
Other interest expense		(1,166,693,660)	(1,547,042,623)
<i>Interest expense</i>		<i>(1,974,376,808)</i>	<i>(2,688,006,412)</i>
<b>Net interest income</b>	<b>20</b>	<b>715,126,677</b>	<b>994,533,055</b>
Realised gains/losses arising from financial operations	21	525,260,622	735,425,388
Write-downs on financial assets and positions	22	(3,972,689,560)	(276,955,036)
Transfer to/from provisions for foreign exchange rate and price risks		2,568,708,838	154,000,000
<b>Net result of financial operations, write-downs and risk provisions</b>		<b>(878,720,100)</b>	<b>612,470,352</b>
<b>Net (expense)/income from fees and commissions</b>	<b>23</b>	<b>(63,466)</b>	<b>(227,158)</b>
<b>Other income</b>	<b>24</b>	<b>2,911,280</b>	<b>3,744,153</b>
<b>Total net income</b>		<b>(160,745,609)</b>	<b>1,610,520,402</b>
Staff costs	25 & 26	(129,886,988)	(120,003,344)
Administrative expenses	27	(153,549,282)	(133,966,576)
Depreciation of tangible fixed assets	28	(30,410,140)	(17,738,206)
Banknote production services	29	(2,096,766)	(118,358,022)
<b>(Loss)/Profit for the year</b>		<b>(476,688,785)</b>	<b>1,220,454,254</b>

Frankfurt am Main, 9 March 2004

EUROPEAN CENTRAL BANK

Jean-Claude Trichet  
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<sup>2</sup>, which the Governing Council of the ECB considers to be appropriate to the nature of central bank activity.

## ACCOUNTING PRINCIPLES

The following accounting principles have been applied: economic reality and transparency, prudence, recognition of post-balance-sheet events, materiality, the accruals principle, going concern and 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 AND FOREIGN CURRENCY ASSETS AND LIABILITIES

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

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

Gold is valued at the market price prevailing at the year-end. 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 31 December 2003.

## SECURITIES

All marketable debt securities and similar assets are valued at the mid-market prices prevailing at the balance sheet date on a security-by-security basis. For the year ending 31 December 2003, mid-market prices on 30 December 2003 were used. Non-marketable securities are valued at cost.

## INCOME RECOGNITION

Income and expenses are recognised in the period in which they are earned or incurred. Realised gains and losses arising from the sale of foreign exchange, gold and securities are taken to the profit and loss account. Such realised gains and losses are calculated by reference to the average cost of the respective asset.

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, currency or in gold are not netted against unrealised gains in other securities, currencies or gold. In the event of an unrealised loss on any item at the year-end, the average cost of that item is reduced to the year-end exchange rate and/or market price.

<sup>1</sup> The detailed accounting policies of the ECB are laid down in a Decision of the Governing Council of the ECB of 5 December 2002 (ECB/2002/11), OJ L 58, 3.3.2003, pp. 38-59.

<sup>2</sup> These policies are consistent with the provisions of Article 26.4 of the Statute of the ESCB, which require a harmonised approach to the rules governing the accounting and financial reporting of Eurosystem operations.

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.

#### **REVERSE TRANSACTIONS**

Under a repurchase agreement, securities are sold for cash with a simultaneous agreement to repurchase them at an agreed price on a set future date. These agreements to repurchase are reflected on the liability side of the balance sheet and also lead to an interest expense in the profit and loss account. Securities sold under such an agreement remain on the balance sheet of the ECB.

Under a reverse repurchase agreement securities are bought for cash with a simultaneous agreement to sell them back to the counterparty at an agreed price on a set future date. These agreements to sell are recorded on the asset side of the balance sheet, but are not included in the ECB's security holding and give rise to interest income in the profit and loss account.

Reverse transactions (including security lending transactions) conducted under an automated security lending programme are recorded on the balance sheet only where collateral is provided to the ECB in the form of cash over the maturity of the transaction. In 2003 the ECB did not receive any collateral in the form of cash over the maturity of such transactions.

#### **OFF-BALANCE-SHEET INSTRUMENTS**

Currency instruments, namely foreign exchange forward transactions, forward legs of foreign exchange swaps and other currency instruments involving an exchange of one currency for another at a future date, are included in the net foreign currency position for the purpose of calculating foreign exchange gains and losses. Interest rate instruments are revalued on an item-by-item basis. Outstanding interest rate futures positions are recorded in off-balance-sheet accounts. Since 2003 daily changes in the variation margin have been recorded in the profit and loss account.

#### **POST-BALANCE-SHEET EVENTS**

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

#### **INTRA-ESCB BALANCES/INTRA-EUROSISTEM BALANCES**

Intra-ESCB transactions are cross-border transactions that occur between two EU central banks. These transactions are processed primarily via TARGET – the Trans-European Automated Real-time Gross settlement Express Transfer system (see Chapter 2) – and give rise to bilateral balances in accounts held between those EU central banks connected to TARGET. These bilateral balances are then assigned to the ECB on a daily basis, leaving each NCB with a single net bilateral position vis-à-vis the ECB only. This position in the books of the ECB represents the net claim or liability of each NCB against the rest of the ESCB.

Intra-ESCB balances of the euro area NCBs with the ECB (except for the capital of the ECB and positions resulting from the transfer of foreign reserve assets to the ECB) are described as intra-Eurosystem claims or liabilities and are presented in the balance sheet of the ECB as a single net asset or liability position.

Intra-Eurosystem balances arising from the allocation of euro banknotes within the Eurosystem are included as a single net asset under "Claims related to the allocation of euro banknotes within the Eurosystem" (see "Banknotes in circulation" in the notes on accounting policies).

Intra-ESCB balances of the non-euro area NCBs (Danmarks Nationalbank, Sveriges Riksbank and the Bank of England) with the ECB are disclosed under "Liabilities to non-euro area residents denominated in euro".

#### **TREATMENT OF FIXED ASSETS**

Fixed assets, with the exception of land, are valued at cost less depreciation. Land is valued

at cost. 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	4 years
Equipment, furniture and plant in building	10 years
Capitalised building and refurbishment expenditure	25 years
Fixed assets costing less than €10,000	Written off in the year of acquisition

The depreciation period for capitalised building and refurbishment expenditure relating to the ECB's existing premises has been reduced in order to ensure that these assets are completely written off by the end of 2008, by which time the ECB is expected to have moved to its final location.

### THE 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 in the notes on the balance sheet. 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.

### BANKNOTES IN CIRCULATION

The ECB and the 12 euro area NCBs, which together comprise the Eurosystem, issue euro banknotes.<sup>3</sup> The total value of euro banknotes in circulation is allocated to the Eurosystem central banks on the last working day of each month in accordance with the banknote allocation key.<sup>4</sup> The ECB has been allocated a share of 8% of the total value of euro banknotes in circulation, which is disclosed under the balance sheet liability item

"Banknotes in circulation". The ECB's share of the total euro banknote issue is backed by claims on the NCBs. These claims, which bear interest<sup>5</sup>, are disclosed under the sub-item "Intra-Eurosystem claims: claims related to the allocation of euro banknotes within the Eurosystem" (see "Intra-ESCB balances/intra-Eurosystem balances" in the notes on accounting policies). Interest income on these claims is included within the item "Net interest income". The Governing Council has decided that this income shall be distributed separately to the NCBs in the form of an interim distribution after the end of each quarter<sup>6</sup>. It will be distributed in full unless the ECB's net profit for the year is less than its income earned on euro banknotes in circulation, and subject to any decision by the Governing Council to reduce this income in respect of costs incurred by the ECB in connection with the issue and handling of euro banknotes.

### OTHER ISSUES

Taking account of the ECB's role as a central bank, the Executive Board of the ECB considers that the publication of a cash flow statement would 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 has approved the appointment of KPMG Deutsche Treuhand-Gesellschaft Aktiengesellschaft Wirtschaftsprüfungsgesellschaft as the external auditors of the ECB for a five-year period starting from the financial year 2003.

3 ECB Decision of 6 December 2001 on the issue of euro banknotes (ECB/2001/15), OJ L 337, 20.12.2001, pp. 52-54.

4 "Banknote allocation key" means the percentages that result from taking into account the ECB's share in the total euro banknote issue and applying the subscribed capital key to the NCBs' share in that total.

5 ECB Decision of 6 December 2001 on the allocation of monetary income of the national central banks of participating Member States from the financial year 2002 (ECB/2001/16), OJ L 337, 20.12.2001, pp. 55-61.

6 ECB Decision of 21 November 2002 on the distribution of the income of the European Central Bank on euro banknotes in circulation to the national central banks of the participating Member States (ECB/2002/9), OJ L 323, 28.11.2002, pp. 49-50.

## NOTES ON THE BALANCE SHEET

### I GOLD AND GOLD RECEIVABLES

The ECB holds 24.7 million ounces of fine gold (2002: 24.7 million ounces). No transactions in gold took place in 2003. The balance sheet movement compared with 2002 is due to the year-end revaluation of these holdings (see “Gold and foreign currency assets and liabilities” in the notes on accounting policies).

### 2 CLAIMS ON NON-EURO AREA AND EURO AREA RESIDENTS DENOMINATED IN FOREIGN CURRENCY

#### *Receivables from the IMF*

This asset represents the ECB’s holdings of Special Drawing Rights (SDRs) as at 31 December 2003. It arises as the result of a two-way SDR buying and selling arrangement with the International Monetary Fund (IMF) whereby the IMF is authorised to arrange sales or purchases of SDRs against euro, on behalf of the ECB, within minimum and maximum holding levels. The SDR is defined in terms of a basket of currencies. Its value is determined as the weighted sum of exchange rates of the four major currencies (euro, Japanese yen, pound sterling and US dollar). For accounting purposes, SDRs are treated as a foreign currency (see “Gold and foreign currency assets and liabilities” in the notes on accounting policies).

#### *Balances with banks and security investments, external loans and other external assets Claims on euro area residents denominated in foreign currency*

These claims consist of balances with banks, loans denominated in foreign currency and investments in securities, denominated in US dollar and Japanese yen. They can be broken down as follows:

<i>Claims on non-euro area residents</i>	2003 €	2002 €	Change €
Current accounts	1,365,187,080	1,249,268,747	115,918,333
Money market deposits	1,197,220,582	1,665,333,388	(468,112,806)
Reverse repurchase agreements	3,834,025,154	8,252,807,861	(4,418,782,707)
Security investments	22,196,952,041	25,984,101,291	(3,787,149,250)
<b>Total</b>	<b>28,593,384,857</b>	<b>37,151,511,287</b>	<b>(8,558,126,430)</b>

<i>Claims on euro area residents</i>	2003 €	2002 €	Change €
Current accounts	26,740	78,898	(52,158)
Money market deposits	2,799,445,764	3,047,897,599	(248,451,835)
<b>Total</b>	<b>2,799,472,504</b>	<b>3,047,976,497</b>	<b>(248,503,993)</b>

The reduction in these positions in 2003 is primarily due to the year-end revaluation of the ECB’s US dollar denominated assets. The depreciation of the US dollar vis-à-vis the euro has resulted in a significant decline in their euro equivalent value (see “Gold and foreign currency assets and liabilities” and “Income recognition” in the notes on accounting policies).

### 3 CLAIMS ON NON-EURO AREA RESIDENTS DENOMINATED IN EURO

As at 31 December 2003, this claim consisted of bank deposits with non-euro area residents.

### 4 OTHER CLAIMS ON EURO AREA CREDIT INSTITUTIONS DENOMINATED IN EURO

As at 31 December 2003, this claim consisted of a bank deposit with a euro area resident.

## 5 INTRA-EUROSISTEM CLAIMS

### *Claims related to the allocation of euro banknotes within the Eurosystem*

This item consists of the claims of the ECB vis-à-vis the euro area NCBs relating to the allocation of euro banknotes within the Eurosystem (see “Banknotes in circulation” in the notes on accounting policies).

### *Other claims within the Eurosystem (net)*

This item consists of the TARGET balances of the euro area NCBs vis-à-vis the ECB and amounts due in respect of the interim distributions of the ECB’s income derived from banknotes. As at 31 December 2003, an amount of €533 million was due from the euro area NCBs in respect of interim distributions of the ECB’s income derived from banknotes. This represents the interim distributions of such income to the euro area NCBs for the first three quarters of the year, which were subsequently recalled (see “Banknotes in circulation” in the notes on accounting policies and note 20 in the “Notes on the Profit and Loss Account”).

	2003 €	2002 €
Due from euro area NCBs in respect of TARGET	49,646,309,854	56,546,091,330
Due to euro area NCBs in respect of TARGET	(45,579,175,620)	(50,471,612,534)
Net TARGET position	4,067,134,234	6,074,478,796
Due from/(to) euro area NCBs in respect of the interim distribution of the ECB’s income derived from banknotes	532,760,169	(606,000,000)
Other claims within the Eurosystem (net)	4,599,894,403	5,468,478,796

## 6 OTHER ASSETS

### *Tangible fixed assets*

These assets comprised the following main items on 31 December 2003:

	Net book value as at 31 Dec. 2003 €	Net book value as at 31 Dec. 2002 €	Change €
Land and buildings	54,929,962	51,496,140	3,433,822
Computers	45,407,622	33,522,388	11,885,234
Equipment, furniture, plant in building and motor vehicles	2,149,813	2,575,083	(425,270)
Assets under construction	23,259,861	9,092,185	14,167,676
Other fixed assets	3,164,692	15,938,962	(12,774,270)
Total	128,911,950	112,624,758	16,287,192

The main increase in this item relates to capitalised costs of the ECB’s installations at the ECB’s third site and the purchase of additional information systems equipment.

### *Other financial assets*

The main components of this item are as follows:

	2003 €	2002 €	Change €
Securities denominated in euro	5,276,052,927	5,428,324,673	(152,271,746)
Reverse repurchase agreements in euro	167,100,400	0	167,100,400
Claims relating to the ECB pension fund	91,727,194	61,852,580	29,874,614
Other financial assets	38,875,737	38,853,212	22,525
Total	5,573,756,258	5,529,030,465	44,725,793



(a) Securities denominated in euro and reverse repurchase agreements in euro constitute the investment of the ECB's own funds (see also note 12).

(b) The investment portfolios relating to the ECB pension fund are valued at €91.7 million (2002: €61.9 million). The assets held represent the investments of accumulated pension contributions by the ECB and the staff of the ECB as at 31 December 2003, 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 external fund manager values the assets of the pension fund using year-end market prices.

(c) The ECB holds 3,000 shares in the Bank for International Settlements (BIS) which are included at the acquisition cost of €38.5 million.

#### **Accruals and prepaid expenses**

In 2002 this position included accrued interest receivable of €727 million on the ECB's claims related to the allocation of euro banknotes within the Eurosystem for the whole year. As from 2003, this interest is received after the end of each quarter. Consequently this position now includes only the final quarterly accrued interest due to the ECB of €165 million (see "Banknotes in circulation" in the notes on accounting policies).

The remainder of this balance consists principally of accrued interest on securities and other financial assets.

#### **Sundry**

In 2002 this position included the accrued interim distribution of the ECB's income derived from banknotes of €606 million. In

2003, all such income was retained by the ECB (see note 20 in the "Notes on the Profit and Loss Account").

## **7 BANKNOTES IN CIRCULATION**

This item consists of the ECB's share of the total euro banknotes in circulation (see "Banknotes in circulation" in the notes on accounting policies).

## **8 LIABILITIES TO OTHER EURO AREA RESIDENTS DENOMINATED IN EURO**

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

## **9 LIABILITIES TO NON-EURO AREA RESIDENTS DENOMINATED IN EURO**

These liabilities principally represent balances held at the ECB by non-euro area NCBs arising from transactions processed via the TARGET system (see "Intra-ESCB balances/intra-Eurosystem balances" in the notes on accounting policies).

## **10 LIABILITIES TO NON-EURO AREA RESIDENTS DENOMINATED IN FOREIGN CURRENCY**

The liabilities arising from repurchase agreements conducted with non-euro area residents in connection with the management of the foreign currency reserves of the ECB are as follows:

	2003 €	2002 €	Change €
Repurchase agreements	1,452,432,822	5,192,380,656	(3,739,947,834)

## 11 INTRA-EUROSYSTEM LIABILITIES

These represent the liabilities to euro area NCBs that arose from the transfer of foreign reserve assets to the ECB. The liabilities are denominated in euro at a value fixed at the time of their transfer. They are remunerated at the latest available marginal rate for the Eurosystem's main refinancing operations, adjusted to reflect a zero return on the gold component (see note 20 in the "Notes on the Profit and Loss Account").

	%	€
Nationale Bank van België/ Banque Nationale de Belgique	2.8658	1,432,900,000
Deutsche Bundesbank	24.4935	12,246,750,000
Bank of Greece	2.0564	1,028,200,000
Banco de España	8.8935	4,446,750,000
Banque de France	16.8337	8,416,850,000
Central Bank & Financial Services Authority of Ireland	0.8496	424,800,000
Banca d'Italia	14.8950	7,447,500,000
Banque centrale du Luxembourg	0.1492	74,600,000
De Nederlandsche Bank	4.2780	2,139,000,000
Oesterreichische Nationalbank	2.3594	1,179,700,000
Banco de Portugal	1.9232	961,600,000
Suomen Pankki – Finlands Bank	1.3970	698,500,000
Total	80.9943	40,497,150,000

## 12 OTHER LIABILITIES

This item consists mainly of interest due to the NCBs in respect of their claims relating to the foreign reserves transferred (see note 11). The ECB's obligations in respect of the pension fund, including a provision based on the actuary's report, amount to €100.6 million (2002: €72.4 million). Also included within this balance are other accruals and outstanding repurchase transactions of €64 million, conducted in connection with the management of the ECB's own funds (see note 6).

## 13 PROVISIONS

In 2000, a general provision against the ECB's large exposure to exchange rate and interest rate risk was made. The size and continuing requirement for this provision was reviewed annually, based on the ECB's assessment of its future exposure to exchange rate and interest rate risk. Given the significant depreciation of the US dollar vis-à-vis the euro in 2003, this provision was used in full to cover unrealised losses expensed at year-end arising principally from the revaluation of the ECB's holding of US dollar denominated assets (see "Income recognition" in the notes on accounting policies and note 22 in the "Notes on the Profit and Loss Account")<sup>7</sup>.

This position also includes provisions relating to pensions and expenditure on goods and services, together with an appropriate provision against the contractual obligation of the ECB to restore its current premises to their original condition when they are vacated and the ECB moves to its final site.

## 14 REVALUATION ACCOUNTS

These accounts represent revaluation reserves arising from unrealised gains on assets and liabilities.

	2003 €	2002 €	Change €
Gold	2,070,968,381	1,983,835,491	87,132,890
Foreign currency	1,901	1,682,723,875	(1,682,721,974)
Securities	105,493,783	738,274,730	(632,780,947)
Total	2,176,464,065	4,404,834,096	(2,228,370,031)

<sup>7</sup> ECB Decision of 21 November 2002 on the distribution of the income of the European Central Bank on euro banknotes in circulation to the national central banks of the participating Member States (ECB/2002/9), OJ L 323, 28.11.2002, pp. 49-50.

## 15 CAPITAL AND RESERVES

### Capital

The fully paid-up subscriptions of the euro area NCBs to the ECB's capital of €5 billion amount to a total of €4,049,715,000 as shown below:

	%	Subscribed capital €	Paid-up capital €
Nationale Bank van België/Banque Nationale de Belgique	2.8658	143,290,000	143,290,000
Deutsche Bundesbank	24.4935	1,224,675,000	1,224,675,000
Bank of Greece	2.0564	102,820,000	102,820,000
Banco de España	8.8935	444,675,000	444,675,000
Banque de France	16.8337	841,685,000	841,685,000
Central Bank & Financial Services Authority of Ireland	0.8496	42,480,000	42,480,000
Banca d'Italia	14.8950	744,750,000	744,750,000
Banque centrale du Luxembourg	0.1492	7,460,000	7,460,000
De Nederlandsche Bank	4.2780	213,900,000	213,900,000
Oesterreichische Nationalbank	2.3594	117,970,000	117,970,000
Banco de Portugal	1.9232	96,160,000	96,160,000
Suomen Pankki – Finlands Bank	1.3970	69,850,000	69,850,000
<b>Total euro area NCBs</b>	<b>80.9943</b>	<b>4,049,715,000</b>	<b>4,049,715,000</b>
Danmarks Nationalbank	1.6709	83,545,000	4,177,250
Sveriges Riksbank	2.6537	132,685,000	6,634,250
Bank of England	14.6811	734,055,000	36,702,750
<b>Total non-euro area NCBs</b>	<b>19.0057</b>	<b>950,285,000</b>	<b>47,514,250</b>
<b>Total euro area and non-euro area NCBs</b>	<b>100.0000</b>	<b>5,000,000,000</b>	<b>4,097,229,250</b>

The non-euro area NCBs' contributions represent 5% of their share in the ECB's subscribed capital and amount to a total of €47,514,250. The amounts paid up by these NCBs are contributions to the operational costs of the ECB. Unlike the euro area NCBs, the non-euro area NCBs are not entitled to receive any share of the distributable

profits of the ECB, including income arising from the allocation of euro banknotes within the Eurosystem, nor are they liable to fund any loss of the ECB.

### Reserves

This position represents the general reserve fund of the ECB, established under Article 33 of the Statute of the ESCB.

## 16 POST-BALANCE-SHEET EVENTS

### CHANGES TO THE ECB'S CAPITAL KEY

#### Background

Under Article 29.3 of the Statute of the ESCB, the key of NCBs for subscription of the ECB's capital must be adjusted every five years. The first such adjustment following the establishment of the ECB was made on 1 January 2004. On 1 May 2004 a second change of the ECB's capital key will follow as a result of the accession of ten new Member States. Based on the Council Decision of 15 July 2003 on the statistical data to be used for the determination of the key for subscription of the capital of the European Central Bank, the capital keys of NCBs were adjusted on 1 January 2004 as follows:

	From 1 January 1999 to 31 December 2003 %	From 1 January 2004 to 1 May 2004 %
Nationale Bank van België/ Banque Nationale de Belgique	2.8658	2.8297
Deutsche Bundesbank	24.4935	23.4040
Bank of Greece	2.0564	2.1614
Banco de España	8.8935	8.7801
Banque de France	16.8337	16.5175
Central Bank & Financial Services Authority of Ireland	0.8496	1.0254
Banca d'Italia	14.8950	14.5726
Banque centrale du Luxembourg	0.1492	0.1708
De Nederlandsche Bank	4.2780	4.4323
Oesterreichische Nationalbank	2.3594	2.3019
Banco de Portugal	1.9232	2.0129
Suomen Pankki – Finlands Bank	1.3970	1.4298
<b>Subtotal for euro area NCBs</b>	<b>80.9943</b>	<b>79.6384</b>

Danmarks Nationalbank	1.6709	1.7216
Sveriges Riksbank	2.6537	2.6636
Bank of England	14.6811	15.9764
<i>Subtotal for non-euro area NCBs</i>	<i>19.0057</i>	<i>20.3616</i>
<b>Total</b>	<b>100.0000</b>	<b>100.0000</b>

## IMPACT OF CHANGES

### *Capital of the ECB*

Due to the overall reduction of 1.3559% in the weighting of the euro area NCBs (with fully paid-up subscriptions) in the ECB's capital, and the increase in that of the non-euro area NCBs (who only paid up 5% of their subscription), the ECB's capital decreased by a total of €64 million on 1 January 2004.

### *NCBs' claims equivalent to the foreign reserve assets transferred to the ECB*

Given the decrease in the weighting in the ECB capital key of the euro area NCBs (which transferred foreign reserve assets to the ECB according to their prevailing subscribed shares in the ECB's capital), the initial claim of €40,497 million equivalent to this transfer was also adjusted accordingly. This resulted in a reduction of €678 million, which was repaid to the euro area NCBs.

### *Changes as at 1 May 2004*

When the new countries join the European Union and their respective NCBs become part of the ESCB, the subscribed capital of the ECB and the limit on the amount of foreign reserve assets that may be transferred to the ECB will be increased automatically.

## OFF-BALANCE-SHEET INSTRUMENTS

### 17 AUTOMATIC SECURITY LENDING PROGRAMME

As part of the management of the ECB's own funds, the ECB has concluded an automatic security lending programme agreement whereby an appointed agent enters into security lending transactions on behalf of the ECB with a

number of counterparties, designated by the ECB as eligible counterparties. Under this agreement, reverse transactions conducted under repurchase and reverse repurchase agreements, each with a value of €0.4 billion (2002: €1.4 billion), were outstanding as at 31 December 2003 (see "Reverse transactions" in the notes on accounting policies).

### 18 INTEREST RATE FUTURES

In 2003 foreign currency interest rate futures were used within the management of the ECB's foreign reserves. As at 31 December 2003, the following transactions were outstanding, stated at nominal value:

Foreign currency interest rate futures	Contract value €
Purchases	1,928,169,982
Sales	610,966,084

### 19 CAPITAL COMMITMENTS

On 5 March 2002 the ECB and the City of Frankfurt am Main signed a purchase agreement for the site of the ECB's final premises. Based on a predefined area of construction floor space, the minimum purchase price had been set at €61.4 million, payable in instalments by 31 December 2004 at the latest, when legal title to the site will pass to the ECB. A first instalment was paid to the City of Frankfurt in 2003.

## NOTES ON THE PROFIT AND LOSS ACCOUNT

### 20 NET INTEREST INCOME

#### *Interest income on foreign reserve assets*

This item includes interest income, net of interest expense, in respect of the assets and liabilities denominated in foreign currency, as follows:

	2003 €	2002 €	Change €
Interest on current accounts	3,679,287	6,076,316	(2,397,029)
Money market deposit income	45,699,455	76,811,025	(31,111,570)
Reverse repurchase agreements	66,206,740	120,729,765	(54,523,025)
Net income on securities	445,357,205	857,373,212	(412,016,007)
<b>Total interest income on foreign reserve assets</b>	<b>560,942,687</b>	<b>1,060,990,318</b>	<b>(500,047,631)</b>
Interest expense on current accounts	(73,292)	(263,018)	189,726
Repurchase agreements	(19,575,020)	(70,108,403)	50,533,383
<b>Interest income on foreign reserve assets (net)</b>	<b>541,294,375</b>	<b>990,618,897</b>	<b>(449,324,522)</b>

#### *Interest income arising from the allocation of euro banknotes within the Eurosystem*

This item consists of the interest income of the ECB relating to its 8% share in the total euro banknote issue. Interest on the claims of the ECB in respect of its share of banknotes is earned at the latest available marginal rate for the Eurosystem's main refinancing operations. This income is distributed to the NCBs as outlined in "Banknotes in circulation" in the notes on accounting policies.

Based on the ECB's estimated financial result for the year ending 31 December 2003, the Governing Council decided in December 2003:

(a) to recall the three interim quarterly distributions already paid to the NCBs during the year amounting to €533 million in total;

(b) to withhold the final quarterly interim distribution of €165 million.

#### *Remuneration of NCBs' claims in respect of foreign reserves transferred*

Remuneration paid to euro area NCBs on their claims on the ECB in respect of the foreign reserve assets transferred under Article 30.1 of the Statute of the ESCB is disclosed under this item.

#### *Other interest income and Other interest expenses*

These positions include interest income and expenses on balances arising from TARGET and in respect of other assets and liabilities denominated in euro.

Net interest income has decreased compared with 2002, primarily due to the further decline in both US dollar and euro interest rates during the year.

### 21 REALISED GAINS/LOSSES ARISING FROM FINANCIAL OPERATIONS

	2003 €	2002 €	Change €
Net realised price gains on securities	528,606,147	734,191,562	(205,585,415)
Net realised exchange rate (losses)/gains	(3,345,525)	1,233,826	(4,579,351)
<b>Realised gains arising from financial operations</b>	<b>525,260,622</b>	<b>735,425,388</b>	<b>(210,164,766)</b>

Net realised gains arose on sales of securities as a result of normal portfolio management transactions. In 2003 there were no material outflows of foreign currencies.

## 22 WRITE-DOWNS ON FINANCIAL ASSETS AND POSITIONS

	2003 €	2002 €	Change €
Unrealised price losses on securities	(10,349,709)	0	(10,349,709)
Unrealised exchange rate losses	(3,962,339,851)	(276,955,036)	(3,685,384,815)
Total	(3,972,689,560)	(276,955,036)	(3,695,734,524)

This expense is primarily due to the write-down of the average acquisition cost of the ECB's US dollar holding to its end-of-year exchange rate as at 31 December 2003, following the depreciation of this currency against the euro over the year. It was partially covered by the release of the remaining general provision against foreign exchange and interest rate risks (see "Income recognition" in the notes on accounting policies and note 2 in the "Notes on the Balance Sheet" respectively).

## 23 NET (EXPENSE)/INCOME FROM FEES AND COMMISSIONS

	2003 €	2002 €	Change €
Income from fees and commissions	700,271	634,241	66,030
Expenses relating to fees and commissions	(763,737)	(861,399)	97,662
Net (expense)/income from fees and commissions	(63,466)	(227,158)	163,692

Income under this heading arose primarily from penalties imposed on credit institutions for non-compliance with the minimum reserve requirements. Expenses primarily relate to fees payable on current accounts and in connection with the execution of foreign currency interest rate futures (see note 18 in the "Notes on the Balance Sheet").

## 24 OTHER INCOME

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

## 25 STAFF COSTS

Salaries and allowances of €108.2 million (2002: €92.6 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 €2.0 million (2002: €2.0 million). No pensions were paid to former members of the Executive Board or their dependants during the year. Transitional payments were made to departing members of the Executive Board. Salaries and allowances, 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.

At the end of 2003 the ECB employed 1,213 staff, of whom 84 held managerial positions. The movement of staff during 2003 was as follows:

	2003	2002
As at 1 January	1,105	1,043
New staff	149	113
Resignations	41	51
As at 31 December	1,213	1,105
Average number employed	1,160	1,080

## 26 THE ECB'S RETIREMENT PLAN

In accordance with the rules of the ECB's retirement plan, a triennial full actuarial valuation is required. The latest full actuarial valuation was carried out as at 31 December 2002, assuming all members left service, and pensionable service ceased, on that date.

The pension cost relating to the plan is assessed in accordance with the advice of a qualified actuary. The total pension cost to the ECB including a provision for disability and post-retirement benefits was €21.7 million (2002: €27.4 million). This cost includes a provision for pensions to members of the Executive Board of €1.9 million (2002: €2.1 million) and any supplementary contributions. The required rate of future service contributions by the ECB is 16.5% of pensionable earnings of all staff.

## **27 ADMINISTRATIVE EXPENSES**

These cover all other current expenses relating to rental and 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.

## **28 DEPRECIATION OF TANGIBLE FIXED ASSETS**

The rise in the level of the depreciation charges in 2003 reflects for the first time the effect of reducing the depreciation period for capital expenditure on buildings and refurbishment (see “Treatment of fixed assets” in the notes on accounting policies).

## **29 BANKNOTE PRODUCTION SERVICES**

In 2003 this expense related to cross-border transportation costs of euro banknotes between NCBs to meet unexpected fluctuations in demand. These costs are borne centrally by the ECB. The figure for 2002 related to the expensing of a contingency stock of euro banknotes acquired for the Eurosystem in 2001.

## NOTE ON THE ALLOCATION OF LOSSES

*This note is not part of the financial statements of the ECB for the year 2003. It is published in the Annual Report for information purposes only.*

### INCOME RELATED TO THE ECB'S BANKNOTE ISSUE

Following a decision by the Governing Council of the ECB, the amount of €698 million was retained by the ECB to ensure that the total profit distribution for the year did not exceed the ECB's net profit for the year. This amount is all of the income relating to the ECB's share of total euro banknotes in circulation for 2003.

### COVERAGE OF ECB LOSSES

Under Article 33.2 of the Statute of the ESCB, in the event of a loss incurred by the ECB, the shortfall may be offset against the general reserve fund of the ECB and, if necessary, following a decision by the Governing Council, against the monetary income of the relevant financial year in proportion and up to the amounts allocated to the national central banks in accordance with Article 32.5 of the Statute.<sup>8</sup>

At its meeting on 18 March 2004, the Governing Council of the ECB decided to cover the loss for the year ending 31 December 2003 as follows:

	2003 €	2002 €
(Loss)/Profit for the year	(476,688,785)	1,220,454,254
Income on the ECB's banknote issue distributed to NCBs	0	(606,000,000)
(Loss)/Profit for the year after distribution of income on the ECB's banknote issue	(476,688,785)	614,454,254
(Transfers to)/withdrawals from general reserve fund	476,688,785	0
Distributable profits	0	614,454,254
Distribution to NCBs	0	(614,454,254)
Total	0	0

<sup>8</sup> Under Article 32.5 of the Statute of the ESCB, the sum of the national central banks' monetary income is to be allocated to the national central banks in proportion to their paid-up shares in the capital of the ECB.







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## Auditor's report

President and Governing Council  
of the European Central Bank

Frankfurt am Main

We have audited the accompanying balance sheet of the European Central Bank as of 31 December 2003 and the related profit and loss account for the year then ended as well as the notes. These annual accounts are the responsibility of the European Central Bank's Executive Board. Our responsibility is to express an opinion on these annual accounts based on our audit.

We conducted our audit in accordance with International Standards on Auditing. Those Standards require that we plan and perform the audit to obtain reasonable assurance about whether the annual accounts are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the annual accounts. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the annual accounts. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the annual accounts give a true and fair view of the financial position of the European Central Bank as of 31 December 2003 and of the results of its operations for the year then ended in accordance with the accounting policies as described in the first part of the notes.

Frankfurt am Main, 9 March 2004

KPMG Deutsche Treuhand-Gesellschaft  
Aktiengesellschaft  
Wirtschaftsprüfungsgesellschaft

(Wohlmannstetter)  
Wirtschaftsprüfer

(Dr. Lemnitzer)  
Wirtschaftsprüfer

Aufsichtsratsvorsitzender:  
WP StB Dipl.-Kfm.  
Gerhard Brackert

Vorstand:  
WP StB Dipl.-Kfm.  
Axel Berger  
WP RA StB  
Dr. Bernd Erle  
WP StB Dipl.-Kfm.  
Prof. Dr. Gerd Geib  
WP Dr. Martin Hoyos

RA StB  
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WP StB Dr. Peter Wesner

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## 5 CONSOLIDATED BALANCE SHEET OF THE EUROSISTEM AS AT 31 DECEMBER 2003

(EUR MILLIONS)

ASSETS	31 DECEMBER 2003	31 DECEMBER 2002
<b>1 Gold and gold receivables</b>	<b>130,344</b>	<b>130,739</b>
<b>2 Claims on non-euro area residents denominated in foreign currency</b>	<b>175,579</b>	<b>234,486</b>
2.1 Receivables from the IMF	29,130	31,305
2.2 Balances with banks and security investments, external loans and other external assets	146,449	203,181
<b>3 Claims on euro area residents denominated in foreign currency</b>	<b>17,415</b>	<b>19,823</b>
<b>4 Claims on non-euro area residents denominated in euro</b>	<b>6,049</b>	<b>4,190</b>
4.1 Balances with banks, security investments and loans	6,049	4,190
4.2 Claims arising from the credit facility under ERM II	0	0
<b>5 Lending to euro area credit institutions related to monetary policy operations denominated in euro</b>	<b>298,163</b>	<b>227,654</b>
5.1 Main refinancing operations	253,001	180,000
5.2 Longer-term refinancing operations	45,000	45,000
5.3 Fine-tuning reverse operations	0	0
5.4 Structural reverse operations	0	0
5.5 Marginal lending facility	134	2,621
5.6 Credits related to margin calls	28	33
<b>6 Other claims on euro area credit institutions denominated in euro</b>	<b>729</b>	<b>147</b>
<b>7 Securities of euro area residents denominated in euro</b>	<b>54,466</b>	<b>27,828</b>
<b>8 General government debt denominated in euro</b>	<b>42,686</b>	<b>44,486</b>
<b>9 Other assets</b>	<b>109,365</b>	<b>105,808</b>
<b>Total assets</b>	<b>834,796</b>	<b>795,161</b>

Totals/subtotals may not add up due to rounding.

LIABILITIES	31 DECEMBER 2003	31 DECEMBER 2002
<b>1 Banknotes in circulation</b>	<b>436,128</b>	<b>371,866*</b>
<b>2 Liabilities to euro area credit institutions related to monetary policy operations denominated in euro</b>	<b>147,328</b>	<b>133,565</b>
2.1 Current accounts (covering the minimum reserve system)	147,247	133,495
2.2 Deposit facility	80	70
2.3 Fixed-term deposits	0	0
2.4 Fine-tuning reverse operations	0	0
2.5 Deposits related to margin calls	1	0
<b>3 Other liabilities to euro area credit institutions denominated in euro</b>	<b>257</b>	<b>15</b>
<b>4 Debt certificates issued</b>	<b>1,054</b>	<b>2,029</b>
<b>5 Liabilities to other euro area residents denominated in euro</b>	<b>39,865</b>	<b>46,197</b>
5.1 General government	34,106	41,123
5.2 Other liabilities	5,759	5,074
<b>6 Liabilities to non-euro area residents denominated in euro</b>	<b>10,279</b>	<b>8,813</b>
<b>7 Liabilities to euro area residents denominated in foreign currency</b>	<b>499</b>	<b>1,125</b>
<b>8 Liabilities to non-euro area residents denominated in foreign currency</b>	<b>11,205</b>	<b>18,588</b>
8.1 Deposits, balances and other liabilities	11,205	18,588
8.2 Liabilities arising from the credit facility under ERM II	0	0
<b>9 Counterpart of special drawing rights allocated by the IMF</b>	<b>5,761</b>	<b>6,340</b>
<b>10 Other liabilities</b>	<b>54,757</b>	<b>62,470</b>
<b>11 Revaluation accounts</b>	<b>67,819</b>	<b>82,615</b>
<b>12 Capital and reserves</b>	<b>59,844</b>	<b>61,538</b>
<b>Total liabilities</b>	<b>834,796</b>	<b>795,161</b>

\* The "Banknotes in circulation" figure for 31 December 2002 includes €13,338 million of euro area national banknotes in circulation. On 1 January 2003 these national banknotes were transferred to the position "Other liabilities" and amounted to €11,338 million as at 31 December 2003.



# ANNEXES

## ANNEXES

### LEGAL INSTRUMENTS ADOPTED BY THE EUROPEAN CENTRAL BANK

The following table lists the legal instruments that were adopted by the ECB in 2003 and early 2004 and published in the Official Journal of the European Union. Copies of the Official Journal can be obtained from the Office for Official Publications of the European Communities. For a list of all the legal instruments adopted by the ECB since its establishment, see the ECB's website ([www.ecb.int](http://www.ecb.int)).

Number	Title	OJ reference
ECB/2003/1	Recommendation, under Article 10.6 of the Statute of the European System of Central Banks and of the European Central Bank, for a Council Decision on an amendment to Article 10.2 of the Statute of the European System of Central Banks and of the European Central Bank	OJ C 29, 7.2.2003, p. 6
ECB/2003/2	Guideline of the European Central Bank of 6 February 2003 concerning certain statistical reporting requirements of the European Central Bank and the procedures for reporting by the national central banks of statistical information in the field of money and banking statistics	OJ L 241, 26.9.2003, p. 1
ECB/2003/3	Recommendation of the European Central Bank of 6 March 2003 to the Council of the European Union on the external auditors of the Deutsche Bundesbank	OJ C 75, 27.3.2003, p. 11
ECB/2003/4	Decision of the European Central Bank of 20 March 2003 on the denominations, specifications, reproduction, exchange and withdrawal of euro banknotes	OJ L 78, 25.3.2003, p. 16
ECB/2003/5	Guideline of the European Central Bank of 20 March 2003 on the enforcement of measures to counter non-compliant reproductions of euro banknotes and on the exchange and withdrawal of euro banknotes	OJ L 78, 25.3.2003, p. 20
ECB/2003/6	Guideline of the European Central Bank of 4 April 2003 amending Guideline ECB/2001/3 on a Trans-European Automated Real-time Gross settlement Express Transfer system (TARGET), as amended on 27 February 2002	OJ L 113, 7.5.2003, p. 10
ECB/2003/7	Guideline of the European Central Bank of 2 May 2003 on the statistical reporting requirements of the European Central Bank in the field of balance of payments and international investment position statistics, and the international reserves template	OJ L 131, 28.5.2003, p. 20
ECB/2003/8	Recommendation of the European Central Bank of 2 May 2003 on the statistical reporting requirements of the European Central Bank in the field of balance of payments and international investment position statistics, and the international reserves template	OJ C 126, 28.5.2003, p. 7

Number	Title	OJ reference
ECB/2003/9	Regulation of the European Central Bank of 12 September 2003 on the application of minimum reserves	OJ L 250, 2.10.2003, p. 10
ECB/2003/10	Regulation of the European Central Bank of 18 September 2003 amending Regulation ECB/2001/13 concerning the consolidated balance sheet of the monetary financial institutions sector	OJ L 250, 2.10.2003, p. 17
ECB/2003/11	Recommendation of the European Central Bank of 3 October 2003 to the Council of the European Union on the external auditors of the Banque centrale du Luxembourg	OJ C 247, 15.10.2003, p. 16
ECB/2003/12	Guideline of the European Central Bank of 23 October 2003 for participating Member States' transactions with their foreign exchange working balances pursuant to Article 31.3 of the Statute of the European System of Central Banks and of the European Central Bank	OJ L 283, 31.10.2003, p. 81
ECB/2003/13	Decision of the European Central Bank of 23 October 2003 amending Decision ECB/2002/12 of 19 December 2002 on the approval of the volume of coin issuance in 2003	OJ L 283, 31.10.2003, p. 87
ECB/2003/14	Decision of the European Central Bank of 7 November 2003 concerning the administration of the borrowing and lending operations concluded by the European Community under the medium-term financial assistance facility	OJ L 297, 15.11.2003, p. 35
ECB/2003/15	Decision of the European Central Bank of 28 November 2003 on the approval of the volume of coin issuance in 2004	OJ L 324, 11.12.2003, p. 57
ECB/2003/16	Guideline of the European Central Bank of 1 December 2003 amending Guideline ECB/2000/7 on monetary policy instruments and procedures of the Eurosystem	OJ L 69, 8.3.2004, p. 1
ECB/2003/17	Decision of the European Central Bank of 18 December 2003 on the national central banks' percentage shares in the key for subscription to the European Central Bank's capital	OJ L 9, 15.1.2004, p. 27
ECB/2003/18	Decision of the European Central Bank of 18 December 2003 laying down the measures necessary for the paying-up of the European Central Bank's capital by the participating national central banks	OJ L 9, 15.1.2004, p. 29
ECB/2003/19	Decision of the European Central Bank of 18 December 2003 laying down the measures necessary for the paying-up of the European Central Bank's capital by the non-participating national central banks	OJ L 9, 15.1.2004, p. 31



<b>Number</b>	<b>Title</b>	<b>OJ reference</b>
ECB/2003/20	Decision of the European Central Bank of 18 December 2003 laying down the terms and conditions for transfers of the European Central Bank's capital shares between the national central banks and adjustment of the paid-up capital	OJ L 9, 15.1.2004, p. 32
ECB/2003/21	Decision of the European Central Bank of 18 December 2003 laying down the measures necessary for the contribution to the European Central Bank's reserves and provisions and for adjusting the national central banks' claims equivalent to the transferred foreign reserve assets	OJ L 9, 15.1.2004, p. 36
ECB/2003/22	Decision of the European Central Bank of 18 December 2003 amending Article 1(f) of Decision ECB/2001/16 of 6 December 2001 on the allocation of monetary income of the national central banks of participating Member States from the financial year 2002	OJ L 9, 15.1.2004, p. 39
ECB/2003/23	Decision of the European Central Bank of 18 December 2003 amending Decision ECB/2001/15 of 6 December 2001 on the issue of euro banknotes	OJ L 9, 15.1.2004, p. 40
ECB/2004/1	Guideline of the European Central Bank of 13 February 2004 amending Guideline ECB/2003/2 concerning certain statistical reporting requirements of the European Central Bank and the procedures for reporting by the national central banks of statistical information in the field of money and banking statistics	OJ L 83, 20.3.2004
ECB/2004/2	Decision of the European Central Bank of 19 February 2004 adopting the Rules of Procedure of the European Central Bank	OJ L 80, 18.3.2004, p. 33

## OPINIONS ADOPTED BY THE EUROPEAN CENTRAL BANK

The following table lists the opinions adopted by the ECB in 2003 and early 2004 under Article 105 (4) of the Treaty and Article 4 of the Statute of the ESCB, Article 112 (2) (b) of the Treaty and Article 11.2 of the Statute of the ESCB as well as Article 48 of the Treaty on European Union. For a list of all the opinions adopted by the ECB since its establishment, see the ECB's website.

### (a) ECB opinions following a consultation by a Member State<sup>1</sup>

Number <sup>2</sup>	Originator	Subject
CON/2003/1	Netherlands	Amendment to the rules on the reporting of balance of payments data
CON/2003/2	Denmark	Replacement of the Financial Business Act and the Mortgage Loans and Mortgage Bonds Act
CON/2003/3	Sweden	Amendments to the Sveriges Riksbank Act and the Riksdag Act
CON/2003/4	Greece	Amendment to the Statute of the Bank of Greece
CON/2003/7	Belgium	Royal Decree on off-exchange market for linear bonds, strips and treasury certificates
CON/2003/8	Austria	Foreign Exchange Act 2003 and amendment to the Cross-border Transfers Act
CON/2003/10	Sweden	Legislative reform of banking and finance law
CON/2003/11	Austria	Financial collateral arrangements in financial markets, implementing Directive 2002/47/EC
CON/2003/14	Italy	Payment systems, payment infrastructures and payment instruments
CON/2003/15	Sweden	Amendment to the Sveriges Riksbank Act
CON/2003/17	Austria	Mortgage bond division of regional public banks, and amending other acts
CON/2003/19	Belgium	Prudential supervision of the financial sector and financial services
CON/2003/22	Finland	Amendments to the Suomen Pankki Act and related acts
CON/2003/23	Netherlands	Merger of De Nederlandsche Bank and the Netherlands Pension and Insurance Supervisory Authority Foundation
CON/2003/24	Ireland	Central Bank and Financial Services Authority of Ireland Bill (No 2) 2003

<sup>1</sup> ECB opinions issued upon the request of national authorities are usually published on the ECB's website six months after they are adopted; policy-important opinions are published immediately.

<sup>2</sup> Consultations are numbered in the order in which the Governing Council adopted them.

Number <sup>2</sup>	Originator	Subject
CON/2003/25	Belgium	Amendments to the Law on the prevention of the use of the financial system for the purpose of money laundering and other laws
CON/2003/27	Austria	The National Foundation for Research, Technology and Development
CON/2003/28	Spain	Amendments to the Law on the autonomy of the Banco de España
CON/2003/29	Portugal	Amendments to the Organic Law of the Banco de Portugal
CON/2004/1	Finland	Amendments to the Suomen Pankki Act and related acts
CON/2004/2	Sweden	Replacement of Sveriges Riksbank's regulations and general advice on the reporting by MFIs of money and banking statistics
CON/2004/3	Luxembourg	Establishment of a specific legal framework for securitisation transactions
CON/2004/5	Austria	Financial Conglomerates Law implementing Directive 2002/87/EC
CON/2004/6	France	Authorisation of an existing State guarantee to the Banque de France

**(b) ECB opinions following a consultation by a European institution<sup>3</sup>**

<b>Number<sup>4</sup></b>	<b>Originator</b>	<b>Subject</b>	<b>OJ reference</b>
CON/2003/5	EU Council	Statistical data to be used for the adjustment of the key for subscription to the capital of the ECB	OJ C 102, 29.4.2003, p. 11
CON/2003/6	EU Council	Recommendation on the appointment of a new member of the Executive Board of the ECB	OJ C 105, 1.5.2003, p. 37
CON/2003/9	EU Council	Investment services and regulated markets	OJ C 144, 20.6.2003, p. 6
CON/2003/12	EU Council	Quarterly financial accounts for general government	OJ C 165, 16.7.2003, p. 6
CON/2003/13	EU Council	Recommendation on the appointment of the new President of the ECB	OJ C 187, 7.8.2003, p. 16
CON/2003/16	EU Council	Analysis and cooperation with regard to counterfeit euro coins	OJ C 202, 27.8.2003, p. 31
CON/2003/18	EU Council	Recommendation on amendments to the Monetary Agreement between the Italian Republic, on behalf of the European Community, and the Holy See, on behalf of the Vatican City State	OJ C 212, 6.9.2003, p. 10
CON/2003/20	EU Council	The draft Treaty establishing a Constitution for Europe	OJ C 229, 25.9.2003, p. 7
CON/2003/21	EU Council	Transparency requirements on information about issuers whose securities are admitted to trading on a regulated market	OJ C 242, 9.10.2003, p. 6
CON/2003/26	EU Council	Community statistics on balance of payments, international trade in services and foreign direct investment	OJ C 296, 6.12.2003, p. 5
CON/2004/4	EU Council	Compilation of quarterly non-financial accounts by institutional sector	OJ C 42, 18.2.2004, p. 23
CON/2004/7	EU Council	Establishment of a new financial services committee organisational structure	OJ C 58, 6.3.2004, p. 23

<sup>3</sup> Published on the ECB's website.

<sup>4</sup> Consultations are numbered in the order in which the Governing Council adopted them.



## DOCUMENTS PUBLISHED BY THE EUROPEAN CENTRAL BANK SINCE JANUARY 2003

This list is designed to inform readers about selected documents published by the European Central Bank since January 2003. For Working Papers, the list only refers to publications released between December 2003 and February 2004. The publications are available to interested parties free of charge from the Press and Information Division. Please submit orders in writing to the postal address given on the back of the title page.

For a complete list of documents published by the European Central Bank and by the European Monetary Institute, please visit the ECB's website.

### ANNUAL REPORT

"Annual Report 2002", April 2003.

### MONTHLY BULLETIN ARTICLES

"The demand for currency in the euro area and the impact of the euro cash changeover", January 2003.  
"CLS – purpose, concept and implications", January 2003.  
"The relationship between monetary policy and fiscal policies in the euro area", February 2003.  
"Exchange rate regimes for emerging market economies", February 2003.  
"The need for comprehensive reforms to cope with population ageing", April 2003.  
"Developments in general economic statistics for the euro area", April 2003.  
"A bank lending survey for the euro area", April 2003.  
"Recent trends in residential property prices in the euro area", May 2003.  
"Electronification of payments in Europe", May 2003.  
"The adjustment of voting modalities in the Governing Council", May 2003.  
"The outcome of the ECB's evaluation of its monetary policy strategy", June 2003.  
"Trends in euro area gross fixed capital formation", July 2003.  
"Early experience of the management of euro banknote printing and issuance", July 2003.  
"Changes to the Eurosystem's operational framework for monetary policy", August 2003.  
"Recent developments in the euro area banking sector", August 2003.  
"Developments in the euro area's international cost and price competitiveness", August 2003.  
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"The integration of Europe's financial markets", October 2003.  
"Developments in the debt financing of the euro area private sector", November 2003.  
"Crisis resolution in emerging market economies – challenges for the international community", November 2003.  
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"EMU and the conduct of fiscal policies", January 2004.  
"Opinion survey on activity, prices and labour market developments in the euro area: features and uses", January 2004.  
"Measuring and analysing profit developments in the euro area", January 2004.  
"The acceding countries' economies on the threshold of the European Union", February 2004.  
"Developments in private sector balance sheets in the euro area and the United States", February 2004.  
"The impact of fair value accounting on the European banking sector – a financial stability perspective", February 2004.

### OCCASIONAL PAPER SERIES

- 8 “An introduction to the ECB’s survey of professional forecasters” by J. A. Garcia, September 2003.
- 9 “Fiscal adjustment in 1991-2002: stylised facts and policy implications” by M. G. Briotti, February 2004.
- 10 “The acceding countries’ strategies towards ERM II and the adoption of the euro: an analytical review” by a staff team led by P. Backé and C. Thimann and including O. Arratibel, O. Calvo-Gonzalez, A. Mehl and C. Nerlich, February 2004.
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- 313 “The high-yield segment of the corporate bond market: a diffusion modelling approach for the United States, the United Kingdom and the euro area” by G. de Bondt and D. Marqués, February 2004.

#### **OTHER PUBLICATIONS**

- “EU banking sector stability”, February 2003.
- “List of Monetary Financial Institutions and institutions subject to minimum reserves”, February 2003.
- “Review of the foreign exchange market structure”, March 2003.
- “Structural factors in the EU housing markets”, March 2003.
- “List of Monetary Financial Institutions in the accession countries”, March 2003.
- “Memorandum of Understanding on the exchange of information among credit registers for the benefit of reporting institutions”, March 2003.
- “Memorandum of Understanding on Economic and Financial Statistics between the Directorate General Statistics of the European Central Bank and the Statistical Office of the European Communities (Eurostat).
- Annex 1: Share of responsibilities in the field of balance of payments and international investment position statistics”, March 2003.
- “TARGET Annual Report 2002”, April 2003.
- “Supplementary guidance notes concerning statistics on the holders of money market fund shares/units”, April 2003.
- “Money, banking and financial market statistics in the accession countries. Methodological Manual. Vol. 1: The current definition and structure of money and banking statistics in the accession countries”, May 2003.
- “Money, banking and financial market statistics in the accession countries. Methodological Manual. Vol. 2: Statistics on other financial intermediaries, financial markets and interest rates in the accession countries”, May 2003.
- “Accession countries: balance of payments/international investment position statistical methods”, May 2003.
- “Electronic money system security objectives according to the common criteria methodology”, May 2003.
- “The transformation of the European financial system, Second ECB Central Banking Conference, October 2002, Frankfurt am Main”, June 2003.
- “Letter from the ECB President to the President of the Convention regarding the draft Constitutional Treaty”, June 2003.
- “Developments in national supervisory structures”, June 2003.
- “Oversight standards for euro retail payment systems”, June 2003.
- “Towards a Single Euro Payments Area – progress report”, June 2003.
- “Amendments to the risk control framework for tier one and tier two eligible assets”, July 2003.
- “ECB statistics: A brief overview”, August 2003.
- “Portfolio investment income: Task force report”, August 2003.
- “The New Basel Capital Accord”, August 2003.
- “Payment and securities settlement systems in the European Union: Addendum incorporating 2001 figures”, September 2003.



“Letter from the ECB President to the President of the Council of the European Union regarding the Opinion of the ECB of 19 September 2003 at the request of the Council of the European Union on the draft Treaty establishing a Constitution for Europe (CON/2003/20)”, 22 September 2003.

“Inflation differentials in the euro area: potential causes and policy implications”, September 2003.

“Correspondent central banking model (CCBM): procedures for Eurosystem counterparties”, September 2003.

“Bond markets and long-term interest rates in European Union accession countries”, October 2003.

“Manual on MFI interest rate statistics – Regulation ECB/2001/18”, October 2003.

“European Union balance of payments/international investment position statistical methods”, November 2003.

“Money market study 2002”, November 2003.

“Background studies for the ECB’s evaluation of its monetary policy strategy”, November 2003.

“Structural analysis of the EU banking sector, Year 2002”, November 2003.

“TARGET: the Trans-European Automated Real-time Gross settlement Express Transfer system – update 2003”, November 2003.

“TARGET2: the payment system of the Eurosystem”, November 2003.

“Seasonal adjustment”, November 2003.

“Comments of the ECB on the third consultative document of the European Commission on regulatory capital review”, November 2003.

“EU banking sector stability”, November 2003.

“Review of the international role of the euro”, December 2003.

“Policy position of the Governing Council of the European Central Bank on exchange rate issues relating to the acceding countries”, December 2003.

“Assessment of accession countries’ securities settlement systems against the standards for the use of EU securities settlement systems in Eurosystem credit operations”, January 2004.

“The monetary policy of the ECB”, January 2004.

“The implementation of monetary policy in the euro area: General documentation on Eurosystem monetary policy instruments and procedures”, February 2004.

“Guidance notes on the MFI balance sheet statistics relating to EU enlargement as laid down in Regulation ECB/2003/10”, February 2004.

“Comments on the communication from the Commission to the Council and the European Parliament concerning a new legal framework for payments in the internal market (consultative document)”, February 2004.

#### **INFORMATION BROCHURES**

“Information guide for credit institutions using TARGET”, July 2003.

# CHRONOLOGY OF MONETARY POLICY MEASURES OF THE EUROSYSTEM<sup>1</sup>

## 9 JANUARY 2003

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 2.75%, 3.75% and 1.75% respectively.

## 23 JANUARY 2003

The Governing Council of the ECB decides to implement the following two measures to improve the operational framework for monetary policy:

First, the timing of the reserve maintenance period will be changed so that it will always start on the settlement day of the main refinancing operation (MRO) following the Governing Council meeting at which the monthly assessment of the monetary policy stance is pre-scheduled. Furthermore, as a rule, the implementation of changes to the standing facility rates will be aligned with the start of the new reserve maintenance period.

Second, the maturity of the MROs will be shortened from two weeks to one week.

These measures are scheduled to come into effect during the first quarter of 2004.

Further to the press release of 10 July 2002, the Governing Council also decides to maintain at €15 billion the allotment amount for each of the longer-term refinancing operations to be conducted in the year 2003. This amount takes into consideration the expected liquidity needs of the euro area banking system in 2003 and reflects the desire of the Eurosystem to continue to provide the bulk of liquidity through its main refinancing operations.

## 6 FEBRUARY 2003

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 2.75%, 3.75% and 1.75% respectively.

## 6 MARCH 2003

The Governing Council of the ECB decides to lower the minimum bid rate on the main refinancing operations by 0.25 percentage point to 2.50%, starting from the operation to be settled on 12 March 2003. It also decides to lower the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 3.50% and 1.50% respectively, both with effect from 7 March 2003.

## 3 APRIL 2003

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 2.50%, 3.50% and 1.50% respectively.

## 8 MAY 2003

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 2.50%, 3.50% and 1.50% respectively.

<sup>1</sup> The chronology of monetary policy measures of the Eurosystem taken in 1999 to 2001 can be found on pages 176 to 180 of the ECB's Annual Report 1999, on pages 205 to 208 of the ECB's Annual Report 2000 and on pages 219 to 220 of the ECB's Annual Report 2001 respectively.

It also announces the results of its evaluation of the ECB's monetary policy strategy. This strategy, which was announced on 13 October 1998, consists of three main elements: a quantitative definition of price stability, a prominent role for money in the assessment of risks to price stability, and a broadly based assessment of the outlook for price developments.

The Governing Council confirms the definition of price stability formulated in October 1998, namely that "price stability is defined as a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2%. Price stability is to be maintained over the medium term". At the same time, the Governing Council agrees that in the pursuit of price stability it will aim to maintain inflation rates close to 2% over the medium term.

The Governing Council confirms that its monetary policy decisions will continue to be based on a comprehensive analysis of the risks to price stability. At the same time, the Governing Council decides to clarify in its communication the respective roles played by economic and monetary analysis in the process of coming to the Council's overall assessment of risks to price stability.

To underscore the longer-term nature of the reference value for monetary growth as a benchmark for the assessment of monetary developments, the Governing Council also decides that it will no longer conduct a review of the reference value on an annual basis. However, it will continue to assess the underlying conditions and assumptions.

#### **5 JUNE 2003**

The Governing Council of the ECB decides to lower the minimum bid rate on the main refinancing operations by 0.50 percentage point to 2.0%, starting from the operation to be settled on 9 June 2003. It also decides to lower

the interest rates on both the marginal lending facility and the deposit facility by 0.50 percentage point, to 3.0% and 1.0% respectively, both with effect from 6 June 2003.

#### **10 JULY, 31 JULY, 4 SEPTEMBER, 2 OCTOBER, 6 NOVEMBER, 4 DECEMBER 2003 AND 8 JANUARY 2004**

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 2.0%, 3.0% and 1.0% respectively.

#### **12 JANUARY 2004**

The Governing Council of the ECB decides to increase the allotment amount for each of the longer-term refinancing operations to be conducted in the year 2004 from €15 billion to €25 billion. This increased amount takes into consideration the higher liquidity needs of the euro area banking system anticipated for the year 2004. The Eurosystem will, however, continue to provide the bulk of liquidity through its main refinancing operations. The Governing Council may decide to adjust the allotment amount again at the beginning of 2005.

#### **5 FEBRUARY, 4 MARCH 2004**

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 2.0%, 3.0% and 1.0% respectively.

## GLOSSARY

**Asset allocation:** the process of distributing investment funds over different asset classes to achieve goals such as optimising portfolio risk/return characteristics.

**Acceding countries:** see **Accession countries**

**Accession countries:** there are currently 13 countries in central and eastern Europe and in the Mediterranean which have been recognised by the **European Council** as candidates for accession to the European Union (EU). Ten countries will join the EU on 1 May 2004: the Czech Republic, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Slovenia and Slovakia. These ten countries are termed the **acceding countries**. Two other countries, Bulgaria and Romania, have already entered into accession negotiations and have been given the prospect of entry into the EU in 2007. Turkey is also an official candidate for accession and is included in the Economic Dialogue with the EU, but accession negotiations have not yet begun. The term accession countries refers to the 12 countries with which negotiations for EU membership have been completed or are still ongoing.

**Acquis communautaire:** the body of Community legislation by which all EU Member States are bound. Countries joining the EU must have implemented the existing *acquis communautaire* by the time of accession.

**Balance of payments (b.o.p.):** a statistical statement that summarises, for a specific time period, the economic transactions of an economy with the rest of the world. The transactions considered are those involving goods, services and income; those involving financial claims on, and liabilities to, the rest of the world; and those (such as debt forgiveness) that are classified as transfers. The concepts and definitions used in the **euro area** balance of payments generally conform to the 5th edition of the IMF Balance of Payments Manual, to the related Guideline ECB/2003/7 of 2 May 2003 and to **Eurostat**'s documentation.

**Basel Capital Accord:** a regulatory framework setting out minimum capital requirements to ensure that banks are able to cover their risks. This framework was adopted in 1988 by the Basel Committee on Banking Supervision on which the central banks and other banking supervisory authorities from the G10 countries, Spain and Luxembourg are represented. The Accord has evolved into a global standard and is now under review in order to adapt it to developments that have occurred in the financial sector since it was initially introduced ("New Basel Capital Accord" or "Basel II").

**Benchmark portfolio:** in relation to investments, a reference portfolio or index constructed on the basis of the objectives for the liquidity and risk of, as well as the return on, the investments. The benchmark portfolio serves as a basis for comparison of the performance of the actual portfolio.

**Bond market:** the market on which medium and long-term **debt securities**, i.e. debt securities with an original maturity of more than one year, are issued and traded.

**Broad Economic Policy Guidelines (BEPGs):** the **Treaty** obliges the Member States to regard their economic policies as a matter of common concern and to coordinate them within the **EU Council**. The BEPGs constitute the main instrument of this coordination. They contain recommendations to policy-makers on macroeconomic and structural policies and provide a yardstick for ex post assessment in the context of multilateral surveillance within the EU Council. The EU Council, acting on a recommendation from the **European Commission**, formulates a draft of the BEPGs and reports its findings to the **European Council**. The EU Council then adopts a recommendation on the BEPGs based on the European Council's conclusions.

**Central counterparty:** an entity which interposes itself as the buyer to every seller and as the seller to every buyer of a specified set of contracts.

**Central securities depository (CSD):** an entity which holds and administers securities and enables securities transactions to be processed by book entry. Securities can be held in a physical but immobilised form or in a dematerialised (book-entry only) form. In addition to the safekeeping and administration of securities, a CSD may incorporate clearing and settlement functions.

**Central government:** the government as defined in the **European System of Accounts 1995 (ESA 95)** but excluding state and local governments (see also **general government**). It includes all administrative departments of the (central) state and other central agencies whose competence normally extends over the entire economic domain except for the administration of social security funds.

**Collateral:** assets pledged (e.g. by **credit institutions** with central banks) as a guarantee for the repayment of loans, as well as assets sold (e.g. to central banks by credit institutions) under **repurchase agreements**.

**Committee of European Securities Regulators (CESR):** this committee, which was established by the **European Commission** in June 2001 in the light of the recommendation of the Report of the Committee of Wise Men on the Regulation of European Securities Markets, is composed of representatives from the national authorities regulating the securities markets. As the Level 3 body of the revised European regulatory approach, it advises the European Commission on securities policy issues and contributes to ensuring a more consistent implementation of Community legislation in the Member States. It also improves coordination among European securities regulators.

**Consolidated balance sheet of the MFI sector:** obtained by netting out inter-MFI positions (mainly loans granted by one MFI to another) on the aggregated MFI balance sheet.

**Corporate governance:** procedures and processes according to which an organisation is directed and controlled. The corporate governance structure specifies the distribution of rights and responsibilities among the different participants in the organisation – such as the board, managers, shareholders and other stakeholders – and lays down the rules and procedures for decision-making. In so doing, it also provides the structure within which the organisation's operational targets are set, and specifies the means of attaining those targets and of monitoring performance.

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

**Credit institution:** an institution covered by the definition in Article 1 (1) of Directive 2000/12/EC of the European Parliament and of the Council of 20 March 2000 relating to the taking up and pursuit of the business of credit institutions, as amended by Directive 2000/28/EC of the European Parliament and of the Council of 18 September 2000. Thus, a credit institution is: (i) an undertaking whose business is to receive deposits or other repayable funds from the public and to grant credit for its own account; or (ii) an undertaking or any other legal person, other than those under (i), which issues means of payment in the form of **electronic money**.

**Credit risk:** the risk that a **counterparty** will not settle an obligation in full, either when due or at any time thereafter.

**Debt (financial accounts):** includes loans, **debt securities** issued, and pension fund reserves of non-financial corporations, valued at market value at the end of the period. In the quarterly financial accounts, debt does not include loans granted by the non-financial sector (e.g. inter-company loans) or by banks outside the **euro area**, whereas these components are included in the annual financial accounts.

**Debt ratio (general government):** general government debt is defined as total gross debt at nominal value outstanding at the end of the year and consolidated between and within the sectors of general government. The government debt-to-GDP ratio is defined as the ratio of general government debt to gross domestic product at current market prices. It is the subject of one of the fiscal criteria laid down in Article 104 (2) of the **Treaty** to define the existence of an excessive deficit.

**Debt securities:** represent a promise on the part of the issuer (i.e. the borrower) to make one or more payment(s) to the holder (the lender) on a specified future date or dates. They usually carry a specific rate of interest (the coupon) and/or are sold at a discount to the amount that will be repaid at maturity. Debt securities issued with an original maturity of more than one year are classified as long-term.

**Deficit ratio (general government):** the general government deficit is defined as net borrowing and corresponds to the difference between government revenue and government expenditure. The deficit ratio is defined as the ratio of the general government deficit to gross domestic product at current market prices. It is the subject of one of the fiscal criteria laid down in Article 104 (2) of the **Treaty** establishing the European Community to define the existence of an excessive deficit. It is also referred to as the budget deficit ratio or the fiscal deficit ratio.

**Deposit facility:** a **standing facility** of the **Eurosystem** which counterparties may use to make overnight deposits, remunerated at a pre-specified **interest rate**, at an NCB (see also **key ECB interest rates**).

**Direct investment:** cross-border investment that reflects the objective of obtaining a lasting interest in an enterprise resident in another economy (in practice assumed for ownership equivalent to at least 10% of the voting rights). The direct investment account records net acquisitions of assets abroad by **euro area** residents (as “direct investment abroad”) and net acquisitions of euro area assets by non-residents (as “direct investment in the euro area”). Direct investment includes equity capital, reinvested earnings and other capital associated with inter-company operations.

**ECOFIN Council:** see **EU Council**.

**Economic analysis:** one pillar of the **ECB**’s framework for conducting a comprehensive analysis of the risks to **price stability**, which forms the basis for the **Governing Council**’s monetary policy decisions. The economic analysis focuses mainly on the assessment of current economic and financial developments and the implied short to medium-term risks to price stability from the perspective of the interplay between supply and demand in goods, services and factor markets at those horizons. In this respect, due attention is paid to the need to identify the nature of shocks affecting the economy, their effects on cost and pricing behaviour and the short to medium-term prospects for their propagation in the economy (see also **monetary analysis**).

**Economic and Financial Committee (EFC):** a consultative Community body which contributes to the preparation of the work of the **EU Council**. It was set up at the start of Stage Three of **Economic and Monetary Union (EMU)**. The Member States, the **European Commission** and the **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 EFC, which include reviewing the economic and financial situation of the Member States and of the Community, and budgetary surveillance.

**Economic and Monetary Union (EMU):** the **Treaty** describes the process of achieving EMU in the European Union (EU) 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 EU. Stage Two of EMU began on 1 January 1994. It provided for, inter alia, the establishment of the **European Monetary Institute (EMI)**, the prohibition of financing of the public sector by the central banks, the prohibition of privileged access to financial institutions by the public sector and the avoidance of excessive government deficits. Stage Three started on 1 January 1999 with the transfer of monetary competence to the **ECB** and the introduction of the **euro**. The cash changeover on 1 January 2002 completed the process setting up EMU.

**Economic Policy Committee (EPC):** a consultative Community body which contributes to the preparation of the work of the **EU Council**. It works in close cooperation with the **Economic and Financial Committee (EFC)** and focuses mainly on structural policies aimed at improving the growth potential and employment in the Community. The Committee, which is provided for in Article 272 of the **Treaty**, was set up by a Council Decision in 1974. Each Member State appoints two members of the Committee, as does the **European Commission** and the **ECB**.

**Effective exchange rates (EERs, nominal/real):** nominal euro EERs are weighted averages of bilateral **euro** exchange rates against the currencies of the **euro area**'s main trading partners. The **ECB** publishes nominal EER indices for the euro against the currencies of a narrow and a broad group of trading partners. The weights used reflect the share of each partner country in euro area trade. Real EERs are nominal EERs deflated by a weighted average of foreign, relative to domestic, prices or costs. They are, thus, measures of price and cost competitiveness.

**Electronic money (e-money):** an electronic store of monetary value on a technical device that may be widely used as a prepaid bearer instrument for making payments to undertakings other than the issuer, without necessarily involving bank accounts in the transactions.

**EONIA (euro overnight index average):** a measure of the **interest rate** prevailing in the euro interbank overnight market, based on transactions.

**Equity market:** the market in which claims to a share in the ownership of a business are issued and traded. A major difference between equity and debt is that the former does not have to be repaid by the issuer.

**Equity securities:** represent ownership of a stake in a corporation. They comprise shares traded on stock exchanges (quoted shares), unquoted shares and other forms of equity. Equities usually produce income in the form of dividends.

**ERM II (exchange rate mechanism II):** the exchange rate arrangement which provides the framework for exchange rate policy cooperation between the **euro area** countries and the EU Member States not participating in Stage Three of **EMU**.

**EU Council (Council of Ministers):** an institution of the European Community 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 economy and finance is often referred to as the **ECOFIN Council**. In addition, for decisions of particular importance, the EU Council meets in the composition of the Heads of State or Government. This should not be confused with the European Council, which also brings together the Heads

of State or Government but which provides the Union with the necessary impetus for its development and defines the general political guidelines.

**EURIBOR (euro interbank offered rate):** the rate at which a prime bank is willing to lend funds in **euro** to another prime bank, computed daily for interbank deposits with different maturities of up to 12 months.

**Euro:** the name of the European single currency adopted by the **European Council** at its meeting in Madrid on 15 and 16 December 1995.

**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 **ECB**. The euro area currently comprises Belgium, Germany, Greece, Spain, France, Ireland, Italy, Luxembourg, the Netherlands, Austria, Portugal and Finland.

**Eurogroup:** informal grouping bringing together those members of the **ECOFIN Council** who represent the **euro area** countries. It meets on a regular basis (usually prior to meetings of the ECOFIN Council) to discuss issues connected with the euro area countries' shared responsibilities for the single currency. The **European Commission** and, when appropriate, the **ECB** are invited to take part in these meetings.

**European Central Bank (ECB):** the ECB lies at the centre of the **European System of Central Banks (ESCB)** and the **Eurosystème** and has legal personality under Community law. It ensures that the tasks conferred upon the Eurosystem and the ESCB are implemented either through its own activities or through those of the NCBs, pursuant to the Statute of the European System of Central Banks and of the European Central Bank. The ECB is governed by the **Governing Council** and the **Executive Board**, and, as a third decision-making body, by the **General Council**.

**European Commission:** the institution of the European Community which ensures the application of the provisions of the **Treaty**. The Commission develops Community policies, proposes Community legislation and exercises powers in specific areas. In the area of economic policy, the Commission recommends **Broad Economic Policy Guidelines (BEPGs)** and reports to the **EU Council** on economic developments and policies. It monitors public finances within the framework of multilateral surveillance and submits reports to the EU Council. It consists of 20 members (until 1 May 2004) and includes two nationals each from Germany, Spain, France, Italy and the United Kingdom, and one from each of the other Member States. Following a transition period after EU enlargement, the Commission will consist of 25 members, one national from each of the 25 Member States.

**European Council:** provides the European Union with the necessary impetus for its development and defines the general political guidelines thereof. It brings together the Heads of State or Government of the Member States and the President of the **European Commission** (see also **EU Council**).

**European Monetary Institute (EMI):** a temporary institution established at the start of Stage Two of **Economic and Monetary Union (EMU)** on 1 January 1994. The two main tasks of the EMI were to strengthen central bank cooperation and monetary policy coordination and to make the preparations required for the establishment of the **European System of Central Banks (ESCB)**, for the conduct of the single monetary policy and for the creation of a single currency in Stage Three. It went into liquidation upon the establishment of the **ECB** on 1 June 1998.

**European Parliament:** consists of 626 representatives of the citizens of the Member States. In addition, 162 observers have been appointed by the national parliaments of the acceding countries. The Accession Treaty



provides that, following its ratification by the current and future Member States, the European Parliament shall comprise 732 members as of the forthcoming parliamentary term (2004-2009). The Parliament contributes to 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 **ECB** to the Parliament (presentation of the Annual Report, general debate on monetary policy, testimonies before the competent parliamentary committees).

**European Payments Council (EPC):** governance body consisting of 52 representatives of institutions, including commercial banks, cooperative banks and savings banks, entrusted with bringing about the single euro payment area and with representing the European banking industry on issues related to payment systems.

**European System of Accounts 1995 (ESA 95):** a system of uniform statistical definitions and classifications aimed at achieving a harmonised quantitative description of the economies of the Member States. The ESA 95 is the Community's version of the world System of National Accounts 1993 (SNA 93).

**European System of Central Banks (ESCB):** composed of the **ECB** and the NCBs of all 15 Member States, i.e. it includes, in addition to the members of the **Eurosystem**, the NCBs of those Member States that have not yet adopted the **euro**. The ESCB is governed by the **Governing Council** and the **Executive Board** of the ECB, and, as a third decision-making body of the ECB, by the **General Council**.

**Eurostat:** the Statistical Office of the European Communities. Eurostat is part of the **European Commission** and is responsible for the production of Community statistics.

**Eurosystem:** comprises the **ECB** and the NCBs of those Member States that have adopted the **euro** in Stage Three of **Economic and Monetary Union (EMU)** (see also **euro area**). There are currently 12 NCBs in the Eurosystem. The Eurosystem is governed by the **Governing Council** and the **Executive Board** of the ECB.

**Eurosystem's international reserves:** these comprise the reserve assets of the **ECB** and the reserve assets held by the NCBs of the **euro area** countries. According to the IMF definition, reserve assets must be under the effective control of the relevant monetary authority, whether the ECB or the NCB of one of the euro area countries, and comprise highly liquid, marketable and creditworthy foreign (i.e. non-**euro**) currency-denominated claims on non-euro area residents, plus gold, special drawing rights and the reserve positions in the International Monetary Fund of the euro area NCBs.

**Excessive deficit procedure:** the provision defined in Article 104 of the **Treaty** and specified in the Protocol on the excessive deficit procedure requires EU Member States to maintain budgetary discipline, defines criteria for a budgetary position to be considered an excessive deficit and sets out the steps to be taken following the observation that the criteria for the budget balance or government debt have not been fulfilled. This is supplemented by the Council Regulation (EC) No 1467/97 of 7 July 1997 on speeding up and clarifying the implementation of the excessive deficit procedure, which is an element of the **Stability and Growth Pact**.

**Executive Board:** one of the decision-making bodies of the **ECB**. It comprises the President and the Vice-President of the ECB and four other members appointed by common accord by the Heads of State or Government of the countries that have adopted the **euro**.

**External trade in goods:** intra- and extra-**euro area** exports and imports of goods, measured in terms of value and as volume and unit value indices. Intra-euro area trade records the arrival and dispatch of goods

flowing between the euro area countries, while extra-euro area trade records the external trade of the euro area. External trade statistics are not directly comparable with exports and imports recorded in the national accounts, as the latter include both intra- and extra-euro area transactions and also combine goods and services.

**Fair value accounting (FVA):** a valuation principle that stipulates the use of either a market price, where it exists, or an estimation of a market price as the present value of expected cash flows, to establish the balance sheet value of financial instruments.

**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:** simultaneous spot and forward transactions exchanging one currency against another. The **Eurosystem** can execute **open market operations** in the form of foreign exchange swaps, where the NCBs (or the **ECB**) buy or sell **euro** spot against a foreign currency and, at the same time, sell or buy them back in a forward transaction.

**General Council:** one of the decision-making bodies of the **ECB**. It comprises the President and the Vice-President of the ECB and the governors of all EU NCBs.

**General government:** as defined in the **European System of Accounts 1995 (ESA 95)**, comprises central, state and local government and social security funds. Publicly owned units carrying out commercial operations, such as public enterprises, are in principle excluded from general government.

**Governing Council:** the supreme decision-making body of the **ECB**. It comprises all the members of the **Executive Board** of the ECB and the governors of the NCBs of the countries that have adopted the **euro**.

**Harmonised Index of Consumer Prices (HICP):** a measure of consumer prices which is compiled by **Eurostat** and harmonised for all EU countries.

**Implied volatility:** a measure of expected volatility (standard deviation in terms of annualised percentage changes) in the prices of, for example, bonds and stocks (or of corresponding futures contracts), which can be extracted from **option** prices.

**Interest rate:** the amount that a debtor has to pay to the creditor over a given period of time in relation to the amount of the principal of the loan, deposit or debt security, usually expressed as an annual percentage.

**Interlinking mechanism:** one of the components of the **TARGET** system. The term is used to designate the infrastructures and procedures which link domestic **RTGS systems** in order to enable the processing of cross-border payments within TARGET.

**International Accounting Standards (IAS):** generally recognised accounting principles issued by the International Accounting Standards Board (IASB), an independent, privately funded setter of accounting standards. These are enforceable global standards relating to the provision of transparent and comparable information in general-purpose financial statements. In April 2001 the IASB announced that its accounting standards would in future be designated International Financial Reporting Standards (IFRS).

**International investment position (i.i.p.):** the value and composition of an economy's outstanding net financial claims on (or financial liabilities to) the rest of the world. Also referred to as the net external asset position.

**Key ECB interest rates:** the interest rates, set by the **Governing Council**, which reflect the monetary policy stance of the **ECB**. They are the **minimum bid rate** on the **main refinancing operations**, the interest rate on the **marginal lending facility** and the interest rate on the **deposit facility**.

**Liquidity risk:** the risk that a **counterparty** or a participant in a payment or settlement system will not settle an obligation at its full value when due. Liquidity risk does not imply that the counterparty is insolvent, since it may be able to settle the required debt obligations at some unspecified time thereafter.

**Longer-term refinancing operation:** a monthly **open market operation**, conducted by the **Eurosystem**, with a usual maturity of three months. The operations are conducted as variable rate tenders with pre-announced allotment volumes.

**M1:** narrow monetary aggregate. Comprises currency in circulation plus overnight deposits held with **MFI**s and **central government** (e.g. at the Post Office or Treasury).

**M2:** intermediate monetary aggregate. Comprises **M1** and deposits redeemable at a period of notice of up to and including three months (i.e. short-term savings deposits) and deposits with an agreed maturity of up to and including two years (i.e. short-term time deposits) held with **MFI**s and **central government**.

**M3:** broad monetary aggregate. Comprises **M2** and marketable instruments, i.e. **repurchase agreements**, **money market** fund shares and units and **debt securities** with a maturity of up to and including two years issued by **MFI**s.

**Main refinancing operation:** a weekly **open market operation** conducted by the **Eurosystem**. In 2003 the **Governing Council** decided that as of 9 March 2004 the maturity of these operations would be reduced from two weeks to one. The operations are conducted as variable rate tenders with a pre-announced **minimum bid rate**.

**Maintenance period:** the period over which **credit institutions'** compliance with **reserve requirements** is calculated. It was decided that as of 10 March 2004 the maintenance period would begin on the settlement day of the first **main refinancing operation** following the meeting of the **Governing Council** at which the monthly assessment of the monetary policy stance is pre-scheduled. The **ECB** publishes a calendar of the reserve maintenance periods at least three months before the start of the year.

**Marginal lending facility:** a **standing facility** of the **Eurosystem** which **counterparties** may use to receive credit from an NCB at a pre-specified **interest rate** against eligible assets (see also **key ECB interest rates**).

**MFI (monetary financial institutions):** financial institutions forming the money-issuing sector of the **euro area**. They include the **ECB**, the NCBs of the euro area countries, and **credit institutions** and **money market** funds located in the euro area.

**MFI credit to euro area residents:** comprises MFI loans to **euro area** residents and MFI holdings of securities issued by euro area residents. Securities comprise shares, other equity and **debt securities**.

**MFI interest rates:** those interest rates that are applied by resident **credit institutions** and other institutions to euro-denominated deposits and loans vis-à-vis households and non-financial corporations resident in **euro area** countries. The requirements for the MFI interest rate statistics are laid down in Regulation ECB/2001/18 of 20 December 2001.

**MFI longer-term financial liabilities:** comprise deposits with an agreed maturity of over two years, deposits redeemable at a period of notice of over three months, **debt securities** issued with an original maturity of more than two years and the capital and reserves of the **euro area** MFI sector.

**MFI net external assets:** comprise external assets of **euro area** MFIs (such as gold, non-euro banknotes, securities issued by non-euro area residents and loans granted to non-euro area residents) minus external liabilities of the euro area MFI sector (such as non-euro area residents' holdings of deposits, **repurchase agreements**, **money market** fund shares and units and **debt securities** with a maturity of up to and including two years issued by MFIs).

**Minimum bid rate:** lower limit to the **interest rates** at which **counterparties** may submit bids in the variable rate tenders of the **main refinancing operations**. This is one of the **key ECB interest rates** reflecting the stance of monetary policy.

**Monetary analysis:** one pillar of the **ECB's** framework for conducting its comprehensive analysis of the risks to **price stability**, which forms the basis for the **Governing Council's** monetary policy decisions. Monetary analysis helps to assess medium to long-term trends in inflation, in view of the close relationship between money and prices over extended horizons. The monetary analysis takes into account developments in a wide range of monetary indicators including **M3**, its components and counterparts, notably credit, and various measures of excess liquidity (see also **economic analysis**).

**Monetary income:** income accruing to the NCBs in the performance of the **Eurosystem's** monetary policy function, derived from assets earmarked in accordance with guidelines established by the **Governing Council** and held against banknotes in circulation and deposit liabilities to **credit institutions**.

**Money market:** the market in which short-term funds are raised, invested and traded using instruments which generally have an original maturity of up to and including one year.

**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) issuing central bank debt certificates; (v) accepting fixed-term deposits; or (vi) conducting **foreign exchange swaps** between domestic and foreign currencies.

**Option:** an option is a financial instrument which gives the owner the right, but not the obligation, to buy or sell a specific underlying asset (e.g. a bond or a stock) at a predetermined price (the strike or exercise price) on or up to a certain future date (the exercise or maturity date). A call option gives the holder the right to purchase the underlying asset at an agreed exercise price, whereas a put option gives the holder the right to sell it at an agreed exercise price.

**Portfolio investment:** a record of net acquisitions by **euro area** residents of securities issued by non-residents of the euro area ("assets") and net acquisitions by non-residents of the euro area of securities issued by euro area residents ("liabilities"). Includes **equity securities**, **debt securities** in the form of bonds and notes, and **money market** instruments. Transactions are recorded at the effective price paid or received, less commissions and expenses. To be regarded as a portfolio asset, ownership in an enterprise must be equivalent to less than 10% of the voting rights.

**Price stability:** the maintenance of price stability is the primary objective of the **Eurosystem**. The **Governing Council** defines price stability as a year-on-year increase of below 2% in the **Harmonised Index of Consumer Prices (HICP)** for the **euro area**. The Governing Council has also made it clear that, in the pursuit of price stability, it aims to maintain inflation rates below, but close to, 2% over the medium term.

**Primary balance:** government net borrowing or net lending excluding interest payments on consolidated government liabilities.

**Projections:** the results of exercises conducted by **Eurosystem** staff to project possible future macroeconomic developments in the **euro area**. Eurosystem staff macroeconomic projections are obtained in a way consistent with individual country projections. The projections, which are published twice a year, form part of the monetary policy strategy of the **ECB** and are one of several inputs into the **Governing Council**'s assessment of the risks to **price stability**.

**Real-time gross settlement (RTGS) 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**).

**Reference value for M3 growth:** the annual growth rate of **M3** over the medium term consistent with the maintenance of **price stability**. At present, the reference value for annual M3 growth is 4½%.

**Repo market:** see **repurchase agreement**.

**Repurchase agreement:** an agreement to sell an asset and to repurchase it at a specified price on a predetermined future date or on demand. Such an agreement is similar to collateralised borrowing, although it differs in that the seller does not retain ownership of the assets. Sale and repurchase agreements are also termed repo transactions and are traded on the **repo market**.

**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:** a ratio defined by the central bank for each category of balance sheet items included in the **reserve base**. The ratios are used to calculate the **reserve requirement**.

**Reserve requirement:** the minimum amount of reserves a **credit institution** is required to hold with the **Eurosystem**. Compliance is determined on the basis of the average of the daily balances over a **maintenance period** of around one month.

**Retail bank interest rates:** see **MFI interest rates**.

**Reverse transaction:** an operation whereby the central bank buys or sells assets under a **repurchase agreement** or conducts credit operations against **collateral**.

**Securities settlement system (SSS):** a system which permits the holding and transfer of securities or other financial assets, either free of payment or against payment (delivery versus payment).

**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 Council Regulations, namely (i) Regulation (EC) No 1466/97 of 7 July 1997 on the strengthening of the surveillance of budgetary positions and the surveillance and coordination of economic policies and (ii) Regulation (EC) No 1467/97 of 7 July 1997 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.

**Stability programmes:** medium-term government plans and assumptions provided by **euro area** countries regarding the development of key economic variables. They set out the medium-term objective of a budgetary position that is close to balance or in surplus, or the adjustment path towards this objective as referred to in the **Stability and Growth Pact**. Stability programmes must be updated annually. They are examined by the **European Commission** and the **Economic and Financial Committee (EFC)**, whose assessments serve as the basis for the examination by the **ECOFIN Council**.

**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**.

**Straight-through processing (STP):** the automated end-to-end processing of trades/payment transfers including the automated completion of generation, confirmation, clearing and settlement of instructions.

**Systemic risk:** the risk that the failure of one participant in a funds transfer system or exchange-for-value system, or in financial markets generally, to meet its required obligations will cause other participants or financial institutions to be unable to meet their obligations (including settlement obligations in a transfer system) when due. Such a failure may cause significant liquidity or credit problems and, as a result, might threaten the stability of financial markets.

**TARGET (Trans-European Automated Real-time Gross settlement Express Transfer system):** the **RTGS system** for the **euro**. It is a decentralised system consisting of 15 national RTGS systems, the ECB payment mechanism (EPM) and the **interlinking mechanism**.

**Treaty:** refers to the Treaty establishing the European Community. The Treaty was signed in Rome on 25 March 1957 and entered into force on 1 January 1958. It established the European Economic Community (EEC), which is now the European Community (EC), and is often referred to as the “Treaty of Rome”. The Treaty on European Union (which is often referred to as the “Maastricht Treaty”) was signed on 7 February 1992 and entered into force on 1 November 1993. The Treaty on European Union amended the Treaty establishing the European Community and established the European Union. The “Treaty of Amsterdam”, which was signed in Amsterdam on 2 October 1997 and entered into force on 1 May 1999, and most recently the “Treaty of Nice”, which was signed on 26 February 2001 and entered into force on 1 February 2003, amended both the Treaty establishing the European Community and the Treaty on European Union.

**Valuation haircut:** a risk control measure applied to underlying assets used in **reverse transactions**, in which the central bank calculates the value of underlying assets as their market value reduced by a certain percentage (haircut). The **Eurosystem** applies valuation haircuts reflecting features of the specific assets, such as their residual maturity.

