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Contents

Chapter III

Other tasks of the EMI

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

National data used in this Report include all data available to the EMI up to the 23rd February 1996.

List of Boxes, Tables and Charts*

Boxes

Tables

Charts

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* *Convention used in the tables:*

"-" *Not applicable or not available*

"..." *Nil or negligible*

Aggregate EU-15 figures in this Report are generally constructed using purchasing parity exchange rates in order to weight the individual national data. However, trade data use actual exchange rates in 1993. Rates and indices (except CPI) are based on 1993 GDP weights, while CPI is based upon consumer spending weights.

Back row (left to right): L. Papademos, P. Jaans, A. de Sousa, B. Andersen, S. Hämäläinen, W. Duisenberg, H. Tietmeyer, U. Bäckström, J.-C. Trichet, A. Verplaetse, K. Liebscher.

Front row: M. O'Connell, A. Fazio, A. Lamfalussy (President), L. Rojo (Vice-President), E. George.

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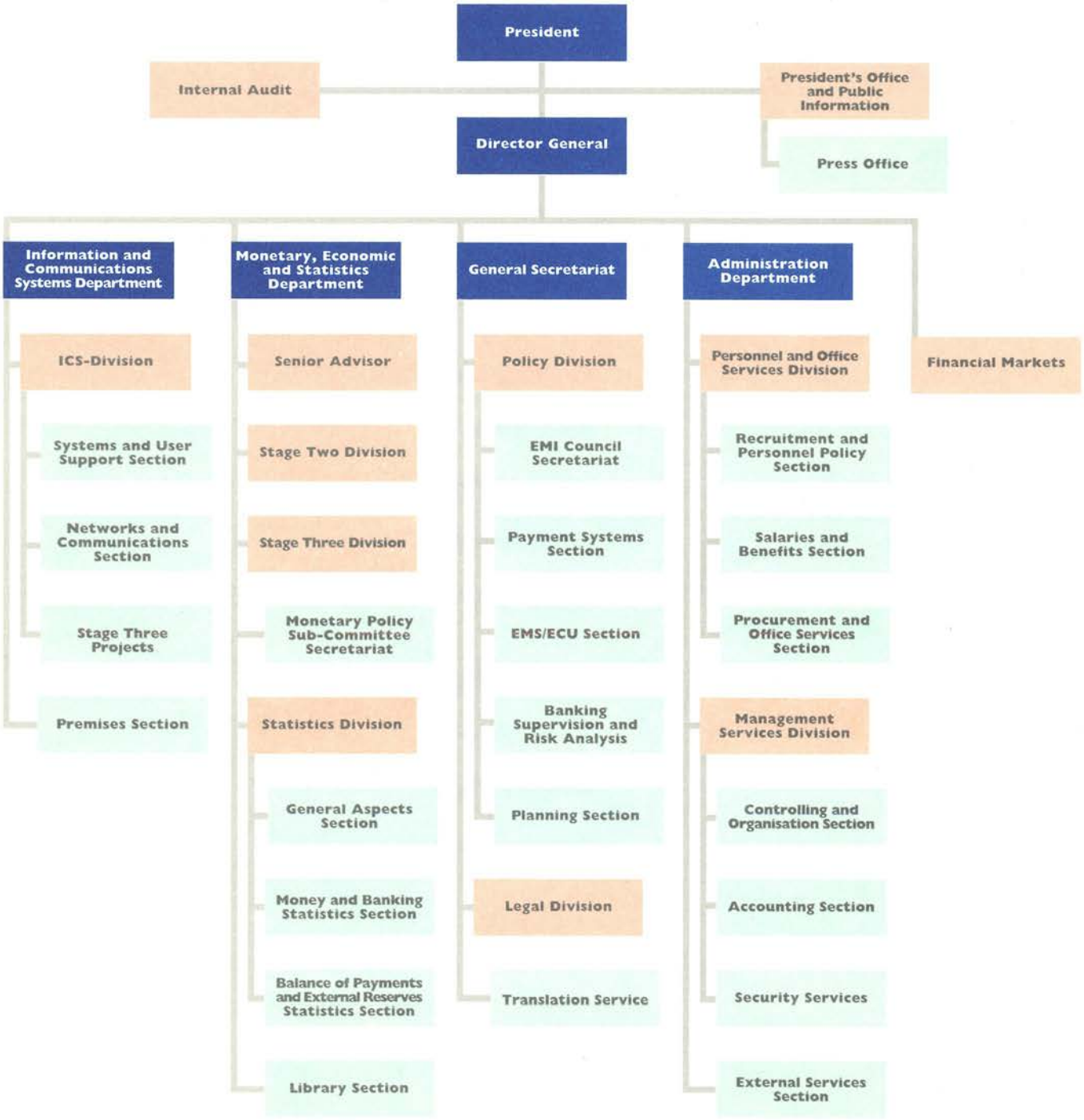

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Foreword

The two main themes of the European Monetary Institute's second Annual Report are the EMI's response to its statutory obligations to prepare for EMU and the performance of the EU economies themselves.

The EMI is on schedule in its preparatory work to comply with the Treaty provision which requires it to specify, by the end of 1996, the regulatory, organisational and logistical framework for the ESCB to perform its tasks in Stage Three. Space does not permit a complete listing of the progress made in such preparation, which is detailed in Chapter II, but it suffices to highlight:

- the EMI report on "The changeover to the single currency", published in November 1995, which was the basis for a proposal by the ECOFIN Council presented to the December 1995 European Council meeting in Madrid. There, the changeover scenario proposal was adopted;

- the preparatory work on monetary policy instruments – an area which is fundamental, where the issues are complex and where considerable analysis is required to produce an effective and practical framework – in which onsiderable progress has been made;

- progress made in the area of payments systems, where the TARGET system of linked real-time gross settlement systems – essential for the operation of the single monetary policy in Stage Three – has been agreed upon, and detailed implementation is in hand.

The above list is by no means exhaustive. Inter alia, advances have also been made in the preparation of EU-wide statistics and foreign exchange policy, in preparatory work for the production of the European banknotes and in the harmonisation of accounting rules and standards. However, the scope of the work which still needs to be undertaken should not be underestimated. Progress in defining monetary and exchange rate policy co-operation between the countries participating from the start in the euro area and other EU countries, as well as in devising the appropriate monetary policy strategy for the ECB, are crucial items on the agenda for 1996.

In parallel with the preparatory work for Stage Three, the EMI also has an important role in Stage Two of strengthening co-operation among the national central banks and co-ordination of national monetary policies with the aim of ensuring price stability. The EMI is assigned an important role in assessing convergence. In this regard it published a report entitled "Progress towards convergence", in November 1995.

Both strengthening co-ordination and assessing convergence entail a need to focus on economic, financial and monetary developments, the subject matter of Chapter I. Although growth has slowed, there are reasons to believe the setback will be temporary. EU countries have made considerable progress in reducing inflation and in moving towards price stability. In those countries where inflationary pressures emerged in 1995, timely adjustments of monetary policy

were broadly successful in containing them. Long-term interest rates have fallen over the year as a whole, thereby continuing the downward trend observed since 1990 which was interrupted in 1994. Exchange rate instability experienced early in the year later eased, with most ERM currencies closing the year close to their central parities and a number of non-ERM currencies showing marked recoveries or even appreciations over the year.

But the key to convergence and to ensuring satisfactory economic performance in the Community more generally remains fiscal policy. Deficits in most union member countries, as well as in the Union as a whole, of well over 3% of GDP are excessive by any standards, while debt ratios in a large number of countries stand in excess of the reference value of 60% laid down in the Treaty and continued to rise on average. The present economic slowdown in Europe does not provide a justification for postponing necessary consolidation measures. For what is at stake is not only monetary union, but also the need to enhance the growth potential of EU economies through redeployment of savings and their ability to cope with coming challenges linked, inter alia, to the ageing of the population. In this respect, it is important to note that fiscal consolidation need not have contractionary effects if it is strongly focused on reduction of public expenditure rather than tax increases and if it is implemented so as credibly to enhance the long-run sustainability of public finances.

To conclude, the preparations that are needed for the ESCB to perform its tasks in Stage Three are in hand. The outcome of the European Council meeting in Madrid has confirmed the political will to move forward to Stage Three in 1999. Given appropriate economic policies, this deadline can be achieved in the context both of strict application of the convergence criteria and of satisfactory economic developments in the Community.

Frankfurt, 5th March 1996

Alexandre Lamfalussy,
President

Chapter I

Economic, monetary and financial conditions in the European Union

Summary and Overview

1. Economic and financial conditions in the EU

In the early part of 1995, in the context of a broadly favourable global economic environment, growth in the European Union appeared to be well under way, synchronised and broadly based. In the second half of 1995, however, growth slowed noticeably in many Member States. This slowdown may be attributed to several factors, including the lagged effects of high long-term interest rates in 1994, country-specific developments, such as the effects of wage settlements in Germany, as well as the easing of rates of economic expansion in North America. Exchange rate turbulence in the early part of 1995 reportedly dampened business confidence in some EU countries.

In 1995 many Member States achieved inflation rates consistent with, or close to, price stability. Low or even negative changes in import prices, as well as limited rises in nominal unit labour costs, helped to keep inflationary pressures subdued in these countries. In other Member States more heterogeneous trends prevailed. Some countries succeeded in reducing inflation rates from higher levels, while inflation peaked in mid-year in several cases and mostly decelerated thereafter.

Despite the fact that growth forecasts have recently been revised downwards, there appears to be a widespread consensus that a general economic downturn is not in prospect, and a pick-up in growth, deriving mainly from domestic demand, is anticipated in the course of 1996. Most of the developments seen as having influenced the slowdown seem likely to have a temporary rather than a permanent effect on activity. Exchange rate tensions in the EU abated later in 1995 and previous sharp changes in exchange rates were substantially reversed. At the end of 1995, long-term interest rates in all EU countries were considerably lower than one year before. Furthermore, there are no signs of constraints on investment arising from corporate indebtedness, and corporate profitability remains broadly healthy. Finally, world trade in 1996 is expected to grow at a substantial rate.

While some improvements in labour markets can be expected from a resumption of GDP growth, the high level of unemployment, standing at almost 11% for the EU as a whole at the end of 1995, primarily reflects structural problems. If the level of unemployment is to be significantly reduced, a major contribution must therefore come from structural reforms to eliminate rigidities and to improve the operation of labour markets.

2. Monetary policies in Member States

Monetary conditions were eased in the course of 1995 in Belgium and Luxembourg, Denmark, Germany, France, Ireland, the Netherlands and Austria as well as in Greece and Portugal. In these Member States, official interest rates on balance moved down together. In Germany, the policy framework was successful in re-establishing low inflation after the unification shock in the early 1990s, while in the view of those countries targeting stable exchange rates in the ERM, central parities have served as a useful objective over time for the co-ordination of monetary policies

aiming at the achievement and maintenance of price stability.

In the remaining EU countries, namely Spain, Italy, Finland, Sweden and the United Kingdom, monetary conditions had to be tightened in the earlier part of 1995 in order to counter inflationary risks. Inflationary pressures were considered to have receded towards the end of the year, which permitted Spain, Finland and the United Kingdom to embark upon a cautious easing of the monetary stance in the context of their strategy of inflation targeting, thereby also lending support to a judgement that the stance adopted previously had been appropriate.

Overall, monetary policies geared towards the primary objective of price stability have contributed to a general decline in inflation. Indeed, Member States have made significant progress since 1990. This can be seen as an important prerequisite for satisfactory and sustainable growth, as well as being conducive to convergence towards price stability under the Maastricht criteria.

Nevertheless, vigilance is required. One element of uncertainty stems from domestic wage and cost developments, including the uncertainty as to whether one-off shocks to prices, such as changes in indirect taxes and import prices, will have an impact on the wage formation process. On the other hand, some indicators hint at the possibility of lower-than-expected inflation in some countries, as a consequence of weaker-than-expected real GDP growth and wage restraint.

3. Challenges for convergence

While longer-term progress towards price stability is encouraging, as is the convergence of long-term interest rates (although less pronounced), there is a clear need for more convergence, as evidenced by episodes of exchange rate tensions. The main challenge for the EU is fiscal consolidation. Public finances are the weakest point of convergence. In a large majority of Member States, the public sector deficit in 1995 was well in excess of the 3% reference value laid down in the Maastricht Treaty. At the same time, structural deficits remain high in most countries, and so too does the share of the public sector in the economy. In the EU as a whole, the government debt ratio increased further, to stand at over 70% of GDP in 1995, i.e. well above the 60% reference value.

All Member States are aware that a sound fiscal position is crucial in order to prevent financial instability. First, an unbalanced policy mix would damage the credibility of price stability-oriented monetary policies. Second, a lack of convergence could exert upward pressure on long-term interest rates, thereby impeding the reduction of public deficits and debt, and the convergence process as a whole, and, third, it could ultimately undermine exchange rate stability. Conversely, if fiscal consolidation is implemented so as to promote credibility in the sustainability of sound public finances it need not have contractionary effects even in the short run. Indeed, for the benefits of fiscal consolidation to materialise swiftly, it should be "frontloaded" and decisive.

Present economic difficulties do not provide a justification for postponing necessary consolidation measures. Such measures remain essential in themselves to reduce the interest burden on outstanding public

debt, to cope with long-term difficulties related to the ageing of the population and to ensure a satisfactory economic performance. Moreover, only implementation of such consolidation measures will allow public finances to take advantage of the anticipated resurgence of growth so as to comply with a strict application of the convergence criteria on the basis of 1997 figures. The year 1996 will be of crucial importance in paving the way towards Monetary Union.

1. Economic and financial background in 1995

1.1 Major developments outside the EU

Broadly favourable external economic growth

On the whole, the global economic environment remained broadly favourable in 1995. Real GDP growth in countries outside the EU is estimated to have been around 3.5%, compared with growth of just above 2.5% in the EU.

For the United States, 1995 was the fourth consecutive year of economic expansion, although the rate of US GDP growth decelerated in the course of the year (see Chart 1). Moreover, world activity was fuelled by the expansion of the dynamic economies in South-East Asia, where GDP growth reached approximately 8%. As growth in Latin America is estimated to have been over 3%, negative spillover effects of the Mexican peso crisis on other Latin American economies were less severe than had initially been feared. In most countries of central and eastern Europe, economic conditions improved, with GDP growth reaching levels of around 3-6%. In contrast to these global trends, Japan's economy virtually stagnated, despite expansionary fiscal and monetary policies, and in most of the countries of the former Soviet Union output declined further, although more gradually. Inflation in the United States rose slightly to just below 3%, whereas inflation in Japan was virtually zero.

Turbulent foreign exchange markets

In the first quarter of 1995, and especially in March, the US dollar depreciated strongly against the Japanese yen and the Deutsche Mark, reaching historical lows against those currencies in April (JPY 80 and DEM 1.36, respectively). One important underlying factor was international investors' increased risk aversion following the Mexican crisis at the end of 1994. This triggered capital outflows from high-yielding currencies, as well as from the dollar, into "safe haven" assets denominated, inter alia, in Deutsche Mark. Other factors included expected changes in interest rate differentials, the US/Japanese trade dispute and the end-year repatriation of Japanese funds.

However, in the second half of 1995, the dollar made an orderly recovery, taking the Deutsche Mark/US dollar rate into a fluctuation band of broadly 1.40-1.45. Shifts in interest rate expectations in favour of the dollar and settlement of the trade dispute played a role. By the end of the third quarter the yen/dollar rate had returned to its end-1994 level (of around JPY 100 to the dollar). Thus, considered over the period from December 1994 to December 1995 and in nominal effective terms, exchange rate movements were less pronounced; while the yen depreciated by 4%, the dollar and the Deutsche Mark appreciated by 2 and 4% respectively (when measured on the basis of the BIS index against twenty-six trading partners).

On balance, while exchange rate developments introduced elements of uncertainty in early 1995, which reportedly have negatively affected a number of countries, the effect on global growth appears to have been more limited. This assessment can also be supported by the fact that world trade expanded rapidly by around 9%.

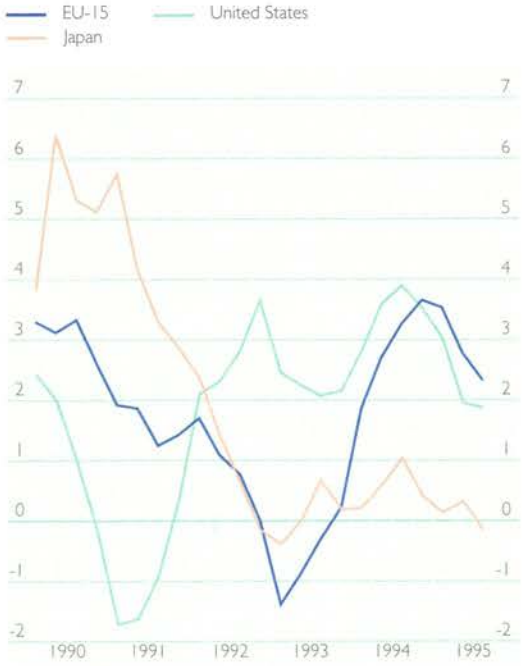
Global decline in bond yields

Between end-1994 and end-1995, yields on 10-year US bonds declined by 226 basis points, while yields on comparable Japanese bonds fell by 168 basis points. These

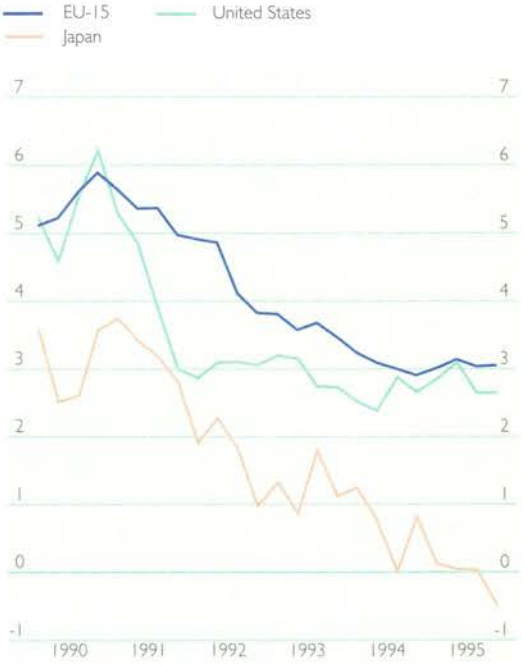
Chart I

Main developments in major industrialised economies

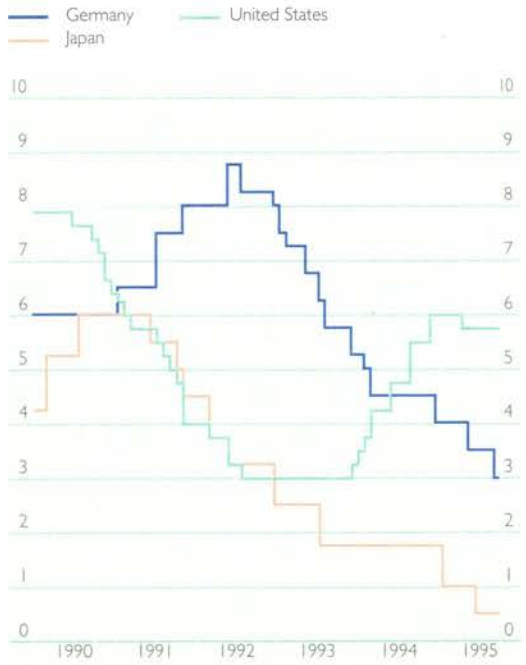
Output growth[a]
(Quarterly data; annual percentage changes)



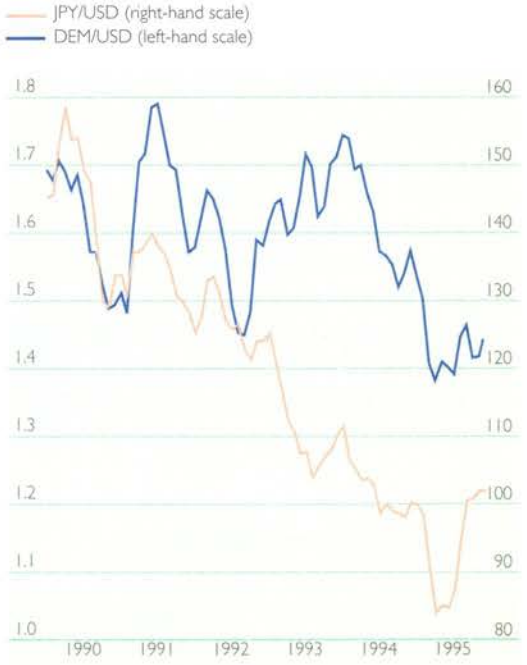
Inflation rates[b]
(Quarterly data; annual percentage changes)



Official interest rates[c]
(end-month data; in percentages)



Exchange rates[d]
(end-month data)



Source National data.
(a) US data based on the new chain-weighted GDP series.
(b) Western Germany up to end 1993, unified Germany thereafter. Italy: Cost-of-living index. United Kingdom: CPI excluding mortgage interest payments (RPIX).
(c) For Germany and Japan discount rate, for the United States federal funds target rate.
(d) Deutsche Mark per dollar and Japanese Yen per dollar.

developments on global bond markets may be seen as representing a continuation of a trend towards declining long-term interest rates which has been evident since the beginning of the 1990s, and which was interrupted by the sharp upturn in 1994. Factors which affected bond markets included the apparent downward revision of expected growth and inflation in the United States in early 1995 and associated expectations of lower short-term interest rates; later in the year, the actual deceleration of inflation and the performance of US growth seemed to confirm expectations of a "soft landing" for the US economy. More important from a longer-term perspective seems to be the growing perception of a consensus among industrialised countries that price stability - as a prerequisite for satisfactory and sustainable growth - is one of the major objectives of economic policies in general, and is the primary objective of monetary policy in particular. Pursuit of this objective has contributed to an increase in the credibility of monetary policies, and to a general decline in inflation expectations and uncertainty.

In addition, ongoing efforts towards fiscal consolidation underpin lower long-term rates. In the context of global developments, the budget debate in the United States was of particular importance. However, as deficits and public debts - as well as long-term interest rates - are still high in a number of industrialised countries, it is evident that more fiscal consolidation is needed to reduce the drain on global savings and to lower real interest rates further (see Section 3).

Monetary policies in major industrialised economies outside the EU were eased in the course of 1995. In the United States, the turning-point of the interest rate cycle was observed following the cut in the federal funds rate from a high of 6% reached in February 1995 to 5.75% in July, and in late December the rate was reduced further to 5.5%. Reflecting the weak state of the economy in Japan, the official discount rate was reduced from 1.75% at the beginning of 1995 to a historical low of 0.5% in September 1995.

1.2 Macroeconomic developments in the EU

Broadly based growth in early 1995, but slowdown later in the year

Real GDP growth in the EU in 1995 is estimated to have been just above 2.5%, broadly in line with the average observed since the mid-1970s (see Box 1). While growth appeared to be well under way, synchronised and broadly based within the Union in the early part of 1995, it slowed noticeably in many Member States in the course of the year. The main exceptions were Spain, Ireland and, up to the third quarter of 1995, Italy (see Table 1).

Table 1

Recent developments in real GDP growth*

(percentage changes)

	Annual rates			Quarterly rates									
	1993	1994	1995(a)	1994	1995				1994	1995			
				Q4	Q1	Q2	Q3	Q4	Q4	Q1	Q2	Q3	Q4
Belgium	-1.6	2.2	1.9	3.6	3.5	2.7	1.8	-	1.7	0.7	-0.3	-0.3	-
Denmark	1.5	4.4	3.1	3.4	4.1	2.3	2.7	-	1.2	1.3	-0.1	0.5	-
Germany	-1.2	2.9	1.9	3.7	2.7	2.5	1.9	-	0.6	0.2	1.1	-0.0	-
Greece	-0.5	1.5	2.0	-	-	-	-	-	-	-	-	-	-
Spain	-1.2	2.1	3.0	2.9	3.2	3.1	2.9	-	0.6	0.9	0.8	0.5	-
France	-1.5	2.9	2.9	4.3	4.1	2.8	2.0	-	1.0	0.7	0.2	0.2	-
Ireland	3.1	6.7	7.2	-	-	-	-	-	-	-	-	-	-
Italy	-1.2	2.2	3.3	2.9	4.2	3.1	3.4	-	0.0	1.5	-0.1	2.0	-
Luxembourg	1.4	3.4	3.7	5.0	-	-	-	-	2.2	-	-	-	-
Netherlands	0.2	2.7	2.7	3.4	3.5	2.4	2.1	-	0.6	0.9	0.3	0.3	-
Austria	0.4	3.0	2.1	3.7	2.3	2.5	1.3	-	0.9	0.1	0.8	-0.5	-
Portugal	-1.3	0.8	2.6	-	-	-	-	-	-	-	-	-	-
Finland	-1.2	4.4	4.4	4.8	7.1	4.5	3.0	-	0.4	1.9	0.4	0.2	-
Sweden	-2.2	2.6	3.6	4.3	4.6	3.9	3.4	-	1.7	0.1	0.7	0.9	-
United Kingdom	2.3	4.1	2.5	4.2	3.7	2.7	2.1	1.8	0.7	0.6	0.4	0.4	0.4
EU-15	-0.5	2.9	2.7	3.7	3.6	2.8	2.4	-	0.7	0.7	0.5	0.5	-

Source: National data.

* Quarterly data seasonally adjusted.

(a) Provisional.

The slowdown in a number of both large and small EU economies may be attributed to several factors, including the lagged effects of high long-term interest rates in 1994, country-specific developments, such as the effects of wage settlements in Germany, as well as the easing of rates of economic expansion in North America. Exchange rate turbulence in the early part of 1995 reportedly dampened business confidence in some EU countries. In addition, in many Member States consumer demand, which is usually expected to support an economic upswing at this stage, remained relatively weak.

BOX 1

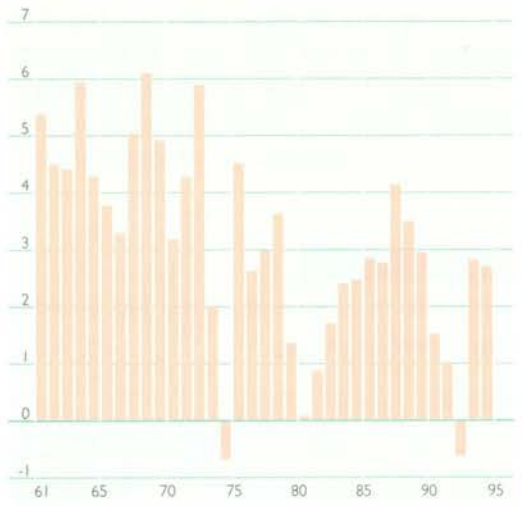
A longer-term perspective on EU growth

The performance of the EU-15 over the past two years has, as highlighted in the main text, been one of recovery from the recession that reached a trough for the EU as a whole in 1993. It is of interest to consider this performance in the light of longer-term patterns of growth among current EU Member States. In this context, the chart below shows annual growth rates of real GDP for the weighted average of the fifteen current Member States. In considering the data, it is important to bear in mind that the dispersion of growth rates and cyclical patterns within the EU has varied over time, so that individual countries' growth often differs from the overall pattern (although there appears to have been a tendency for the dispersion of growth rates to diminish).

The average rate of real GDP growth in the EU between 1961 and 1995 was 3.2%. Within this overall period, there is evidence of deceleration over time. In the 1960s average growth was 4.7%, in the 1970s it was 3.3%, in the 1980s 2.2% and so far in the 1990s it has been 2.0%. There was a clear watershed in growth performance in 1974, the year when the first oil crisis hit; before that year, average growth was 4.5%, whereas since then the average growth rate of the Union has been 2.3%.

EU-15 real GDP growth

(annual percentage change)



Source: National data.

The explanations proposed for such a growth slowdown are legion, and their relative importance is a matter of dispute; on the one hand, some point to the maturing of EU economies as compared with the 1960s and early 1970s, which means investment requirements are less. Others point to the decline in national saving since the mid-1970s, largely as a result of fiscal deficits; higher world real interest rates; effects of goods and labour-market regulations stifling competition; higher tax rates (especially in the 1980s), which have tended to hinder enterprise and work incentives; and excessive wage increases. Many of these factors also affected the United States and Japan, which saw a decline in growth after 1974, too. For the United States, growth over the period 1962-74 averaged 4.1%, and in 1975-95 it was 2.7%; for Japan the corresponding figures were 8.9% and 3.5%.

Besides growth rates per se, it is apparent that the nature of the cycle in the EU varied strongly between the periods before and after 1974. Before that year, the cyclical pattern of EU countries was on average characterised by a long period of positive growth. Peaks were typically around 6%, with such booms being interspersed by "growth recessions" when output growth rates declined, albeit still remaining above 3% even at the cyclical troughs. Since 1974 the amplitude of the cyclical pattern has been much greater, and growth rates at the cyclical peaks and troughs have also been much lower. Output fell in 1975 and 1993, and was at a standstill in 1981. Cyclical peaks since 1974 have featured output growth rates of the order of 3-4%.

Comparing the three major cycles since 1974 purely in terms of annual growth performance in the EU as a whole, it is apparent that the current cycle features a more rapid recovery than in the early 1980s, when from the trough of zero growth in 1981 growth did not attain the rate that was seen in 1994-95 until the mid-1980s. The recovery of 1976 was more rapid, as after declining in 1975, EU output grew by 4.5% in 1976. However, the growth performance of the 1980s proved to be more sustainable, with growth of 2.3% or more each year between 1984 and 1990. Growth in the late 1970s only lasted four years before slowing drastically in 1980. Considering the link of these patterns to inflation performance (see Box 4), the more sustainable growth performances in the 1980s coincided with lower inflation, compared with the short cycle in the 1970s in an environment of high inflation.

In terms of purely historical patterns, the growth performance of 1994-95 is broadly in line with average growth since 1974. Also, the current cycle is still short, compared to past experience, and, considering the inflation environment, it resembles developments in the 1980s much more than those in the 1970s.

Exports and investment as major forces behind growth

The composition of growth in the EU countries is shown in Table 2, indicating both similarities and differences among Member States. Overall, export growth was just below 8% year on year, somewhat slower than in 1994, but still vigorous. This reflected growth in demand in major trading partners within the Union, as well as the impact of external demand, as highlighted in Section 1.1. The rise in imports amounted, on average, to around 6.5%. The EU current account balance improved in 1995 (see Table 3).

Table 2

Composition of growth in the EU in 1995*

(annual percentage change)

	Real GDP	Domestic demand					Trade	
			Consumption		Invest-ment	Stock changes[a]	Exports	Imports
			Private	Govern-ment				
Belgium	1.9	1.5	1.3	0.8	2.5	0.0	8.2	7.9
Denmark	3.1	3.2	2.6	0.3	9.6	0.4	4.4	5.7
Germany	1.9	1.8	1.3	2.0	2.8	1.1	3.7	3.1
Greece	2.0	2.4	1.5	0.2	7.8	1.8	4.6	5.0
Spain	3.0	3.4	1.8	0.9	9.1	0.2	10.5	11.1
France	2.9	2.3	2.3	-1.6	7.1	-0.1	7.6	5.3
Ireland	7.2	5.0	4.0	3.8	9.6	-0.7	13.7	12.1
Italy	3.3	2.4	1.2	-0.5	6.6	0.4	14.0	11.0
Luxembourg	3.7	3.1	2.4	2.3	3.5	-0.4	4.4	3.8
Netherlands	2.7	2.4	1.9	1.5	6.4	-0.3	5.8	5.7
Austria	2.1	2.4	2.0	1.5	3.5	2.1	8.5	7.0
Portugal	2.6	3.1	1.7	2.1	6.1	1.2	11.8	11.5
Finland	4.4	4.9	4.7	1.1	2.7	0.5	8.1	16.7
Sweden	3.6	1.9	0.4	-1.7	11.6	0.4	12.0	8.3
United Kingdom	2.5	2.0	2.4	0.6	1.3	0.2	5.7	3.9
EU-15	2.7	2.3	1.8	0.5	5.1	0.5	7.7[b]	6.5[b]
Memo item:								
EU-15 (1994)	2.9	2.6	1.6	0.3	2.1	0.9	8.9[b]	7.8[b]

Source: National data.

* Data partly estimated.

(a) As a percentage of GDP.

(b) The trade figures are a weighted average of the EU-15 countries' data and, as such, do not exclude intra-EU trade.

A second factor underlying the growth performance in 1995 was the increase in fixed investment, amounting to around 5% for the EU as a whole. In almost all Member States investment was considerably higher than in 1994, particularly in the enterprise sector. Early in 1995, buoyant growth expectations and a high rate of capacity utilisation were important underlying factors. The main exceptions to the overall pattern were Germany and the United Kingdom, where investment growth was weak. In Germany this appeared to be strongly related to the end of the housing boom, sizable wage increases and uncertainties related to the appreciation of the Deutsche Mark; in the United Kingdom it may be linked to an overhang of capacity in industrial and commercial buildings and to uncertainty, reflected in the high rates of return required on new investment projects.

Private consumption remained subdued across the Union. In only a few countries - Denmark, Ireland and Finland - did it grow at rates in excess of 2.5%. The explanation for this pattern varies among EU countries. The most important factors seem to have been the direct and indirect effects of fiscal policies, trends in employment, moderate growth in real personal disposable incomes in many countries and, in a few, the lingering after-effects of earlier balance-sheet adjustments in the private sector.

Government consumption in 1995 was virtually flat in the Union as a whole, reflecting modest real expenditure growth in most countries and declines in others. (As regards the impact of fiscal developments on demand and growth, a broader analysis of the macroeconomic impact of fiscal policy is provided in

Table 3

Trade and current account balances in the EU*

(as a percentage of GDP)

	Trade balances				Current account balances			
	1992	1993	1994	1995[a]	1992	1993	1994	1995[a]
BLEU	1.5	2.6	2.8	3.4	2.9	5.0	5.2	5.8
Denmark	4.9	5.7	5.1	4.4	2.8	3.5	1.9	1.2
Germany	1.1	2.0	2.2	2.7	-1.1	-0.9	-1.0	-0.7
Greece	-14.5	-14.0	-14.1	-15.5	-2.2	-0.8	-0.1	-2.8
Spain	-5.9	-3.9	-3.8	-4.1	-3.0	-0.4	-0.7	1.1
France	0.2	1.2	1.2	1.4	0.3	0.8	0.6	1.1
Ireland	11.7	15.0	15.9	18.3	4.8	6.6	5.9	7.0
Italy	-0.8	2.1	2.2	2.6	-2.3	1.1	1.5	2.4
Netherlands	3.5	4.7	4.4	5.0	2.4	4.0	4.1	4.3
Austria	-5.2	-4.6	-5.1	-	-0.1	-0.4	-1.0	-2.0
Portugal	-9.8	-7.9	-7.6	-7.2	-0.1	1.0	-1.2	-1.8
Finland	2.6	6.4	6.5	7.7	-4.6	-1.3	1.3	3.6
Sweden	2.4	3.7	4.4	6.6	-3.5	-2.0	0.4	2.1
United Kingdom	-2.5	-2.5	-1.9	-0.7	-1.8	-2.0	-0.3	-0.7
EU-15[b]	-0.4	1.0	1.3	1.7	-1.2	0.0	0.1	0.5

Source: National data.

* Surplus (+), deficit (–). Figures distorted from 1993 onwards by the change in the statistical collection procedure.

(a) Provisional.

(b) European Commission data. Excludes intra-EU trade.

Section 3.) Recent developments reflected the limited room for manoeuvre for public authorities, given the constraints on public spending against the background of high levels of expenditure in relation to GDP, the ongoing need to address fiscal imbalances and urgent efforts to reverse the increase in debt ratios.

Unemployment remains high

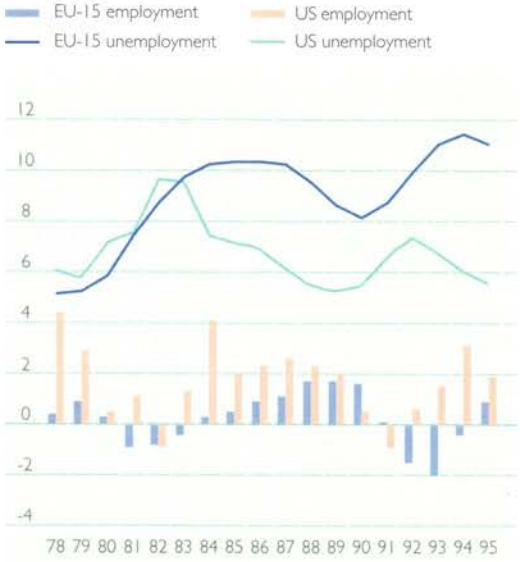
For the EU as a whole, measured on the basis of national data, the unemployment rate fell by around 0.5 percentage point from a peak in the first quarter of 1994 to stand at 10.9% in the third quarter of 1995. No further improvement was apparent in the fourth quarter.

At the level of individual countries, measured unemployment rates fell during the course of the year in Denmark, Spain, Finland and the United Kingdom, and also, though to a lesser extent, in France, Ireland and the Netherlands. However, in France, Ireland, the Netherlands and Finland unemployment rates were either stable or rose towards the end of the year and for most individual Member States and for the Union as a whole unemployment remained well above both the average recorded during the 1980s and the low point reached during the last recovery (see Chart 2).

Moreover, since the early 1980s the EU unemployment rate has diverged significantly from that in the United States. Part of the explanation may lie in the fact that real growth in the Union was on average lower than in the United States over the same period. However, this comparison also highlights the fact that overall trends in European unemployment primarily reflect structural problems rather than the effects of the cycle. In particular, and in contrast to the United States, there is clearly an "asymmetry" in the cyclical pattern of European employment, as unemployment rises in recessions, but economic recoveries typically do not lead to equivalent reductions. Thus, while some improvements in labour

Chart 2

Employment growth[(a)] and unemployment rates[(b)]



Source: OECD Economic Outlook (December 1995).
(a) Annual percentage changes.
(b) As a percentage of labour force.

markets can be expected from a resumption of GDP growth, a major contribution must come from structural reforms to eliminate rigidities and to improve the operation of labour markets.

1.3 Intra-EU exchange rates

Developments in EMS currencies' exchange rates

After the relatively calm market conditions recorded during most of 1994, intra-EU exchange rates were subject to episodes of turbulence in 1995. Exchange rate developments were influenced by various factors, the relative importance of which differed between countries and over time. Generally speaking, it appears that in the period under review domestic imbalances in member countries were the focus of markets' recurrent attention. Factors relevant in this respect may have included developments - both at a national and at a Community level - generating market

Chart 3

Position of currencies in the ERM

(in percentage points)

Source: National data.

Vertical green lines show realignments of ESP and PTE. The position of a currency in the fluctuation band is determined by its deviation with respect to the midpoint between the strongest and weakest currencies in the ERM. The deviation between two currencies represents the percentage difference between their market exchange rate and their bilateral central rate.

concerns about the EMU process and individual member countries' participation, as well as the pronounced weakness of the US dollar during the first half of 1995, which may have acted as a triggering factor for the weakness of some EU currencies.

The Dutch guilder (which was the strongest currency in the system throughout 1995), the Austrian schilling (which joined the ERM on 9th January) and the Belgian franc remained closely aligned with the Deutsche Mark for the year as a whole.

For most other ERM currencies, four phases may be distinguished. First, from end-1994 until late spring 1995, ERM tensions, fuelled by the US dollar's weakness in the aftermath of the Mexican crisis, initially concentrated on the Spanish peseta. This was partly a result of political uncertainty. Later, these developments had an impact on the Portuguese escudo. Upon request by the Spanish authorities, the decision was taken to adjust the central rate of the peseta downward by 7%, effective from 6th March 1995. Following this, a downward adjustment of the central rate of the Portuguese escudo of 3.5% was agreed by Ministers and central bank Governors. Subsequently, the peseta and, to a lesser extent, the escudo appreciated substantially. However, the realignment provided no immediate relief for the ERM as a whole and pressures switched to the Irish pound and the French franc. The Danish krone also suffered from market strains, albeit to a lesser extent. Outside the ERM, the Italian lira, the Swedish krona and the pound sterling all depreciated vis-à-vis the strongest ERM currencies during this period. In a second phase, during the summer months, calmer conditions prevailed, allowing the currencies previously affected to make up most of the ground lost earlier. In a third phase, between the second half of September and late October, repeated bouts of tension were observed again, focusing particularly on the French franc. Finally, from late October until the end of 1995, a return to calmer conditions took place, notwithstanding smaller and short-lived pressures in early December on the French franc, so that by the end of the year currencies had recovered, in most cases, to stand close to their central rates (see Chart 3).

As regards the currencies outside the ERM, the Finnish markka, which was only modestly affected by the exchange rate turbulence in the first part of 1995, underwent a strong recovery during the summer months to close 1995 at a higher level against the strongest ERM currencies. In contrast, the Italian lira, the Swedish krona and the pound sterling depreciated substantially vis-à-vis the strongest ERM currencies during the first four months of 1995. While the pound has subsequently regained a little ground, the lira recovered a significant part of the earlier loss. The krona, which strengthened steadily after the second quarter of 1995, ended the period with a substantial net appreciation vis-à-vis the strongest ERM currencies. The Greek drachma depreciated by 3% against the ECU, in line with its 1995 target.

Changes in effective rates during 1995

Owing to the turbulence in foreign exchange markets, real and nominal effective exchange rates of several EU Member States underwent significant fluctuations in 1995, although as a result of offsetting movements in the dollar such changes were less marked than those against the strongest ERM currencies highlighted above.

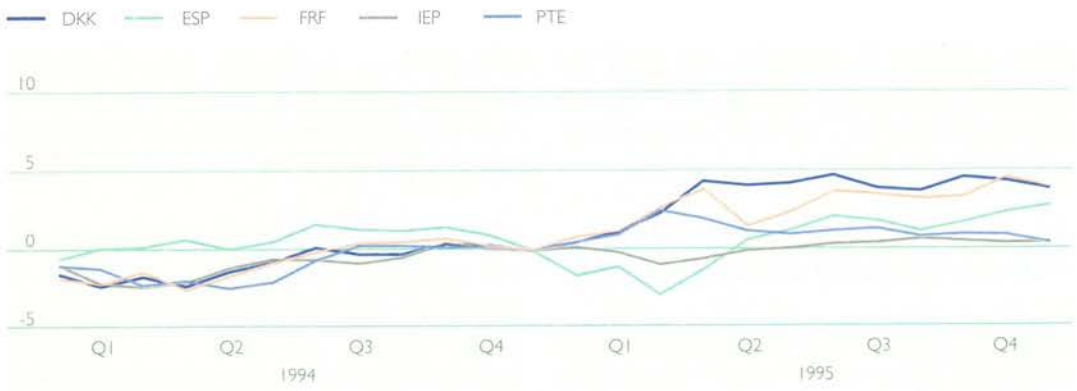
Comparing nominal effective exchange rates of end-1995 with those prevailing at the end of 1994, EU currencies can be roughly divided into four groups: two non-ERM currencies, namely the Swedish krona and the Finnish markka, experienced sizable appreciations of around 6-8%; a group of seven ERM currencies, namely the Belgian

Chart 4

Nominal effective exchange rates*

(monthly averages; in percentage changes relative to December 1994)

ERM currencies



Non-ERM currencies

Source: BIS.

* Against a basket comprising the currencies of 26 industrialised countries.

franc, the Danish krone, the Deutsche Mark, the Spanish peseta, the French franc, the Dutch guilder and the Austrian schilling, underwent appreciations of the order of 2-4%; two other ERM currencies, the Irish pound and the Portuguese escudo, were relatively stable; the other three non-ERM currencies depreciated: the Greek drachma by 3.2%, and the Italian lira and the pound sterling by 4-6% (see Chart 4). Given the relatively short time span and the limited inflation differentials, changes in nominal exchange rates translated to a large extent into changes in real effective exchange rates, i.e. into changes in measured price and cost competitiveness. The main exceptions were Italy, where competitiveness improved rather less than the nominal effective rate would suggest; Finland, where it declined less than the nominal appreciation implies; and Greece, where, in spite of a nominal depreciation, competitiveness deteriorated slightly.

Main underlying factors and policy responses

Both international developments and factors within the Community had an influence on intra-EU exchange market developments. At the international level, investors' increased risk aversion following the Mexican crisis and sizable fluctuations of the US dollar vis-à-vis European currencies had spillover effects on European currency markets. The correlation of movements between EU currencies' exchange rates with respect to the dollar/Deutsche Mark exchange rate was stronger than in previous years and was in general more marked for non-ERM currencies.

Within the EU, a number of developments were perceived by markets as potentially impairing the sustainability of a country's economic policy, triggering tensions in a number of cases. Markets closely monitored the current and prospective state of public finances in member countries, with particular reference to compliance with the convergence criteria for participation in Stage Three of EMU. Uncertainty about political developments sometimes played a role. Furthermore, currencies of countries with a less favourable record of price stability appeared more vulnerable to overall trends, while generalised market uncertainties surrounding the prospects for EMU may have played a role. They also had a perceptible effect on both issuance and prices in the ECU market (see Box 2).

In contrast to previous episodes of ERM tension, there were no major cyclical divergences among EU economies which could have given rise to the perception of policy dilemmas. Likewise, exchange rate pressures did not in general reflect a perceived need to correct imbalances in competitive positions; some of the currencies which depreciated in the first half of 1995 were already in favourable competitive positions.

Exchange rate turbulence posed challenges for monetary policies. As discussed in detail in Section 2, monetary policy responses to exchange rate tensions followed two broad strategies: the majority of ERM countries continued to give priority to stable nominal exchange rates vis-à-vis the strongest ERM currencies in their formulation of monetary policy; other countries found it more appropriate to allow more exchange rate flexibility, as evidenced by the increased use of the ±15% fluctuation bands within the ERM and the fluctuations of most non-ERM currencies. These patterns reflected to some degree differing monetary policy strategies, depending, in particular, on whether countries were pursuing a close exchange rate objective. Nevertheless, notwithstanding different operating environments, many central banks raised official interest rates in 1995 to contain their currencies' exchange rate depreciation and/or fight inflationary pressures. A number of central banks also resorted to foreign exchange intervention to support their

BOX 2

Private ECU markets

The overall private ECU banking and financial market (see Table below) is estimated to have contracted by 4.9% between end-September 1994 and end-September 1995, to stand at ECU 167.7 billion. The largest decline was observed in the volume of outstanding international bond issues, which contracted from ECU 69.1 billion at the end of September 1994 to ECU 62.5 billion at the end of September 1995. Repayments of maturing bonds were high, while issuance, notably at long maturities, slumped, reportedly as a consequence of uncertainty over aspects of EMU. Against the background of buoyant issuing activity on international bond markets, the decline in ECU issues brought the share of international ECU bonds in the total outstanding down from 4.3 to 3.7% over the twelve months to end-September 1995. By contrast, the value of outstanding domestic ECU bonds increased slightly from ECU 56.3 to 56.6 billion. Short-term instruments outstanding increased slightly over the same period, as the rise in outstanding international ECU paper more than outweighed the further decline in domestic short-term issues. Estimated bank lending in ECUs (total final

ECU financial markets

(Outstanding stocks at end-period; in billions of ECUs)

	1991	1992	1993	1994	1995			
	Q3	Q3	Q3	Q3	Q1	Q2	Q3	Q4
Bonds, *of which*	111.4	130.3	124.5	125.4	123.4	119.8	119.1	117.1
- international	*72.3*	*86.3*	*78.2*	*69.1*	*66.5*	*63.4*	*62.5*	*60.1*
- domestic	*39.1*	*44.0*	*46.3*	*56.3*	*56.9*	*56.4*	*56.6*	*57.0*
(National) Treasury bills	7.9	6.9	8.3	4.7	3.5	3.5	3.5	3.5
Euro-CPs and Euro-notes	9.5	8.6	6.5	6.4	8.3	8.1	8.2	8.9
Estimated bank lending [a]	60.7	66.5	66.6	59.9	56.7	60.2	56.9	-
Estimated total market size [b]	169.5	193.3	185.9	176.4	171.9	171.6	167.7	-
Bank assets, *of which:*	175.7	198.0	196.0	178.3	182.8	180.1	163.6	-
- vis-à-vis non-banks [c]	*46.1*	*61.6*	*61.0*	*55.5*	*51.7*	*55.0*	*52.0*	-
Bank liabilities, *of which:*	180.9	200.7	191.9	175.0	179.2	174.7	157.6	-
- vis-à-vis non-banks [c]	*28.7*	*34.9*	*30.9*	*27.1*	*25.4*	*24.7*	*23.2*	-
Memorandum items:								
Central banks' holdings of private ECUs	28.8	18.9	19.1	24.0	21.3	24.1	23.3	22.9
Turnover of ECU securities [d]	1143.7	1473.6	333.6	402.0	454.6	460.2	479.6	425.9
% of total turnover in all currencies	*16.0*	*13.3*	*6.1*	*6.9*	*7.4*	*7.2*	*7.4*	*6.0*

Source: BIS, EMI, Euroclear and Cedel.

(a) Final lending and lending to banks outside the reporting area.

(b) ECU 20 billion are deducted for estimated double counting: there is an overlap between the securities and banking markets owing to the role of banks as issuers and holders of ECU securities. In the absence of comprehensive data, this overlap may only be estimated.

(c) Identified non-banks only.

(d) Primary and secondary market, international and domestic straight bonds, convertibles, floating rate notes, CDs, short and medium-term notes.

bank lending and lending to banks outside the BIS reporting area) declined by 4.7% (to stand at ECU 57.1 billion at end-September 1995, compared with ECU 59.9 billion at end-September 1994). On the liabilities side, ECU deposits held by non-banks contracted by 13.8%. The ECU's market share in total international bank assets and liabilities dropped further from 2.7 to 2.3% (assets) and from 2.6% to 2.3% (liabilities).

Previously, the divergence between the market and the theoretical exchange rates of the ECU had remained in a range of ±20 basis points (except during periods of exchange market tensions), as banks took positions in the private ECU against the basket of component currencies so as to profit from the elimination of larger differences. However, from April 1994 onwards, the negative spread widened markedly and durably and broadened further in the first quarter of 1995 to reach the widest margin since the exchange rate crises of 1992-93 (see Chart below). After remaining at around 100 basis points throughout the second and third quarters of 1995, the spread widened sharply from end-September 1995 onwards, to reach well above 200 basis points during most of November and December. In contrast, the long-term interest rate spread remained close to par throughout 1994-95.

Difference between market and theoretical exchange rates of the ECU
(in percentage points)

Source: National data.

Several factors have been mentioned to explain the emergence of the exchange rate spread. First, the persistent and large exchange rate spread during 1994 and in the second and third quarters of 1995 is thought to reflect a deterioration of liquidity conditions in the private ECU interbank market. Awareness of the lack of an institutionalised link of market ECU to basket ECU is thought to have increased perceptions of risk in position-taking in private ECUs against a basket of component currencies.

Second, the widening of the spread in March/April and again in September/October 1995 may also reflect exchange rate tensions among ERM currencies. As in previous episodes, the sharp decline in the US dollar and the attendant strengthening of the Deutsche Mark affected the ECU more than the component currencies of the basket.

A third general factor, the importance of which may have varied over time, appears to have been uncertainty among market participants about the EMU process and the continuity of contracts.

Finally, the market exchange rate may also have been weakened by the sale of proceeds of maturing bonds into other currencies, to the extent that those repayments were funded by drawing on existing ECU deposits.

The Presidency Conclusions to the Madrid European Council in December 1995 stated that "in the case of contracts denominated by reference to the official ECU basket of the European Community, in accordance with the Treaty, substitution by the euro will be at the rate of one to one, unless otherwise provided in the contract".

currencies. However, with few exceptions, the amounts involved were generally smaller in 1995 than in the second half of 1993.

1.4 Securities markets in EU countries

Declining long-term interest rates

In line with the trend in the global bond markets highlighted in Section 1.1, nominal yields on 10-year bonds in all EU countries declined over the course of 1995, as can be seen from the decrease in EU average yields of 168 basis points (see Table 4). There were marked cross-country differences; yields in Finland and Sweden declined significantly by 289 and 247 basis points respectively, while long-term interest rates in Denmark, Spain and Portugal dropped by around 200 basis points. In Germany, Belgium, France and the Netherlands yields fell by 164 to 175 basis points, while the decline was less pronounced in Ireland, Italy, Austria and the United Kingdom. In Spain, Sweden, Italy and Portugal, long-term bond yields increased appreciably during the early part of the year against the background of exchange market turbulence, but subsequently - as tensions abated - fell considerably below the levels seen at the end of 1994. Greek variable coupon rates, which are not comparable with the other yields highlighted in this section, declined by 360 basis points in 1995.

Table 4

Long-term interest rates

(long-term bond yields; end-month; in percentages)*

	December 1993	December 1994	June 1995	December 1995	Change[a] 1994	Change[a] 1995
Belgium	6.42	8.34	7.55	6.69	1.92	-1.65
Denmark	6.09	9.14	8.53	7.23	3.05	-1.91
Germany	5.72	7.66	7.01	6.02	1.94	-1.64
Greece[b]	22.25	19.00	17.25	15.40	-3.25	-3.60
Spain	8.12	11.79	11.74	9.70	3.67	-2.09
France	5.64	8.28	7.63	6.64	2.64	-1.64
Ireland	6.26	8.76	8.58	7.34	2.50	-1.42
Italy	8.65	12.40	12.64	10.87	3.75	-1.53
Luxembourg[c]	6.45	7.98	7.30	7.47	1.53	-0.51
Netherlands	5.50	7.76	7.03	6.01	2.26	-1.75
Austria	5.90	7.63	7.26	6.36	1.73	-1.27
Portugal	9.12	11.81	11.95	9.77	2.69	-2.04
Finland	6.71	10.09	8.85	7.20	3.38	-2.89
Sweden	6.98	10.88	10.98	8.41	3.90	-2.47
United Kingdom	6.18	8.87	8.63	7.53	2.69	-1.34
EU-15	6.87	9.49	9.11	7.81	2.62	-1.68
United States	5.83	7.84	6.21	5.58	2.01	-2.26
Japan	3.04	4.59	2.69	2.91	1.55	-1.68

Source: National data.

* For the EU-15, harmonised convergence criteria bond yields (see also footnotes (b) and (c)). For the United States, 10-year bond yield and for Japan, 10-year benchmark bond yield.

(a) Percentage points, end-year on end-year.

(b) The data refer to variable coupon rates adjusted annually. As such, they cannot be used for comparisons with other countries, but only for intertemporal comparisons.

(c) Provisional data.

Two broad issues arise from bond market developments in 1995. First, the role of international transmission, i.e. the relationship between US and EU bond markets; and second, inside the EU, the correlation between developments in long-term interest rate differentials against countries with the lowest bond yields and exchange rate tensions, which was reflected in a widening of the former in the early part of the year and a subsequent narrowing as exchange rate tensions subsided.

As regards international transmission, the relationship between US and EU markets, although strong, is not one-to-one. In 1995 this was reflected in the fact that yields on 10-year bonds in most countries in the EU declined to a lesser extent than in the United States; as mentioned earlier, while yields on US 10-year bonds fell by 226 basis points over the course of 1995, equivalent yields in the EU declined by 168 basis points on average, albeit by varying amounts for individual countries, as described above. Furthermore, yield curve slopes (measured by the one-year/ten-year yield spread) evolved differently. Whereas in the United States the yield curve demonstrated a marked flattening during 1995, particularly in the wake of the cut in US official interest rates during the summer, in Germany and some other EU countries (Belgium, Denmark, Ireland, the Netherlands, Austria and Portugal) yield curves continued to steepen in 1995, whereas the opposite was the case in Spain, Italy, Finland and Sweden. Indeed, on this measure, the German yield curve, whose slope has become increasingly positive since the end of 1992, reached a degree of steepness that had only previously been seen during 1976 and 1988. Overall, yield curve slopes across the EU were generally steeper than in the United States during the year. At the end of 1995, the EU one-year/ten-year interest rate spread was over 150 basis points on average compared to just 40 basis points in the United States.

The second feature mentioned above was that within the EU there was a tendency for long-term interest rate differentials against countries with the lowest bond yields to widen significantly during the first months of 1995, particularly in Spain, Italy, Portugal, and Sweden, although this pattern was more than reversed towards the end of the year (see Chart 5, where interest rate differentials against German long-term yields have been used as a proxy). While a pattern of divergence is traditionally a more common feature in an environment of generally rising bond yields, as in 1994, during periods of downward movements of long-term interest rates yield differentials tend to narrow, as was the case in 1993 and the latter half of 1995. The behaviour of differentials in the initial stages of the rally of 1995 indicates that a role was played by country-specific factors such as past inflation performance, exchange rate instability and adverse fiscal positions, which may have reflected an increased focus by financial markets on the perceived risk of individual currencies. To some extent, the widening of differentials of some EU currencies against the background of an overall decline in long-term interest rates during the first months of 1995 may point to a widening of differentials in inflation expectations on the part of market participants, also in part related to developments in exchange rates; similar assessments on the part of the monetary authorities led to a tightening of monetary policy during the year in a number of instances. In the latter months of 1995, and partly as a consequence of the positive results of the previous monetary tightening, markets reacted strongly in favour of high-yielding currencies.

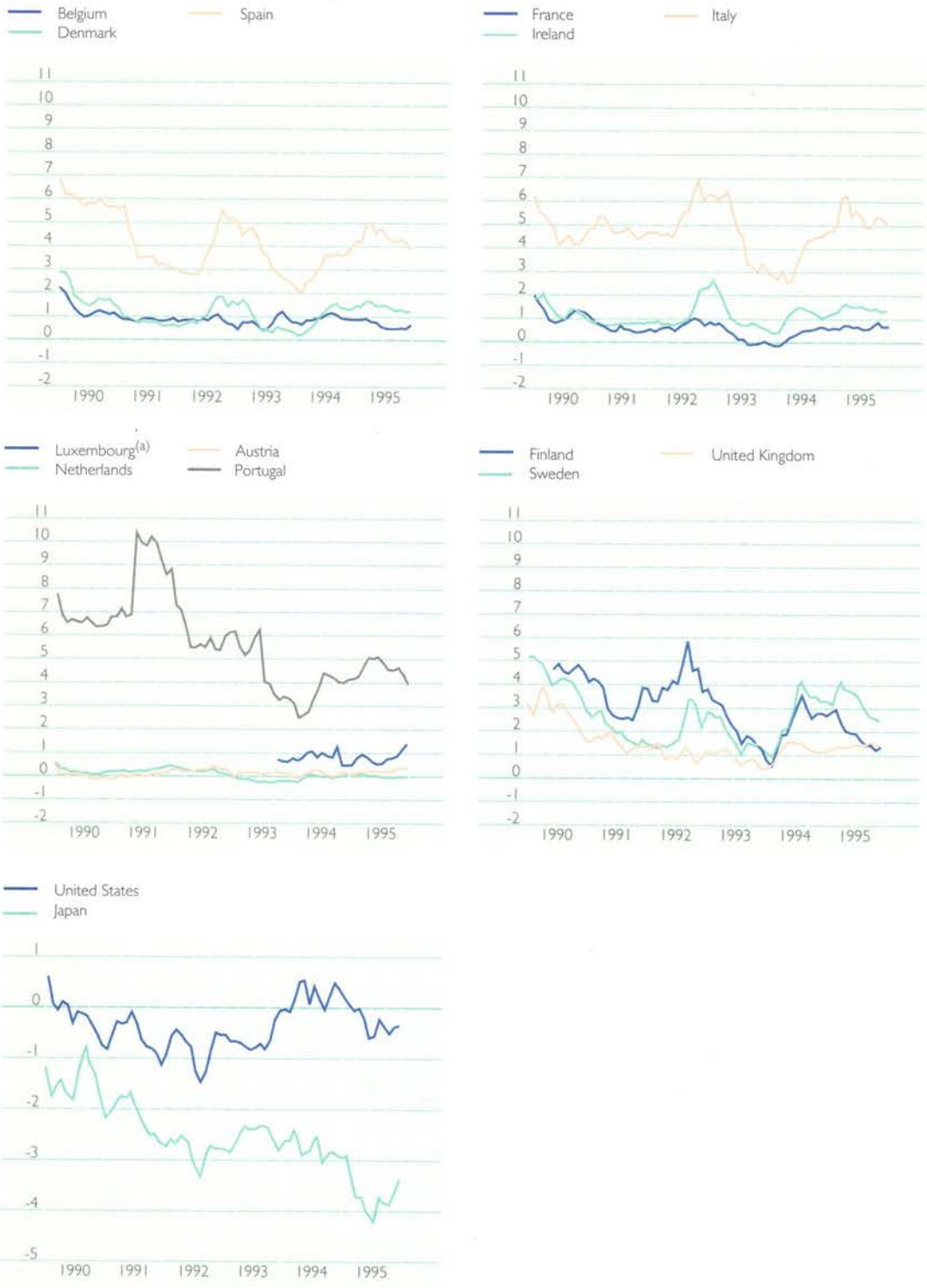
Performance of equity markets in 1995 weaker than that of bond markets

In recent years, developments in equity markets and developments in bond markets have been influenced by similar factors. In

Chart 5

Differentials against German long-term bond yields*

(monthly data; in percentage points)



Source: National data.

* For further explanation of the data used see footnotes to Table 4. For the United States, 10-year bond yield and for Japan, 10-year benchmark bond yield. For reasons of comparability, Greek data are not shown.

(a) Provisional data. Comparable data are only available from 22nd October 1993.

particular, changing expectations about longer-term prospects for inflation have had an important influence on the implicit interest rate at which corporate earnings are discounted, and thus equity markets have also benefited from this influence. As a consequence, a stronger correlation between developments in bond and equity markets has been observed.

However, in 1995 the performance of equity markets was weaker than that of bond markets in many EU countries. Although most countries experienced increases in equity prices, price-to-earnings ratios declined in a number of countries while dividend yields increased and the gap between bond yields and dividend yields narrowed.

Among the principal factors behind the relative performance of the equity markets of EU countries (measured by commonly-used market indices) were political uncertainty and changes in nominal effective exchange rates. For example, in Italy, where equity prices declined by 2%, political uncertainties inter alia were a negative factor. France, with a limited 0.5% decrease, was also affected. An intermediate group includes Germany, Belgium and the Netherlands, where equity prices increased by 7%, 12.2% and 16.7% respectively. The reason that these increases fell short of those in the best performers, such as the United Kingdom, where equity prices increased by 20.3%, would appear to relate partly to changes in exchange rates and to buoyant merger and acquisition activity, and the consequences of these for expected corporate earnings. In the United Kingdom (and also in Ireland) price-to-earnings ratios tended to fall although dividend yields declined and the gap between bond yields and dividend yields narrowed.

1.5 Price developments

Trends in inflation

In the Union as a whole, average inflation in 1995 stood at 3.0%, the same rate as in 1994 (see Table 5), while the dispersion of inflation rates declined further. A large number of Member States can be identified where inflation rates were low and price performance in 1995 as a whole was broadly favourable.

In Belgium, Denmark, Germany, France, Ireland, Luxembourg, the Netherlands, Austria and Finland, consumer price inflation rates for 1995 ranged between 1.0% and 2.5%, which is at, or close to, levels normally considered as price stability. For most of these countries, this continued the pattern already observed in 1994; Germany, the Netherlands and Austria joined this group in 1995.

Whereas in 1994 inflation was below 2.5% in Sweden and the United Kingdom, it rose in 1995 in both countries to stand closer to 3%.

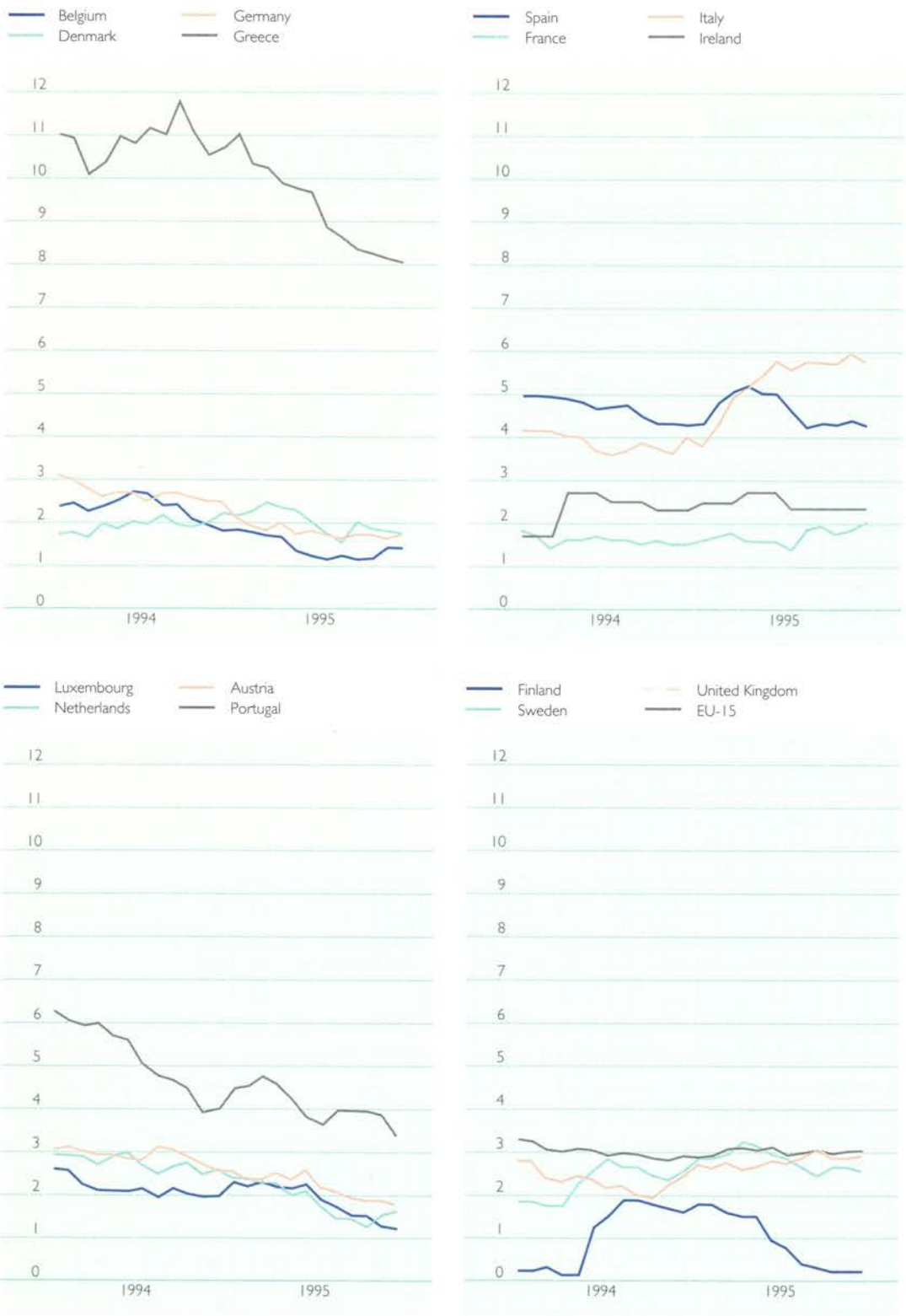
Inflation in Italy rose from 3.9% in 1994 to 5.4% in 1995. In Spain, annual inflation was unchanged at 4.7%. Portugal succeeded in reducing average inflation from 5.2% in 1994 to 4.1% in 1995. In Greece, inflation for the year as a whole was reduced from 10.9% to 9.3%.

Inflation rates in terms of annual averages may partly obscure divergent developments over the course of the year - although the distinction between the groups of countries outlined above is also apparent when looking at month-by-month developments (see Chart 6). The trend towards lower consumer price inflation broadly persisted throughout the year in Belgium, Denmark, Germany, Luxembourg, the Netherlands, Austria and Finland, as well as in Greece. In Spain, Portugal and Sweden twelve-month inflation rose in early 1995, peaked during

Chart 6

Consumer price inflation*

(monthly data; annual percentage changes)



Source: National data.

* Data for Ireland are based upon quarterly data. For further explanation of the inflation data used see Chart 1.

the first half of the year and decelerated thereafter, ending 1995 at rates below those observed at end-1994, namely 4.3%, 3.4% and 2.6% respectively. In Italy, inflation reached 5.8% in June and was broadly unchanged thereafter. Meanwhile, inflation in France and the United Kingdom rose slightly over the course of 1995, whereas in Ireland inflation was broadly stable over the year.

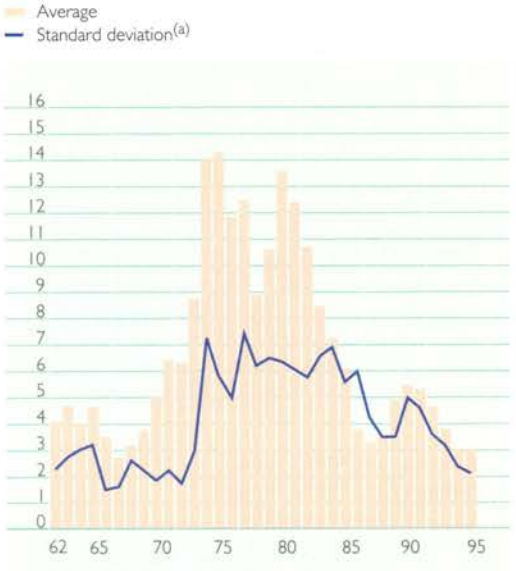
BOX 3

A longer-term perspective on EU inflation

Average inflation in the fifteen current Member States (constructed on the basis of national consumer price indices, where the weights are derived from consumers' expenditure levels in 1993) fell to 3% in 1994 and remained broadly constant during the course of 1995, having fallen from a recent peak of 5.7% in 1990. Current inflation in Member States is also relatively low when viewed against the background of historical inflation developments from the 1960s onwards. The chart shows the annual twelve-month CPI inflation rate for the EU-15 for this period. The average rate of consumer price inflation in the EU between 1962 and 1995 was 6.7%. Although the improved inflation performance is a general phenomenon within the EU, there are, naturally, important differences among countries. Marked improvements have been seen in some countries, more limited improvements in others. This reflects in part the fact that average inflation rates over this time period have differed significantly among EU countries. Differences in the definition of CPIs could have played a role. However, overall, the dispersion of inflation rates has declined significantly since the early 1980s, and the divergence of inflation rates (measured by the unweighted standard deviation) has been lower in the past few years than at any time since the first oil shock in the early 1970s.

Average EU-15 inflation rate and its dispersion

(annual percentage change)



Source: National data.
(a) Unweighted standard deviation of national CPI inflation.

Considering this longer time period, it is notable that the recent inflation performance of the EU-15 constitutes a period of comparatively low inflation, whereby average levels of inflation in a number of countries have approached those generally considered as price stability. Comparable inflation has been observed in two periods: during 1966-68 and again in 1987-88. The lowest inflation rate for the Union as a whole since the start of 1962 was achieved in June 1967, when inflation reached a low point of 2.5%. As inflation in the EU has now been below 3.5% for almost three years, and further progress may be achieved in a number of Member States, the current trend suggests a break with the experience of the past. In addition, there appears to have been a progressive improvement when comparing averages over a period of years. For example, comparing more recent developments with earlier periods, average EU inflation has declined successively from 10.5% in 1980-84, to 4.4% in 1985-89, to 4.1% in 1990-95, and to 3% in the past two years. A recent improved inflation performance is a feature not just of the EU, but also appears to be the case in other OECD countries such as the United States.

As regards the factors underlying the trend towards low inflation, the conduct of monetary policy itself has clearly been central, since inflation is, ultimately, a monetary phenomenon and there has been increasing emphasis on the role of maintaining price stability. However, the easing of inflationary pressures may also partly reflect the development and stage of the latest economic cycle, as well as differences in the factors underlying the path of expansion and recession. Notably, there were no rapid rises in major commodity prices, which could have negatively affected the price climate, set in motion a price/wage spiral and necessitated a monetary policy response. More controversial is the question of what role, if any, has been played by factors of a more structural nature - such as the increased downward pressure exerted on consumer prices by increased competition both within and outside the Union, changes in industrial structure, and labour market behaviour. Some of these may be expected to have a temporary impact on inflationary pressures, while others may affect the environment within which monetary policy is conducted more permanently.

Contrasting underlying factors

In the short run, and linked to the description of economic and financial developments set out above, demand and cost pressures affect trends in inflation. (As regards the role of monetary developments and policies, see Section 2.) Among cost factors (see Table 5), one may distinguish external factors (which may be proxied by import prices) from domestic costs (broadly measured by the GDP deflator, which is primarily determined by unit labour costs). On the demand side, the focus is on capacity utilisation. Finally, fiscal policy may have a direct effect on the price level via changes in indirect taxes.

At an EU level, the increase in import prices accelerated from 2% in 1994 to above 3% in 1995, while the rise in the GDP deflator stood at just below 3%. Unit labour cost growth rose to almost 2%, reflecting accelerating wage growth of around 4% and productivity growth slowing down to 2%. However, these averages mask important cross-country differences. It is hence useful to trace the influence of these factors for the respective countries as set out above.

In the countries where the inflation environment in 1995 was broadly favourable and which were at, or close to, price stability (Belgium, Denmark, Germany, France, Ireland, Luxembourg, the Netherlands, Austria and Finland), import price increases in 1995 were low or even negative, thus helping to keep inflationary pressures subdued. A firm or appreciating exchange rate was a key underlying influence. Domestic factors were also generally under control. Domestic costs, as measured by the GDP deflator, rose by around 2% or less in most of these countries. Price pressures stemming from labour markets were relatively subdued in 1995 in the majority of these countries, where the growth of nominal unit labour costs remained well below 2%. The main exception was Finland, where the growth of wages was relatively high compared with the growth of productivity. In Denmark, Germany, France, Luxembourg, the Netherlands and Austria, wage growth was also quite strong, but its effect on unit labour costs was partly or wholly offset by productivity growth. Finally, in Finland, reductions in food prices and increased competition following accession to the EU contributed to low inflation in 1995.

Among the countries where inflationary pressures were stronger in 1995, import prices rose sharply during the year in Italy, Sweden and the United Kingdom. The principal underlying factor appears to have been developments in exchange rates. In Greece, and also in Spain, import price inflation played a role, too, particularly in

Table 5

Consumer price inflation and important determinants

(annual percentage changes)

		CPI[a]	Import prices	GDP deflator	Nominal unit labour costs	Compensation per employee	Productivity
Belgium	1994	2.4	1.0	2.6	0.8	4.2	3.4
	1995	1.5	0.4	1.9	0.3	1.9	1.6
Denmark	1994	2.0	0.4	1.7	0.0	3.6	3.5
	1995	2.1	1.2	1.1	2.1	3.3	1.2
Germany	1994	2.7	0.8	2.3	-0.4	3.2	3.6
	1995	1.8	0.4	2.2	1.6	3.8	2.2
Greece	1994	10.9	7.5	10.9	12.7	12.3	-0.4
	1995	9.3	6.1	9.0	9.8	10.9	1.0
Spain	1994	4.7	6.0	3.9	1.5	4.2	2.7
	1995	4.7	4.8	4.9	3.1	3.4	0.4
France	1994	1.7	1.7	1.3	0.5	2.0	1.6
	1995	1.7	2.0	2.2	1.7	3.1	1.3
Ireland	1994	2.4	2.8	1.2	-6.4	2.0	8.4
	1995	2.5	1.8	2.0	-3.0	2.8	5.8
Italy	1994	3.9	5.7	3.6	-0.3	3.9	4.2
	1995	5.4	11.5	4.3	1.2	4.8	3.6
Luxembourg	1994	2.2	0.9	2.6	3.3	4.7	1.2
	1995	1.9	1.1	3.1	2.5	3.4	1.2
Netherlands	1994	2.7	0.1	2.5	-0.8	2.3	3.1
	1995	2.0	-1.5	1.1	1.4	3.0	1.6
Austria	1994	3.0	0.9	3.4	-4.6	3.1	8.1
	1995	2.2	0.5	2.1	-1.1	3.8	5.0
Portugal	1994	5.2	3.2	5.1	3.6	4.7	1.1
	1995	4.1	2.4	5.2	3.3	6.6	3.2
Finland	1994	1.1	-0.2	1.1	-3.2	1.4	4.9
	1995	1.0	-0.3	3.8	3.4	5.6	2.2
Sweden	1994	2.3	3.4	3.0	1.9	2.8	0.9
	1995	2.9	6.2	3.2	1.9	3.4	1.5
United Kingdom	1994	2.4	3.0	1.7	-0.4	4.0	3.4
	1995	2.8	8.8	1.9	1.5	3.4	1.7
EU-15	1994	3.0	2.0[b]	2.6	0.3	3.6	3.2
	1995	3.0	3.2[b]	2.9	1.8	3.9	2.0

Source: National data, partly estimated.

(a) For further explanation of the data used see footnote to Chart 1.

(b) Import prices obtained from European Commission (Autumn forecasts 1995). These data exclude intra-EU trade.

the first half of the year. Meanwhile, it remained subdued in Portugal. Unit labour cost increases were somewhat in excess of 3% in Spain and Portugal and around 10% in Greece. Greece and, to a lesser extent, Portugal experienced strong wage growth. In Italy, growth in unit labour costs remained low; relatively high wage growth was compensated by strong productivity growth. In the United Kingdom the increase in unit labour costs remained subdued.

Some influences were common to virtually all Member States. Subdued increases in

Table 6

Effects of indirect tax changes on consumer price inflation*

(percentage points)

	BE	DK	DE	GR	ES	FR	IE	IT	LU	NL	AT	PT	FI	SE	UK	EU-15
1994	0.7	0.1	0.4	0.1	0.2	0.1	0.3	0.3	0.1	0.3	0.2	0.1	0.6	0.2	0.7	0.3
1995	0.1	0.2	0.0	0.0	0.6	1.1	0.1	0.8	0.1	0.2	0.5	0.6	1.1	1.1	0.6	0.5

Source: National estimates.

* Estimates are based on the assumption of a full pass-through of changes in indirect taxes to consumer prices.

commodity prices put downward pressure on inflation, while the deceleration of growth and the rise in fixed investment during 1995 tended to ease pressures arising from capacity utilisation.

In contrast, indirect tax contributed to increases in prices in most member countries, with the effects being strongest in Spain, France, Italy, Austria, Portugal, Finland, Sweden and the United Kingdom (see the estimates in Table 6). Of course, the extent to which changes in indirect taxation are effectively passed through from producers and retail traders to consumers depends on the price elasticities of supply and demand for the goods and services (for example, the increase in France was less pronounced than had been forecast). Furthermore, the likelihood of second-round effects from indirect tax increases on inflation depends on whether economic agents see the initial price changes as a one-off change in the price level or whether these feed into their expectations of higher future inflation, thus possibly triggering a price-wage spiral. Firm and credible monetary policies, as discussed in Section 2 below, have an important contribution to make in preventing such adverse developments.

2. Monetary policies in Member States

In this section, the conduct of monetary policies in EU Member States is reviewed, focusing on official and key interest rate changes and monetary developments against the background of overall economic and financial developments provided in Section 1. The discussion of monetary policy developments in EU Member States in this section is a reflection of the tasks of the EMI in Stage Two of EMU, namely to strengthen co-operation between national central banks and co-ordination of monetary policies of Member States, with the aim of ensuring price stability. The role of the EMI in monitoring the functioning of the EMS (Section 1.3) may also be seen in this context. Linked to these responsibilities, the appropriateness and compatibility of current monetary and foreign exchange policies are reviewed in regular discussions by the EMI Council.

Monetary conditions were eased in the course of 1995 in Belgium and Luxembourg, Denmark, Germany, France, Ireland, the Netherlands and Austria, as well as in Greece and Portugal. In the remaining EU countries, namely Spain, Italy, Finland, Sweden and the United Kingdom, monetary conditions had to be tightened in the earlier part of 1995 in order to counter inflationary risks.

Monetary easing in countries with a favourable inflation environment

In the majority of EU countries the stance of monetary policy was eased throughout 1995. Official and key interest rates were lowered on several occasions during the year (see Chart 7), allowing three-month interbank rates to decline further. In a longer-term context, these countries were able to resume the downward trend in short-term interest rates, which had been interrupted in the summer of 1994 when inflation prospects had temporarily become more uncertain.

In Germany, the official discount rate was lowered in March, in August and again in December, each time by 0.5 percentage point, to reach 3.0%. The lombard rate was reduced from 6 to 5%. In the course of the year, the securities repurchase rate, which had been maintained at 4.85% since mid-1994, was allowed to fall and stood at 3.75% at the end of 1995. These policy measures brought official interest rates in Germany down to their lowest levels since mid-1988.

The strength of the Dutch guilder allowed De Nederlandsche Bank to cut its interest rates at times shortly in advance of the Bundesbank. This was mirrored by money market rates, which fluctuated somewhat below their German equivalents. Austrian short-term interest rate differentials vis-à-vis Germany remained slightly positive throughout the year; political uncertainty in the autumn, culminating in new elections, had little influence. Belgium, Denmark, France and Ireland experienced brief but in some cases recurring episodes of tension in foreign exchange markets, which were reflected in higher and more volatile money market rates. Belgian short-term interest rate differentials vis-à-vis Germany were least affected; they narrowed again soon after tensions subsided and official rates could then be reduced to levels comparable to those in Germany. In Denmark, the narrowing of interest rate differentials vis-à-vis Germany and the fall in short-term interest rates were more gradual, but by the end of the year the differential had returned to the level observed before the tension. In France, the rise in three-month interest rate spreads proved more persistent, but rates declined substantially at the end of the year. In Ireland, the position of the currency within the ERM

Chart 7

Official and key interest rates

(in percentages)

Source: National data. (Rates indicated are the most relevant for monetary policy in each country).

(a) End-of-week data.

(b) End-of-month data.

(c) Break in series from 8th March to 21st June 1995 inclusive and from 6th October 1995 to 8th November 1995 inclusive, when the Banque de France suspended its 5 to 10-day lending facility and replaced it with a 24-hour repo facility.

(d) Rates on occasional operations (up to one week).

combined with the strength of the economy required a more cautious approach to interest rate policy. Thus, although interbank rates declined in line with those elsewhere, official interest rates at end-1995 were still somewhat higher than at the start of the year.

Portugal has sought to stabilise its currency within the ERM with a view to sustaining the downward trend in inflation and, therefore, raised official interest rates in the spring of 1995 to defend the escudo against speculative attacks. Following the escudo's realignment in March (see Section 1.3), short-term interest rates returned to pre-crisis levels. In line with other ERM members, official rates were lowered further in several steps, and in December were below their levels of end-1994. In Greece, monetary policy remained restrictive with a view to contributing to the achievement of the Government's inflation objective. The success of the non-accommodative exchange rate policy (the monetary authorities increased the weight given to exchange rate policy and aimed at limiting the depreciation of the drachma against the ECU to 3%) allowed the Bank of Greece to lower its official interest rates in line with falling inflation.

The Deutsche Bundesbank's decisions to cut official interest rates principally reflected weak money supply growth in a context of falling inflation and declining long-term interest rates. In addition, short-term inflationary pressures were reduced as a result of the effective appreciation of the Deutsche Mark. After a sharp contraction of the money supply in late 1994 and early 1995, which mainly reflected a correction of the monetary overhang that had arisen previously, the growth of M3 showed a modest recovery in the rest of 1995. However, during the whole year under review the rate of monetary expansion in Germany remained subdued. This resulted in an annual growth rate in the fourth quarter of 1995 against the fourth quarter of 1994 of 2.1%, implying a considerable undershooting of the 4-6% target range (see Table 7a). The extended M3 aggregate (including deposits on the international markets, short-term bank bonds and investments in money market funds) also expanded at a moderate pace. Expansion of money market funds, which had been introduced in Germany in 1994, was quite weak in 1995. The main factor underlying weak monetary developments until August was the continued shift of non-banks' portfolios away from short-term deposits towards longer-term financial assets not included in M3. Besides this, capital outflows and a deceleration of credit growth also played a role. As in recent years, monetary targeting in Germany thus had to face a higher degree of short-term volatility of M3 data in 1995. In principle, this has required the assessment of money growth to be made in the light of information available from other indicators of future inflation. On balance, however, these did not provide contradictory signals.

In France, the expansion of the money supply accelerated in the course of 1995 to a rate close to the medium-term objective of 5% (see Table 7a). This concluded a two-year period of very weak and at times even negative M3 growth rates, which in turn reflected substantial portfolio restructuring by private households and falling private credit demand. Gross total domestic debt, a measure which the Banque de France uses as a supplementary monetary indicator, expanded by around 5% and provided further evidence of a gradual return to normal overall liquidity conditions. Domestic debt growth reflected strong government borrowing combined with virtually stagnant private sector credit demand, owing to the sound financial position of firms.

Financial innovations in Greece stimulated substitution away from monetary assets and contributed to a deceleration of M3

growth below the target band for most of the year. The operation of technical factors led to a strong pick-up towards year-end, however, causing M3 to exceed the target band.

When aggregated over those EU countries considered in this first grouping (Belgium and Luxembourg, Denmark, Germany, France, Ireland, the Netherlands, Austria, Greece and Portugal), the expansion of the broad money supply (harmonised M3) virtually stagnated in spring 1995 before recovering to 2.5% later in the year. The relative steepness of yield curves may be seen as a factor contributing to the very subdued demand for money in some of these countries. This downward trend in monetary growth which began in 1992 was broadly in line with falling inflation rates.

Overall, in these Member States, official

Table 7

Monetary policy targets and guidelines of Member States

a) Monetary aggregates - targets and guidelines

(annual percentage changes)*

		1994		1995		1996
	Reference variable	Target/ guideline[a]	Outturn	Target/ guideline[a]	Outturn	Target/ guideline[a]
Germany	M3	4-6	5.7	4-6	2.1	4-7
Greece	M3	8-11	8.8	7-9	10.4	6-9
Spain	ALP	3-7	8.2	<8[b]	9.2	<8[b]
France	M3	5[b]	0.8	5[b]	3.7	5[b]
Italy	M2	5-7	2.8	5	2.1	5
United Kingdom	M0	0-4	5.7	0-4	7.0	0-4
	M4	3-9	5.6	3-9	5.5	3-9

Source: National data.

* Fourth quarter-fourth quarter or December-December (United Kingdom: March-March).

(a) Monitoring ranges for the United Kingdom.

(b) Medium-term objective.

b) Formal inflation targets

(annual percentage changes)

		1994		1995		1996	Medium
	Target variable[a]	Target	Outturn	Target	Outturn	Target	-term Target
Spain	CPI	-	4.7	-	4.7	3.5-4[b]	< 3[c]
Finland	CPIY	-	1.3	2	-0.2	2	2
Sweden	CPI	-[d]	2.3	2 ± 1	2.9	2 ± 1	2 ± 1
United Kingdom	RPIX	1-4	2.4	1-4	2.8	1-4	< 2.5[e]

Source: National data.

(a) CPI = Consumer price index. CPIY = CPI excluding indirect taxes, subsidies and capital costs for owner-occupied housing (mortgage interest payments and depreciation).
RPIX = Retail price index excluding mortgage interest payments.

(b) Applies to the first quarter of 1996.

(c) Objective for 1997.

(d) The inflation objective for 1994 was to prevent the underlying inflation rate from increasing.

(e) Refers to the end of the current Parliament and beyond. The previous medium-term target aimed at bringing RPIX inflation down to a range of 1-2.5% by the end of the current Parliament (April 1997 at the latest).

and key interest rates on balance moved down together. Nevertheless, the conduct of monetary policy had to cope with a number of challenges, including a higher degree of short-term volatility of M3 data in Germany and currency movements within the ERM in the case of other countries. Experience suggests, however, that the policy framework in Germany was successful in re-establishing low inflation after the unification shock in the early 1990s, while in the view of those countries targeting stable exchange rates in the ERM, central parities have served as a useful objective over time for the co-ordination of monetary policies aiming at the achievement and maintenance of price stability.

Monetary restraint in other EU countries to counter inflation risks

In those EU countries where inflation continued to be under upward pressure in early 1995 (namely Spain, Italy, Finland, Sweden and the United Kingdom), central banks generally pursued policies of monetary restraint. Most of them had already carried out pre-emptive moves in the course of 1994 to avert inflationary risks and had raised official interest rates accordingly. While in the first half of 1995 monetary tightening was pursued further, official rates reached a plateau in the summer. Towards year-end, inflationary pressures were considered to have receded to such an extent that several countries saw room for a cautious monetary easing (see Chart 7). The recovery of effective exchange rates from their low points earlier in 1995 may have played a part in some cases.

Within the ERM, Spain initiated a more restrictive monetary policy stance from the start of 1995. The Banco de España raised its key intervention rate in three steps, by a total of 1.9 percentage points, to 9.25% in June, in line with its newly announced direct inflation objective for the medium term (see Table 7b). These measures were justified by the build-up of inflationary pressures, which in part arose from the depreciation of the peseta's effective exchange rate and the increase in VAT. Towards year-end, as the currency recovered and the inflationary outlook improved, a start was made with a careful reduction of interest rates.

Outside the ERM, inflationary pressures in Sweden increased in the first half of 1995 owing to a weakening of the krona, rapidly increasing producer prices and high capacity utilisation. Against the background of the official inflation target, this led Sveriges Riksbank to raise the repurchase rate further to 8.91%, at which level it was stabilised from the summer onwards. In Finland, a deteriorating medium-term outlook for underlying inflation prompted Suomen Pankki to undertake pre-emptive monetary action, although actual consumer price inflation was low. The tender rate was increased from 5.5% to a high of 6% in June. As the inflationary outlook subsequently improved, and compliance with the 2% target for underlying inflation seemed assured again, the central bank gradually lowered the tender rate to 4.25% in December.

In February 1995 the monetary authorities of the United Kingdom decided to raise the minimum lending rate by 0.5 percentage point to 6.75%. Similar interest rate measures had been taken in September and December 1994, following projections of underlying retail price inflation (RPIX) rising into the top half of the earlier 1-4% target range over the next two years. The official rate was maintained at the February level throughout most of 1995. However, in December it was judged possible to lower the rate to 6.5% without endangering the renewed medium-term objective, announced in June, of achieving RPIX inflation of 2.5% or less.

Clear indications of an upward movement of inflation in Italy, derived from a range of economic and monetary variables, also called for increased monetary restraint. The Banca d'Italia responded by moving official interest rates significantly higher in the first half-year, raising the discount rate by 1.5 percentage points to 9%. This move was consistent with the central bank's aim of reducing inflation to an average of 4.5% (net of indirect taxes) in 1995, and its announcement that in 1996 monetary policy would seek to ensure that the consumer price increase would fall below 4%.

All the countries which pursued a policy of monetary restraint in 1995 monitor closely the development of monetary aggregates in the context of a range of indicator variables. Even though their weight in determining the course of monetary policy has been reduced over the years, expansion of the money supply remains an important longer-term indicator of future inflation. Against this background, several countries continue to set informal monetary targets or guidelines with a view to supporting the credibility of their anti-inflationary strategies (see Table 7a).

After the adoption of a direct inflation targeting framework as of 1995, the Banco de España gave its monetary aggregate ALP (liquid assets held by the public) a privileged position within the broad set of inflation indicators to be monitored. An ALP growth rate of below 8% in the long term is seen as consistent with the announced inflation objective. With the actual rate of increase accelerating to around 9% in the fourth quarter, this reference value was exceeded in 1995. Underlying factors were the public's increased liquidity preference in the face of volatile financial markets in 1994 and the first quarter of 1995, and a higher rate of nominal income growth for the first half of 1995. In the United Kingdom, narrow money (M0) again exceeded its monitoring range in 1995. The strength of M0 growth may be related to a shift in velocity, as the adjustment to an environment of lower inflation reduces the opportunity costs of holding cash versus interest-bearing deposits more permanently. Broad money growth (M4) accelerated during the year and exceeded the ceiling of its monitoring range. Underlying the pick-up in M4 growth was, inter alia, stronger credit growth, linked in part to merger and acquisition activity. In Italy the contraction of the M2 money supply continued in early 1995. This was linked to weak private sector credit demand and significant portfolio shifts - partly due to the behaviour of the banking system in setting deposit rates - which reduced the short-term information content of M2. Subsequent months saw some recovery, but M2 growth remained well below the reference target of 5%.

In Spain, Finland, Sweden and the United Kingdom, monetary policy actions are taken within a framework of inflation targets. In assessing their experience it should be recalled that the changeover to a direct inflation targeting strategy in Spain took place only in early 1995 and had to gain credibility over time. In the course of the year further monetary tightening was viewed by markets as a clear anti-inflationary signal. The maintenance of the key intervention rate at increased levels and the detailed explanations offered by the Banco de España in its inflation reports contributed significantly to the acceptance of the new monetary policy framework.

In Finland, Sweden and the United Kingdom the strategy of targeting inflation was introduced some years ago and is by now well understood. The regular publication of key documents on inflation has promoted transparency and made it easier for the public to judge the performance of the monetary authorities. Notably in Sweden and the United Kingdom, inflationary pressures appeared to be building up in 1994-95. The monetary authorities concerned responded by a prompt

tightening of monetary policy. Recent experience suggests that they have been successful in containing the risk of overshooting inflation targets.

In the face of inflationary trends, and forecasts showing high or rising inflationary pressures in early 1995, the above-mentioned countries tightened the stance of monetary policy. In the context of the adopted strategies of these countries the easing of incipient inflationary pressures in most cases towards the end of the year lends support to a judgement that the stance adopted previously had been appropriate.

3. Economic prospects and challenges for convergence

Besides its role in strengthening monetary policy co-ordination, the EMI also plays a key role in the monitoring of sustainable convergence under the Maastricht criteria. A first comprehensive report on "Progress Towards Convergence" was released by the EMI in November 1995, and part of the material in this section provides a brief update. Later, in line with the Treaty, the EMI must prepare reports to the EU Council which - together with reports by the Commission - will serve as the basis for the assessment of convergence by the EU Council and its recommendation to the Heads of State or of Government as to the formation and composition of Monetary Union. In the assessment of the degree of convergence achieved, the individual criteria are to be interpreted and applied in a strict manner. The EMI Council intends to express its views independently.

The economic outlook

Forecasts produced by major international organisations towards the end of 1995 suggested that in 1996 both the external environment and prospects for growth in the EU would be broadly favourable. Since then, the release of new data has shown that actual growth has decelerated in most Member States, and growth forecasts have recently been revised downwards.

Despite these developments, there appears to be a widespread consensus that a general economic downturn is not in prospect. A pick-up in growth, deriving mainly from domestic demand, is anticipated in the course of 1996, although its timing remains uncertain. As regards the reasons for such projections, first, most of the developments seen as having influenced the slowdown (see Section 1.2) seem likely to have a temporary rather than a permanent effect on activity. Exchange rate tensions in the EU abated later in 1995 and previous sharp changes in exchange rates were substantially reversed. At the end of 1995 long-term interest rates in all EU countries were considerably lower than one year before. Furthermore, there are no signs of constraints on investment arising from corporate indebtedness, and corporate profitability remains broadly healthy. Finally, the world economy has not slowed down markedly and world trade in 1996 is still expected to grow at a substantial rate. Consequently, the weaker growth in more recent quarters would appear to signal a "pause" in growth, rather than a fundamental weakening of the economies of Member States. While the duration of such a pause is uncertain, the view that the slowdown in activity is temporary appears also to be supported by the analysis of longer-term patterns of EU growth, which suggest that the current cycle is still in a relatively early phase (see Box 1).

Main risks related to prospects for fiscal consolidation

Public finances are the weakest point of convergence. On the basis of autumn 1995 Commission data, the overall public sector deficit in the EU in 1995 amounted to 4.7%, more than one and a half times the reference value laid down in the Treaty, and a large majority of Member States had imbalances well in excess of the 3% reference value laid down in the Treaty (see Table 8); in most countries structural deficits remain high, and so too does the share of the public sector in the economy. The government debt ratio in the EU as a whole has increased further, to stand at over 70% of GDP in 1995, i.e. well above the 60% reference value. For 1996, deficits in the EU are forecast to fall to 3.8% of GDP, in spite of which government

Table 8

Economic indicators and the Maastricht Treaty convergence criteria

(excluding the exchange rate criterion)

1994	Inflation[a] (CPI)		Long-term interest rate[b]		General government surplus (+) or deficit (-)[d]		General government gross debt[d]
Belgium		2.4		7.8		-5.3	135.0
Denmark[c]	***	2.0	***	7.8		-3.8	75.6
Germany		2.7		6.9	#	-2.6	# 50.2
Greece		10.9		20.8		-11.4	113.0
Spain		4.7		10.0		-6.6	63.0
France	**	1.7	**	7.2		-6.0	# 48.4
Ireland[e]		2.4		7.9	#	-2.1	91.1
Italy		3.9		10.5		-9.0	125.4
Luxembourg		2.2		7.7	#	2.2	# 5.9
Netherlands		2.7		6.9		-3.2	78.0
Austria		3.0		7.0		-4.4	65.2
Portugal		5.2		10.5		-5.8	69.4
Finland	*	1.1	*	9.1		-5.8	# 59.8
Sweden		2.3		9.7		-10.4	79.7
United Kingdom		2.4		8.2		-6.8	# 50.1
EU-15		3.0		8.4		-5.5	68.1

Sources: National data (inflation in 1994 (CPI), long-term interest rates), European Commission (general government surplus or deficit, general government gross debt; see also footnote (d) below), EUROSTAT (inflation in 1995 (IICP)).

The statistical data to be used in assessing whether the Member States meet the convergence criteria will be provided by the European Commission; the above fiscal data date from Autumn 1995.

*,**,*** = first, second and third best performer in terms of price stability.

= public deficit not exceeding 3% of GDP or public debt not exceeding 60% of GDP.

(a) Annual percentage changes. For further explanation of the data used see footnotes for Chart 1.

(b) In percentages, annual average. For further explanation of the data used see footnotes for Table 4.

(c) General government gross debt figures are not adjusted for the assets held by the Danish Social Pension Fund against sectors outside general government, and for government deposits at the central bank for the management of foreign exchange reserves. According to statements 5 and 6 relating to Council Regulation (EC) No. 3605/93 of 22nd November 1993, the Council and the Commission agree that, for Denmark, these items shall be specified in the presentation of general government gross debt. They totalled 20.8% of

debt is expected to rise to around 72% of GDP.

As mentioned above, these data are autumn Commission forecasts, as released in November 1995. Estimates from national authorities suggest higher deficit-to-GDP ratios in the case of countries such as Germany and the Netherlands (of well above 3%), as well as Finland and Sweden (where deficits are well over 5%). They also suggest lower deficit ratios for Denmark and Ireland (of below or around 2%), as well as for Portugal, Spain, Italy and Greece (where deficits range between 5 and 9%).

A sound fiscal position is crucial in order to prevent financial instability and to deliver satisfactory economic performance. By contrast, if the prospects for fiscal consolidation remain uncertain or if the convergence process is not decisive enough, then risks may arise. First, an unbalanced policy mix would damage the credibility of price stability-oriented monetary policies. Second, a lack of convergence could exert upward pressure on long-term interest rates, thereby impeding the reduction of public deficits and debt, and the convergence process as a whole. Third, this could ultimately undermine exchange rate stability. Moreover, high deficit or

1995	Inflation[f] (IICP)		Long-term interest rate[b]		General government surplus (+) or deficit (-)[d]		General government gross debt[d]	
Belgium	***	1.4	***	7.5		-4.5		134.4
Denmark[c]		2.3		8.3	#	-2.0		73.6
Germany		1.6		6.8	#	-2.9	#	58.8
Greece		9.0		17.3		-9.3		114.4
Spain		4.7		11.3		-5.9		64.8
France		1.7		7.5		-5.0	#	51.5
Ireland[e]		2.4		8.3	#	-2.7		85.9
Italy		5.4		12.2		-7.4		124.9
Luxembourg		1.9		7.6	#	0.4	#	6.3
Netherlands	**	1.1	**	6.9		-3.1		78.4
Austria		2.0		7.1		-5.5		68.0
Portugal		3.8		11.5		-5.4		70.5
Finland	*	1.0	*	8.8		-5.4		63.2
Sweden		2.9		10.2		-7.0		81.4
United Kingdom		3.0		8.3		-5.1	#	52.5
EU-15		3.0		8.9		-4.7		71.0

GDP in 1993, 16.3% of GDP in 1994 and are expected to be 13.3% of GDP in 1995. In addition, the data are not adjusted for the amounts outstanding in the government debt for the financing of public undertakings, which according to statement 3 related to the aforementioned Regulation will be subject to a separate presentation for the Member States. In Denmark, this item amounted to 7.2% of GDP in 1993, 6.8% of GDP in 1994, and is expected to be 6.6% of GDP in 1995. If corrected by these items, the debt level at end-year would stand at 52.3% of GDP in 1993, 52.5% of GDP in 1994 and an expected 53.7% in 1995.

(d) As a percentage of GDP. Provisional for 1995. (European Commission forecasts, Autumn 1995). Estimates from national authorities suggest higher deficit-to-GDP ratios in the case of countries such as Germany and the Netherlands (of well above 3%), as well as Finland and Sweden (where deficits are well over 5%). They also suggest lower deficit ratios for Denmark and Ireland (of below or around 2%), as well as for Portugal, Spain, Italy and Greece (where deficits range between 5 and 9%).

(e) In 1994 and 1995 Ireland was not the subject of an EU Council decision under Article 104c (6) of the Treaty that an excessive deficit exists.

(f) Annual percentage changes. For further explanation of the data used see Box 5.

debt ratios constrain the room for manoeuvre for fiscal policy, and pressures on the authorities to ease monetary policy may increase, irrespective of inflationary developments. Even in countries with better records in terms of monetary policy credibility, fiscal tensions have at times hampered the ability of central banks to fight inflation.

In a broader context, long-term imbalances in fiscal policies may damage the prospects for non-inflationary growth (see Box 4). Typically, high borrowing requirements by governments to finance consumption tend to crowd out more productive uses - such as private investment - via higher interest rates; and long-run unsustainable debt positions may create major disruptions in economic systems. Although these risks may appear less significant for the short term, they will increase in importance in the face of the ineluctable ageing of the population in EU countries.

EU countries have the objective (in most cases included in convergence programmes) of reducing deficit and debt levels. Achievement of this objective holds out the promise of a virtuous circle, bringing the economy on track towards sustained real growth and higher employment in an environment of price

stability. In particular, a move towards a more balanced policy mix which is seen as credible by markets would help long-term interest rates to fall as risk premia would diminish. For the benefits brought about by a more balanced policy mix to materialise swiftly, fiscal consolidation should be "frontloaded" and decisive rather than too incremental. A strategy of too-gradual improvements in fiscal policies stretched over a longer period of time risks failing to gain credibility, so that confidence effects fail to materialise in the process of fiscal consolidation.

In the context of recent economic developments, it has been argued that the slowdown would complicate the achievement of the fiscal convergence criteria of the Maastricht Treaty. This, however, does not provide a justification for postponing necessary consolidation measures. Such measures remain essential in themselves to reduce the interest burden on outstanding public debt, to cope with long-term difficulties related to the ageing of the population and to ensure a satisfactory economic performance.

BOX 4

What is the macroeconomic impact of fiscal consolidation?

– A review of the literature –

One view in the literature on the macroeconomic effects of fiscal consolidation is that, in the short run, reductions in deficits provoke a fall in total demand, which is only partially compensated by the crowding-in of private or external demand due to a fall in interest or exchange rates. In this view, the natural rate of output, or the trend growth rate of the economy, is invariant to the size of the public sector. Other things being equal, therefore, deficit reductions are unnecessary.

Alternative analyses put greater stress on the impact of levels of public revenues and expenditures on aggregate supply and longer-run growth.[1] From this perspective, the crucial issue is to evaluate the effects of fiscal consolidation (at least in the medium term) on capital accumulation and on economic growth. If fiscal consolidation leads to a reduced share of government in GDP, to a reduction of distortionary taxes and expenditures, and to a crowding-in of productive private investment (and thus to an increase in the capital stock), then the impact on growth should be favourable in the long run. If, by contrast, fiscal consolidation is based on increases in taxation (which distort market decisions), on reductions of public investment in infrastructure (that are important for long-term growth potential) and on maintenance of the share of current public expenditures, then fiscal consolidation may harm growth, both in the short as well as in the long run. Although the empirical estimates are subject to great uncertainty, the impact of higher taxes and larger public sectors on potential growth may be sizable.[2]

While the two views outlined differ on the long-term implications of a move towards fiscal consolidation, both would still predict that, in the short run, fiscal consolidation is associated with slower growth. A further strand of the literature suggests that a policy that would be seen as contractionary in a standard model may well have an expansionary impact in the short run if it introduces a sufficiently strong change in expectations of future policy changes.[3] In particular, a contractionary fiscal policy based on expenditure restraint, if forceful enough, may induce a major reduction in the long-term interest rate (via reduced solvency risk), and a boost in current consumption and investment (due also to expectations of lower taxes in the future). This expansion may well offset any direct short-term contractionary impact arising via direct demand effects. Conversely, the same policy of deficit reduction, based on tax increases, may

reinforce the short-run contraction if it generates expectations of future tax increases. The way a deficit is cut may thus be at least as important as the magnitude of the deficit reduction when assessing the short-run impact on economic activity, as well as the long-run effectiveness of the deficit reduction measures.[4]

Finally, in a context of high government deficits and high and rising debt ratios, taking into account the expected impact of ageing populations on health and unfunded pension systems, the market's evaluation of the long-term sustainability of policies will play a crucial role. In particular, there is the possibility of a "hard landing" or "portfolio saturation" scenario[5] if debt ratios continue to increase. In that scenario, limits on how many of a country's assets investors are willing to hold in their portfolios may become binding, and simultaneously the default risk perceived by investors rises. They may then begin to liquidate their holdings, and create a "worst case" chain reaction in the economy: stock and bond markets fall, interest rates increase sharply, private consumption and investment are depressed (due to higher interest rates and lower confidence), real wages and growth falter (thus aggravating the fall in demand), the exchange rate depreciates, inflation increases and, ultimately, a general financial crisis may erupt, causing widespread bankruptcies. Even if such a "hard landing" scenario is perceived as highly unlikely, even small probabilities may well have an impact on current variables such as exchange rates and long-term interest rates and they should be considered when assessing the benefits of fiscal consolidation.[6] In this context, when fiscal consolidation in a given country is expected by markets, the lack of progress or the abandonment of the fiscal effort may well lead to an increased probability of a "hard landing" scenario and to a reversal of the positive developments seen when the deficit reduction measures were announced.

The above analysis suggests the following tentative conclusions. A strategy of fiscal consolidation may generate expansionary effects, even in the short run, if several or all of the following factors apply: first, the higher the perceived risk of a "hard landing" scenario (i.e. the lower the credibility, the more there is to gain); second, the more the consolidation is based on cuts in current expenditure rather than on tax increases; third, the lower the reduction in productive expenditure (such as research and development and investment in infrastructure); fourth, the greater the role of permanent measures (the smaller the recourse to one-off measures); and, finally, the more decisive the action. Even in the event that the short-term expansionary impact does not materialise (since the direct demand impact turns out to be greater than confidence and crowding-in effects), this negative impact could be seen as trading off short-term negative effects against the return to sustainable developments in the longer term and the need for measures to reduce any likelihood of a "worst case" scenario.

The literature documents cases in which forceful consolidation measures - particularly as part of an economic package including other structural reforms and monetary measures - in the context of an adverse fiscal situation can contribute favourably to growth.[7] For the EU in 1995, the strong correlations observed between the announcement of fiscal consolidation measures and falls in long-term interest rates, and the strength of business investment (relative to previous recoveries), are two factors that would tend to suggest that some of these positive effects of fiscal consolidation are also present in current circumstances.

1 M. Feldstein (1995), conference on "Budget Deficits and Debt: Issues and Options", Symposium by the Federal Reserve Bank of Kansas City.

2 See, for instance, R. Corker et al. (1995), "United Germany: the First Five Years", IMF Occasional Paper 125, Chapter IV.

3 G. Bertola and A. Drazen (1993), "Trigger Points and Budget Cuts: Explaining the Effects of Fiscal Austerity", American Economic Review 83(1).

4 A. Alesina and R. Perotti (1995), "Fiscal Adjustment: Fiscal Expansions and Adjustments in OECD Countries", Economic Policy, October 1995.

5 See L. Ball and N.G. Mankiw (1995), "What do budget deficits do?", NBER Working Paper 5263.

6 M. Haliassos and J. Tobin (1990), "The Macroeconomics of Government Finance", Handbook of Monetary Economics, Vol. II, Ed. by B.M. Friedman and F.H. Hahn.

7 See F. Giavazzi and M. Pagano (1995), "Non-Keynesian Effects of Fiscal Policy Changes: International Evidence and the Swedish Experience", NBER Working Paper 5332, November 1995.

Moreover, only implementation of such consolidation measures will allow public finances to take advantage of the anticipated resurgence of growth so as to comply with a strict application of the convergence criteria on the basis of 1997 figures. In addition, a strategy of fiscal consolidation need not have contractionary effects even in the short run if it is implemented so as to promote credibility in the sustainability of sound public finances (see Box 4).

Progress towards price stability is encouraging, but vigilance required

Price stability is an essential precondition for sustainable, employment-generating growth and also constitutes a criterion for entry to Monetary Union (see Box 5). Prospects for inflation are quite encouraging. Member States have made significant progress since 1990 - in most countries inflation stands close to, or at, levels consistent with price stability (see Table 8) - and the outlook for inflation in most countries is good.

One element of uncertainty stems from domestic wage and cost developments. In particular, in countries which at present have higher inflation rates, there are upward risks to the extent that future wage agreements reflect past inflation performance. In addition, in several countries there is uncertainty as to whether one-off shocks to prices, such as changes in indirect taxes and import prices, will have an impact on the wage formation process. A further risk stems from the fact that in several countries profit margins remain compressed in some sectors, reflecting

BOX 5

Interim indices of consumer prices

The Treaty on European Union requires price convergence to be measured by consumer price indices calculated on a comparable basis, taking into account differences in national definitions. To meet this requirement, the EU Council adopted in October 1995 a Regulation concerning Harmonised Indices of Consumer Prices. Accordingly, from January 1997 Harmonised Indices of Consumer Prices (HICPs) will be calculated using comparable definitions and procedures. As a forerunner, Interim Indices of Consumer Prices (IICPs) are now available for the period from January 1994 onwards, which allows for the calculation of inflation rates for the year 1995. The concepts and methods for their calculation employ the current and not fully comparable national concepts. In order to improve comparability, certain categories of the national indices for which practices differ significantly between countries are excluded from the IICPs (owner-occupied housing costs, expenditures for education, health and insurance). In contrast, prices of alcoholic beverages and tobacco are included, although they are not components of the national index in all countries. IICPs cover between 75% and 90% of the total weight of the existing national indices. Such interim indices of consumer prices are not intended to replace national consumer price indices. They should be seen as only a first step towards a satisfactory basis for international comparisons. However, they are more comparable than existing national indices and thus provide a better basis for assessing convergence in the European Union.

The general pattern of IICPs is close to that given by the national consumer price indices, since the differences in the figures are generally small, in the range ±0.1 percentage point to ±0.2 percentage point. In only three cases (Greece, the Netherlands and Portugal) does the difference exceed this interval. There is a tendency, however, for inflation recorded by the IICPs to be lower than inflation measured by

Consumer price inflation in 1995 based upon national indices (NCPIs) and interim indices (IICPs)*

(annual percentage changes)

	BE	DK	DE	GR	ES	FR	IE	IT	LU	NL	AT	PT	FI	SE	UK
IICP	1.4	2.3	1.6	9.0	4.7	1.7	2.4	5.4	1.9	1.1	2.0	3.8	1.0	2.9	3.0
NCPI(a)	1.5	2.1	1.8	9.3	4.7	1.7	2.5	5.4	1.9	2.0	2.2	4.1	1.0	2.9	2.8
Difference	-0.1	0.2	-0.2	-0.3	0.0	0.0	-0.1	0.0	0.0	-0.9	-0.2	-0.3	0.0	0.0	0.2

Sources: European Commission, National data.

* Differences in the results obtained using IICPs and those obtained from the national CPIs previously used for the analysis of convergence reflect (1) differences in the coverage of the two indices and (2) differences in price developments in the covered sub-groups. Furthermore, the significance of both factors varies across countries, thereby affecting, to a greater or lesser extent, the difference between the IICP and the national CPI in each individual Member State.

(a) For further explanation of the national data used see footnote to Chart 1.

the CPIs, the exceptions being Denmark and the United Kingdom, where the annual increase in the IICP was 0.2 percentage point higher than the rise in the CPI or, for the United Kingdom, the RPIX in 1995.

One explanation for the general pattern is that the items excluded from the national consumer price indices when calculating the IICPs are predominantly goods and services not traded on international markets. Price increases on products provided by sheltered sectors tend to be higher than those on goods and services traded on international markets. Furthermore, the excluded goods and services are characterised by relatively low productivity growth and are in several cases subject to administrated prices and specific taxes. When comparing the two sets of price indices it should, however, be borne in mind that in some countries the national indices already disregard some of the items excluded from the IICPs.

The general tendency for the increase in the IICPs to be lower than the increase in the national consumer price indices does not mean that the use of IICPs for assessing compliance with the price stability criterion of the Maastricht Treaty is less strict, since recorded inflation in the best-performing countries, on the basis of which the reference value of the criterion is calculated, is reduced as well.

subdued domestic demand; if the expected improvement in demand materialises, there is a risk that enterprises and retailers will try to restore their margins.

Nevertheless, some indicators hint at the possibility of lower-than-expected inflation in some countries, as a consequence of weaker-than-expected real GDP growth as well as wage restraint in the light of perceived needs to improve macroeconomic conditions for employment growth, and the slowing of EU-wide monetary growth. The decline in bond yields might signal lower inflation expectations and has contributed to the convergence of long-term interest rates.

Exchange rate instability points to the need for more convergence

Exchange rate stability - as specified in the Treaty as a criterion for entry to EMU - typically requires that markets should consider that current and expected inflation is sufficiently low to sustain competitiveness at current exchange rates, and that monetary authorities have built up counter-inflationary credibility. Equally, a sound fiscal policy may generate confidence and thereby contribute to exchange rate stability. Recent episodes of exchange rate tension raise a number of issues. These include the appropriate response of countries to downward pressure on their

currencies, and the possible spillover effects stemming from unwarranted exchange rate movements, which could affect inflation, trade and the Single Market. Overall, the challenge for Member States is to ensure sound macroeconomic and structural policies as the basis for sustainable convergence and exchange rate stability.

Period ahead of crucial importance

The year 1996 will be of crucial importance in paving the way towards Monetary Union. While external developments and cyclical conditions within the Union will determine the overall environment, the resolute continuation of appropriate economic policies is a sine qua non for achieving further progress towards sustainable convergence. In this respect, it is important not to postpone structural measures, particularly in the field of public finances but also in goods and labour markets, and to continue the conduct of monetary policies geared to price stability. It is, moreover, important that growth in labour costs be kept under control by supportive behaviour on the part of social partners, both to pursue the benefits in terms of inflation and also to improve prospects for employment.

Such policies, while they would decisively help in meeting the convergence requirements of the Maastricht Treaty, are more generally to be seen as cornerstones of sound economic management, and their pursuit is thus in the direct interest of each individual Member State, irrespective of the EMU process. Not least among the benefits of such policies is the contribution they would make to exchange rate stability and the sustainability of low long-term interest rates.

Chapter II

Preparatory work for Stage Three

1. The changeover to the single currency

In order to contribute to the preparatory work for the introduction of the European currency - the euro - in Stage Three, the EMI decided to conduct, in co-operation with the national central banks, an extensive EU-wide survey of the banking community on the subject of the changeover in the spring of 1995. Nearly 400 commercial credit institutions ranging from large to small and covering all Member States were approached. As a stepping-stone for more technical discussions with the banking community, the enquiry offered the possibility to draw some preliminary conclusions.[1]

On 26th and 27th June 1995 the European Council meeting in Cannes requested the ECOFIN Council to elaborate proposals for a changeover scenario in co-operation with the EMI and the European Commission. The latter had published its Green Paper on the practical arrangements for the introduction of the single currency on 31st May 1995.

The EMI's detailed proposals for a changeover scenario were set out in the report "The changeover to the single currency", released to the press on 14th November. The thrust of the report was adopted, at its meeting on 27th November, by the ECOFIN Council, which finalised the proposal for a changeover scenario and submitted it to the Heads of State or of Government. At its Madrid meeting on 15th and 16th December, the European Council adopted the scenario for the changeover to the single currency, which was compatible with the one proposed by the EMI. The European Council agreed to name the European currency to be introduced at the start of Stage Three the "euro" and confirmed that Stage Three would start on 1st January 1999. The list of countries participating in the euro area is to be decided as early as possible in 1998 following the availability of reliable actual data for the year 1997.

1.1 Main features of the changeover scenario

The organisation of the changeover is guided by the following *five principles*, which are necessary to ensure transparency and public acceptance of the process:

1) there must be a clear legal framework for the introduction of the euro and its complete substitution for the national currencies in the Member States participating in the euro area; this legal framework will need to be consistent with the Treaty;

2) in order to make the changeover credible to all citizens it must be relatively simple and user-friendly;

3) the changeover has to be efficient, proceed in a cost-effective manner and aim at avoiding competitive distortions;

4) the changeover needs to be organised in a way which facilitates the efficient implementation of the single monetary policy which will be conducted by the ESCB from the start of Stage Three of EMU with the objective of maintaining price stability;

5) from the start of Stage Three, private economic agents will be free to use the euro; on the other hand, they will not be obliged to do so before the deadline set for the completion of the changeover; as far as possible, they will

[1] *For more details, see Annex 1 of the EMI report on "The changeover to the single currency", which was published in November 1995.*

be allowed to develop their own mechanisms of adjustment to the changeover; however, the implementation of these principles will take into account market practices in terms of standardisation.

To ensure that the changeover process is orderly and rapid, a chronological sequence of events organised by reference to critical deadlines has been pre-announced. *Four important dates* mark the process toward a complete changeover:

1) *as soon as possible in 1998*, the Council, meeting in the composition of the Heads of State or of Government, will confirm which Member States fulfil the necessary conditions to participate in the euro area. As early as possible thereafter, the Executive Board of the European Central Bank (ECB) will be appointed and the ECB and the European System of Central Banks (ESCB) established;

2) *Stage Three will begin on 1st January 1999* with the irrevocable fixing of conversion rates among the currencies of the participating countries and against the euro. A Council Regulation will enter into force on 1st January 1999 and provide the legal framework for the use of the euro, which, from this date, will become a currency in its own right. The national currencies and the euro will become different expressions of what is economically the same currency. The Council Regulation will establish a legally enforceable equivalence between the euro and the national monetary units. National banknotes will remain the only banknotes with legal tender status within the jurisdiction of the respective countries until the introduction of euro banknotes. The technical preparatory work for this Regulation will be completed at the latest by the end of 1996. The ESCB will start conducting its single monetary policy in the euro;

3) *by 1st January 2002 at the latest*, euro banknotes and coins will be put into circulation and the ESCB will start exchanging the national banknotes and coins against them;

4) *at most six months later*, the national currencies will have been completely replaced by the euro in all participating countries and the changeover to the single currency will have been completed. National banknotes and coins will lose their legal tender status and the European ones will become the only banknotes and coins to have the status of legal tender within the euro area. Thereafter, national banknotes and coins may still be exchanged free of charge at the national central banks.

The intervening periods between these four dates delineate *three distinct phases* of the changeover process. The main points of action to be undertaken by the authorities are set out diagrammatically in Table 9.

The *first period* extends from the decision on the move to Stage Three until its start. During this period the ECB will be set up so that its decision-making bodies can decide on, implement and test the framework needed for the ESCB to perform its tasks in Stage Three, announce the date for the launch of the euro banknotes and start the production. The Community authorities will adopt a series of legislative measures with a view to the start of Stage Three. The private sector in the Member States designated to participate in the euro area, notably the banking and finance industry, will prepare the technical and organisational adaptations necessary for it to start using the euro in Stage Three.

Table 9

Main points of action by the authorities

	Delineation of periods		Main action points within each period
		early 1998	
1st period	Decision by the Heads of State or of Government on the Member States participating in the euro area		■ Establish the ECB and the ESCB and make them operational ■ Adopt secondary legislation with respect to the establishment of the ESCB ■ Decide on, and undertake final testing of, the framework for the ESCB to operate entirely in euro from day one of Stage Three ■ Start the production of euro banknotes and coins and announce their date of introduction ■ Launch a wide-ranging public information campaign
		1st January 1999	
2nd period	Start of Stage Three of EMU: ■ Irrevocable fixing of conversion rates among the currencies of participating Member States and the euro ■ Entry into force of legislation relating to the introduction of the euro ■ Euro introduced in non-cash form		■ Conduct of the single monetary and foreign exchange policy in euro by the ESCB as from day one ■ Start of operation of the TARGET system ■ Provide conversion facilities to counter-parties which have not been able to equip themselves to translate amounts from euro into national monetary units and vice versa ■ Exchange banknotes at par value (Art. 52 of the ESCB/ECB Statute) ■ Monitor progress in the changeover of the private sector and give guidance where appropriate ■ Prepare the changeover of the public administration ■ New tradable public debt issued in euro
	euro banknotes and coins introduced	***1st January 2002 at the latest***	
3rd period	National banknotes and coins lose legal tender status	***1st July 2002 at the latest***	■ Implement the complete changeover of the public administration ■ Withdraw national banknotes and coins ■ Monitor the complete changeover of the private sector

The *second period* extends from the start of Stage Three until the date when the euro banknotes and coins are put into circulation. At the start of the period, the ESCB will undertake the following actions:

- all monetary policy operations will be announced and executed in euro by the ESCB; all accounts held by counterparties with the ESCB will be in euro;

- for those financial institutions which have not been able to equip themselves with the necessary conversion facilities to translate amounts from euro into national monetary units, and vice versa, national central banks may provide such facilities; these conversion facilities will expire at the latest when national banknotes cease to be legal tender;

- the ESCB will support the co-ordination of market participants' actions so as to ensure the smooth functioning of an area-wide money market based on the euro; it will contribute to defining the main elements of such a market; it will offer a real-time gross settlement payment system (the TARGET system) of which the Interlinking system will operate in euro and the national RTGS systems will be capable of doing so right from the start;

- since the national currencies and the euro will be linked by irrevocably fixed conversion rates, there will no longer be foreign exchange markets between them but only purely arithmetical conversions. The ESCB will encourage the use of the euro in the foreign exchange markets; its operations in these markets will be effected and settled in euro;

- the national central banks will exchange national banknotes at par value in accordance with Article 52 of the Statute of the ESCB/ECB.

New tradable debt issues by the public sector will be denominated in euro. The EMI expects that financial markets will largely change over to the euro at an early stage; however, most private individuals and most enterprises are likely to continue to operate in the national monetary units.

At the latest three years after the start of Stage Three, euro banknotes and coins will be introduced, marking the start of the *third period*, and will start to circulate alongside national banknotes and coins. In line with the increasing circulation of euro banknotes and coins, national banknotes and coins will be withdrawn. Member States should endeavour to keep this period of dual circulation of national and euro banknotes and coins to a minimum. In any event, national banknotes and coins will cease to be legal tender at the latest six months after the introduction of euro banknotes and coins. The generalisation of the use of the euro for public sector operations will occur in all participating Member States at the latest when euro banknotes and coins are fully introduced. The time frame will be laid down in Community legislation and might leave some freedom to individual Member States. At the end of the third period, all monetary liabilities will *de jure* be redeemable only in euro. The national central banks will of course continue, as a service to the public, to exchange the old national banknotes for euro banknotes at their counters, as is the current national practice throughout the EU for banknotes of a series that has been withdrawn from circulation.

1.2 Further work ahead

In the course of 1996, the EMI intends to continue its preparatory work with respect to the introduction of the euro at four different levels. First, further conceptual work will be undertaken with respect to some technical issues related to the

changeover. Second, the EMI will carry out preparatory work needed to ensure that the ECB and the national central banks will be in a position to start conducting the single monetary and foreign exchange rate policy in euro right from the start of Stage Three. Third, the EMI will continue, with the national central banks, to monitor the progress in the banking and financial area relating to its preparations for the switchover to the euro, in particular in its operations with central banks in Stage Three. Fourth, the EMI will contribute to the preparation of a Council Regulation providing the legal framework for the use of the euro and, more generally, to increase public awareness about the future introduction of the single currency.

2. Organisational, logistical and regulatory framework for the ESCB to perform its tasks in Stage Three

In 1995 the EMI made further progress in carrying out one of its core tasks of preparing the ground for the ESCB to be able to perform its tasks from the start of Stage Three. This has involved continuing its preparatory work in several areas of central bank activity, in particular: monetary policy; foreign exchange policy; statistics; payment systems; issuing banknotes; accounting rules and standards; and information systems.

2.1 Monetary policy

This section describes the preparatory work under way in the field of monetary policy instruments and procedures as well as the discussions and research on the monetary policy strategies that the ESCB may follow in order to maintain price stability.

The EMI has begun its preparatory work in the field of monetary policy with the analysis and design of instruments and procedures because of the long lead times associated with their technical implementation. In this approach, potential requirements of the candidate monetary policy strategies have been taken into account in order to ensure that the operational framework made available to the ESCB is compatible with alternative monetary policy strategies. Furthermore, the ESCB should be in a position to adjust to a changing financial and economic environment by adapting the features of the operational framework. In this respect, the EMI has secured flexibility by making the range of instruments available to the ESCB at the beginning of Stage Three of EMU sufficiently broad.

The approach taken by the EMI in the preparations has involved a number of steps. First, monetary policy instruments and their evolution were compared across member countries and proposals for their design in Stage Three of EMU were discussed (see Annual Report 1994). Second, it was examined how the instruments can be optimally combined to form an operational framework for the conduct of monetary policy in Stage Three of EMU. Alternative combinations of instruments were defined, taking into account the desired functions of the operational framework and general guiding principles for choosing instruments and procedures. The next step is currently under way and involves the definition of blueprints and draft regulations for instruments and procedures and the identification of the adaptation of technical infrastructures necessary for the execution of monetary policy by the ESCB.

Work related to the monetary policy strategy in Stage Three of EMU has only started recently. So far, it has involved the assessment of patterns of money demand and the identification of the transmission mechanism of monetary policy in the EU, as background to the examination of alternative monetary policy strategies.

Instruments and procedures

The operational framework of the ESCB should be designed with a view to achieving, in an optimal way, the objectives for monetary policy enshrined in the Treaty. The principal requirement of the operational framework is, therefore, that it contributes to fulfilling the ultimate objective of price stability. Within this broad context, the quality of an operational framework depends mainly on whether it performs satisfactorily a set of operational functions, which are themselves important for the achievement of the ultimate objective, and, in addition, on whether it

observes a set of general normative principles derived from Treaty provisions.

As regards the functions, it is of primary importance that the operational framework enables the ESCB to control its operational target efficiently, i.e. under normal circumstances, a short-term interest rate. Therefore, the operational framework should enable the ESCB to steer money market rates and to ensure that their volatility is contained within the range desired. Second, the monetary policy instruments should allow the ESCB to give signals of monetary policy intentions with an adequate degree of precision and differentiation. Third, the operational framework should be capable of providing and withdrawing liquidity in the interbank market. Fourth, a framework helping to control monetary aggregates by increasing the interest elasticity of money demand would be advantageous, particularly if the ESCB were to use a monetary aggregate as an intermediate target, provided that such a framework does not, at the same time, distort the relationship between the monetary aggregate and the price level. Fifth, it would be desirable for the framework to allow adequate information to be extracted from market developments. Finally, it would also be desirable for the framework to contribute to the smooth functioning of the payment system.

The general normative or guiding principles that should be observed in the choice of the operational framework were described in detail in the EMI's convergence report published in the autumn of 1995 in accordance with Article 7 of its Statute. To summarise, these principles include: operational efficiency; conformity with the principle of an open market economy with free competition; equal treatment of the ESCB's counterparties, regardless of their institutional status and country of origin; decentralisation of the execution of monetary policy to the extent that it does not reduce operational efficiency and does not conflict with the other principles; harmonisation of instruments and procedures in order to avoid regulatory arbitrage and undesirable delocation effects; simplicity and transparency; continuity so as to make proper use of the existing infrastructure and central bank experience; conformity with the decision-making framework of the ESCB; and cost efficiency.

In choosing the operational framework, the ESCB also needs to be cognizant of the financial environment. Financial market structures in EU countries differ in some respects and are evolving quite rapidly under the influence of deregulation, innovation, globalisation and the Single Market. In this context, a number of financial market factors are of relevance for the operational framework, inter alia, the specification of the operational target, the structural liquidity position of the interbank market and the volatility of autonomous money market items (see Box 6).

In addition, the legal framework has to be taken into account. The range of potential monetary policy operations set by the ESCB/ECB Statute is, in general, regarded as sufficiently broad to encompass the requirements for the efficient conduct of monetary policy operations in Stage Three of EMU, although the provisions of Article 19.1 of the Statute - according to which the ECB may require only "credit institutions" (within the meaning of Article 1 of the Second Banking Co-ordination Directive) to hold minimum reserves - might be too restrictive. On the other hand, differences in national laws, in particular bankruptcy laws, might have a bearing on the cross-border use of eligible debt instruments in monetary policy operations as well as on the finality of transactions involved in monetary policy operations in some countries.

BOX 6

Financial market features and the operational framework

In very general terms, the operational target can be defined as the variable the central bank focuses on, or attaches most importance to, in its day-to-day money market management, i.e., under normal circumstances, a short-term interest rate. Ideally, the maturity of the operational target should be similar to the maturity of the interest rate that is regarded as most important for the monetary policy transmission process. In practice, however, the maturity of the operational target is normally (much) shorter and fairly similar across countries. The main reason for the difference between theory and practice is that rates at longer maturities are more difficult to control by the central bank. The acceptable degree of volatility of the target interest rate depends very much on its consequences for those interest rates that play a more important role in the transmission process.

If not compensated by monetary policy measures, the size and frequency of autonomous shocks hitting the money market have a major influence on interest rate volatility. The most important factors accounting for these shocks are changes in the public sector accounts at the central bank as well as, under certain circumstances, changes in foreign reserves. It appears likely that, provided national money markets are sufficiently integrated in Stage Three and money market conditions of Member States participating in the Monetary Union are similar to today's, the volatility of autonomous factors will, in relative terms, be lower in the Monetary Union as a whole than it is in most Member States today. This is because it is likely that national shocks will tend to average out at the EU level. However, it might be difficult to predict the size of liquidity shocks in the early phases of Stage Three.

The ex ante structural money market position is defined as the liquidity deficit or surplus of the banking sector vis-à-vis the central bank before the use of any monetary policy instrument by the central bank. If an ex ante structural surplus position prevails in the money market, the central bank has two main ways of dealing with it. First, it could operate in the money market in a debtor position by using short-term liquidity-withdrawing instruments to steer market rates. Alternatively, it could 'enlarge' the demand for base money over a longer term by issuing central bank paper or by imposing positive reserve requirements. Interest rates could then be steered using liquidity-providing instruments. If money market conditions which currently prevail were also to prevail in Stage Three, the ESCB would be operating in the position of creditor, because of an ex ante structural money market deficit. However, as the aggregate position may not be stable over time, it would be prudent not to disregard the potential usefulness of instruments performing an 'enlargement' function.

Following a detailed analysis of the individual instruments and procedures and of their possible combinations in terms of an operational framework, the EMI Council agreed in December 1995 to undertake preparatory work on all technical and institutional issues relating to a basic set of monetary policy instruments, consisting of a marginal lending facility, a deposit facility and several open market instruments. It was also agreed to pursue preparatory work on reserve requirements.

Regarding *open market operations*, these currently play a pivotal role in the operation of monetary policy, being the primary instrument by which money market interest rates are steered in the majority of EU countries. Their use reflects the increasing flexibility and market orientation of monetary policy and the desire to promote the development of interbank markets as an efficient means of allocating liquidity. In Stage Three of EMU, open market operations (including mainly reversed transactions, but potentially also outright transactions, foreign exchange repos and

swaps, the issuance of central bank paper and the collection of fixed-term deposits) should provide the main means of supplying and withdrawing liquidity, steering interest rates and, if so desired, performing signalling functions.

Standing facilities, i.e. facilities that may be used at the discretion of central bank counterparties, should, in Stage Three of EMU, include a marginal lending facility and a deposit facility. A marginal lending facility will provide liquidity at an interest rate above market levels for counterparties facing a shortage of liquidity at the end of the day. A deposit facility will create investment opportunities at an interest rate below market levels for counterparties with end-of-day liquidity surpluses. Used in combination, the interest rates on these two facilities can bound short-term interest rates, thereby setting a corridor for market rates. Standing facilities also perform a signalling function over a medium-term horizon.

According to Article 18 of the Statute, liquidity-providing ESCB operations will have to be based on adequate collateral. A detailed examination of issues related to the selection of eligible debt instruments has been undertaken. Appropriate solutions in this respect will be considered in 1996, taking into account the requirements of the single monetary policy, which implies that monetary policy operations of the ESCB, and thereby the transfer and settlement of underlying assets and the establishment of collateral, will have to meet certain standards of speed, smoothness and safety, while respecting the specific features of national financial markets.

Reserve requirements will also figure among the set of monetary policy instruments available to the ESCB (Article 19 of its Statute). As far as the preparatory work on reserve requirements is concerned, it has to be taken into account that potential application of this instrument by the ESCB will be based on the general framework of money and banking statistics prevailing at the start of Stage Three of EMU. When considering the use of the required reserve instrument, the ESCB will take into account the following factors. The first relates to the potential functions of the instrument. These include, first, its ability to contribute to creating a structural shortage in the money market; second, when combined with averaging provisions (i.e. the maintenance of minimum reserve balances on average over a certain period of time), its ability to stabilise money market interest rates; and, third, its ability to contribute to the control of monetary expansion (by helping to increase the negative elasticity of money demand) in the case of less than full remuneration. The second factor is the extent to which these functions can be performed by alternative instruments. The final factor is the possible impact, in the case of less than full remuneration, on delocation and disintermediation of financial activity.

There is general agreement on the elements of the basic model consisting of a marginal lending facility, a deposit facility and several open market instruments. One option is to stick to this basic model. The stabilisation of interest rates, in the context of this model, could be achieved either by relatively frequent fine-tuning open market operations or by setting a narrow corridor between the two standing facilities. Another option would be to make use of averaging provisions applied to reserve requirements. Finally, it should be noted that the specification of the preparatory work does not exclude the possibility that the ESCB could supplement the set of instruments with additional modalities of providing liquidity to its counterparties. In this context, a special facility for refinancing of the banking system, with a maturity of a few months, is currently being studied.

The ESCB will make the final decision on the operational framework, taking into account the economic and financial conditions prevailing in the countries participating in the single currency area. However, implementing changes to monetary policy instruments and procedures takes time. Therefore, if the ESCB's choice is not to be restricted, the preparation of instruments and procedures has to start at an early stage and, at the same time, has to include all features which are considered necessary in order to provide the ESCB with sufficient flexibility as regards the choice of the strategy and the operational framework of monetary policy. In the course of 1996, blueprints for the use of the various monetary policy instruments will be drafted. In addition, the operational procedures and infrastructural requirements associated with the implementation of monetary policy will need to be defined in detail.

Monetary policy strategy

A monetary policy strategy has to meet two principal requirements. First and foremost, it should be effective in the sense that its pursuit leads to the desired outcome in terms of price stability. Second, it should be credible in the sense that market participants and other agents are confident of the central bank's commitment to the final objective and its ability to achieve that objective. To date, candidate strategies for Stage Three of EMU, such as monetary targeting and inflation targeting, have been discussed in outline only.

Underlying the monetary targeting approach is the fundamental idea that inflation is a monetary phenomenon in the long run and that, by controlling the growth of the money supply, price stability can be achieved. For the adoption of such a strategy, it is necessary to have a stable, or at least predictable, relationship between the growth of the money supply and inflation. Furthermore, it requires that the targeted aggregate be controllable by the monetary policy instruments at the disposal of the central bank. In the autumn of 1995 the EMI brought together central bank experts in the field of money demand. The conference focused on a number of technical issues, in particular the choice of variables to be included in a money demand function and its estimation. It is generally acknowledged that EU-wide money demand equations have better statistical properties than most corresponding national estimations. But a crucial and still largely unresolved question is what accounts for this relatively better performance. This may have important implications for the prospective performance of EU-wide money demand equations in Stage Three of EMU.

An inflation targeting strategy has been adopted by a number of countries in recent years. In this case, the approach is to focus directly on expected future inflation. This involves the use of a wide range of available indicators to arrive at a projection of inflation in the future. Monetary policy is then set so as to be consistent with the achievement of price stability as defined by the target. In order to implement such a strategy, it is necessary that a sufficiently predictable relationship exists between this wider set of indicators and future inflation and that this relationship can be clearly explained to the public.

In general, the analysis of monetary policy strategies requires further study. The EMI intends to focus on the background research needed to examine both monetary targeting and inflation targeting strategies in 1996.

2.2 Foreign exchange policy

From the beginning of Stage Three of EMU the ESCB will hold and manage the official foreign reserves of the Member States participating in the euro area and will have to be able to conduct foreign exchange operations. The EMI is preparing the operational framework for the performance of these basic tasks. Several areas are of particular relevance: first, the organisation of foreign exchange intervention; second, the transfer of foreign reserve assets from the NCBs to the ECB and the management of the ECB's foreign reserves; third, the guidelines for NCBs' and Member States' transactions in their remaining foreign reserve holdings; fourth, the exchange rate co-operation between the euro area and other EU countries.

Organisation of foreign exchange intervention

Foreign exchange intervention is an instrument that should be at the disposal of the ESCB from the start of Stage Three. Two basic options for the operational framework underlying the organisation of foreign exchange intervention have been retained: a centralised set-up, in which intervention operations are carried out by the ECB; and a decentralised set-up, in which intervention operations are executed by the NCBs upon instructions from the ECB. Both options will be made available to the ESCB. The EMI Council considers that the ECB should retain flexibility in the future organisational framework in view of possible adjustments to be made in the light of experience and prevailing conditions.

Both approaches share two common features: first, the ECB is ultimately responsible for any decision regarding intervention operations, in line with the principle of the singleness of foreign exchange policy; second, market counterparties are to be selected from all member countries participating in the euro area, and possibly non-participating EU Member States and third countries. The two basic options are mutually compatible in a technical sense since, inter alia, their information systems requirements would be largely similar and part of their common infrastructure is already in place at the level of EU central banks.

Follow-up work is currently under way in the operational and telecommunications areas. Concerning operational aspects, it is planned to examine three main issues: first, the criteria for the selection of market counterparties will be defined on the basis of EU central banks' current practices and in line with market principles and equal treatment; second, the methods to be used for monitoring counterparty risks as well as settlement procedures, including possible collateralisation, will be established after reviewing existing rules at EU central banks; third, the need for some harmonisation of back-office procedures will also be examined. In the telecommunications area, the telephone network used by EU central banks to exchange, on an ongoing basis, information and data on market developments will be upgraded to improve both the capacity and the functions offered by the present network. This will allow all national central banks in the euro area to take part in the monitoring of market conditions and reporting of operations and market feedback in the context of foreign exchange intervention.

Management of foreign reserve assets transferred to the ECB

Article 105 (2), third indent, of the Treaty stipulates that one of the basic tasks of the ESCB shall be "to hold and manage the official foreign reserves of the Member States". Article 30.1 of the Statute provides that "the ECB shall be provided by the

national central banks with foreign reserve assets, other than Member States' currencies, ECUs, IMF reserve positions and SDRs, up to an amount equivalent to ECU 50,000 million". The proportion to be called up, following the ECB's establishment and at later dates, shall be decided by the ECB Governing Council. Further calls beyond ECU 50 billion may be decided by the ECB, within the limits and under the conditions to be set by the EU Council in Community secondary legislation. Article 30.1 of the Statute also stipulates that "the ECB shall have the full right to hold and manage the foreign reserves that are transferred to it and to use them for the purposes set out in this Statute".

The primary purpose of transferring part of the NCBs' foreign reserve assets to the ECB is to endow it with a pool of assets that can be used in foreign exchange policy operations, more specifically exchange market intervention. Furthermore, the Treaty provides that the ECB may conduct all the operations which are deemed useful for achieving the ESCB's objectives.

The EMI has conducted preparatory work in two main areas: the transfer of NCBs' foreign reserves to the ECB; and the ECB's management of the reserves transferred to it.

The amount and composition of reserves to be transferred to the ECB at the start of Stage Three are, among other factors, likely to be influenced by the initial size of the euro area, by the ECB's prospective need for foreign exchange reserve assets for intervention purposes and by the ability to call up further reserves rapidly and efficiently if needed. The pooling of reserve assets will be made in the form of outright transfers of ownership rather than revolving swap arrangements. Only assets denominated in currencies of non-EU Member States and gold will be eligible for transfer to the ECB.

Follow-up work is being conducted in several areas: first, the definition of the ECB's requirements regarding its reserve asset composition (i.e. currencies and investment instruments); second, the specification of NCBs' claims on the ECB arising from the transfer of reserve assets (in particular, their remuneration and currency denomination), an issue which has to be seen in the broader context of the allocation of monetary income within the ESCB; and, third, the consequences of the transformation of foreign reserve assets held in EU currencies participating in the euro area into domestic assets denominated in euro.

As regards the ECB's foreign reserve management, the EMI Council has identified general principles, drawing mainly on current reserve management practices of EU central banks, while taking into account the implications resulting from the specific nature of the ECB. These principles deal, inter alia, with the operational objectives of the ECB's foreign reserve management; ways of determining reserve currency composition; the identification, monitoring and management of various types of risks inherent in foreign reserve management, such as exchange rate, interest rate, credit, settlement and liquidity risks; the question of the most appropriate portfolio management strategy; the choice of investment instruments, issuers and counterparties; the management of possible gold holdings; and, finally, issues of portfolio performance measurement and evaluation.

Based on the general principles for the ECB's foreign reserve management, a more detailed operational framework will be drawn up for submission to the EMI Council and approval by the ECB Governing Council. Several areas for follow-up work have been identified: first, the establishment of the necessary infrastructure enabling the ECB to monitor market developments, trade in reserve

assets and ensure the reliable processing and settlement of transactions; second, the drawing-up of accounting rules, valuation principles and internal auditing procedures; and, finally, the establishment of appropriate information systems support for the performance of the above functions. The ECB will define the management strategy for the reserves pooled within the ESCB.

Guidelines for the NCBs' and Member States' operations in foreign reserve assets

In Stage Three of EMU, following the transfer of part of their foreign reserve assets to the ECB, the NCBs will keep the remaining part of their external reserves. Likewise, Member States will be allowed to hold and use foreign exchange working balances. However, since foreign exchange operations by the NCBs and Member States should not interfere with the exchange rate and monetary policies of the euro area, Article 31 of the Statute provides that such transactions shall, above a certain limit to be established by the ECB, be subject to approval by the ECB, and that the ECB Governing Council shall issue guidelines with a view to facilitating such operations.

The design of these guidelines needs to take into account the potential effects of the NCBs' and Member States' foreign exchange operations on the ECB's policies. Foreign exchange transactions against the euro effected by the NCBs as fiscal agents for their respective governments (i.e. external debt servicing, IMF-related operations) or on behalf of other customers (i.e. foreign exchange sales or purchases against the euro to cover flows arising from current account transactions) are likely to affect both monetary conditions and exchange rate developments in the euro area. Transactions not conducted against the euro (i.e. cross-currency transactions related to reserve assets management or interest income accruing on the NCBs' reserve holdings) could also have implications: although these operations would not directly affect the ECB's exchange rate and monetary policies through changes in the euro area's monetary base or monetary aggregates, they may have a bearing on foreign exchange markets. Member States' foreign exchange operations (i.e. foreign currency borrowing or the conversion of external assets into euro) may, under certain circumstances, also have a bearing on monetary aggregates or on the exchange rate policy of the euro area.

A number of principles for designing the guidelines have been identified. First, all operations that the NCBs may perform, with or without specific approval, will be included in a comprehensive list established and updated, as need be, by the ECB. Second, the ECB will monitor these operations through reporting and prior approval procedures to safeguard the singleness of the exchange rate and monetary policies of the euro area, while allowing some flexibility in the conduct of these operations by the NCBs. In view of these two distinct requirements, the prior approval procedure will apply only to operations deemed to be most sensitive and above thresholds to be decided by the Governing Council of the ECB. Third, as a rule, reporting and prior approval requirements will be more stringent - in terms of frequency or thresholds - for operations against the euro than for reserve management transactions, given the greater policy implications of the former. Fourth, a distinct set of guidelines, following broadly similar principles, will be applicable to Member States' operations with their foreign exchange working balances. In this framework, NCBs may be used as channels between the ECB and their respective Member States.

Follow-up work is proceeding in two areas. First, the formal guidelines will be

drawn up for approval by the ECB Governing Council. Second, appropriate technical facilities will be needed to support the reporting and prior approval procedures, which will allow the ECB to monitor the NCBs' and Member States' operations. In this respect, as well as for organising foreign exchange intervention, a new upgraded teleconference network (see also Chapter II, Section 2.7) will be set up. In addition, a feasibility study has been conducted on an information and telecommunications infrastructure to enable the exchange of the required operational data.

Monetary and exchange rate policy co-operation between the euro area and other EU countries

At its meeting in December 1995 in Madrid, the European Council asked the ECOFIN Council, together with the Commission and the EMI in their respective fields of competence, to study the range of issues raised by the fact that some EU countries may not, at least initially, participate in the euro area. In particular, the European Council requested that issues related to monetary instability be studied. As a consequence, work on these issues is currently under way at the EMI, as well as within other competent EU bodies.

While the Treaty does not provide a comprehensive and systematic treatment of the issue, several provisions suggest the need for monetary and exchange rate policy co-operation between the euro area and the non-participating EU countries from the start of Stage Three. First, Member States not participating in the euro area are to treat their exchange rate policy as a matter of common interest in accordance with Article 109m of the Treaty. Second, the assessment of non-participating member countries' convergence includes the evaluation of the exchange rate criterion, which is formulated in the Treaty with reference to the EMS/ERM. Third, at an institutional level, the ECB General Council - the ECB's transitory third decision-making body - will have among its responsibilities those of the EMI's tasks which, because of derogations of Member States, will still have to be performed in Stage Three. These tasks include, inter alia, the strengthening of monetary policy co-ordination among member countries and the monitoring of the functioning of the EMS.

Some preliminary work on the range of issues involved has been carried out within the EMI and further analysis is under way. An important element to be taken into consideration when designing monetary and exchange rate policy co-operation between the euro area and other EU countries is the environment in which such co-operation will develop. At an economic level two main features might be underlined. First, the EU countries not participating in the euro area from the start can be expected to gear their economic policies towards economic convergence, in particular towards the central objective of achieving and maintaining domestic price stability. Second, the monetary policy conducted in the euro area, aimed at maintaining price stability, can be expected to represent an important benchmark for the policies of the other EU countries.

2.3 Statistics

The Treaty requires the EMI to "promote the harmonisation, where necessary, of the rules and practices governing the collection, compilation and distribution of statistics in the areas within its field of competence". This involves providing the statistical material to support the co-ordination of monetary policies in Stage Two, and preparing properly articulated statistics for the euro area in Stage Three. These tasks are fulfilled in part through co-

operation with the European Commission (EUROSTAT).

The early stages of specifying the statistics needed to support the ESCB's policy functions were described in the 1994 Annual Report. The statistics fall into three main areas.

The first group consists of monetary, balance of payments, financial accounts and a variety of other statistics. Included here is the harmonisation of statistics based on central banks' and credit institutions' balance sheets, and statistics covering the financial and capital account of the balance of payments. Statistics in a number of other closely-related areas have been examined to assess the extent to which they already meet the requirements on interest rates, capital issues and statistics of collective investment institutions. Monthly monetary and key balance of payments statistics covering the euro area and available promptly are considered an essential requirement for policy. They necessitate a high degree of harmonisation and must be capable of proper consolidation at euro area level. Interest rate statistics are needed to trace market developments as well as the transmission of monetary policy. Other financial data support the analysis underlying monetary policy. In some of these areas, compliance with international standards (the European System of Accounts 1995, and the 5th edition of the IMF Balance of Payments Manual) will provide the uniformity in national data required for comparisons within the euro area and for meaningful aggregation.

The second group concerns price and government finance statistics. Price and cost statistics relate directly to the ESCB's main objective, the maintenance of price stability. These comprise a harmonised index of consumer prices, already at an advanced stage of preparation for purposes of assessing convergence, and a wide range of other price and cost data. Data on general government deficits and outstanding debt are also already being harmonised for purposes of assessing convergence. They will remain of close interest to the ESCB in Stage Three.

The third set of prospective data required by the ESCB comprises background economic data such as quarterly national accounts and monthly statistics of production and domestic demand, external trade, labour market conditions, and business expectations.

The focus of the ESCB's policy responsibilities will be the future euro area. But Article 109k of the Treaty obliges the ECB to report to the Council at least once every two years on the progress towards convergence of Member States with a derogation, or at the request of a Member State concerned. Since, under the provisions of the Treaty, derogations may be lifted at any time once Stage Three has begun, the ECB is likely to monitor developments in these countries closely, much as the EMI monitors developments in all EU countries in Stage Two, requiring harmonised or at least comparable data. The ECB is likely to encourage them to align their statistical systems with practice in the euro area.

The EMI has continued statistical preparations for Stage Three in all these areas in 1995. Its efforts have focused on the first area, where, with the active involvement of national central banks, further investigations into money and banking statistics and related statistical areas, and, in co-operation with the European Commission (EUROSTAT), into balance of payments statistics (in particular the financial and capital account) have been carried out and harmonisation proposals made. Part of the work in 1995 has concerned the composition of a monetary financial institutions sector, with the aim of providing a homogeneous

reporting population for purposes of monetary statistics. EMI staff have also participated in working groups on consumer price index harmonisation and government finance. Work in these areas is the responsibility of the European Commission. Also for convergence purposes, the EMI has developed for the European Commission a harmonised series of yields on 10-year government bonds. In the area of background economic statistics, the EMI is discussing the availability of comparable data with the European Commission.

Given the time it takes to introduce statistical changes - eighteen to thirty months was indicated by a survey of national central banks carried out in 1995 - a start to Stage Three in January 1999, with a need for some data for purposes of defining policy some months in advance, implies early agreement on detailed statistical requirements and a programme for implementing them. The EMI Council endorsed such an approach in January 1996; the intention is to seek the EMI Council's approval of a detailed implementation package in mid-1996.

In July 1995 the EMI Council endorsed principles concerning the organisation of statistical work in Stage Three. The ESCB should have primary responsibility for banking and monetary and related statistics; responsibility for balance of payments and financial accounts statistics should be shared between the ESCB and the European Commission. Other economic and financial statistics, including statistics relating to the convergence criteria, should remain the responsibility of the European Commission, with the ESCB as a user to exercise influence on the content, quality, frequency and timeliness of these data. Therefore, the ESCB and the European Commission would co-operate closely in statistical matters; the arrangements foreseen for Stage Three are already reflected in the working arrangements that have been agreed between the EMI's Statistics Division and EUROSTAT. As for the organisation of work within the future ESCB, in the interests of coherence at the euro area level, the ECB, in consultation with the national central banks, would establish the statistical framework (define concepts, choose compilation procedures and check that agreed practices are followed), while each national central bank would collect and compile data at the national level for transmission to the ECB in a form capable of aggregation, where appropriate.

A rapid, reliable and secure means of transmitting large volumes of data within the ESCB will be needed. Some preliminary work has been done in this respect. The intention in 1996 is to specify the need in full, and design a system, in order to leave sufficient time for it to be built and tested before the start of Stage Three.

The statistical part of the framework to enable the ESCB to perform its tasks in Stage Three, which Article 4 of its Statute requires the EMI to specify by end-1996, will comprise a statement of statistical needs for Stage Three, and a programme for implementing them; the organisational arrangements described above; proposals for complementary Community legislation in the statistical field necessary for Stage Three, and for arrangements to protect the confidentiality of data; and a system for data transmission.

2.4 Payment systems

In May 1995 the EMI Council published a report prepared by the Working Group on EU Payment Systems on the TARGET (Trans-European Automated Real-time Gross settlement Express Transfer) system. The TARGET system will be mainly composed of one RTGS (Real-Time Gross Settlement) system in each of the countries which will adopt the single currency at the start of Stage Three of EMU. In addition, an "Interlinking" mechanism composed of a

communications network and a series of common procedures will be established in order to link together those RTGS systems which will be part of TARGET.

RTGS systems of non-participating countries may also be connected to TARGET, but only to process euro through the Interlinking mechanism. For this purpose, participants in these (non-EMU) RTGS systems wishing to be connected to TARGET may have to maintain a dual set of accounts with their central bank (in euro and in the national currency).

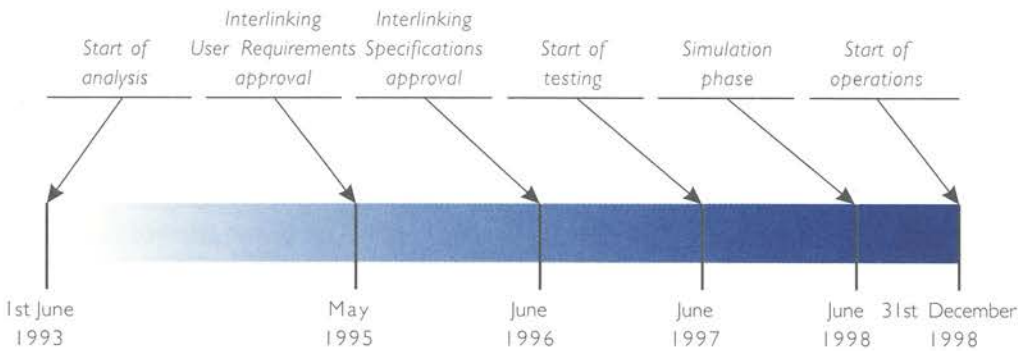
TARGET will offer payment services whose speed will be similar to those which are offered domestically. This is indispensable to the efficient conduct of the ESCB's monetary policy operations. TARGET will enable participants in the national RTGS systems to exchange domestic and cross-border payments in euro in the same efficient way. Since TARGET will be based on real-time settlement, it will eliminate most settlement risks which typically exist in particular in net settlement systems or generally when payments are exchanged before settlement; therefore, TARGET will also contribute to the reduction of payment systems risks in the EU (see Chapter III, Section 1).

In contrast to existing national payment arrangements, cross-border payments through TARGET will have two settlement agents: one NCB which undertakes to debit the account of the originator of the payment and another NCB which takes responsibility for crediting the beneficiary of the payment. There is no risk for the receiving central bank vis-à-vis the originator because the central bank of the originator transmits the payment order to the central bank of the beneficiary only if the amount of the payment can be irrevocably debited (i.e. if funds or collateralised overdraft facilities are available on the originator's account). There is no delay in the transfer of funds because the beneficiary is irrevocably credited by its central bank as soon as the latter receives the payment order from the originating central bank.

There will not be specific *access criteria* to TARGET. Any direct participant in Member States' RTGS systems will be entitled to send payments via TARGET and will have to accept payments processed through TARGET. The use of TARGET will not be compulsory, except for payments stemming from the implementation of monetary policy. Therefore, other payment arrangements will probably exist in Stage Three to process large-value payments in euro in parallel with TARGET. The ECB (which will not manage an RTGS system) will participate in the Interlinking in order to process its own payments through the TARGET system.

Table 10

Current TARGET overall planning



According to the decentralisation principle, domestic RTGS systems participating in TARGET may keep *specific features* insofar as they process domestic payments. Harmonisation of domestic RTGS systems will be limited to the minimum required to avoid impediments to the efficient conduct of the single monetary policy and distortions in competition between credit institutions. In this framework, a certain level of harmonisation of the features of RTGS systems may be necessary in the following three areas: the provision of intraday liquidity; operating hours; and pricing policies.

Because it is an essential tool for the efficient conduct of the monetary policy operations of the ESCB, TARGET will be ready by the start of Stage Three. Since payment systems projects have long lead times, the implementation of TARGET has already started. By the end of 1996, RTGS systems are expected to be in operation in eleven EU countries. In the other countries they are expected to be in operation in the course of 1997. User requirements for the *Interlinking project* were adopted in May 1995. The specification of the system will be finalised during the first part of 1996. Table 10 gives an indication of the current overall planning of the TARGET system.

Securities settlement systems

Central banks, in general, are concerned with the financial soundness of securities clearance and settlement arrangements because they perceive that possible disturbances to settlement in the securities markets have the potential to spread more widely within payment systems and more generally to financial markets. In addition to these general concerns, the EMI has investigated the specific requirements which will stem from the implementation of the monetary policy of the ESCB from the start of Stage Three of EMU and of the links between RTGS systems within TARGET. These requirements mainly relate to the necessity arising from Article 18 of the Statute of the ESCB for TARGET participants to collateralise the intraday liquidity they will obtain from the ESCB and for the counterparties of the ESCB in monetary policy operations to collateralise the loans granted by the System.[2]

In 1995 the EMI conducted a fact-finding analysis of the relations which exist within the EU between central banks and securities settlement systems and of the way cross-border securities transactions are handled. As a result of this survey, it appears that wide differences exist at present between domestic securities settlement systems in EU countries. The role of the EU central banks varies from providing almost all the elements of the securities settlement system to providing only facilities for the settlement of the cash component of securities transactions. Settlement arrangements in securities settlement systems vary from trade-by-trade settlement on a real-time gross basis to net end-of-day settlement.

Cross-border arrangements are even more heterogeneous as few domestic securities settlement systems in the EU have links with other national systems. Cross-border transactions can be carried out in a variety of ways, including the use of international securities depositories, direct or indirect links between domestic systems, and correspondent banking relationships.

In Stage Three of EMU securities settlement systems should be able to meet, in particular, the following requirements in order to facilitate the

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[2] *Article 18 states that "the ECB and the national central banks may conduct credit operations with credit institutions and other market participants, with lending being based on adequate collateral".*

implementation of the single monetary policy of the ESCB:

- to ensure links between the ESCB and a broad range of counterparties;
- to allow for the use of a broad range of debt instruments;
- to enable the use of eligible debt instruments for monetary policy operations in a cross-border context;
- to ensure speedy, smooth and reliable transactions.

According to preliminary analysis, existing securities settlement systems should be able to support the implementation of the single monetary policy. If deemed appropriate, links will be established between central banks in order to allow counterparties of the ESCB's monetary policy to use securities deposited in one country to obtain central bank liquidity from an NCB in another country. Moreover, so that a broad range of debt instruments can be used, it must be ensured, in particular, that appropriate procedures are established to facilitate the use of securities which are not deposited with central securities depositories. Since the operating procedures of the ESCB may require interventions at very short notice in order to have a rapid impact on market liquidity, securities settlement systems have to ensure that no credit is granted before securities have been finally delivered. Therefore, NCBs should be able to ensure that eligible debt instruments for monetary policy and payment systems operations which are settled through the TARGET system can be pre-deposited, pre-delivered or finally settled on an intraday basis. In the latter two cases, the operating hours of securities settlement systems will need to be made consistent with those of the EMU money market and of the TARGET system.

The EMI also conducted a preliminary assessment of the main features of each securities settlement system with a view to establishing whether differences in regulations and practices could create problems in the future and, if so, whether some minimum common standards need to be established. These issues will be further investigated in 1996-97.

2.5 Preparation of euro banknotes

The changeover scenario adopted by the European Council in Madrid in December 1995 provides for the production of euro banknotes to start in 1998 (as soon as possible after the decision on which Member States will participate initially in the euro area and the establishment of the ECB and the ESCB) and for the banknotes to be put into circulation at the latest by 1st January 2002. The ECB will announce soon after its establishment the precise date on which euro banknotes will be put into circulation. Given the long lead times for producing the euro banknotes, the EMI is undertaking a number of preparatory activities. These activities will be submitted for decision to the ECB Governing Council.

In 1995 the EMI carried out preparatory work on the selection of design themes and features for the euro banknotes. On the basis of the work of an advisory group consisting of art historians, graphic designers and perception experts, two themes have been selected: "Ages and styles of Europe" and an abstract/modern design. For the "Ages and styles" theme, the features to be depicted on each of the seven banknote denominations (EURO 5, 10, 20, 50, 100, 200 and 500) represent a specific period of European cultural history (Classical, Romanesque, Gothic, Renaissance, Baroque and Rococo, the age of Iron and Glass architecture, the age of modern 20th century architecture). The abstract theme is to be represented by a modern design depicting abstract or figurative elements.

Two options on the appearance of the euro banknotes are being kept open: banknotes without any national differentiation; and banknotes which include a limited national feature (occupying no more than 20% of one face) but which are otherwise identical.

Other features to be included in the design of the banknotes will be the name of the currency, the initials of the ECB in their five language variants (BCE, ECB, EZB, EKT, EKP) and the "twelve stars", symbol of the EU. A number of advanced security features will be incorporated to ensure that euro banknotes will be at least as well protected against counterfeiting as existing national banknotes. To this end, a wide range of visually recognisable characteristics will be incorporated, such as: paper-based (e.g. watermarks and security threads), printed (e.g. intaglio printing and optically variable ink) and non-print features (e.g. diffractive or reflective foils). In addition, machine-readable features will be integrated into the euro banknotes to enable the NCBs and the vending and note-handling machine industry to detect authenticity reliably.

The technical specification will take into account the needs of the blind and partially sighted. In order to facilitate identification of the different denominations, the euro banknotes will have different sizes according to their denomination, be designed in different dominant colours, display clearly visible and legible numerals located in a standard position throughout the range of banknotes on both sides, and have tactile features.

From the date on which the design and technical specifications are agreed, and before banknotes can be put into circulation, three main phases need to be completed: the design; the origination and preparation of production; and the production of banknotes.

The *design phase* comprises three stages. First, the design competition, which was launched on 12th February 1996, will last seven months. Banknote designers nominated by the EU central banks must follow a precise design brief; they will draft a series of seven banknotes for one or both of the two themes: "Ages and styles of Europe" and "Abstract/modern design". Second, the evaluation of the proposals and selection of the winning designs will take place. Third, the winning series of seven banknote designs will be finalised and any necessary adaptation for technical and security reasons will be undertaken before it is submitted to the ECB Governing Council. In addition to the design competition, it is intended to prepare a test banknote in order to ensure that the euro banknotes can be produced without problems.

The *origination and preparation of production* entails, first of all, the conversion of the completed designs into printing plates. The next step is the preparation of the production processes, in particular adapting the printing machines; running tests to make sure that the euro banknotes can be produced at a constant quality according to specification; and procuring the necessary paper, inks, threads and foils.

With respect to the *production of banknotes*, sufficient stocks will have to be built up to meet the initial demand for euro banknotes and to enable the substitution to take place within the set deadline. The time required to produce such stocks depends, inter alia, on the type of equipment and on the organisation of production, which is currently being examined by the EMI.

Further details of the preparation of euro banknotes and their introduction in Stage Three were outlined in the EMI's report on "The changeover to the single currency", published in November 1995.

2.6 Harmonisation of accounting rules and standards

Work is progressing on the *harmonisation of accounting rules and standards* to make possible the construction of a consolidated balance sheet of the ESCB. Indeed, harmonisation of accounting rules and standards among participating national central banks is a prerequisite for the application of the ESCB/ECB Statute's provisions, particularly with regard to the allocation of the monetary income of national central banks and foreign exchange transfers.

In pursuance of the practical implementation of this objective, work is progressing on the elaboration of a single set of accounting policies for participants in the ESCB. Such accounting policies should be appropriate to the nature and conduct of central bank activities and contribute to the credibility of the ESCB. The aim is to achieve a unified approach within the System which recognises the features of existing national accounting practices used by the central banks, although some degree of adaptation by the latter may be required.

Preparatory work is also under way to develop an appropriate method for the practical implementation of the determination of monetary income so as to ensure that the income arising from the performance of the ESCB's monetary policy function is reallocated among the participating national central banks in accordance with the Treaty's requirements. Several variants are being looked into, with a view to maintaining consistency with the unified structure of the ESCB, and in particular with the sharing of responsibilities within the ESCB, while recognising that risks should be borne by the body responsible for the relevant decisions taken in the execution of the single monetary policy. Furthermore, the calculation method should be transparent and fair while not representing a burden on the decision-making process of the ESCB.

It is considered that the time schedule for the aforementioned preparatory work should leave sufficient room for national central banks to implement the recommendations endorsed by the EMI Council including, if need be, changes in domestic legislation.

2.7 Information and communications systems

In the field of *information and communications systems* work is continuing in a number of areas. During 1995 discussions within and among the relevant EMI sub-committees and working groups were intensified in order to identify the functional requirements for information systems support of the operational tasks of the ESCB.

In 1995 the EMI Council was presented with a feasibility study regarding the replacement of the teleconference system available to the EMI. The Council approved the launching of a project for preparing to replace existing facilities with a new and significantly enhanced teleconference system.

Regarding information systems support for the monetary policy area, the possibility for the ESCB to conduct a range of open market operations in a decentralised manner, i.e. with the national central banks performing the operational functions, has been ascertained from a technical point of view. Further work, with the aim of specifying in detail how these and other monetary policy operations can most effectively be carried out in the final stage of EMU, has been identified and is ongoing.

A related area of work is the conduct of foreign exchange market interventions. Within this field, the preliminary analysis of functional requirements has commenced and a number of operational frameworks have been outlined. Among these, the

option of a decentralised execution of interventions appears to be the most time-consuming from an information and communications point of view, and work has, therefore, initially been concentrated on this option. In addition, the ESCB's foreign exchange reserve management and operations will need to be supported by an adequate information systems architecture.

For the conduct of both monetary policy and foreign exchange policy, as well as for other operational requirements of the ECB, a need for an exchange of operational data has been identified. The necessary communications links to facilitate the exchange of this type of data are now to be planned; in relation to this, further work on the specification of information systems to be installed at the ECB and the national central banks is to start. Also, the exchange of statistical data between national central banks and the ECB will necessitate the establishment of an adequate information and communications systems infrastructure.

Finally, an important element of information and communications systems is that which underlies the development of the TARGET system, to be established by the interlinking of national RTGS systems (see Section 2.4).

2.8 Banking supervision

The Treaty contains two provisions which make explicit reference to a possible involvement of the ESCB/ECB in the field of banking supervision:

- "the ESCB shall contribute to the smooth conduct of policies pursued by the competent authorities relating to the prudential supervision of credit institutions and the stability of the financial system" (Article 105 (5));
- "the Council may, acting unanimously on a proposal from the Commission and after consulting the ECB and after receiving the assent of the European Parliament, confer upon the ECB specific tasks concerning policies relating to the prudential supervision of credit institutions and other financial institutions with the exception of insurance undertakings" (Article 105 (6)).

The preparatory work of the EMI in this area entails the identification of the ways in which Article 105 (5) of the Treaty could be implemented, as well as a preliminary assessment of how the ECB might define its position in respect of the advice to be given under Article 105 (6). Work is under way on these two issues in the Banking Supervisory Sub-Committee, composed of representatives of EU central banks and banking supervisory authorities, together with the EMI.

2.9 Legal issues

In September 1995 the Council of the EMI established a Working Group of Legal Experts and appointed Mr. Jean Guill, Director of the Institut Monétaire Luxembourgeois, as its Chairman. The Working Group was given a mandate to report on all relevant legal issues to the Council of the EMI and, in particular, to study issues arising in the context of preparatory work for Stage Three of EMU.

In previous Annual Reports of the Committee of Governors of the Central Banks of the Member States of the European Union and the EMI, respectively, attention was paid to institutional features of the national central banks. This subject was also addressed in the report of November 1995 on "Progress towards convergence", which the EMI prepared in accordance with Article 7 of its Statute, and will again be dealt with in the report which the EMI will issue under Article 109j (1) of the Treaty.

Chapter III

Other tasks of the EMI

1. Central bank co-operation in the field of payment systems

As far as payment systems are concerned, the EMI has facilitated co-operation between the EU central banks in two major fields: the co-operative oversight of payment systems; and the definition of minimum common features in domestic payment systems.

Co-operative oversight in the field of payment systems

In the context of a potential increase in the participation of foreign credit institutions in domestic payment systems, general agreements governing the exchange of information between central banks were established in 1993 within the framework of the former Committee of Governors. As far as necessary and possible, these agreements involve banking supervisors within the limits of their secrecy obligations. The objective of these agreements is to facilitate the oversight duties of central banks in respect of payment arrangements established in their countries.

An *Observatory of EU Payment Systems* was created in 1993 by the Committee of Governors in order to collect and disseminate payment systems information with a low degree of confidentiality which is useful for EU central banks. In particular, the Observatory maintains a list of "contact points" (senior managers at EU central banks) with a view to facilitating the flows of information between central banks, especially in the event of crisis situations. The Observatory also keeps records on cross-border participants in EU interbank funds transfer systems.

The Observatory maintains a detailed record of the functioning features of the member countries' interbank funds transfer systems, a duty which is mainly performed through the preparation every four years of a "Blue Book" on payment systems in EU countries. The next edition, which is being prepared in close collaboration with EU central banks, is expected to be released in April 1996.

Achieving minimum common features for EU payment systems

A comparative analysis of payment systems in the EU was conducted by the Committee of Governors in 1992-93 and revealed considerable differences among large-value funds transfer systems, especially in terms of access conditions, risk control measures, legal and technical aspects, pricing policies and operating hours. Within this framework, the report on "Minimum common features for domestic payment systems", published by the Committee of Governors in November 1993, sets out ten principles for a minimum harmonisation of EU payment systems primarily in order to ensure that differences between domestic payment systems do not create risks for the integrity and stability of domestic and cross-border payment arrangements and also, to a certain extent, to avoid undue competition developing within the framework of a single market for payment systems services in the EU.

In 1995, as in 1994, the EMI conducted a general assessment of the main features of EU Interbank Funds Transfer Systems (IFTS) vis-à-vis the principles set out in the November 1993 report. The main results are contained in a report on "Developments in EU payment systems in 1995", which was released to the banking communities in March 1996. The three salient issues addressed in the report concern: i) risk reduction in large-value funds transfer systems; ii) remote access to interbank funds transfer systems; and iii) central banks' involvement in retail payments.

Risk reduction in large-value interbank funds transfer systems

The most important work currently in progress in the field of payment systems is the design and implementation of RTGS systems in all EU countries. Although at present RTGS systems are in operation in only seven countries and most large-value payments are settled through net settlement systems, it is envisaged that RTGS systems for large-value payments will be in operation in all EU countries by end-1997. In eight EU countries RTGS systems are expected to process all large-value payments by that time.

At the end of 1995 the situation was as follows:

- in Denmark, Finland, Germany and Sweden RTGS systems are already in operation. In Germany a new procedure for processing cross-border payments (AZV procedure) was introduced in March 1995. In the other three countries RTGS systems are only able to process domestic interbank payments. Technical adjustments are envisaged to incorporate these RTGS systems into TARGET (see Chapter II, Section 2.4);

- in Austria (the intraday gross settlement system), Italy and the Netherlands the existing RTGS systems are being completely redesigned;

- in the United Kingdom the large-value net settlement system is being transformed into an RTGS system;

- in Ireland and Spain the end-of-day gross settlement systems will be converted into RTGS systems;

- in the other countries new RTGS systems are being developed.

In compliance with the November 1993 report, risk control measures in net settlement systems are being introduced so that, by 1999, all EU funds transfer systems which process large-value payments on a net basis will comply at least with the minimum safety standards laid down in the Report on Interbank Netting Schemes published by the Bank for International Settlements in November 1990.

Remote access to interbank funds transfer systems

In July 1995 the EMI Council agreed on some common principles concerning the conditions under which, in Stage Two of EMU, EU credit institutions could be allowed to participate in interbank funds transfer systems in countries where they have no branch (remote access). The Council agreed that, under Community legislation, credit institutions cannot be denied remote access to foreign IFTS; however, it stressed that there is no automatic right to remote access and that EU central banks would treat requests for remote access to IFTS which they oversee as if they came from credit institutions established in their own country, applying to them the same non-discriminatory conditions.

Moreover, in order to provide the same oversight framework for domestic and foreign credit institutions, central banks may ask credit institutions applying for remote access to provide all information which they receive, as a matter of routine or on demand, from applicant credit institutions which are supervised in their country. "Host" central banks may also liaise with the home central banks to discuss whether, and under which conditions, remote access should be granted. This exchange of information may be repeated, as often as necessary, once remote access has been granted.

When necessary to facilitate remote access to IFTS, the EMI Council agreed that

access to settlement account facilities at EU central banks should be granted to remote participants on a non-discriminatory basis. Access to intraday credit may also be granted provided that the risks central banks would incur from remote participants do not exceed those they agree to incur from domestic participants. The consensus reached within the EMI Council on the issue of remote access to IFTS does not relate to the issue of remote access to monetary policy operations in Stage Three, which is still being examined.

Finally, the EMI Council also agreed that EU central banks would contribute, within the limits of their powers, to removing the obstacles which, in practice, make remote access difficult in the IFTS located in their country.

Central banks' involvement in retail payment systems

Traditionally, central banks have paid more attention to large-value payment arrangements than to retail payment systems. This can be explained by the importance of the former in the execution of monetary policy operations and by the low level of systemic risk involved in the latter. The efficiency of payment systems is to a large extent dependent on a good balance between competition and co-operation among providers of payment system services. Whenever market forces are unable to achieve such a balance the EMI and EU central banks may have a legitimate reason for action.

Whereas national central banks focus their attention mainly on the development of domestic retail payment systems, the EC Treaty assigns to the EMI a special role in the promotion of the efficiency of cross-border payments in view of Stage Three. In accordance with the Treaty, the EMI should monitor payment systems operators' initiatives for the processing of cross-border retail payments and discuss with EU central banks whether these initiatives are sufficiently efficient. In this context, the EMI may give advice to the private sector in order to encourage the use of compatible standards and may establish contacts with payment system providers and international standardisation bodies. The EMI is particularly concerned about the possible proliferation of non-compatible payment systems standards in the EU.

At the national level, for historical reasons and because of institutional arrangements specific to each EU country, the extent of the involvement of the central bank differs greatly across EU countries, ranging from oversight of such systems and the provision of settlement facilities to extensive operational involvement (e.g. the processing of interbank retail payments). In some countries, central banks may have to promote co-ordination between providers of payment services in order to minimise social costs; in others this can be left to banking associations.

There appears to be no substantial need for harmonisation between the various practices in EU countries. Regarding retail payment systems and instruments, a common policy approach by central banks may be called for if the financial reliability of the EU payment systems at large or the implementation of monetary policy were potentially at stake, and, at the same time, different approaches in the various countries would endanger the level playing-field between providers of payment services within the European Union. An example of such a need is the multi-purpose prepaid card, or "electronic purse", for which a common policy was agreed in 1994. In the future, the EMI and EU central banks may also analyse other problems which involve central bank co-operation.

2. Oversight of the ECU Clearing and Settlement System

By virtue of Article 109f (2), sixth indent, of the EC Treaty, the EMI has the task of overseeing the ECU Clearing and Settlement System. In 1995 the system processed about 6,000 transactions per day with an average daily turnover of ECU 50 billion; the ECU Clearing is the third-largest automated net settlement system in the European Union, after the EAF in Germany and CHAPS in the United Kingdom.

The oversight of the ECU Clearing and Settlement System by the EMI has the fundamental objectives of ensuring that: i) the operations of the clearing do not pose unacceptable systemic risk either to the ECU market or to EU domestic markets; and ii) the risks run by the participating credit institutions by virtue of their participation in the System are controlled. Within this framework, the major line of action of the EMI is to seek to ensure that the ECU Banking Association (EBA), which manages the System, takes the necessary measures to improve compliance with the safety standards laid down in the 1990 Report on Interbank Netting Schemes. The most important reform under way is the establishment of limits to the multilateral net position which a participant is allowed to incur at any time during the clearing process. Compliance with these limits is a precondition for the activation of liquidity-sharing and loss-sharing arrangements designed to ensure the end-of-day settlement of the clearing, even when the credit institution with the largest debtor position is unable to settle its obligations at the end of the day. The EMI has invited the EBA to modify the ECU Clearing and Settlement System's computer system so that any payment order sent during the day which would breach agreed limits would be blocked and held in a queue. In early 1995 a project plan was agreed between the EMI and the EBA for the implementation of the new system, which should be fully operational by September 1996.

The EMI has also stressed the need for the EBA to introduce collateral in the settlement process and to improve the legal framework of the clearing. At present, the EBA is studying the circumstances in which collateral might be required and how it might be held effectively. The analysis of the need for collateralisation will be closely linked to the work on other legal issues. The EBA's progress will be monitored by the EMI in the course of 1996.

In November 1995 the President of the EMI provided the EBA with a list of legal issues to be addressed in its review of the legal basis of the ECU Clearing and Settlement System. Particular attention will be given to the enforceability and legal soundness of the liquidity-sharing and loss-sharing provisions, since these are major prerequisites for compliance with Standard IV of the 1990 Report on Interbank Netting Schemes. In principle, these revisions ought to be completed before the implementation of intraday limits. As a longer-term project, the EBA will analyse the validity of the netting and settlement arrangements in all relevant jurisdictions, and assess the soundness of the rules governing the clearing in the event of the insolvency of one of the participants in the clearing.

The EMI has confirmed that there is no reason to prevent the ECU Clearing and Settlement System from processing euro in Stage Three, in parallel with TARGET, if its members so decide, provided that the System at least complies in full with the minimum standards set out in the 1990 Report on Interbank Netting Schemes. Moreover, if the ECU Clearing and Settlement System decides to process euro in Stage Three, it will have to settle in central bank money, i.e. in the books of the ESCB, in the same way as any other large-value interbank funds transfer system dealing with the new European currency.

3. Co-operation in the field of banking supervision

In 1995 the EMI, in accordance with Article 109f (2), fourth indent, of the Treaty, held consultations among supervisory authorities on a number of issues affecting the stability of financial institutions and markets. The most important topics which were dealt with are: credit risk management; central credit registers; and internal control systems.

Credit risk management

In the context of a general analysis of the financial fragility of the banking system, a survey has been conducted on the ways in which credit institutions manage credit risk, with consideration being given to possible supervisory measures which could be taken in this field. In particular, the analysis focused on the three main areas into which the credit risk management process can be divided, namely credit risk strategy, selection of credit risk (assessment of counterparties' creditworthiness and pricing), and credit risk monitoring.

The main finding of the survey is that credit institutions have made substantial progress in the management of credit risk over the past few years but, although the situation is satisfactory in many EU countries, deficiencies in the ways in which they select and monitor borrowers can still be observed in some cases.

These deficiencies can be explained, in a context of increased competition in the banking field, by insufficient prudence in the credit risk selection process, which may lead credit institutions to propose credit on terms which amount to sacrificing economic pricing for the immediate preservation of market share.

Against this background, a number of general principles have been identified on which banking supervisors could draw to ensure that credit institutions adopt adequate credit risk management processes on a continuous basis. These principles cover the following main aspects:

- credit risk strategy: strategic plans, risk limits, targets for profitability, stress scenarios and the active involvement of the Board of Directors;

- selection of credit risk: regular and up-to-date information on the borrowers' financial situation and performance; and internal written procedures for risk selection;

- credit risk monitoring: proper internal control (monitoring separate from operation), the role of the Board, internal and external auditors and a regular review process.

Central credit registers

Consultations continued to take place in the field of central credit registers (CCRs) with the aim of promoting co-operation among the central banks which manage these systems, currently existing in seven Member States (Belgium, Germany, Spain, France, Italy, Austria and Portugal).

The permanent exchange of information among five CCRs (Belgium, Germany, Spain, France and Italy) for supervisory purposes continued in a way which confirmed the interest of banking supervisors in receiving the data on individual borrowers held in the registers. Moreover, the exchange of information has led to a better understanding of the functioning of the various registers and to improved contacts among the authorities concerned. The remaining two countries which maintain a register (Austria and

Portugal) are expected to join the information-sharing arrangement as soon as they have overcome certain legal obstacles.

Member States which do not have a CCR were allowed, on an experimental basis and for a limited period of six months, to have access to the data in the registers for supervisory purposes. This exercise was intended to enable the competent authorities of the non-CCR countries to assess the usefulness of the instrument. The outcome of the experiment showed that, in most of the non-CCR countries, the competent authorities continue to be unconvinced of the need to set up a credit register.

The main objective of the consultations in this area, however, remained the pursuit of the opening-up of the EU registers to the reporting institutions on a cross-border basis. This is perceived as an important step so as to allow the registers to preserve their effectiveness for the reporting institutions in a context characterised by a higher degree of integration of financial markets arising from the implementation of the Single Market. Therefore, the technical and legal obstacles relating to access to the information stored in the CCRs on a cross-border basis have been identified.

For the time being, the opening-up of the registers can be easily achieved in three countries (Belgium, Spain and Italy), whereas in the remaining four (Germany, France, Austria and Portugal) it is hampered to a varying extent by legal impediments. In the latter countries, initiatives will be taken in due course by the respective central banks to promote the adoption of the necessary measures to remove the existing obstacles.

Internal control systems

The features of some recent banking crises have confirmed once again the particular importance of the existence of sound internal control systems at credit institutions. Therefore, discussions have started on this subject with the aim of identifying some "best practices" which could guide the activity of banking supervisors in evaluating the adequacy of the internal control procedures followed by credit institutions. In the first stage of this work, specific consideration is being devoted to the analysis of the area of high-level controls, particularly the role of the credit institutions' Boards of Directors and management committees in devising and implementing effective internal control mechanisms.

Other issues

Consultations among supervisory authorities continued to address some aspects related to the implementation of the "home country control" principle, enshrined in the Second Banking Co-ordination Directive. The focus of the discussions was on the problems linked to the supervision of branches established in other EU countries that have arisen in the course of completing the memoranda of understanding. In this context, some consideration has also been given to the relationship between the "home country control" principle and the rules adopted at Community level with the aim of combating money laundering.

Supervisory authorities continued to take an interest in the issue of the public disclosure of derivatives activities undertaken by credit institutions. In particular, recommendations have been put forward in this field both by the Basle Committee on Banking Supervision, jointly with the Technical Committee of the International Organisation of Securities

Commissions (IOSCO), and by international non-supervisory bodies (Group of Thirty, International Institute of Finance, Euro-currency Standing Committee). These recommendations have been examined from a supervisory standpoint. No initiative has been taken, but the intention is to stay abreast of developments in this area.

4. Administration of EMS mechanisms and Community loans

The EMI's operational tasks relate to the administration of the mechanisms of the European Monetary System (EMS) - the Very Short-Term Financing mechanism, the Short-Term Monetary Support mechanism and the creation of ECUs for the purpose of implementing the EMS Agreement - and the administration of borrowing and lending operations concluded by the Community under the Medium-Term Financial Assistance mechanism.

The administrative aspects of the EMI's operational functions, which had been performed by the BIS on the basis of an agency agreement between the latter and the EMI since 1st January 1994, were taken over by the EMI as from 15th May 1995.

EMS mechanisms

The EMI carries out operations associated with the creation, utilisation and remuneration of official ECUs. This involves, in particular, swap operations with the EU central banks participating in the Exchange Rate Mechanism (ERM) or contributions of reserve assets against official ECUs, on a voluntary basis, by EU central banks not participating in the ERM. Through these swaps official ECUs are issued to EU central banks against the contribution of 20% of their gross gold holdings and US dollar reserves. The swap operations are renewed every three months, which allows for the necessary adjustments to be made in order to: first, ensure that each EU central bank's contribution to the EMI continues to represent at least 20% of its gold and US dollar reserve holdings at the end of the month preceding the renewal date; and, second, take account of changes in the price of gold and in the US dollar exchange rate vis-à-vis the official ECU. The results of these operations are shown in the Annual Accounts enclosed with this Report.

Following the accession of Austria, Finland and Sweden to the European Community on 1st January 1995, the Oesterreichische Nationalbank, Suomen Pankki and Sveriges Riksbank became parties to the Agreement of 13th March 1979 laying down the operating procedure for the EMS and the Agreement of 9th February 1970 setting up the Short-Term Monetary Support mechanism. The Oesterreichische Nationalbank became a member of the ERM, with effect from 9th January 1995, which entailed its compulsory participation in the ECU swap mechanism from that date. Although Suomen Pankki and Sveriges Riksbank decided not to participate in the ERM for the time being, they decided to make voluntary contributions of gold and US dollars against ECUs to the EMI. Suomen Pankki made its initial voluntary contribution on the occasion of the quarterly renewal of swaps on 11th January 1995, while Sveriges Riksbank made its first contribution on the occasion of the renewal on 11th April 1995.

The amount of official ECUs issued by the EMI under the last three-month swap transaction within the period of reference, which took place on 11th January 1996, reached ECU 54.2 billion. Compared with January 1995, the stock of ECUs decreased by more than ECU 3 billion. The reduction was mainly due to: first, a fall in the US dollar/ECU exchange rate and in the price of gold in terms of ECUs; and, second, a decrease in the total volume of gold and US dollar reserve contributions from the EU central banks participating in ECU swap operations with the EMI.

Given its status of "Other Holder" of ECUs, the Swiss National Bank acquired

ECUs through swap operations with two EU central banks; at end-1995 the official ECUs held by it amounted to ECU 63.5 million.

In addition to the creation of official ECUs, the EMI records in its books transfers of ECUs among the participating central banks and Other Holders. In 1995 such transfers resulted in a decrease of ECU 1.65 billion in net ECU positions. The ECU mobilisation mechanism has not been activated since 1986. No use was made of the Very Short-Term Financing mechanism (VSTF) in 1995, nor of the Short-Term Monetary Support mechanism. The latter has not been activated since 1974.

Community loans

In accordance with Article 109f (2) of the Treaty and Article 11 of Council Regulation (EEC) No. 1969/88 of 24th June 1988, the EMI administers the borrowing and lending operations concluded by the Community under the Medium-Term Financial Assistance mechanism. The mechanism provides for loans to be granted to Member States which are experiencing or are seriously threatened by difficulties in their balance of payments (current or capital account). The EMI effects payments arising from these borrowing and lending operations. It verifies the maturity dates laid down in the borrowing and lending contracts for the payment of interest and repayment of the principal and reports to the Commission on the operations carried out for the account of the EU.

In 1995 the EMI continued to receive from borrowers, namely Greece and Italy, and to pay to creditors vis-à-vis the Community the sums due in respect of interest, commission and expenses on outstanding loans. The following table shows the total of outstanding Community lending operations as at 31st December 1995.

Following a repayment of principal amounting to DEM 536 million and ECU 240 million by the Greek Government in February 1996, the outstanding Community lending to Greece stood at ECU 500 million at the end of February 1996.

Table 11

Outstanding Community loans

(at 31st December 1995 in millions)

	Outstanding loans denominated in Deutsche Mark	Outstanding loans denominated in ECUs	Total outstanding loans expressed in ECUs
Greece	536	740	1,024
Italy	3,900	1,975	4,045
Total	4,436	2,715	5,069

Source: EMI

5. Advisory functions

Article 109f (6) of the Treaty establishing the European Community and Article 5.3 of the Statute of the EMI require that the EMI be consulted by the Council of the European Union or the responsible national authorities, as appropriate, on any proposed Community or national legislation within its field of competence. The limits and conditions of consultations on draft legislation by national authorities are set out in Council Decision 93/717/EEC of 22nd November 1993. Article 1 of this Decision states that "Member States shall consult the EMI in particular on:

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

Eighteen requests for consultations were received in 1995. Four came from the Council of the European Union and fourteen originated from national authorities.

The consultations from the Council of the European Union concerned draft Directives on: cross-border payments; investors' compensation schemes; a European system of national and regional accounts in the European Community; and a proposal for a Council Regulation on harmonised consumer price indices.

The consultations from national authorities, inclusive of central banks, concerned draft legislation on:

- currency legislation (Finland twice);
- adjustment of statutes of national central banks (Belgium, Portugal);
- instruments of monetary policy (France, Austria);
- statistics (Belgium, Luxembourg);
- payment systems (Belgium, Sweden);
- financial markets (Denmark twice, Ireland twice, Sweden, the United Kingdom);
- the prohibition of public financing as laid down in Article 104 of the Treaty (Luxembourg, Austria, Sweden).

Several draft laws extended to more than one of the above areas.

The EMI's benchmark for the assessment of the consultations was primarily the compatibility of the proposed legislation with the Treaty establishing the European Community, whilst the potential impact on future arrangements for Stage Three of EMU and, in appropriate cases, the question as to whether the stability of financial institutions and markets would be affected by the legislation were also examined.

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

In 1995 the EMI continued to monitor central banks' fulfilment of their obligations under Articles 104 and 104a of the Treaty and Council Regulations (EC) Nos. 3603/93 and 3604/93.[1] The European Commission monitors Member States' compliance with these provisions. With the accession of Austria, Finland and Sweden to the European Community with effect from 1st January 1995, the monitoring procedure was extended to the Oesterreichische Nationalbank, Suomen Pankki and Sveriges Riksbank.

Most of the Member States anticipated the requirements set out in Articles 104 and 104a and the related secondary legislation and adapted their respective national legislation and practices before the beginning of Stage Two or, in the case of the three new Member States, before their accession to the EC on 1st January 1995. Some imperfections have appeared in the transition to the new arrangements and technical problems have occasionally occurred in the implementation of new regulations. These inconsistencies can be considered as being of minor importance in terms of amounts involved or without any significant impact on the conduct of monetary policy. Nevertheless, every effort has to be made to fulfil the requirements of the Treaty. In some of the Member States where such infringements of the prohibitions still existed corrective measures had been taken by the end of 1995. In the few remaining cases, corrective measures were being prepared.

The EMI also monitors central banks' secondary market purchases of public sector debt instruments. Although the acquisition of debt instruments of the public sector in the secondary market is in general in compliance with the Treaty, such purchases must not be used to circumvent the objective of Treaty Article 104.

For further background information on the legal framework of this topic see the EMI's Annual Report 1994, Chapter III, B.

7. Co-operation with other institutions

In the performance of its tasks the EMI has continued to co-operate closely with other bodies of the European Union in a number of forms and at a number of levels. The President of the Council of the European Union and a member of the European Commission have regularly participated in the meetings of the EMI Council, and the President of the EMI has attended meetings of the Council of the European Union whenever matters relating to the objectives and tasks of the EMI have been discussed. Importantly, this has included his attendance at informal ECOFIN Council meetings, which, inter alia, played a key role in developing the changeover scenario (see Chapter II, Section 1), as well as at the June and December meetings of the European Council, which adopted the changeover scenario at its latter meeting. The President has also appeared before the competent committees of the European Parliament and, indeed, presented the EMI's 1994 Annual Report to a plenary session of the Parliament in April 1995.

At the working level, senior representatives of the EMI have regularly attended the meetings of the Monetary Committee as observers. Close working relationships exist with the competent Directorates General of the European Commission which also attend meetings of some EMI working groups. In the field of statistics the EMI has further enhanced its co-operation procedures with EUROSTAT (the European Commission's statistical office) and participates in the Committee on Monetary, Financial and Balance of Payments Statistics. Furthermore, the EMI has continued to co-operate with the national Mint Directors, representing the institutions which are responsible for producing the coins which will circulate alongside the euro banknotes in Stage Three.

With regard to contacts with institutions outside the Community, the "concertation procedure" has remained a valuable forum for exchanging data among foreign exchange experts from central banks in the EU and those in Canada, Japan, Norway, Switzerland and the United States on exchange market developments, intervention and other official foreign exchange transactions. Consultations on matters of common interest between the EMI and the central banks of Norway and Switzerland have continued, and a good relationship has been established with the IMF and the World Bank.

Important links have also been retained with the Bank for International Settlements (BIS), which between 1964 and 1994 provided the human and technical resources for the functioning of the former Secretariat of the Committee of Governors and provided technical support for the setting-up of the EMI. Co-operation has continued, particularly in the statistical field.

Annual Accounts of the EMI

Balance Sheet as at 31st December 1995

ECU

Assets

		1995	*1994*
I	**EMS-related assets**		
	Holdings of gold	27,204,932,117	*28,624,566,048*
	Holdings of US dollars	27,015,081,233	*27,951,282,957*
		54,220,013,350	*56,575,849,005*
II	**Other assets**		
(1)	Cash and bank sight accounts	490,709	*499,203*
(2)	Time deposits	597,168,977	*0*
(3)	Securities	31,326,075	*12,358,418*
(4)	Tangible assets	8,809,555	*6,595,995*
(5)	Other assets	1,243,530	*1,277,793*
		639,038,846	*20,731,409*
Total assets (I and II)		**54,859,052,196**	*56,596,580,414*
Memorandum item:			
Forward claims in ECUs (from revolving quarterly swaps)		54,220,013,350	*56,575,849,005*

ECU

Liabilities

		1995	*1994*
I	**EMS-related liabilities**		
	ECUs issued to EU central banks	54,220,013,350	*56,575,849,005*
		54,220,013,350	*56,575,849,005*
II	**Other liabilities**		
(1)	Creditors and other liabilities	3,469,106	*3,639,743*
(2)	Provision for pensions and similar obligations	1,958,363	*377,803*
(3)	Other provisions	5,258,218	*3,566,464*
(4)	Contributions from EU central banks (pursuant to Article 16.2 of the Statute)	615,573,495	*13,029,998*
(5)	Revaluation account	243,514	*117,401*
(6)	Surplus for the year	12,536,150	*0*
		639,038,846	*20,731,409*
Total liabilities (I and II)		**54,859,052,196**	*56,596,580,414*
Memorandum item:			
	Forward liabilities in gold and US dollars (from revolving quarterly swaps)	54,220,013,350	*56,575,849,005*

Profit and Loss Account for the year 1995

ECU

	1995	*1994*
Income		
Interest income	45,439,252	*341,956*
Total income	**45,439,252**	*341,956*
Expenses		
Staff costs	15,039,033	*3,388,001*
Other administrative expenses	15,775,583	*14,692,575*
Depreciation of tangible assets	2,449,521	*231,382*
Total expenses	**33,264,137**	*18,311,958*
Extraordinary income	361,035	*0*
Surplus/deficit for the year	**12,536,150**	*(17,970,002)*

Frankfurt am Main,
6th February 1996

EUROPEAN MONETARY INSTITUTE

A. Lamfalussy

President

1. Accounting Policies

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

1.2 Although the EMI, as a body of the European Communities, is not subject to national laws and regulations on accounting practices, its accounting policies follow internationally accepted accounting principles, unless specific EMI issues require otherwise. Notwithstanding the limited life of the EMI, the accounts have been prepared on a "going concern" basis.

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

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

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

1.5 Apart from EMS-related assets and liabilities and financial fixed assets, foreign currency translation of balance sheet items into ECUs is based on the official rates published by the European Commission applying at 29th December 1995, or otherwise on closing market rates for that date. Foreign currency transactions reflected in the Profit and Loss Account are valued at the average of daily official rates for the year 1995. Translation of financial fixed assets denominated in foreign currencies is at the spot rates of exchange ruling on the dates of their acquisition.

1.6 Income and expenses are recognised on an accruals basis. Unrealised gains arising from the revaluation of assets vis-à-vis the purchase price are not recognised as income but taken into a revaluation account; unrealised losses are charged against previous unrealised gains in the revaluation account and any remaining losses charged against profit.

1.7 In accordance with Article 17.4 of the Statute, the Council has appointed C & L Treuarbeit Deutsche Revision as independent external auditors.

2. Notes on the Balance Sheet

2.1 EMS-related assets and liabilities

These items relate to the three-month revolving swaps of official ECUs created in exchange for EU central banks' contributions to the EMI of 20% of their gold and US dollar reserves. These operations are described in Chapter III, Section 4 of the Report. The respective assets and liabilities are shown in the EMI's books. The entries do not imply any interest payments or receipts. Interest on official reserves swapped for ECUs continues to accrue to the underlying owners. Interest on ECU holdings arising out of swaps only becomes due where a central bank's holdings exceed its forward ECU liabilities; in such cases, payments are covered by interest due from central banks whose forward liabilities in ECUs exceed their holdings of ECUs.

2.2 Other assets

II (1) *Cash and bank sight accounts:* Cash balances were held on a current account in Deutsche Mark, in which currency almost all of the EMI's day-to-day transactions are payable. This account was used exclusively to deal with payments and receipts relating to the day-to-day administration of the EMI.

II (2) *Time deposits:* As stated in the Annual Report for 1994, ECU 597.2 million of the resources contributed by the EU central banks pursuant to Article 16.2 of the Statute of the EMI was placed in time deposits at a fixed term of three years to generate the income deemed necessary to cover the EMI's administrative expenses. These deposits constitute a financial fixed asset of the EMI.

II (3) *Securities:* Excess cash balances were employed on a daily basis in Treasury Bills of the Federal Republic of Germany. No other securities were held at 31st December 1995.

II (4) *Tangible assets:* Net of cumulative depreciation of ECU 2.7 million these comprised, at year-end:

	ECU	
	1995	*1994*
Special installations	4,717,153	*2,562,867*
Other equipment	2,037,679	*2,113,555*
Computers and software	1,922,277	*1,717,027*
Other	132,446	*202,546*
Total	8,809,555	*6,595,995*

"Special Installations" comprises the costs of special additions and enhancements to the standard fittings and capital plant and equipment within the EMI's premises in the Eurotower building in Frankfurt am Main required to meet its particular operational needs. In addition to these capitalised costs, a total of ECU 4.1 million was spent on non-capital items in this connection during 1994 and 1995.

II (5) *Other assets:* This item principally represents a claim against the German Federal Ministry of Finance in respect of recoverable value-added and other indirect taxes paid on goods and services. Such taxes are refundable under the terms of Article 3 of the Protocol on the privileges and immunities of the European Communities, which also applies to the EMI by virtue of Article 21 of its Statute.

2.3 Other liabilities

II (1) *Creditors and other liabilities:* This item principally comprises payments due to suppliers, together with income tax deducted at source from salaries pending payover to the European Communities, and accumulated pension contributions with interest thereon repayable to staff. Members of the staff contribute to the pension scheme a percentage of their basic salary (matched by a contribution of twice that amount by the EMI - see II (2) below); the staff contribution is repayable at the termination of the employment contract together with accrued interest thereon.

II (2) *Provision for pensions and similar obligations:* This item comprises the accumulated contributions of the EMI towards the staff pension scheme. These contributions are required to cover the eventual cost of severance grants and any ill-health pensions.

II (3) *Other provisions:* These comprise funds set aside in respect of restoration of the EMI's premises at the end of its lease, office rental and service charge payments outstanding in respect of 1995, final settlement of costs of work on establishing the premises, and the production of the Annual Report and the accounts for 1995.

II (4) *Contributions from EU central banks:* These represent the contributions made pursuant to Article 16.2 of the Statute by the EU central banks in 1994 and 1995, as detailed below.

Central Bank	ECU
Belgium	17,235,643
Denmark	10,464,542
Germany	138,808,404
Greece	12,311,159
Spain	54,476,907
France	104,644,800
Ireland	4,924,381
Italy	97,565,912
Luxembourg	923,360
Netherlands	26,161,252
Austria	14,162,957
Portugal	11,387,902
Finland	10,160,382
Sweden	17,857,642
United Kingdom	94,488,252
Total	615,573,495

II (5) *Revaluation account:* The appreciation of the Deutsche Mark against the ECU during 1995 resulted in an unrealised gain in the net value of assets held in, or denominated in, Deutsche Mark, which has been taken into this account.

II (6) *Surplus for the year:* See Note 3.4 below.

3. Notes on the Profit and Loss Account

3.1 Income

Interest income: This item represents interest of ECU 44.6 million earned on the time deposits and of ECU 0.8 million from employment of excess cash balances in Treasury Bills (see Notes under "Other assets").

3.2 Expenses

Staff costs: This item relates to salaries and general allowances (ECU 12.9 million), and to employer's contributions to pensions and health and accident insurance (ECU 2.1 million), in respect of permanent staff employed by the EMI. At 31st December 1995, the EMI's establishment consisted of the President and 192 permanent staff. Of these, six held senior management positions, 26 held managerial positions, 81 were employed in a professional capacity and 80 were employed in support functions. Of the 126 staff employed at end-1994, the bulk had transferred to the EMI in Frankfurt near the end of that year. During 1995, 73 permanent staff were recruited and 7 staff resigned. The average number of permanent staff employed during 1995 was 166. Salaries and allowances of staff, including emoluments of holders of senior management positions, are modelled in essence on, and comparable to, the remuneration scheme of the European Communities.

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

3.3 Extraordinary income

This item represents extraordinary income arising mainly from the release of provisions made at end-1994 in respect of anticipated expenditure arising in that year, that are no longer required.

3.4 Allocation of surplus

Pursuant to Article 17.5 of the Statute of the EMI, any surplus of the EMI shall be transferred in the following order:

(a) an amount to be determined by the Council of the EMI shall be transferred to the general reserve fund of the EMI;

(b) any remaining surplus shall be distributed to the national central banks in accordance with the key referred to in Article 16.2.[1]

[1] *At its meeting on 5th March 1996, the Council determined that the entire surplus for the year 1995 should be transferred to the general reserve fund.*

President and Council
of the European Monetary Institute

Frankfurt am Main

We have audited the accompanying financial statements of the European Monetary Institute. The Management of the European Monetary Institute is responsible for the preparation of the accounts. It is our responsibility to form an independent opinion on these accounts based on our audit, and to report our opinion to you.

We conducted our audit in accordance with International Standards of Auditing. An audit includes examinations, on a test basis, of evidence relevant to the amounts and disclosures in the accounts. It also includes an assessment of the significant estimates and judgements made in the preparation of the accounts, and of whether the accounting policies are appropriate to the European Monetary Institute's circumstances and adequately disclosed.

In our opinion, the financial statements, which have been prepared under accounting policies set out in Section 1 of the notes on the accounts of the European Monetary Institute, give a true and fair view of the financial position of the European Monetary Institute at 31st December 1995 and the results of its operations for the year then ended.

Frankfurt am Main, 14th February 1996

C&L TREUARBEIT
DEUTSCHE REVISION
Aktiengesellschaft

(Wagener) (Kern)

Auditor Auditor

Annexes

Glossary

Bilateral central rate: the official parity between any pair of **ERM** member currencies, around which the **ERM fluctuation margin** is defined.

Central credit register (CCR): information system designed to provide commercial credit institutions, central banks and other supervisory authorities with data regarding the indebtedness of firms and individuals vis-à-vis the whole banking system.

Collateral: assets pledged as a guarantee for the repayment of the short-term liquidity loans which credit institutions receive from the central banks, as well as assets purchased by central banks from credit institutions as part of repurchase operations in the course of providing liquidity to the markets.

Committee on Monetary, Financial and Balance of Payments Statistics (CMFB): established by the **Council** to enhance co-operation in the *European Economic Area (EEA)* in the field of statistics between the national statistical institutes and the European Commission on the one hand, and the central banks and the European Monetary Institute on the other, and to provide opinions on statistical matters to all relevant parties. Where appropriate (e.g. for statistical matters closely related to the preparations for Monetary Union), the Committee can also meet in an EU capacity.

Concertation procedure: framework within which central bank foreign exchange experts (from each EU Member State, Canada, Japan, Norway, Switzerland and the United States) participating in the Concertation Group exchange information about market developments. The framework provides for regular daily telephone sessions and periodic meetings of central bank experts.

Correspondent banking: arrangement under which one credit institution provides payment and other services to another credit institution. Payments through correspondents are often executed through reciprocal accounts (so-called nostro and loro accounts), to which standing credit lines may be attached. Correspondent banking services are primarily provided across international boundaries.

Council (of the European Union): 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 *Council of Ministers*). The Council meeting in the composition of the Ministers of Finance and Economy is usually referred to as the *ECOFIN Council*. In special circumstances, in particular in the case of Article 109j of the Treaty, the Council meets in the composition of the Heads of State or of Government. See also **European Council**.

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

ECB Executive Board: the decision-making body of the **ECB** which will implement monetary policy in accordance with the guidelines and decisions laid down by the **ECB Governing Council**. It will be composed of the President, the Vice-President and two to four other members, appointed from among persons of recognised standing and professional experience in monetary and banking matters by common accord of the governments of the Member States at the level of the Heads of State or of Government, on a recommendation from the **Council** after it has consulted the **European Parliament** and the **ECB Governing Council.**

ECB Governing Council: composed of the members of the **ECB Executive Board** and the governors of the national central banks of the countries participating in the **euro area**; it will be the decision-making body of the **ESCB** which will adopt the guidelines and take the decisions necessary to ensure the performance of the tasks entrusted to the ESCB under the **Treaty** and the ESCB Statute.

Economic and Monetary Union (EMU): the **Treaty** describes the process of achieving economic and monetary union in the EU in three stages. *Stage One* of EMU started in July 1990 and ended on 31st 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 1st January 1994. It provided, inter alia, for the establishment of the European Monetary Institute, the prohibition of monetary financing of and privileged access to financial institutions for the public sector, as well as for the avoidance of excessive deficits. *Stage Three* will start at the latest on 1st January 1999, with the transfer of monetary competence to the **ESCB** and the creation of the **euro**.

ECU (European Currency Unit): in its present definition (Council Regulation No. 3320/94 of 20th December 1994), the ECU is a basket made up of the sum of fixed amounts of twelve out of the fifteen currencies of the Member States. Article 109g of the **Treaty** states that this composition shall not be changed until the start of Stage Three. The value of the ECU is calculated as a weighted average of the value of its component currencies. As official ECU, it serves, inter alia, as the numeraire of the **ERM** and as a reserve asset for central banks. Official ECUs are created by the EMI through three-month swap operations against one-fifth of the US dollar and gold assets held by the fifteen EU central banks. Private ECUs are ECU-denominated financial instruments (e.g. bank deposits or securities) which are based on contracts making reference to the official ECU. The "theoretical" value of the private ECU is defined on the basis of the value of the individual components of the ECU basket. However, the circulation of the private ECU is different from that of the official ECU and in practice the market value of the private ECU may diverge from its "theoretical" basket value. In the conclusions of the **European Council's** meeting in Madrid on 15th and 16th December 1995, it was indicated that "In the case of contracts denominated by reference to the official ECU basket of the European Community, in accordance with the Treaty, substitution by the **euro** will be at the rate of one-to-one, unless otherwise provided in the contract".

Electronic purse: see **Multi-purpose prepaid card**.

EMS (European Monetary System): established in 1979 in accordance with the Resolution of the **European Council** on the establishment of the EMS and related matters of 5th December 1978. The Agreement of 13th March 1979 between the central banks of the Member States of the European Economic Community lays down the operating procedures for the EMS. The objective is to create closer monetary policy co-operation between Community countries leading to a zone of monetary stability in Europe. The main components of the EMS are: the **ECU**; the exchange rate and intervention mechanism (**ERM**); and various credit mechanisms.

EMU: see **Economic and Monetary Union**.

ERM (Exchange Rate Mechanism): the exchange rate and intervention mechanism of the **EMS** defines the exchange rate of participating currencies in terms of a central rate vis-à-vis the **ECU**. These central rates are used to establish a grid of bilateral exchange rates between participating currencies. Exchange rates are allowed to fluctuate around bilateral central rates within fluctuation margins. These margins have been set at ±15% since 2nd August 1993. Pursuant to a bilateral agreement between Germany and the Netherlands, a fluctuation margin between the Deutsche Mark and the Dutch guilder is maintained at ±2.25%. Adjustments of central rates are subject to mutual agreement between all countries participating in the ERM.

ERM fluctuation margins: floor and ceiling of bilateral exchange rates, within which **ERM** currencies are allowed to fluctuate.

ESCB (European System of Central Banks): the ESCB is composed of the **ECB** and of the national central banks. It will be governed by two decision-making bodies, the **ECB Governing Council** and the **ECB Executive Board**. Its primary objective will be to maintain price stability. Its basic tasks are to define and implement the monetary policy of the **euro area**, to hold and manage the official reserves of the participating Member States and conduct foreign exchange operations and to promote the smooth operation of payment systems in the euro area. The ESCB shall also contribute to the smooth conduct of policies pursued by the competent authorities relating to the prudential supervision of credit institutions and the stability of the financial system.

euro: the name of the European currency adopted by the **European Council** at its meeting in Madrid on 15th and 16th December 1995. It will be used instead of the generic term **ECU** used by the **Treaty** to refer to the **European Currency Unit**

euro area: area encompassing those Member States where the **euro** will be substituted for the national currency and in which a single monetary policy will be conducted under the responsibility of the decision-making bodies of the **ECB** (**ECB Governing Council ECB Executive Board**).

European Commission: institution of the European Community which ensures the application of the provisions of the **Treaty**, takes initiatives for Community policies, proposes Community legislation and exercises powers in specific areas. In the economic policy area, the Commission recommends broad guidelines for the economic policies in the Community and reports to the **Council** on economic developments and policies. It monitors public finances and initiates the procedure on excessive deficits. It consists of twenty members and includes two nationals from Germany, Spain, France, Italy and the United Kingdom, and one from each of the other Member States.

European Council: brings together the Heads of State or of Government of the Member States and the President of the **European Commission**. See also **Council**

European Parliament: consists of 626 representatives of the citizens of the Member States. It is a part of the legislative process, though with different prerogatives according to the procedures through which EU law is to be enacted. In the framework of **EMU**, the Parliament has mainly consultative powers. However, the **Treaty** establishes certain procedures for democratic accountability of the **ECB** to the Parliament (presentation of the annual report, general debate on the monetary policy, hearings to the competent parliamentary committees).

Fiduciary money: refers to banknotes and coins. These means of payment are termed "fiduciary" because their value is based on the confidence and trust of the holder in the issuer of the currency.

Fixed rate tender: auction of central bank credit at a pre-announced interest rate (as opposed to **variable rate tender**).

Funds transfer system (FTS): a formal arrangement, based on private contract or statute law, with multiple membership, common rules and standardised arrangements for the transmission and the settlement of money obligations arising between the members.

IFTS (Interbank Funds Transfer System): a **funds transfer system** in which most of (or all) participants are credit institutions.

Interlinking: the Interlinking mechanism is one of the components of the architecture of the **TARGET** system. The term Interlinking is used to designate the infrastructures and the procedures which link domestic **RTGS** systems in order to process cross-border payments within TARGET.

Intervention at the limits: compulsory intervention carried out by central banks the currencies of which are respectively at the floor and ceiling of their **ERM fluctuation margins**

Intra-marginal intervention: intervention carried out by a central bank to support its currency the exchange rate of which is still within its **ERM fluctuation margins**

Large-value payments: payments, generally of very high amounts (typically well above ECU 100,000), which are mainly exchanged between credit institutions or between participants in the financial markets and require urgent and timely settlement. For example, settlement operations for net settlement systems are considered as large-value payments, whatever their amount, because they need to be executed at a very precise moment.

Liquidity-sharing rule (or liquidity-sharing agreement): an agreement between participants in a clearing system regarding the allocation of any liquidity risk arising when one or more participants fail to fulfil their obligations; the arrangement stipulates how the liquidity risk will be shared among the parties concerned in the event the agreement is activated.

Loss-sharing rule (or loss-sharing agreement): an agreement between participants in a clearing system regarding the allocation of any loss arising when one or more participants fail to fulfil their obligations; the arrangement stipulates how the loss will be shared among the parties concerned in the event the agreement is activated.

Monetary Committee: a consultative Community body, composed of two representatives from each Member State in a personal capacity (normally, one from the government and one from the central bank) and two representatives of the **European Commission**. It was created in 1958 on the basis of Article 105 of the EEC **Treaty**. In order to promote co-ordination of the policies of Member States to the full extent needed for the functioning of the internal market, Article 109c of the Treaty lists a set of areas where the Monetary Committee contributes to the preparation of the work of the **Council**. At the start of Stage Three (**Economic and Monetary Union**), the Monetary Committee will be dissolved and an *Economic and Financial Committee* will be created instead.

Monitoring Group: group composed of foreign exchange experts from the EU central banks who review current economic and monetary developments and policies in order to assess the functioning of the **EMS**

Multi-purpose prepaid card: a prepaid card which can be used to purchase goods and services at a range of retail outlets. Also known as an **electronic purse**

Net settlement system (NSS): an **IFTS** in which payments are exchanged during the working day (or part of the working day) and settled on a net basis at the end of the day (or, less often, several times a day).

Realignments: change in the **ECU** central rate and bilateral central rates of one or several currencies participating in the **ERM**

Re-denomination of securities: the *denomination* of a security is the currency in which the par value of the security is expressed (in most cases, the face value of a certificate). Re-denomination refers to a procedure through which the original denomination of a security, issued in national currency, is changed into the **euro** at the irrevocably fixed conversion rate.

Remote access to IFTS: a credit institution has remote access to an **IFTS** if it has direct access to an **IFTS** located in another country without having a physical presence there.

RTGS (Real-Time Gross Settlement) system: a **funds transfer system** in which payment orders are processed one by one as they arise and which provides for the immediate settlement of all payments, provided that there are enough funds or overdraft facilities on the originators' account with the settlement agent.

Scriptural money: all money in book-entry form and therefore not circulating in the form of banknotes and coins.

Second Banking Co-ordination Directive: adopted on 15th December 1989 (89/646/EEC), which deals with the co-ordination of laws, regulations and administrative provisions relating to the taking-up and pursuit of the business of EU-based credit institutions. It amends the First Banking Co-ordination Directive adopted in 1977 (77/780/EEC).

Settlement risk: a general term used to designate both credit and liquidity risk in a **funds transfer system**, i.e. the risk that a party will fail to meet one or more obligations to its counterparties or to a settlement agent or settlement institution.

Settlement agent: an institution that manages the settlement process (e.g. the determination of settlement positions, monitoring the exchange of payments, etc.) for transfer systems or other arrangements that require settlement.

TARGET (Trans-European Automated Real-time Gross settlement Express Transfer) system: the TARGET system is defined as a payment system which will be composed of one **RTGS** system in each of the Member States participating in the **euro area** at the start of Stage Three (**Economic and Monetary Union**). The national RTGS systems are interconnected through the **Interlinking** mechanism so as to allow same-day cross-border transfers throughout the European Union. RTGS systems of non-participating countries may also be connected to TARGET, but only to process **euro** through the Interlinking mechanism.

Treaty: the term refers to the Treaty establishing the European Community. The Treaty was signed in Rome on 25th March 1957 and entered into force on 1st January 1958. It established the *European Economic Community (EEC)* and was often referred to as the "Treaty of Rome". The Treaty on European Union was signed in Maastricht (therefore often referred to as the "Maastricht Treaty") on 7th February 1992 and entered into force on 1st November 1993. It amended the EEC Treaty which is now known as the Treaty establishing the European Community.

Variable rate tender: auction of central bank credit where the central bank sets the volume of credit offered, allowing the interest rate to be determined by the bids submitted by credit institutions (as opposed to **fixed rate tender**).

Chronology of monetary measures taken in the EU in 1995[1]

1st January The accession of *Austria*, *Finland* and *Sweden* to the European Union and to the European Monetary System (EMS) becomes effective.

2nd January The *Greek Government* lowers interest rates on three-month and twelve-month Treasury bills by 0.25 percentage point to 15.75% and 17.5%, respectively, and on six-month Treasury bills by 0.5 percentage point to 16.5%.

4th January The *Banco de España* raises its official 10-day repurchase rate by 0.65 percentage point to 8.0%.

7th January The Ministers and central bank governors of the *Member States of the European Union*, following a decision by the Austrian Government to join the exchange rate mechanism of the European Monetary System, decide by mutual agreement, in a common procedure involving the European Commission and the European Monetary Institute and after consultation with the Monetary Committee, on the terms on which the Austrian schilling will participate as of 9th January 1995. The Austrian Government announces that it intends to continue maintaining exchange rate stability through its established approach to monetary policy.

2nd February The *Bank of England* announces a rise in its minimum lending rate of 0.5 percentage point to 6.75%.

9th February *Sveriges Riksbank* raises its deposit rate by 0.5 percentage point to 6.5%, and its lending rate by 0.5 percentage point to 8.5%.

10th February The *Bank of Greece* announces a targeted depreciation of the drachma against the ECU of about 3% for 1995. It also announces a target range of 7-9% for the growth of the money supply (M3) for 1995.

Suomen Pankki raises its tender rate by 0.25 percentage point to 5.75%.

14th February The *Greek Government* lowers the interest rate on twelve-month Treasury bills by 0.25 percentage point to 17.25%.

Sveriges Riksbank raises its repo rate by 0.2 percentage point to 7.8%.

21st February *Sveriges Riksbank* raises its repo rate by 0.03 percentage point to 7.83%.

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[1] *Dates of announcement of monetary measures.*

22nd February The *Banca d'Italia* raises its discount rate by 0.75 percentage point to 8.25% and its fixed-term advances (or lombard) rate by 1.25 percentage points to 9.75%.

27th February The weighted average repo rate of the *Banco de Portugal* increases by 0.002 percentage point to 8.877%.

28th February The *Greek Government* lowers the interest rates on three-month, six-month and twelve-month Treasury bills by 0.25 percentage point to 15.5%, 16.25% and 17%, respectively.

Sveriges Riksbank raises its repo rate by 0.07 percentage point to 7.9%.

3rd March The *Central Bank of Ireland* raises its short-term lending facility rate by 0.5 percentage point to 6.75%.

5th March The bilateral central rates of the *Spanish peseta* and the *Portuguese escudo* against the other ERM currencies are reduced by 7% and 3.5%, respectively, with effect from 6th March.

7th March *Sveriges Riksbank* raises its repo rate by 0.15 percentage point to 8.05%.

8th March The *Banque Nationale de Belgique* raises its central rate by 1 percentage point to 5.85%, its ordinary end-of-day rate by 1.5 percentage points to 7.85% and its emergency rate by 1 percentage point to 10%.

Danmarks Nationalbank raises its official discount rate by 1 percentage point to 6% and raises its 14-day certificates of deposit rate by 1.5 percentage points to 7%.

The *Banque de France* suspends its 5 to 10-day lending facility and replaces it with a 24-hour repo facility. The repo rate is set at 8%, which is 1.6 percentage points higher than the former 5 to 10-day lending rate.

The weighted average repo rate of the *Banco de Portugal* increases by 2.686 percentage points to 11.563%.

9th March The *Central Bank of Ireland* raises its short-term lending facility rate by 0.5 percentage point to 7.25%.

14th March The *Banco de España* raises its official 10-day repurchase rate by 0.5 percentage point to 8.5%.

Sveriges Riksbank raises its repo rate by 0.05 percentage point to 8.10%.

20th March The weighted average repo rate of the ***Banco de Portugal*** decreases by 0.285 percentage point to 11.278%.

21st March ***Sveriges Riksbank*** raises its repo rate by 0.05 percentage point to 8.15%.

27th March The weighted average repo rate of the ***Banco de Portugal*** decreases by 0.166 percentage point to 11.112%.

28th March ***Sveriges Riksbank*** raises its repo rate by 0.05 percentage point to 8.20%.

30th March The ***Deutsche Bundesbank*** announces a reduction of the discount rate by 0.5 percentage point to 4%. In addition it announces that its next securities repurchase agreement will be offered at a fixed rate of 4.5% (allowing for a reduction of 0.35 percentage point) and that the following two securities repurchase agreements will be offered at a variable rate.

The ***Banque Nationale de Belgique*** announces a reduction of the discount rate by 0.5 percentage point to 4%, a reduction of its central rate by 0.6 percentage point to 5.25%, a reduction of its ordinary end-of-day rate by 0.6 percentage point to 7.25% and a reduction of its emergency lending rate by 0.5 percentage point to 9.5%.

De Nederlandsche Bank cuts the interest rate on advances by 0.5 percentage point to 4% and lowers the rate on special advances by 0.3 percentage point to 4.5%.

The ***Oesterreichische Nationalbank*** announces a reduction of the discount rate by 0.5 percentage point to 4.0% and a reduction in the lombard rate by 0.25 percentage point to 5.25%. It also lowers the GOMEX rate by 0.25 percentage point to 4.45%.

31st March The ***Greek Government*** lowers the interest rates on three-month, six-month and twelve-month Treasury bills by 0.25 percentage point to 15.25%, 16% and 16.75%, respectively.

The ***Bank of Greece*** lowers the overdraft rate on credit institutions' current accounts by 2 percentage points to 28%.

4th April The weighted average repo rate of the ***Banco de Portugal*** decreases by 1.822 percentage points to 9.290%.

Sveriges Riksbank raises its repo rate by 0.07 percentage point to 8.27%.

6th April

The ***Banque Nationale de Belgique*** lowers its central rate by 0.25 percentage point to 5% and its ordinary end-of-day rate by 0.5 percentage point to 6.75%.

Danmarks Nationalbank lowers its 14-day certificates of deposit rate by 0.25 percentage point to 6.75%.

The ***Banque de France*** lowers its 24-hour effective ceiling rate by 0.25 percentage point to 7.75%.

11th April

Sveriges Riksbank raises its repo rate by 0.07 percentage point to 8.34%.

12th April

The ***Banque Nationale de Belgique*** lowers its central rate by 0.25 percentage point to 4.75%. It also reduces the ordinary end-of-day rate by 0.5 percentage point to 6.25% and its emergency lending rate by 0.5 percentage point to 9%.

The ***Deutsche Bundesbank*** offers a securities repurchase agreement at variable rate, allowing for no change from the offer at a fixed rate of 4.5% the previous week.

De Nederlandsche Bank lowers the rate on special advances by 0.1 percentage point to 4.4%.

The weighted average repo rate of the ***Banco de Portugal*** decreases by 0.29 percentage point to 9.0%.

Sveriges Riksbank raises its deposit rate by 1 percentage point to 7.5% and its lending rate by 0.5 percentage point to 9.0%.

18th April

Sveriges Riksbank raises its repo rate by 0.07 percentage point to 8.41%.

19th April

The weighted average repo rate of the ***Banco de Portugal*** increases by 0.034 percentage point to 9.034%.

20th April

The ***Deutsche Bundesbank*** allows for a rise in its securities repurchase rate by 0.01 percentage point to 4.51%.

The ***Bank of Greece*** announces a reduction in its base deposit rate by 1 percentage point to 14%, with effect from 1st May 1995.

26th April

The weighted average repo rate of the ***Banco de Portugal*** decreases by 0.025 percentage point to 9.009%.

27th April

Danmarks Nationalbank lowers its 14-day certificates of deposit rate by 0.25 percentage point to 6.5%.

2nd May The *Greek Government* lowers the interest rates on three-month, six-month and twelve-month Treasury bills by 0.25 percentage point to 15%, 15.75% and 16.5%, respectively.

4th May The weighted average repo rate of the *Banco de Portugal* decreases by 0.005 percentage point to 9.004%.

8th May *De Nederlandsche Bank* lowers the rate on special advances by 0.1 percentage point to 4.3%.

12th May The *Bank of Greece* lowers the overnight intervention rate by 0.2 percentage point to 15.8%. It also holds a tender for one-month deposits resulting in a tender rate of 16.2%.

The weighted average repo rate of the *Banco de Portugal* increases by 0.017 percentage point to 9.021%.

15th May The *Banque Nationale de Belgique* cuts its central rate by 0.25 percentage point to 4.5% and its ordinary end-of-day rate by 0.25 percentage point to 6.0%.

17th May The *Greek Government* lowers the interest rate on twelve-month Treasury bills by 0.25 percentage point to 16.25%.

18th May *Danmarks Nationalbank* lowers its 14-day certificates of deposit rate by 0.15 percentage point to 6.35%.

19th May The weighted average repo rate of the *Banco de Portugal* decreases by 0.002 percentage point to 9.019%.

26th May The *Banca d'Italia* raises its discount and fixed-term advances (or lombard) rates by 0.75 percentage point to 9.0% and 10.5%, respectively.

The weighted average repo rate of the *Banco de Portugal* decreases by 0.023 percentage point to 8.996%.

30th May *De Nederlandsche Bank* lowers the rate on special advances by 0.1 percentage point to 4.2%.

2nd June The *Banco de España* raises its official 10-day repurchase agreement rate by 0.75 percentage point to 9.25%.

5th June The weighted average repo rate of the *Banco de Portugal* decreases by 0.062 percentage point to 8.934%.

6th June *Sveriges Riksbank* raises its repo rate by 0.25 percentage point to 8.66%.

7th June

The ***Deutsche Bundesbank*** allows for a fall in its securities repurchase rate by 0.01 percentage point to 4.5%.

8th June

The ***Banque Nationale de Belgique*** reduces its ordinary end-of-day rate and its emergency lending rate by 0.25 percentage point to 5.75% and 8.75%, respectively.

De Nederlandsche Bank lowers the interest rate on advances by 0.25 percentage point to 3.75%, and the rate on special advances by 0.1 percentage point to 4.1%.

Suomen Pankki announces that the minimum reserve system will be revised so that the minimum reserve requirement is based on a monthly average, with effect from 2nd October 1995. This change implies that banks will have to deposit the minimum reserves on their current accounts with Suomen Pankki and that the monthly average of daily balances must be at least as large as its minimum reserve requirement. Previously, the minimum reserves have been deposited monthly on special accounts at Suomen Pankki.

9th June

The ***Bank of Greece*** lowers its overnight intervention rate by 0.2 percentage point to 15.6%.

Suomen Pankki raises its tender rate by 0.25 percentage point to 6.0%.

12th June

The weighted average repo rate of the ***Banco de Portugal*** decreases by 0.033 percentage point to 8.901%.

16th June

The ***Bank of Greece*** lowers the tender rate for one-month deposits by 0.01 percentage point to 15.34%.

The weighted average repo rate of the ***Banco de Portugal*** decreases by 0.026 percentage point to 8.875%.

19th June

The weighted average repo rate of the ***Banco de Portugal*** increases by 0.024 percentage point to 8.899%.

22nd June

The ***Bank of Greece*** introduces 14-day variable rate reverse repo tenders (American auction) on government securities. The first tender results in a rate of 15.51%.

The ***Banque de France*** suspends its 24-hour repo facility and reintroduces the 5 to 10-day repo facility which had been suspended on 8th March 1995. The 5 to 10-day repo rate is set at 7.5%, which is 0.25 percentage point lower than the former 24-hour repo rate.

23rd June The ***Bank of Greece*** lowers its overnight intervention rate by 0.10 percentage point to 15.5%. It also raises the tender rate for one-month deposits by 0.02 percentage point to 15.36%.

26th June The weighted average repo rate of the ***Banco de Portugal*** increases by 0.013 percentage point to 8.912%.

29th June ***Sveriges Riksbank*** raises its deposit and lending rates by 0.5 percentage point to 8.0% and 9.5%, respectively, with effect from 5th July 1995.

4th July The weighted average repo rate of the ***Banco de Portugal*** increases by 0.002 percentage point to 8.914%.

Sveriges Riksbank raises its repo rate by 0.25 percentage point to 8.91%.

6th July ***Danmarks Nationalbank*** lowers its 14-day certificates of deposit rate by 0.15 percentage point to 6.2% and its official discount rate by 0.25 percentage point to 5.75%.

The ***Banque de France*** lowers its 5 to 10-day repo rate by 0.25 percentage point to 7.25%.

12th July The weighted average repo rate of the ***Banco de Portugal*** decreases by 0.028 percentage point to 8.886%.

13th July The ***Deutsche Bundesbank*** reduces the minimum reserve requirements on sight deposits from 5% to 2% and on savings accounts from 2% to 1.5%, with effect from 1st August 1995. It also announces that in future credit institutions will not be allowed to include their cash holdings when calculating holdings against reserve requirements.

19th July The weighted average repo rate of the ***Banco de Portugal*** decreases by 0.011 percentage point to 8.875%.

20th July The ***Banque de France*** lowers its 5 to 10-day repo rate by 0.25 percentage point to 7.0%.

26th July The weighted average repo rate of the ***Banco de Portugal*** increases by 0.008 percentage point to 8.883%.

27th July ***Danmarks Nationalbank*** lowers its 14-day certificates of deposit rate by 0.15 percentage point to 6.05%.

28th July The *Bank of Greece* announces a rise in the minimum reserve requirements from 9% to 11% of deposits held by credit institutions. It also announces that foreign currency deposits held at Greek credit institutions and credit institutions' liabilities in foreign currency will be subject to minimum reserve requirements. Furthermore, the Bank of Greece lowers its discount rate by 1 percentage point to 19.5%, the lombard rate by 1 percentage point to 23% and the key overdraft penalty rate by 1 percentage point to 27%.

2nd August The *Bank of Greece* raises its 14-day reverse repo rate by 0.54 percentage point to 16.05%.

3rd August *Danmarks Nationalbank* lowers its 14-day certificates of deposit rate by 0.15 percentage point to 5.9% and its official discount rate by 0.25 percentage point to 5.5%.

The *Banque de France* lowers its 5 to 10-day repo rate by 0.5 percentage point to 6.5%.

4th August The weighted average repo rate of the *Banco de Portugal* decreases by 0.007 percentage point to 8.876%.

9th August The *Banque Nationale de Belgique* lowers its central rate by 0.05 percentage point to 4.45% and its ordinary end-of-day rate by 0.05 percentage point to 5.7%.

The *Deutsche Bundesbank* allows for a fall in its securities repurchase rate by 0.05 percentage point to 4.45%.

11th August The *Bank of Greece* holds a tender for one-month deposits resulting in a lowering of the tender rate by 0.27 percentage point to 15.36%.

14th August The weighted average repo rate of the *Banco de Portugal* decreases by 0.008 percentage point to 8.868%.

16th August The *Bank of Greece* lowers its 14-day reverse repo rate by 0.79 percentage point to 15.26%.

18th August The *Bank of Greece* holds a tender for one-month deposits resulting in a lowering of the tender rate by 0.19 percentage point to 15.17%.

De Nederlandsche Bank lowers the interest rate on special advances by 0.1 percentage point to 4.0%.

21st August The weighted average repo rate of the *Banco de Portugal* decreases by 0.116 percentage point to 8.752%.

23rd August The ***Deutsche Bundesbank*** allows for a fall in its securities repurchase rate by 0.06 percentage point to 4.39%.

The ***Banque Nationale de Belgique*** lowers its central rate and its ordinary end-of-day rate by 0.05 percentage point to 4.4% and 5.65%, respectively.

24th August The ***Deutsche Bundesbank*** announces a reduction of its discount and lombard rates by 0.5 percentage point to 3.5% and 5.5%, respectively.

The ***Banque Nationale de Belgique*** lowers its discount rate by 0.5 percentage point to 3.5% and its emergency lending rate by 0.75 percentage point to 8.0%.

Danmarks Nationalbank reduces its 14-day certificates of deposit rate by 0.25 percentage point to 5.65% and its official discount rate by 0.5 percentage point to 5.0%.

The ***Central Bank of Ireland*** lowers its short-term lending facility rate by 0.25 percentage point to 7.0%.

De Nederlandsche Bank lowers its interest rate on advances by 0.25 percentage point to 3.5% and the rate on special advances rate by 0.1 percentage point to 3.9%.

The ***Oesterreichische Nationalbank*** announces a reduction of its discount rate by 0.5 percentage point to 3.5%. It also reduces its GOMEX rate by 0.1 percentage point to 4.35%.

25th August The ***Bank of Greece*** lowers its discount and lombard rates by 1 percentage point to 18.5% and 22%, respectively. It also reduces its overnight intervention rate by 0.3 percentage point to 14.9% and the tender rate by 0.13 percentage point to 14.94%.

28th August The weighted average repo rate of the ***Banco de Portugal*** decreases by 0.002 percentage point to 8.75%.

30th August The ***Deutsche Bundesbank*** allows for a fall in its securities repurchase rate by 0.09 percentage point to 4.3%.

The ***Banque Nationale de Belgique*** lowers its central rate and its ordinary end-of-day rate by 0.1 percentage point to 4.3% and 5.55%, respectively.

31st August The *Greek Government* lowers the interest rate on three-month Treasury bills by 0.7 percentage point to 13.8%, the interest rate on six-month Treasury bills by 0.95 percentage point to 14.3%, and the interest rate on twelve-month Treasury bills by 0.75 percentage point to 14.75%.

The *Banque de France* lowers its 5 to 10-day repo rate by 0.35 percentage point to 6.15%.

The *Oesterreichische Nationalbank* reduces its GOMEX rate by 0.1 percentage point to 4.25%.

1st September The *Bank of Greece* lowers its 14-day reverse repo rate by 0.14 percentage point to 15.04%.

6th September The *Deutsche Bundesbank* allows for a fall in its securities repurchase rate by 0.1 percentage point to 4.2%.

The *Banque Nationale de Belgique* lowers its central rate and its ordinary end-of-day rate by 0.1 percentage point to 4.2% and 5.45%, respectively.

7th September *Danmarks Nationalbank* reduces its 14-day certificates of deposit rate by 0.15 percentage point to 5.5%.

The *Oesterreichische Nationalbank* reduces its GOMEX rate by 0.1 percentage point to 4.15%.

13th September The *Deutsche Bundesbank* allows for a fall in its securities repurchase rate by 0.05 percentage point to 4.15%.

The *Banque Nationale de Belgique* lowers its central rate and its ordinary end-of-day rate by 0.05 percentage point to 4.15% and 5.4%, respectively.

The *Bank of Greece* raises its 14-day reverse repo rate by 0.08 percentage point to 15.12%.

15th September The *Bank of Greece* resumes tenders for one-month deposits. The tender results in a weighted average rate of 15.09%.

20th September The *Deutsche Bundesbank* allows for a fall in its securities repurchase rate by 0.03 percentage point to 4.12%.

The *Banque Nationale de Belgique* lowers its central rate and its ordinary end-of-day rate by 0.05 percentage point to 4.1% and 5.35%, respectively.

The *Bank of Greece* lowers its liquidity absorption rate by 1 percentage point to 14.9%.

21st September *De Nederlandsche Bank* lowers the rate on special advances by 0.1 percentage point to 3.8%.

The *Oesterreichische Nationalbank* reduces its GOMEX rate by 0.1 percentage point to 4.05%.

22nd September The *Bank of Greece* holds a tender for one-month deposits resulting in a lowering of the tender rate by 0.07 percentage point to 15.02%.

27th September The *Deutsche Bundesbank* allows for a fall in its securities repurchase rate by 0.04 percentage point to 4.08%.

The *Bank of Greece* lowers its 14-day reverse repo rate by 0.02 percentage point to 15.1%.

28th September *Danmarks Nationalbank* reduces its 14-day certificates of deposit rate by 0.1 percentage point to 5.4%.

30th September The *Greek Government* lowers the interest rate on three-month Treasury bills by 0.3 percentage point to 13.4%, the interest rate on six-month Treasury bills by 0.5 percentage point to 13.8%, and the interest rate on twelve-month Treasury bills by 0.5 percentage point to 14.25%.

2nd October The *Oesterreichische Nationalbank* introduces several changes in its operational framework; the overall and the individual refinancing ceilings at the central bank are lowered; the special refinancing facilities are incorporated into the normal standing facilities; overall and individual ceilings for the discount of trade bills are abolished; a ceiling for open market operations (partly for basic liquidity and partly for fine-tuning) is introduced, which will be offered by tender procedures.

4th October The *Deutsche Bundesbank* allows for a fall in its securities repurchase rate by 0.03 percentage point to 4.05%.

The *Banque Nationale de Belgique* lowers its central rate and its ordinary end-of-day rate by 0.05 percentage point to 4.05% and 5.30%, respectively.

5th October *Danmarks Nationalbank* reduces its 14-day certificates of deposit rate by 0.1 percentage point to 5.3%.

Suomen Pankki lowers its tender rate and its rate on banks' excess reserves by 0.5 percentage point to 5.5% and 3.5%, respectively. It also reduces the base rate by 0.25 percentage point to 5.0%, with effect from 1st November.

6th October The *Bank of Greece* holds a tender for one-month deposits resulting in an increase in the tender rate by 0.05 percentage point to 15.07%.

The *Banque de France* suspends its 5 to 10-day repo facility and replaces it with a 24-hour repo facility. The 24-hour repo rate is set to 6.15%, equal to the former 5 to 10-day repo rate.

9th October The *Banque de France* raises its 24-hour repo rate by 1.1 percentage points to 7.25%.

11th October The *Deutsche Bundesbank* allows for a fall in its securities repurchase rate by 0.02 percentage point to 4.03%.

13th October The *Bank of Greece* holds a tender for one-month deposits resulting in a lowering of the tender rate by 0.04 percentage point to 15.03%.

16th October The *Banque de France* lowers its 24-hour repo rate by 0.25 percentage point to 7.0%.

19th October *De Nederlandsche Bank* lowers the rate on special advances by 0.1 percentage point to 3.7%.

20th October The *Bank of Greece* holds a tender for one-month deposits resulting in a lowering of the tender rate by 0.05 percentage point to 14.98%.

25th October The *Bank of Greece* lowers its 14-day reverse repo rate by 0.04 percentage point to 15.06%.

27th October The *Bank of Greece* holds a tender for one-month deposits resulting in an increase in the tender rate by 0.18 percentage point to 15.16%.

31st October The *Greek Government* lowers the interest rate on three-month Treasury bills by 0.3 percentage point to 13.1%, the interest rate on six-month Treasury bills by 0.3 percentage point to 13.5%, and the interest rate on twelve-month Treasury bills by 0.25 percentage point to 14.0%.

1st November *Suomen Pankki* reduces its tender rate and its rate on banks' excess reserves by 0.5 percentage point to 5.0% and 3.0%, respectively.

2nd November The *Deutsche Bundesbank* allows for a fall in its securities repurchase rate by 0.01 percentage point to 4.02%.

The *Banque Nationale de Belgique* lowers its central rate and its ordinary end-of-day rate by 0.05 percentage point to 4.0% and 5.25%, respectively.

The *Banque de France* lowers its 24-hour repo rate by 0.4 percentage point to 6.6%.

6th November The weighted average repo rate of the *Banco de Portugal* increases by 0.001 percentage point to 8.751%.

8th November The *Deutsche Bundesbank* allows for a fall in its securities repurchase rate by 0.02 percentage point to 4.0%.

Danmarks Nationalbank reduces its 14-day certificates of deposit rate by 0.15 percentage point to 5.15% and its official discount rate by 0.25 percentage point to 4.75%.

9th November The *Banque de France* closes its 24-hour repo facility and reintroduces the 5 to 10-day repo facility which had been suspended on 6th October 1995. The 5 to 10-day repo rate is set at 6.35%, which is 0.25 percentage point lower than the former 24-hour repo rate.

13th November The weighted average repo rate of the *Banco de Portugal* decreases by 0.001 percentage point to 8.751%.

15th November The *Deutsche Bundesbank* allows for a fall in its securities repurchase rate by 0.02 percentage point to 3.98%.

16th November The *Banque de France* lowers its 5 to 10-day repo rate by 0.25 percentage point to 6.1% and its intervention rate by 0.2 percentage point to 4.8%.

De Nederlandsche Bank lowers its interest rate on advances by 0.25 percentage point to 3.25% and the rate on special advances by 0.1 percentage point to 3.6%.

20th November *Suomen Pankki* reduces its tender rate and its rate on banks' excess reserves by 0.25 percentage point to 4.75% and 2.75%, respectively.

22nd November The *Banque Nationale de Belgique* lowers its central rate and its ordinary end-of-day rate by 0.05 percentage point to 3.95% and 5.2%, respectively.

23rd November The *Deutsche Bundesbank* allows for a fall in its securities repurchase rate by 0.01 percentage point to 3.97%.

Danmarks Nationalbank reduces its 14-day certificates of deposit rate by 0.15 percentage point to 5.0%.

29th November *Suomen Pankki* reduces its base rate by 0.25 percentage point to 4.75%, with effect from 15th December.

The *Deutsche Bundesbank* allows its securities repurchase rate to rise by 0.01 percentage point to 3.98%.

30th November The *Oesterreichische Nationalbank* lowers the GOMEX rate by 0.1 percentage point to 3.95%.

7th December The *Banque de France* announces a reduction in its money market intervention rate by 0.1 percentage point to 4.7%.

13th December The *Bank of England* announces a reduction in its minimum lending rate by 0.25 percentage point to 6.5%.

14th December The *Deutsche Bundesbank* announces a reduction in its discount and lombard rates by 0.5 percentage point to 3.0% and 5.0%, respectively. In addition, it announces that the next three securities repurchase agreements will be offered at a fixed rate of 3.75% (allowing for a reduction of 0.23 percentage point). It also sets the M3 target range for 1996 at 4-7% compared with the previous range of 4-6%.

The *Banque Nationale de Belgique* lowers both its central rate and its ordinary end-of-day rate by 0.2 percentage point to 3.75% and 5.0%, respectively. It lowers the discount rate by 0.5 percentage point to 3.0% and the emergency lending rate by 1 percentage point to 7%.

Danmarks Nationalbank lowers its 14-day certificates of deposit rate by 0.25 percentage point to 4.75%. It reduces its discount rate from 4.75% to 4.25%.

De Nederlandsche Bank lowers the interest rate on advances by 0.5 percentage point to 2.75% and the rate on special advances by 0.2 percentage point to 3.4%.

The *Oesterreichische Nationalbank* announces a reduction in its discount rate by 0.5 percentage point to 3.0%.

15th December The *Bank of Greece* lowers its discount and lombard rates by 0.5 percentage point to 18.0% and 21.5%, respectively.

The *Banque de France* lowers its money market intervention rate by 0.25 percentage point to 4.45%.

The *Central Bank of Ireland* reduces its short-term lending facility rate by 0.5 percentage point to 6.5%.

19th December The *Oesterreichische Nationalbank* lowers the GOMEX rate by 0.2 percentage point to 3.75%.

The weighted average repo rate of the *Banco de Portugal* decreases by 0.25 percentage point to 8.5%.

Suomen Pankki reduces its tender rate and its rate on banks' excess reserves by 0.5 percentage point to 4.25% and 2.25%, respectively.

21st December The *Banque de France* lowers the 5 to 10-day repo rate by 0.25 percentage point to 5.85%.

22nd December The *Banco de España* reduces its official 10-day repurchase rate by 0.25 percentage point to 9.0%.

28th December *Danmarks Nationalbank* lowers its 14-day certificates of deposit rate by 0.15 percentage point to 4.6%.

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 of America

Currencies

BEF/LUF	Belgian/Luxembourg franc
DKK	Danish krone
DEM	Deutsche Mark
GRD	Greek drachma
ESP	Spanish peseta
FRF	French franc
IEP	Irish pound
ITL	Italian lira
NLG	Dutch guilder
ATS	Austrian schilling
PTE	Portuguese escudo
FIM	Finnish markka
SEK	Swedish krona
GBP	Pound sterling
JPY	Japanese yen
USD	US dollar

List of Published EMI Documents[1]

"The TARGET System (Trans-European Automated Real-time Gross settlement Express Transfer System; a payment system arrangement for Stage Three of EMU)", May 1995.

"The changeover to the single currency", November 1995.

"Progress towards convergence", November 1995.

"The role and functions of the European Monetary Institute", February 1996.

"Developments in EU payment systems in 1995", Working Group on EU Payment Systems, March 1996.[2]

"Payment systems in the European Union" (the "Blue Book", revised edition), Working Group on EU Payment Systems, April 1996.[3]

"Recent developments in the use of the private ECU: statistical review", Foreign Exchange Policy Sub-Committee, April 1996.[4]

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[1] *Documents published before April 1995 are listed in the EMI's first Annual Report.*
[2] *A report relating to developments in 1994 was released in February 1995.*
[3] *The first edition was published in September 1992.*
[4] *The first edition of this annual review was published in February 1991.*