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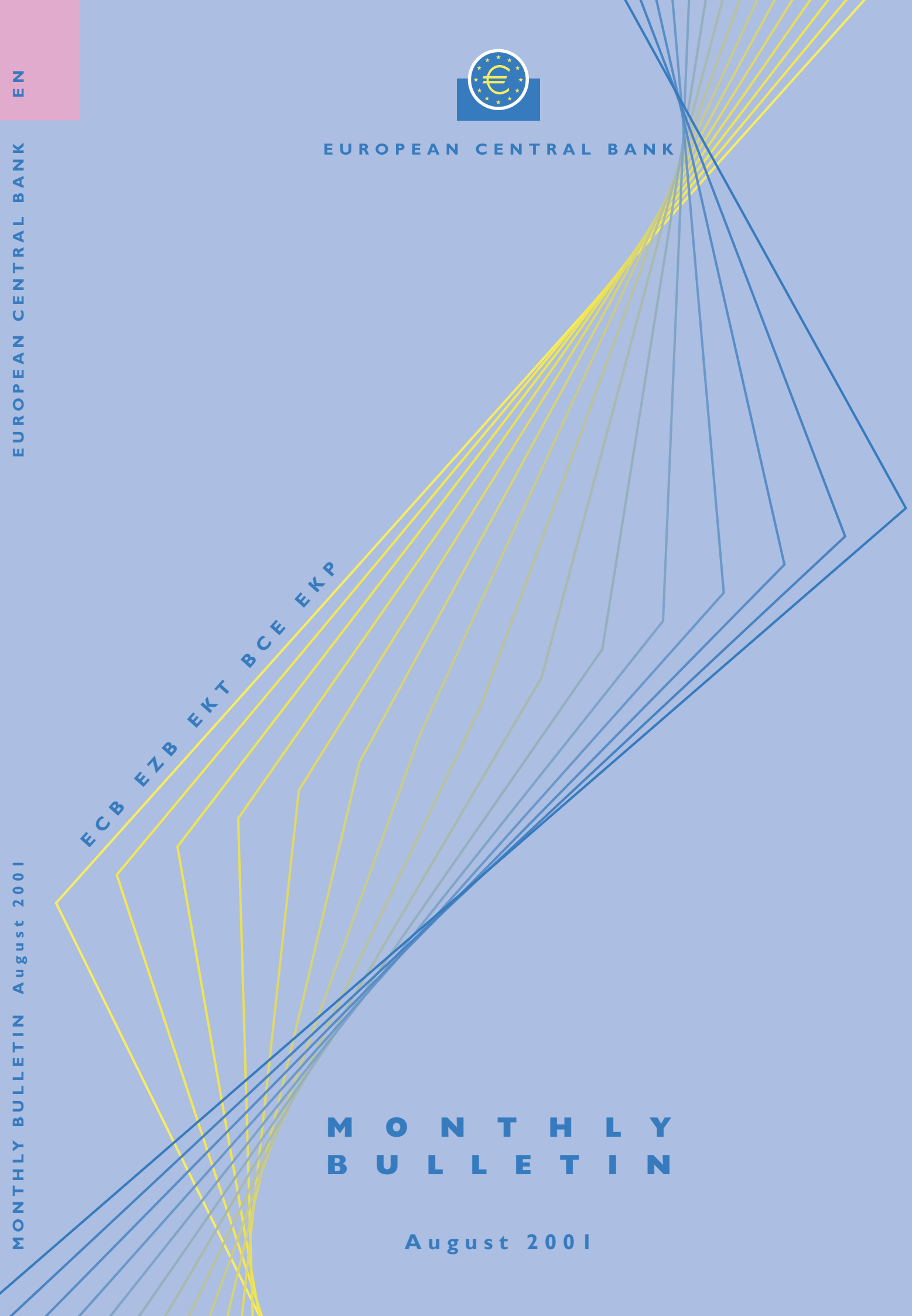
EUROPEAN CENTRAL BANK



MONTHLY BULLETIN

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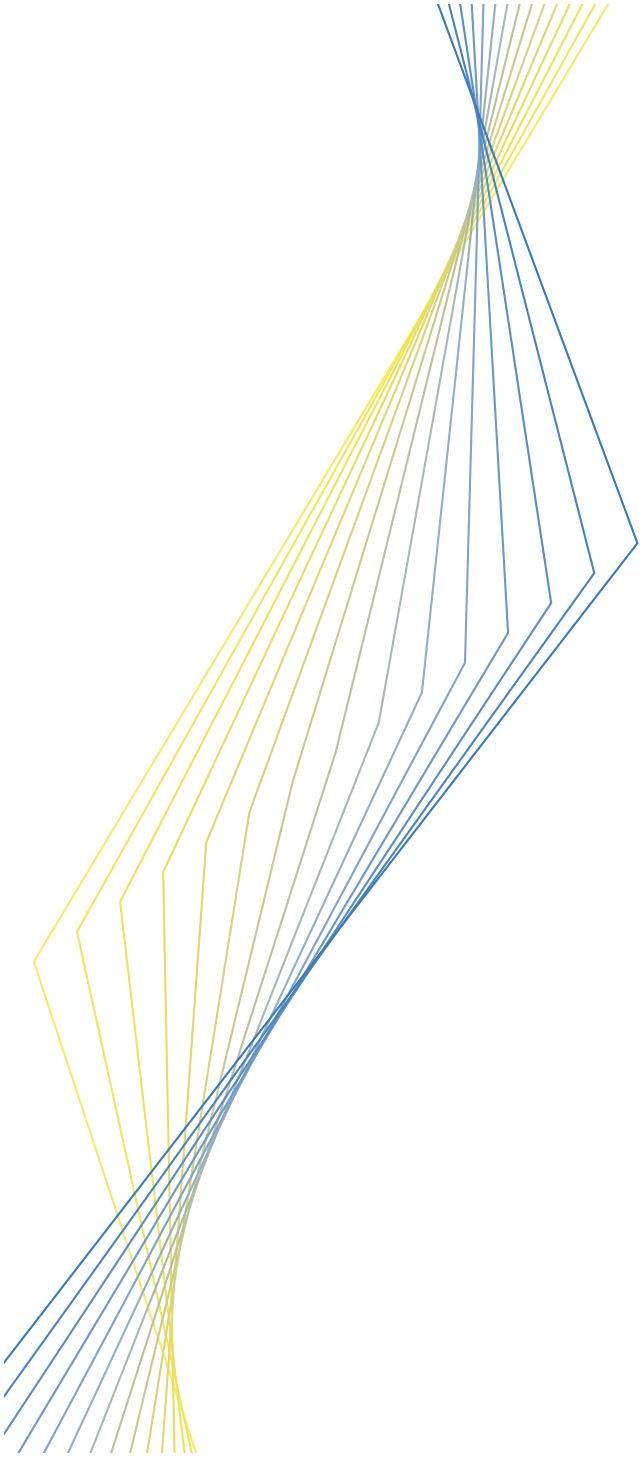

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Contents

Abbreviations

Countries

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

Others

BIS	Bank for International Settlements
BPM5	IMF Balance of Payments Manual (5th edition)
CDs	certificates of deposit
c.i.f.	cost, insurance and freight at the importer's border
CPI	Consumer Price Index
ECB	European Central Bank
ECU	European Currency Unit
EMI	European Monetary Institute
ESA 95	European System of Accounts 1995
ESCB	European System of Central Banks
EU	European Union
EUR	euro
f.o.b.	free on board at the exporter's border
GDP	gross domestic product
HICP	Harmonised Index of Consumer Prices
ILO	International Labour Organization
IMF	International Monetary Fund
MFIs	Monetary Financial Institutions
NACE Rev. 1	Statistical classification of economic activities in the European Community
NCBs	national central banks
repos	repurchase agreements
SITC Rev. 3	Standard International Trade Classification (revision 3)

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

Editorial

At its meetings on 19 July and 2 August 2001 the Governing Council of the ECB decided to leave the minimum bid rate on the main refinancing operations of the Eurosystem at 4.50%. The interest rates on the marginal lending facility and the deposit facility were also left unchanged at 5.50% and 3.50% respectively.

The current level of key ECB interest rates is considered appropriate to maintain price stability in the euro area over the medium term. This assessment is based on the analysis of the information provided under the two pillars of the ECB's monetary policy strategy.

With regard to the first pillar, the three-month average of the annual growth rates of M3 (adjusted for non-euro area residents' holdings of money market fund shares/units) increased to 5.3% in the period from April to June 2001, from 4.8% in the period from March to May. However, taking into account the upward distortion related to non-euro area residents' holdings of money market paper and debt securities with a maturity of up to two years (which is estimated at around three-quarters of a percentage point), the three-month average of the annual growth rates of M3 is broadly in line with the reference value of 4½%. The increase in M3 growth over recent months seems to have been driven by the effects on money demand of some factors which are likely to remain temporary, such as the increase in inflation, the gradual flattening of the yield curve and the uncertainty prevailing in the financial markets. Data which become available over the coming months will need to be analysed carefully to confirm this assessment. Overall, and also taking into account the slow but continued decline in the annual growth rate of loans to the private sector up to June 2001, the assessment related to the first pillar has remained broadly unchanged.

With regard to the second pillar, starting with economic activity, recent information on industrial activity and survey indicators suggest that economic growth in the second quarter of 2001 was weaker than in previous quarters. Real GDP growth in the first half of 2001 is therefore now expected to have been below the levels projected earlier, and this has implications for growth estimates for the year as a whole. The deceleration reflects, first, the global slowdown which seems to have significantly affected euro area exports and investment and, second, weaker than expected consumption growth, which may be in part related to the effects on real disposable income stemming from the increase in energy and food prices. There is, therefore, increased uncertainty surrounding economic growth in the euro area in the second half of 2001, especially in light of possible further effects of the deteriorating growth performances in several other regions of the world and of the potential impact of changes in confidence on domestic demand. However, the expected decline in consumer price inflation should contribute in the latter part of this year and particularly in 2002 to the recovery of consumption in the euro area. Further positive effects on euro area economic growth should stem from the impact of tax reductions in several euro area countries and the favourable financing conditions.

Turning to price developments, annual consumer price inflation in the euro area, as measured by the Harmonised Index of Consumer Prices (HICP), declined to 3.0% in June 2001, from 3.4% in May 2001, whereas the annual rate of increase in the HICP excluding unprocessed food and energy remained unchanged at 2.2%. Preliminary national data indicate that annual consumer price inflation in the euro area may have declined further in July 2001. While the level of inflation remains high, these developments confirm the view that the past increase in HICP inflation was, to a significant extent, the direct effect of temporary factors which should gradually unwind. The indirect effects of the past increases in import prices should also gradually decline, although they may continue to affect the dynamic of inflation for some time. The reduction in the annual rate of increase in producer prices in the euro area (especially for intermediate and energy

goods) supports this expectation. Recent euro area labour cost indicators show that wage moderation continued at the beginning of 2001.

In the absence of further unfavourable shocks, the decline in consumer price inflation is expected to continue, with possible temporary interruptions. This outlook is consistent with market expectations for euro area inflation. Against this background, and in light of the current cyclical situation and of wage behaviour so far, there are reasons to expect that wage moderation will continue. However, the risk that wage growth will be affected by past increases in HICP inflation still cannot be ruled out and, in light of upcoming wage negotiations, caution should be exercised.

Overall, given the current information under the two pillars, the present stance of monetary policy is considered appropriate to ensure price stability over the medium term. At the same time, there is a need to closely monitor developments that may affect this assessment.

At this juncture, it is important to recall the factors which best contribute to supporting sustainable economic growth in the euro area. Monetary policy will continue to focus on price stability in the medium term, thereby supporting the maintenance of a favourable environment for economic growth. A steady decline in inflation is crucial for the development of real disposable income and private consumption. Wage moderation will be an essential factor in overcoming the current slowdown, supporting economic growth over the longer term and, in particular, favouring employment growth. The governments of the euro area countries should contribute by conducting fiscal policy in line with the Stability and Growth Pact and by broadening and deepening structural reforms. The euro area economy would then be in the best position to withstand adverse shocks and should benefit from increasing long-term potential growth.

This issue of the Monthly Bulletin contains three articles. The first discusses the role of fiscal policies in enhancing growth in the long term and their effects on economic activity in the short term. The second article analyses why structural reforms aimed at increasing competition and reducing distortions in euro area goods and services markets are likely to have considerable economic benefits and lower the adjustment costs associated with economic shocks. Finally, the third article illustrates the process of consolidation in central counterparty clearing in the euro area.

Economic developments in the euro area

1 Monetary and financial developments

Monetary policy decisions of the Governing Council of the ECB

At its meetings on 19 July and 2 August 2001, the Governing Council of the ECB decided to leave the minimum bid rate in the main refinancing operations, conducted as variable rate tenders, at 4.50%. The interest rates on the marginal lending facility and the deposit facility were also kept unchanged, at 5.50% and 3.50% respectively (see Chart 1).

Further strengthening in the shorter-term dynamics of M3

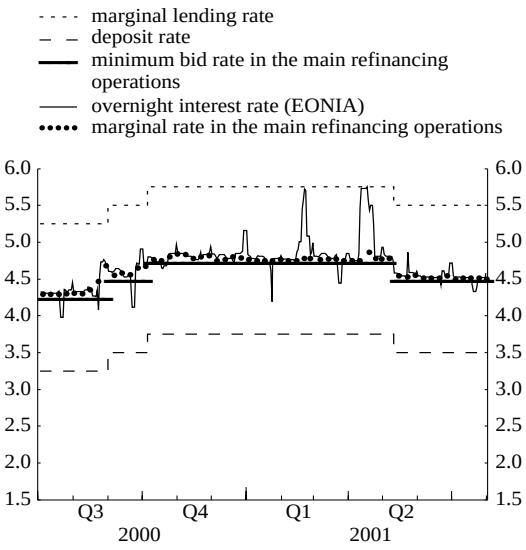
In June 2001 the annual growth rate of M3 rose to 6.1%, from 5.1% in the previous month[1] (see Chart 2). The three-month average of the annual growth rates of M3 for the period from April to June 2001 increased to 5.3%, from 4.8% in the period from March to May. According to preliminary indications, non-residents' holdings of money market paper and debt securities with a maturity of up to two years amount to around three-quarters of a percentage point of annual M3 growth. Hence, the three-month average of the annual growth rates of M3, if fully corrected for non-residents' holdings of negotiable instruments, would be broadly in line with the reference value of 4½%.

The increase in the annual rate of growth of M3 in June is partly related to a base effect, because the monthly decline in M3 in June

Chart 1

ECB interest rates and money market rates

(percentages per annum; daily data)

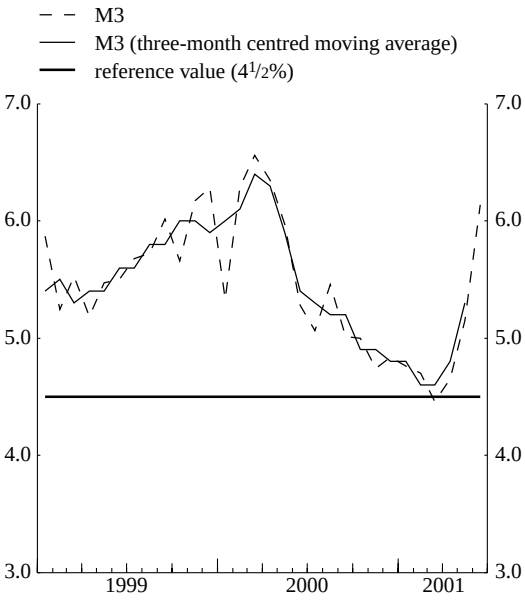


Sources: ECB and Reuters.

Chart 2

M3 growth and the reference value

(annual percentage changes; seasonally and calendar effect adjusted)



Source: ECB.

1 *From the June 2001 data onwards, the annual rates of growth for currency in circulation, overnight deposits, M1, short-term deposits other than overnight deposits (M2 - M1), M2, marketable instruments (M3 - M2) and M3 are calculated on the basis of data adjusted for seasonal and end-of-month calendar effects. Through this procedure, the annual growth rates reflect underlying patterns in a more accurate way than the annual growth rates based on unadjusted data. When the ECB first published monetary statistics, no sufficiently reliable and stable seasonally adjusted data were available. In the meantime, the ECB has developed the methodology for calculating these data (see the ECB report entitled "Seasonal adjustment of monetary aggregates and HICP for the euro area", August 2000) and now regards their quality to have been sufficiently tested. For further items of the consolidated balance sheet of the MFI sector, annual rates of growth calculated on the basis of seasonally and calendar adjusted data are under development.*

2000 is no longer included in the calculation of the annual rate of growth. At the same time, the shorter-term dynamics of M3 continued to strengthen. In June, the seasonally adjusted and annualised six-month growth rate of M3 increased further to 7.4%, compared with 6.8% in the previous month and 4.9% in December 2000. The increased money holdings of economic agents in nominal terms can at least in part be explained by the pick-up in inflation in 2000 and in the first half of 2001. In addition, in an environment characterised by the gradual flattening of the yield curve and uncertainties in the equity markets, economic agents tend to hold a comparatively high share of their portfolio in liquid assets. Finally, it has to be taken into account that M3 – if fully corrected for the estimated impact of non-residents' holdings of negotiable instruments – expanded at a rather subdued pace in late 2000 and early 2001, meaning that an increase in M3 growth was to be expected.

With regard to the components of M3, the annual growth rate of the narrow monetary aggregate M1 increased to 3.8%, from 2.9% in May (see Table 1). However, the developments in the two components of M1 differed markedly. The increase in the annual growth rate of M1 is solely related to the rise in the annual rate of growth of overnight deposits, while the rate of decline in currency in circulation became more pronounced. The increase in the annual growth rate of overnight deposits (to 5.6%, from 4.3% in the previous month) can largely be interpreted as a normalisation, following the exceptionally subdued expansion of overnight deposits in the second half of 2000 and in early 2001. The annual rate of change in currency in circulation amounted to -4.7%, having been -3.9% in May. This continuing decline of currency in circulation is likely to be connected to the forthcoming cash changeover to the euro. Euro area residents are reducing their holdings of banknotes and would appear to be shifting them largely to other secure and liquid assets included in M3. With regard to holdings outside the euro area of banknotes denominated in euro area currencies, the available evidence does not point to a considerable flowback of banknotes.

The annual growth rate of short-term deposits other than overnight deposits increased to 4.6% in June, from 4.1% in the previous month. The rate of decline in deposits redeemable at notice of up to three

Table 1

Summary table of monetary variables for the euro area

(annual percentage changes; quarterly averages)

	2000 Q4	2001 Q1	2001 Q2	2001 Mar.	2001 Apr.	2001 May	2001 June
Seasonally and calendar effect adjusted							
M1	5.7	2.6	2.3	1.6	1.4	2.9	3.8
Currency in circulation	1.9	-1.3	-3.2	-1.9	-2.5	-3.9	-4.7
Overnight deposits	6.5	3.5	3.5	2.3	2.2	4.3	5.6
M2 - M1 (= other short-term deposits)	2.2	3.4	4.4	4.3	4.8	4.1	4.6
M2	3.8	3.1	3.5	3.0	3.2	3.5	4.3
M3 - M2 (= marketable instruments)	11.4	14.7	14.4	12.9	13.5	14.8	17.3
M3	4.9	4.7	5.0	4.5	4.6	5.1	6.1
Unadjusted for seasonal and calendar effects							
Longer-term financial liabilities	6.1	4.5	3.8	4.7	3.8	3.6	3.3
Credit to euro area residents	6.4	6.0	5.9	5.8	5.8	5.9	6.1
Credit to general government	-6.0	-5.9	-3.6	-5.5	-4.6	-2.7	-1.5
of which: Loans to general government	-1.9	-0.1	-1.3	-0.3	-1.5	-1.4	-1.6
Credit to other euro area residents	10.5	9.9	8.9	9.4	9.1	8.6	8.4
of which: Loans to the private sector	9.6	9.1	8.2	8.7	8.4	8.0	7.8

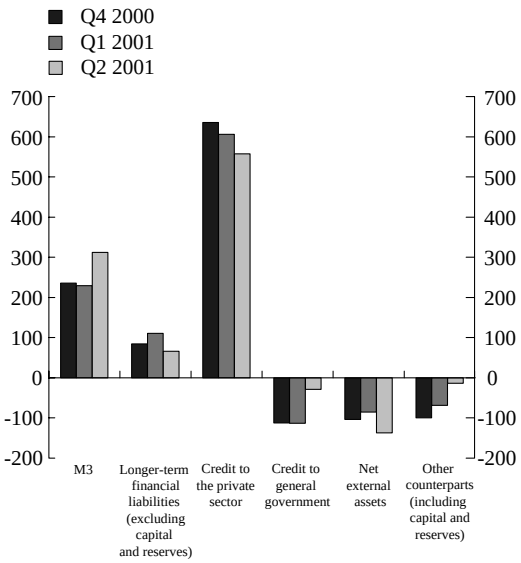
Source: ECB.

months (not adjusted for seasonal and calendar effects) became less pronounced and stood at -1.0% in June, compared with -2.3% in May, whereas the annual rate of growth of deposits with an agreed maturity of up to two years (not adjusted for seasonal and calendar effects) decreased slightly to 12.4%, from 12.7% in May. The annual rate of growth of marketable instruments continued to expand strongly to 17.3% in June, from 14.8% in May. The demand for these instruments might have been fostered by the uncertainty on the stock markets and by the gradual flattening of the yield curve which induced investors to further shift funds from longer-term financial assets to short-term monetary assets. This explanation is further supported by the continual weakening which is evident in the annual growth of longer-term MFI financial liabilities (to 3.3% in June, compared with 3.6% in the previous month (not adjusted for seasonal and calendar effects)).

Chart 3

Movements in M3 and its counterparts

(annual flows; EUR billions; not adjusted for seasonal and calendar effects)



Source: ECB.

Continuing moderation in the growth rate of loans to the private sector

Turning to the counterparts of M3, which are, again, not seasonally adjusted, in June the annual growth rate of credit granted to euro area residents increased slightly to 6.1%, from 5.9% in May. This was entirely attributable to a less pronounced annual rate of decline in credit to general government, of 1.5%, compared with 2.7% in May. However, there was a continued decline in the annual growth rate of credit to the private sector, to 8.4%, from 8.6% in the previous month (see Table 1 and Chart 3). The latter development was driven by the further moderation in the annual growth rate of loans to the private sector to 7.8%, from 8.0% in May. It is likely that the decline in the dynamics of loans to the private sector is partly related to the weakening of the impact of some of the special factors which fostered the demand for loans in 2000, such as merger and acquisition transactions and the interplay between booming housing markets and mortgage lending in some euro area countries. In addition, the moderation in economic activity and the decline in business confidence since the second half of 2000 may have had some dampening influence on the growth of loans.

Continued strong debt securities issuance in May 2001

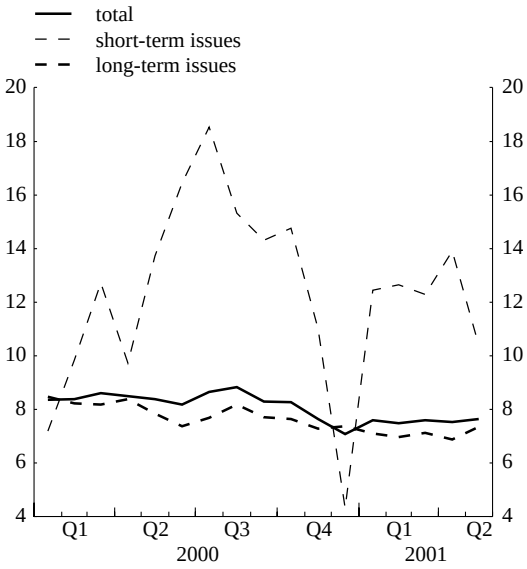
The annual growth of the amount outstanding of debt securities issued by euro area residents was little changed at 7.6% in May 2001, compared with 7.5% in the previous month. Underlying the slight change in this growth rate were a decrease in the annual growth of the amount outstanding of short-term debt securities, from 13.9% in April 2001 to 10.4% in May, and an increase in the annual growth of the amount outstanding of long-term debt securities, from 6.9% in April 2001 to 7.3% in May (see Chart 4).

The breakdown of the data by currency shows that the annual growth of the amount outstanding of euro-denominated debt securities issued by euro area residents, which had been rising since the beginning of

Chart 4

Amounts outstanding of debt securities issued by euro area residents

(annual percentage changes)



Source: ECB.

Note: From January 2001, euro area data include Greek data. For reasons of comparability, annual growth rates before January 2001 use data for the euro area plus Greece.

2001, decreased to 6.0% in May, compared with 6.4% in April. The share of gross issuance by euro area residents of debt securities denominated in euro continued to increase, reaching 95.1% in May, up from 94.1% in April.

The sectoral breakdown reveals that debt securities issuance slowed down in the MFI sector in May, whereas it increased within the corporate and public sectors. The annual growth of the amount outstanding of debt securities issued by MFIs was 6.2% in May 2001, compared with 7.9% in April. The decline in this growth rate was largely attributable to significant redemptions of short-term securities by the MFI sector. The latter may have been the result of a temporary decrease in the need for MFIs to fund themselves through securities issuance as a result of increasing growth in deposits over recent months combined with slower growth in loans from the MFI sector to the private sector in the euro area. The trend decline in restructuring activity in the financial sector may have also contributed to this decline in issuance activity. The issuance activity of non-monetary financial corporations rose in May 2001, with annual growth remaining high, at above 30%. The average annual growth of the amount outstanding of debt securities issued by non-financial corporations increased to 22.2% in May 2001, compared with 19.6% in April. A broad upward trend in this growth rate has been apparent over the past 12 months, despite less optimistic growth expectations, deteriorating business confidence and the slow decline in restructuring activity in the corporate sector. It may, however, have reflected difficult equity market issuing conditions, while corporate bond spreads, particularly at the higher end of the credit quality spectrum, have been narrowing since the start of 2001 (see Box 2).

In the public sector, the annual growth of the amount outstanding of debt securities issued by central government increased from 2.3% in April to 2.5% in May 2001, continuing the pattern of slightly rising growth rates which has been observed over the past two months. This increase seems to have been attributable to a combination of slightly deteriorating government balances in the euro area as a whole and a substitution from indirect to direct financing, as loans from the MFI sector to general government continued to decrease in May.

Retail bank interest rates declined in June 2001

Short-term retail bank interest rates continued to decline in June 2001 (see Chart 5). The average interest rates on deposits with an agreed maturity of up to one year declined by 9 basis points between May and June 2001, whereas rates on deposits redeemable at up to three months' notice declined by just 3 basis points. The rate on loans to enterprises with a maturity of up to one year fell by 7 basis points in the same period, suggesting some sluggishness in the pass-through of recent declines in three-month money market rates, which dropped

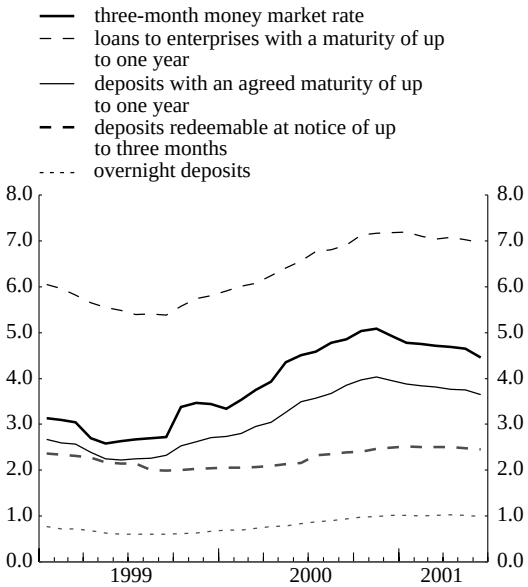
by around 20 basis points between May 2001 and June. Over the period between November 2000, when money market interest rates started to decline, and June 2001, the average rates on deposits as well as loans to enterprises both with maturities of up to one year declined by about 40 and 20 basis points respectively. At the same time, the interest rates on overnight deposits and on deposits redeemable at a period of notice of up to three months remained virtually unchanged, in line with the usual stickiness of these rates. Over the same period, the average three-month money market interest rate declined by a little more than 60 basis points.

There was also a decline in long-term retail bank interest rates between May and June 2001 (see Chart 6). During this period, the average rate on deposits with an agreed maturity of over two years declined by 2 basis points. In addition, the rates on loans to enterprises with a maturity of over one year and on loans to households for house purchase declined by 9 and 4 basis points respectively between May and June 2001. The decline in the latter, in particular, represented the continuation of a downward tendency evident since October 2000, interrupted only by slight increases in May 2001. Overall, recent developments in long-term retail rates have been in line with past experience of a relatively swift pass-through of developments in capital market rates to these retail bank interest rates.

Chart 5

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

(percentages per annum; monthly averages)

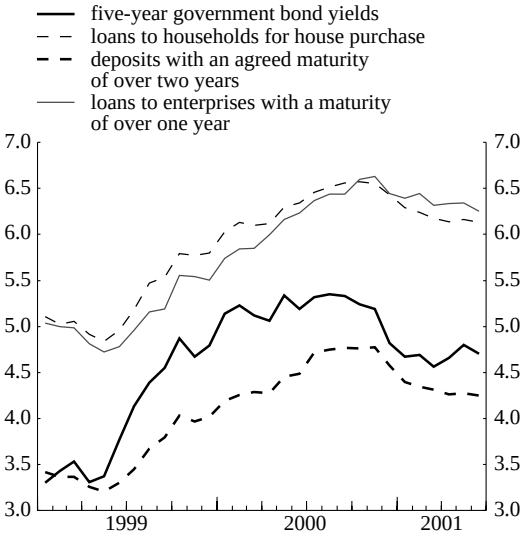


Sources: ECB aggregation of individual country data and Reuters.
Note: From 1 January 2001 onwards Greek data are also included.

Chart 6

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

(percentages per annum; monthly averages)



Sources: ECB aggregation of individual country data and Reuters.
Note: From 1 January 2001 onwards Greek data are also included.

Money market interest rates declined at the longer end of the curve

Money market rates at the shorter end of the money market yield curve remained broadly stable in the period between end-June and 1 August 2001, having declined significantly in earlier months. As interest rates declined at the longer end of the curve, the downward slope of the EURIBOR yield curve became more pronounced.

Box 1

Monetary policy operations and liquidity conditions in the reserve maintenance period ending on 23 July 2001

During the reserve maintenance period which lasted from 24 June to 23 July 2001, the Eurosystem settled four main refinancing operations (MROs) and one longer-term refinancing operation.

The MROs were carried out as variable rate tenders with a minimum bid rate of 4.50%. The allotted volumes ranged between €73 billion and €85 billion. The ratio of the amount bid to the volume allotted varied between 1.29 and 1.94, while the average for the reserve maintenance period was 1.70. With the exception of the first operation, where the marginal rate amounted to 4.54%, the marginal rates were 1 basis point above or at the level of the minimum bid rate. In all four operations the weighted average rates were 1 basis point above the marginal rates. The number of counterparties participating in the tenders ranged between 391 and 452, with an average of 424.

On 27 June, the Eurosystem conducted a longer-term refinancing operation through a variable rate tender with a pre-announced allotment volume of €20 billion. A total of 250 counterparties participated in this operation, submitting a total amount of bids of €44.2 billion. The marginal and the weighted average rates were 4.36% and 4.39% respectively.

The EONIA remained stable at around 4.55% during the first four days of the maintenance period, climbing up to 4.72% on 29 June owing to the end-of-semester effect. On 2 July the EONIA fell back to 4.54%, and during the following two and a half weeks it declined smoothly to reach 4.51% on 17 July. On 19 and 20 July it dropped to 4.41% and 4.33% respectively, driven by market expectations of a loose ending of the reserve maintenance period. On 23 July the maintenance period ended with an EONIA of 4.40% and a net recourse to the deposit facility of €3.5 billion.

The net liquidity-absorbing impact of the autonomous factors (i.e the factors not related to monetary policy) on the banking system's liquidity (item (b)) was €94.5 billion on average. The daily sum of autonomous factors fluctuated between €80.3 billion and €118.4 billion. The published estimates of average liquidity needs, stemming from autonomous factors, ranged between €86.6 billion and €106.4 billion, differing from the actual figures by an amount ranging from minus €2.3 billion to plus €2.3 billion.

Contributions to the banking system's liquidity

(EUR billions)

Daily average during the reserve maintenance period from 24 June to 23 July 2001

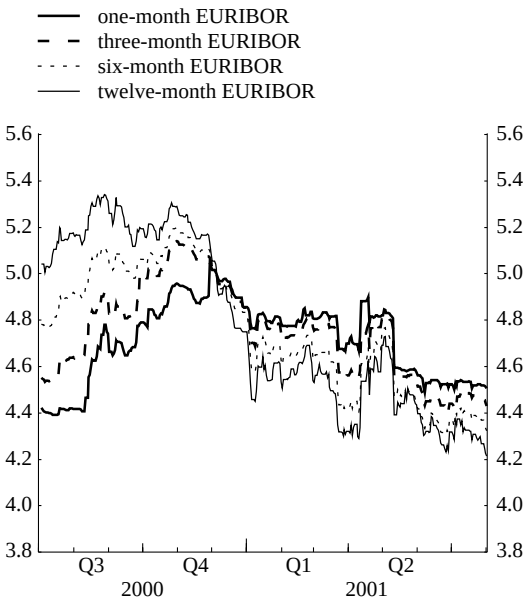
	Liquidity providing	Liquidity absorbing	Net contribution
(a) Monetary policy operations of the Eurosystem	**222.0**	**0.4**	**+ 221.6**
Main refinancing operations	161.9	-	+ 161.9
Longer-term refinancing operations	59.9	-	+ 59.9
Standing facilities	0.2	0.4	- 0.2
Other operations	0.0	0.0	0.0
(b) Other factors affecting the banking system's liquidity	**397.6**	**492.1**	**- 94.5**
Banknotes in circulation	-	350.8	- 350.8
Government deposits with the Eurosystem	-	42.5	- 42.5
Net foreign assets (including gold)	397.6	-	+397.6
Other factors (net)	-	98.8	- 98.8
(c) Credit institutions' holdings on current accounts with the Eurosystem (a) + (b)			**127.1**
(d) Required reserves			**126.4**

Source: ECB.
Totals may not add up due to rounding.

Chart 7

Short-term interest rates in the euro area

(percentages per annum; daily data)



Source: Reuters.

Money market rates at the shorter end of the curve remained practically unchanged in July. The EONIA fluctuated within a very narrow range just above the minimum bid rate of 4.50% and only fell below this level in the last few days of the maintenance period ending on 23 July on account of a perception among market participants that the liquidity situation was loose. The two-week rates remained in a close range around the minimum bid rate in the same period. In the main refinancing operations settled in July (see Box 1), the marginal and the average rates did not exceed the minimum bid rate by more than 2 basis points.

The one-month and three-month EURIBOR were almost unchanged between end-June and 1 August, and stood at 4.51% and 4.43% on 1 August (see Chart 7). The marginal and average rates in the longer-term refinancing operation settled on 26 July were very close to the prevailing three-month EURIBOR, at 4.39% and 4.42% respectively (3 basis points higher than in the previous longer-term refinancing operation settled on 28 June).

At the longer end of the curve, the six-month and twelve-month EURIBOR decreased between end-June and 1 August, to stand at 4.32% and 4.22% respectively on 1 August (5 and 10 basis points lower than the level at end-June). The downward slope of the yield curve, as measured by the difference between the twelve-month and the one-month EURIBOR, became steeper between end-June and 1 August, to stand at -29 basis points on 1 August.

While the three-month rate implied in futures prices on contracts with delivery dates in September 2001 displayed little change between end-June and 1 August, to stand at 4.24% on 1 August, the rate implied in futures prices on contracts with delivery dates in December 2001 and March 2002 declined by 16 and 20 basis points respectively, to stand at 4.05% and 3.95% on 1 August 2001.

Long-term bond yields declined in July

Following a slight overall decline in June, ten-year government bond yields in the euro area declined during July (see Chart 8). By 1 August 2001 the average euro area ten-year bond yield had dropped to just above 5.1%, which was about 20 basis points lower than the level observed at end-June. A more marked decline took place in US ten-year government bond yields, which declined by around 30 basis points during the same period, to just below 5.2%. Consequently, the spread between ten-year government bond yields in the United States and the euro area narrowed by about 20 basis points, to around nil.

In the United States, the drop in long-term government bond yields in July seemed to reflect lower long-term inflation expectations and additional market concerns about US growth prospects. In particular, the testimony by the Chairman of the Federal Reserve Board of Governors in the semi-annual Monetary Policy Report to Congress on 18 July was interpreted by market participants

as signalling a further deterioration in the pace of economic activity in the United States. However, it cannot be ruled out that the increased uncertainty in emerging markets also contributed to the decline in long-term bond yields. Developments in US index-linked bond markets suggest that the decline in nominal bond yields stemmed from lower long-term US inflation expectations and, to a lesser extent, lower economic growth expectations. The US ten-year break-even inflation rate dropped by around 20 basis points between end-June and 1 August, to around 1.8 percentage points. At the same time, the real yield of ten-year US index-linked bonds declined by around 10 basis points to 3.4%. The US yield curve flattened in July, with the spread between the ten-year government bond yield and the three-month interest rate decreasing from around 170 basis points to 150 basis points between the end of June and 1 August.

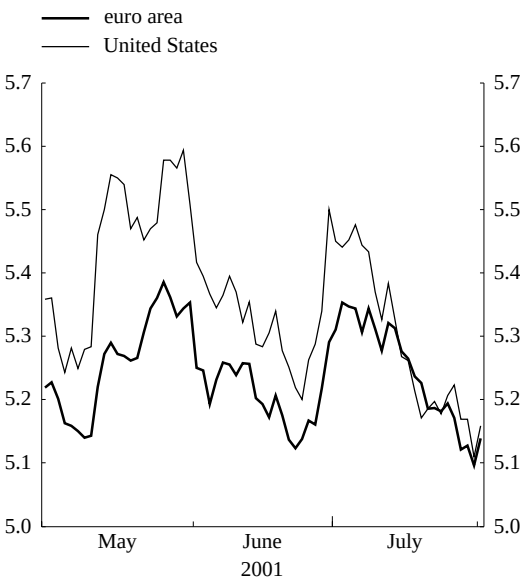
In Japan, the ten-year government bond yield increased by around 15 basis points between end-June and 1 August, to around 1.3%, close to the highest levels since end-April 2001. Although continuing uncertainty about the Japanese economic outlook, as also reflected in recent stock market developments, may have put downward pressure on long-term bond yields, this seems to have been countervailed by increasing concerns about the need for additional government debt issuance.

In the euro area, long-term government bond yields followed a declining path for much of July. These developments mainly reflected lower inflation expectations for the euro area owing in particular to the appreciation of the euro, further declines in oil prices and the decline in HICP inflation in June. This interpretation is supported by developments in the French index-linked bond market,

Chart 8

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

(percentages per annum; daily data)

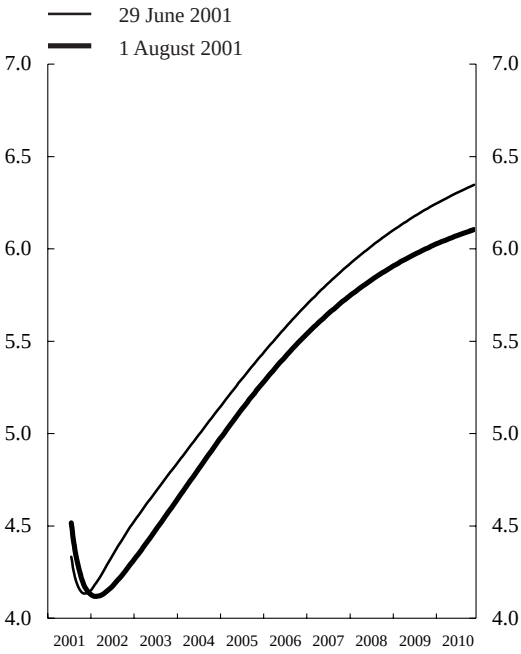


Source: Reuters.
Notes: Long-term government bond yields refer to ten-year bonds or to the closest available bond maturity. From 1 January 2001 onwards euro area data include Greek data.

Chart 9

Implied forward euro area overnight interest rates

(percentages per annum; daily data)



Source: ECB estimation. The implied forward yield curve, which is derived from the term structure of interest rates observed in the market, reflects the market expectation of future levels for short-term interest rates. The method used to compute these implied forward yield curves was outlined on page 26 of the January 1999 issue of the Monthly Bulletin. The data used in the estimation are derived from swap contracts.

where the ten-year break-even inflation rate fell by around 25 basis points between end-June and 1 August, to close to 1.35%, the lowest level since early April 2000. As always, developments in index-linked bond markets and break-even inflation rates should be interpreted with caution, as a number of well-known caveats related, inter alia, to the low liquidity of index-linked bond markets, may complicate the interpretation of their significance for the underlying fundamentals.

Given that euro area short-term interest rates remained broadly unchanged in July, the yield curve slope, when measured by the spread between the ten-year government bond yield and the three-month interest rate, flattened by around 15 basis points between end-June and 1 August, to around 70 basis points. Consequently by 1 August, the implied forward euro area overnight interest rate curve was maintaining its inverted shape at shorter horizons while remaining positively sloped at medium and long-term maturities (see Chart 9). Thus, although the yield curve points to some further slowdown in the pace of euro area economic activity in the period ahead, it also points to market expectations that growth will pick up at a fairly robust pace thereafter.

Box 2

Recent developments in corporate bond spreads

In the course of this year, the spreads of long-term corporate bond yields over government bond yields have been narrowing, notably in the United States. This process seems to have begun after the decision of the Federal Reserve to lower its target for the federal funds rate on 3 January 2001. Overall, by 1 August, the spread of long-term US AAA corporate bond yields over ten-year government bond yields had narrowed by 40 basis points compared with end-December 2000. Larger absolute declines took place at the lower ends of the US credit quality spectrum. In the euro area, corporate bond spreads have also been declining, albeit to a lesser degree.

Charts A and B show how euro area and US corporate bond spreads have evolved since January 2001. A notable feature of the recent narrowing of corporate bond spreads is that it has taken place in an environment

Chart A: Spreads between high-quality long-term corporate bond yields and government bond yields in the euro area and in the United States
(basis points per annum; daily data)

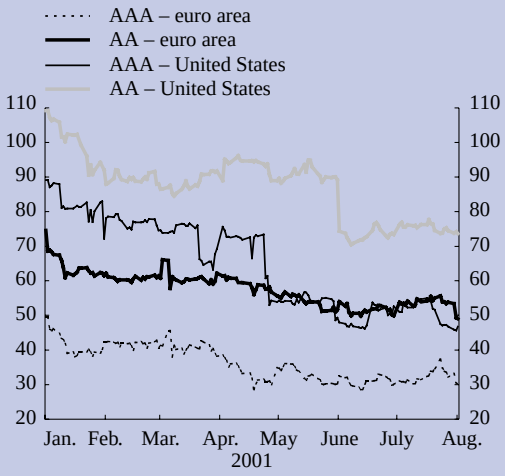
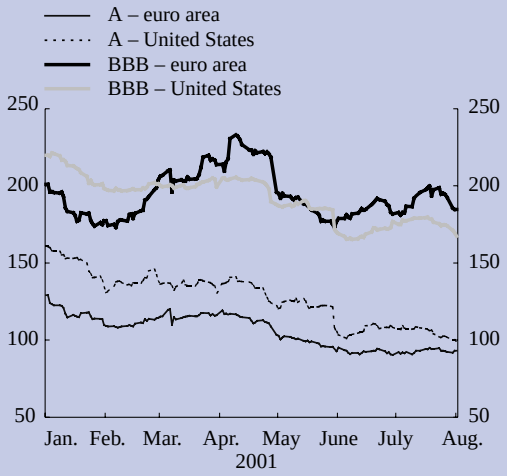


Chart B: Spreads between lower-quality long-term corporate bond yields and government bond yields in the euro area and the United States
(basis points per annum; daily data)



Sources: Bloomberg and ECB calculations.
Note: Corporate bond spreads are calculated as the difference between (seven to ten-year) corporate bond yields and (seven to ten-year) government bond yields, using the indices published by Merrill Lynch.

in which global economic activity has been slowing down, equity prices have dropped further owing to less optimistic corporate earnings prospects and corporate bond issuance has been robust, both in the United States and in the euro area. Typically, it might have been expected that in such an environment corporate bond spreads would have been under some upward pressure. For instance, corporate bond spreads widened in the early 1990s when the US economy was in recession. Corporate bond spreads also often widen during periods of financial market turbulence, as was the case in 1998 and again during the second half of 2000. Often such a widening is taken as a signal of a forthcoming slowdown. Hence, in order to interpret the recent narrowing against the background of weaker global economic growth, it is useful to consider the key factors which drive corporate bond spreads.

Corporate bond spreads can be decomposed into two main components: the market price of credit risk and the credit risk uncertainty premium. The market price of credit risk, and therefore corporate bond spreads, may decrease when the economic outlook is improving. In such circumstances, if market participants expect an improvement in a firm's earnings prospects, they will face a lower risk on their investment, as the corporation is unlikely to face difficulties in repaying its debt. Since default rates tend to decrease when the pace of economic activity accelerates, falling credit risk will, ceteris paribus, tend to cause corporate bond spreads to decline.

Corporate bond spreads also reflect uncertainty among bondholders. The credit risk uncertainty premium, and therefore corporate bond spreads, may decrease when the volatility of firms' earnings decreases. Even if expected average earnings remain unchanged, an increase in the regularity of earnings can render firms less vulnerable to financial distress.

Option-pricing theory can assist in decomposing corporate bond spreads into the aforementioned risk premia. In particular, linking them to other economic variables, such as implied stock market volatility, reveals the importance of uncertainty facing investors. For instance, there are strong theoretical reasons for expecting to find a link between corporate bond spreads and the volatility in equity prices. Such a link can be predicted by considering a firm's common stock to be a call option (i.e. an option to buy) on the net present value of the cash flows which are earned from the firm's assets (i.e. the value of the firm), with an exercise price (i.e. the purchase price) equal to the face value of the firm's debt. Correspondingly, debtholders can be thought of as having a short position (i.e. the sale of an asset which is not owned) on a put option (i.e. an option to sell), again with an exercise price equal to the debt's face value. Among other factors, the valuation of these options reflects the uncertainty about the future value of the underlying assets of the firm. When this uncertainty (i.e. the implied volatility) decreases, the value of the option decreases to the benefit of bondholders and to the disadvantage of shareholders.

The link to implied volatility can be understood if it is recognised that the payoff at maturity to a bondholder from holding a corporate bond resembles the payoff from holding a short position on a put option, where the underlying asset is the value of the firm and the exercise price is represented by the face value of the bond. If the value of the firm (the underlying asset) is lower than the value of the bond (exercise price) at the maturity of the bond, then shareholders will exercise their put option and default on the debt. Additionally, a decline in the volatility of the firm's value decreases the probability of default, thereby leading to a decline in the corporate bond spread. Thus, by lowering the value of the put option which corporate bondholders have granted to shareholders, decreased stock market volatility can lead to a tightening of corporate bond spreads.

It would appear that recent trends in corporate bond spreads, particularly at the lowest end of the credit quality spectrum, can be partly explained by implied stock market volatility. Charts C and D show that broad movements in credit spreads seem to have been in line with broad trends in stock market volatility. In particular, in both the euro area and the United States, corporate bond spreads have declined when volatility has decreased, and vice versa. Hence, although declines in stock prices since the start of 2001 would tend to

Chart C: Long-term corporate bond spreads in the euro area and EURO STOXX 50 implied volatility

(left-hand axis: basis points; right-hand axis: percentages per annum)

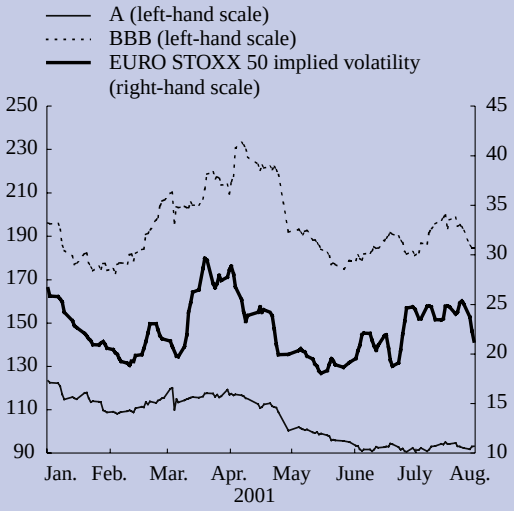
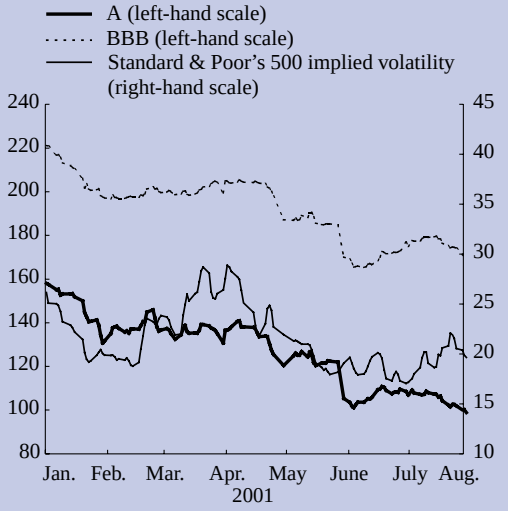


Chart D: Long-term corporate bond spreads in the United States and Standard &Poor's 500 implied volatility

(left-hand axis: basis points; right-hand axis: percentages per annum)



Source: Bloomberg.

suggest that market participants have lowered their expectations of corporate earnings growth, the drop in stock market volatility and narrowing of credit spreads would tend to suggest that they have lowered the degree of uncertainty surrounding their central expectations.

Although euro area corporate earnings have broadly been more favourable than in the United States in the first half of 2001, euro area corporate bond spreads have declined by less than in the United States, particularly at the lowest end of the credit quality spectrum. This seems partly attributable to the special circumstances which have prevailed in the case of some euro area companies which belong to the lower end of the credit quality spectrum. In particular, a large number of the companies in these rating categories belong to the telecommunications sector, which is heavily indebted owing to the high costs of financing UMTS licences.

Stock prices dropped further in July

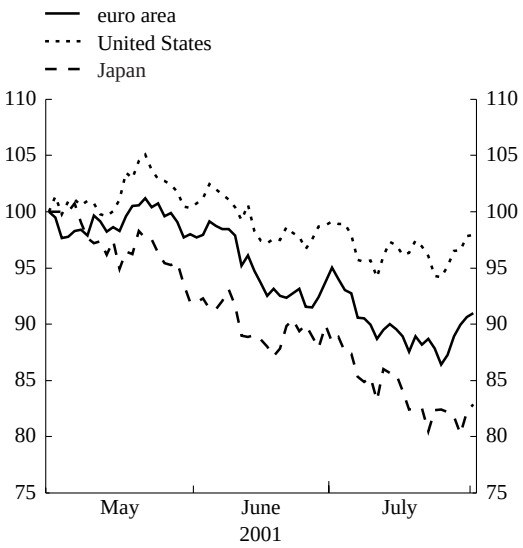
In a relatively volatile environment, stock prices in the euro area, the United States and Japan, as measured by the Dow Jones EURO STOXX, the Standard & Poor's 500 and the Nikkei 225 indices, all decreased between the end of June and 1 August (see Chart 10). Hence, there was a continuation of the decline which started in global stock markets towards the end of May 2001. The declines seemed to be largely attributable to reports of weak corporate earnings in the second quarter of 2001. Implied stock market volatility increased in all of the aforementioned stock market indices in July, reflecting increased uncertainty about the global economic outlook. The most marked increase in volatility took place in the euro area.

In the United States, the Standard & Poor's 500 index declined by 1% between the end of June and 1 August. Although, overall, corporate earnings reported for the second quarter of 2001 seemed to exceed market expectations, they were still very weak by historical standards. Moreover, a number of firms lowered their forecasts for earnings in the third quarter while uncertainty about the economic outlook seemed to increase. Developments in implied volatility derived from options on the Standard & Poor's 500 index increased slightly, bringing this measure

Chart 10

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

(index: 1 May 2001 = 100; daily data)



Source: Reuters.
Notes: Dow Jones EURO STOXX broad (stock price) index for the euro area, Standard & Poor's 500 for the United States and Nikkei 225 for Japan. From 1 January 2001 onwards euro area data include Greek data.

back to levels more typical of those seen over the past two years.

In Japan, stock prices fell by 8% between the end of June and 1 August, and on 30 July the Nikkei 225 index reached the lowest level seen since the first half of the 1980s. It would appear that this marked decline in Japanese stock prices was mainly attributable to continuing uncertainties regarding the economic situation and concerns about the bad loans problem in the banking sector. Implied volatility on the Nikkei 225 index increased, remaining at levels higher than those in either the euro area or the United States and also above the average levels for the past two years.

In the euro area, conditions in the stock market were relatively volatile and the Dow Jones EURO STOXX index declined by 3% between the end of June and 1 August. Reports of corporate earnings for the second quarter of 2001 seemed, in general, to be lower than anticipated, especially in the technology sector. Stock prices declined in most sectors, suggesting that this further drop reflected, to a large extent, expectations of moderate economic growth. However, as in June, the technology sector index showed the largest decline – more than 7% between the end of June and 1 August – of all economic sector indices. The increase in implied stock market volatility derived from options on the Dow Jones EURO STOXX 50 index was more pronounced than for the broad indices in the United States and in Japan. This may signal a higher degree of uncertainty in the stock market about the outlook for corporate profitability in the euro area.

2 Price developments

Lower HICP inflation in June 2001 due to developments in energy prices

According to Eurostat, and in line with expectations, the annual rate of inflation in the euro area fell in June to 3.0% compared with 3.4% in May. This 0.4 percentage point decline in inflation was almost entirely due to a significant fall in the contribution of energy prices. When data for Greece are included in the base year (2000) over which the year-on-year rate is calculated, the fall in inflation was marginally smaller (0.3 percentage point to 3.1% in June 2001, see Table 2). By contrast with the decline in overall inflation, the annual rate of increase in the HICP excluding energy and unprocessed food prices, also including Greece in the base period, remained at 2.2% in June 2001, i.e. unchanged compared with May.

The annual rate of increase in the energy component declined to 5.5% in June 2001, down from 8.6% in May 2001, and thereby continued the broad tendency towards a lower contribution of energy prices to overall inflation compared with the situation in 2000 (see Chart 11). The latest decline was mainly the consequence of the base effect associated with the strong increase in energy prices between May and June 2000. In addition, the slight decrease in the energy price level from May to June 2001 also contributed to this decline. The decrease in euro-denominated oil prices from €32.5 per barrel in June 2001

Table 2

Price and cost developments in the euro area

(annual percentage changes, unless otherwise indicated)

	1998	1999	2000	2000 Q3	2000 Q4	2001 Q1	2001 Q2	2001 Feb.	2001 Mar.	2001 Apr.	2001 May	2001 June	2001 July
Harmonised Index of Consumer Prices (HICP) and its components													
Overall index	1.2	1.1	2.4	2.5	2.7	2.6	3.2	2.6	2.6	3.0	3.4	3.1	.
of which:													
Goods	0.7	0.9	2.7	2.9	3.2	2.8	3.5	2.9	2.8	3.3	3.8	3.4	.
Food	1.7	0.6	1.4	1.9	2.2	3.2	5.0	3.0	3.9	4.3	5.2	5.4	.
Processed food	1.5	1.0	1.2	1.2	1.4	2.0	2.8	2.1	2.2	2.6	2.8	3.1	.
Unprocessed food	2.0	0.1	1.7	3.1	3.5	5.2	8.4	4.5	6.5	7.1	9.0	9.1	.
Industrial goods	0.2	1.0	3.4	3.4	3.8	2.6	2.8	2.8	2.3	2.9	3.2	2.4	.
Non-energy industrial goods	1.0	0.7	0.7	0.6	1.1	1.3	1.5	1.3	1.3	1.5	1.6	1.6	.
Energy	-2.6	2.3	13.4	13.7	13.8	7.2	7.3	8.3	5.6	7.9	8.6	5.5	.
Services	2.0	1.6	1.7	1.8	1.8	2.3	2.5	2.3	2.3	2.4	2.5	2.6	.
Other price and cost indicators													
Industrial producer prices [1]	-0.7	-0.4	5.4	5.8	6.1	4.5	.	4.5	4.2	4.2	3.7	.	.
Unit labour costs [2]	0.2	1.3	1.1	1.2	1.7	2.0	.	-	-	-	-	-	-
Labour productivity [2]	1.2	0.9	1.3	1.1	0.5	0.2	.	-	-	-	-	-	-
Compensation per employee [2]	1.5	2.2	2.5	2.3	2.1	2.2	.	-	-	-	-	-	-
Total hourly labour costs [3]	1.7	2.3	3.5	3.6	3.2	3.1	.	-	-	-	-	-	-
Oil prices (EUR per barrel) [4]	12.0	17.1	31.0	33.7	34.5	28.4	31.7	29.9	28.1	29.8	32.7	32.5	29.4
Commodity prices [5]	-12.5	-3.1	18.1	18.0	16.4	1.4	-0.9	1.7	-0.8	-1.1	-4.0	2.5	-1.0

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

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

1) Excluding construction.

2) Whole economy.

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

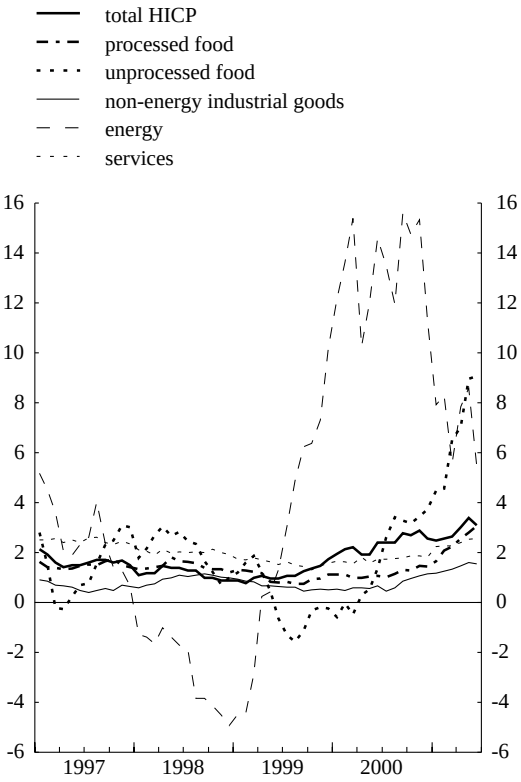
4) Brent Blend (for one-month forward delivery). In ECU up to December 1998.

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

Chart 11

Breakdown of HICP inflation in the euro area by component

(annual percentage changes; monthly data)



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

to €29.4 in July points to a further fall in the annual rate of increase in energy prices in July 2001. Looking further ahead, while there is always a large degree of uncertainty associated with current oil price developments, in September 2001 the annual increase in energy prices should again benefit substantially from the base effect associated with the very strong increase in energy prices registered in September 2000. However, further developments in energy prices are not likely to be smooth from month to month, as the underlying base effects are not evenly distributed.

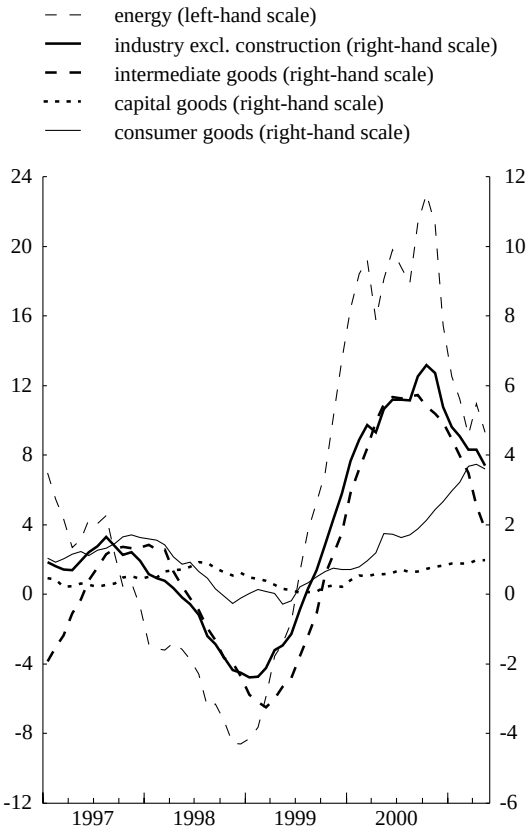
By contrast with developments in energy prices, the annual rate of increase in food prices rose further in June. This reflected higher rates of increase in both unprocessed and processed food components. However, while the annual rate of increase in processed food prices rose significantly, by 0.3 percentage point, to stand at 3.1% in June 2001, the annual rate of increase in unprocessed food prices increased only a little further, i.e. by 0.1 percentage point to 9.1%. This suggests that the very strong upward pressure on food prices observed in the first five months of the year – mainly associated with BSE and foot-and-mouth disease – may be starting to ease. In particular, meat prices, one of the main unprocessed food items affected by these factors, remained roughly unchanged in June compared with the previous month.

Turning to developments in the other components of the HICP, following a steady

Chart 12

Breakdown of industrial producer prices for the euro area

(annual percentage changes; monthly data)



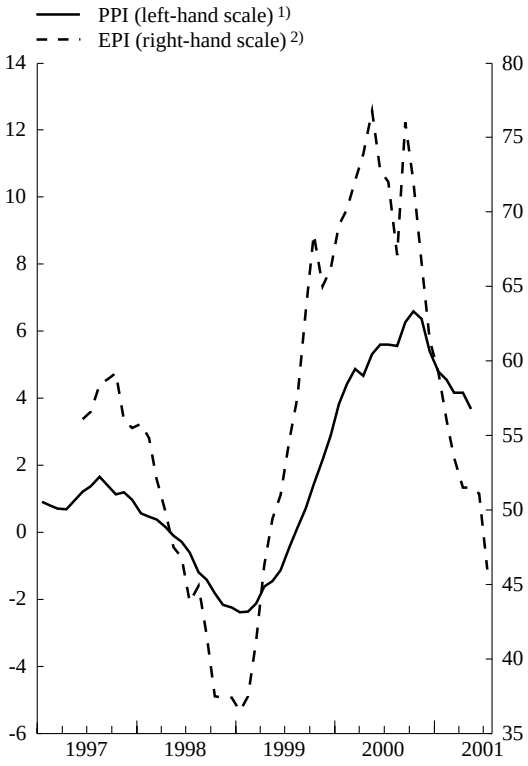
Source: Eurostat.
Note: Data refer to the Euro 12 (including periods prior to 2001).

upward movement over the past year, the annual change in non-energy industrial goods prices stood at 1.6% in June 2001, i.e. unchanged compared with May. However, services price increases continued their gradual upward movement with their annual rate of change rising from 2.5% in May to 2.6% in June 2001. Looking ahead, future inflation developments are likely to gradually reflect an easing of the upward pressure associated with the past increases in import prices in 1999 and 2000. This supports the expectation of a gradual, though uneven, decline in the overall HICP inflation over the rest of the year and in 2002.

Chart 13

Overall producer prices and manufacturing input prices for the euro area

(monthly data)



Sources: Eurostat and Reuters.
Note: When available, data refer to the Euro 12 (including periods prior to 2001).

1) *Producer Price Index; annual percentage changes; excluding construction.*
2) *Eurozone Price Index; manufacturing input prices from the Purchasing Managers' Survey. An index value above 50 indicates an increase in manufacturing input prices, whereas a value below 50 indicates a decrease.*

Further decline in the annual rate of change in producer prices in May 2001

Continuing the downward trend observed since October 2000, the annual rate of increase in overall producer prices in the euro area declined further to reach 3.7% in May 2001 from 4.2% in April. This was mainly due to lower price increases at the early stages of production – in particular for energy and intermediate input costs (see Chart 12). As explained in detail in Box 3, Eurostat has recently applied the new harmonised definition of the main industrial groupings to the producer price data for the euro area. The main relevant change is that energy prices are now a separate category, whereas previously they had to a large extent been included in intermediate goods prices.

Considering likely developments in producer prices after May 2001, the slight decline in euro-denominated oil prices observed in June should have exerted a further downward impact on the annual rate of change. Consistent with this, there was a further decline in the Eurozone Price Index, which measures the costs of inputs in the manufacturing sector (see Chart 13). Overall, these developments continue to support the view that recent energy and intermediate input price developments should result in a gradual easing of the upward pressures on prices further along the chain of production.

Continued moderate wage increases in the first quarter of 2001

The latest information on labour costs – which refers to the first quarter of 2001 – shows a continuation of the moderate wage increases observed for 2000 as a whole. The annual rate of increase in compensation per employee stood at 2.2% in the first quarter of 2001, representing a 0.1 percentage point increase compared with the previous quarter, but in line with the average rate of increase for 2000 as a whole. Growth in unit labour costs increased to 2.0% year-on-year in the first quarter of 2001, up 0.3 percentage point

from 1.7% in the last quarter of 2000. This increase was mainly due to the cyclical slowdown in labour productivity.

By contrast with these labour cost indicators, the annual growth in total hourly labour costs stood at 3.1% in the first quarter of 2001. However, developments in this indicator may still be affected by the working time reduction in France and other statistical effects associated with the reduction in working days in 2000 (see Box 3 in the February 2001 issue of the ECB Monthly Bulletin).

Overall, wage developments have remained moderate and continue to support the view that consumer price inflation will fall in the second half of 2001 and early 2002. However, a number of wage negotiations are scheduled to take place over the remainder of this year, and therefore close monitoring will be required with a view to assessing any risks to price stability arising from wage developments.

Box 3

Release of harmonised statistics for main industrial groupings in short-term statistics

In implementing the EU Council Regulation concerning short-term statistics, Eurostat, in co-operation with the Member States, has started to apply new and harmonised definitions of the main industrial groupings for the publication of industrial short-term statistics[1]. The main industrial groupings refer to a breakdown of the industry sector (excluding construction) into the "intermediate goods industry", "capital goods industry", "durable" as well as "non-durable consumer goods industry", and "energy". There is a long practice of regularly publishing sub-aggregates for the industrial sector according to the end use of the products. However, since the composition of these sub-aggregates differed across countries, the results were not fully comparable, which had implications also for the respective aggregates for the euro area, calculated by Eurostat from national data. Eurostat is, however, now able to compile harmonised euro area-wide sub-aggregates calculated from more detailed information on economic activities according to the NACE Rev.1 classification. Eurostat will implement the harmonised definition for all short-term industrial indicators. The new breakdown is also used in the "Euro area statistics" section of this Monthly Bulletin in Tables 4.2 and 5.2, starting from this issue.

An important change in the classification of sub-aggregates is that energy activities are now excluded from the intermediate goods industry and reported separately. In the index for industrial production (excluding construction) it accounts for a weight of 12.1%; as a result of this change the intermediate goods industry accounts for 36.1% of the total and remains the component with the greatest weight. Important activities such as the manufacture of cars and computers are now completely allocated to the capital goods industry. Previously, some countries split these items between capital and the durable consumer goods sectors. This explains the significant increase in the weight of the capital goods industry and the smaller weight for the durable consumer goods industry. The revised shares of the capital goods and durable consumer goods industry are 25.2% and 4.4% respectively. The revised share of non-durable consumer goods industry is 22.2%.

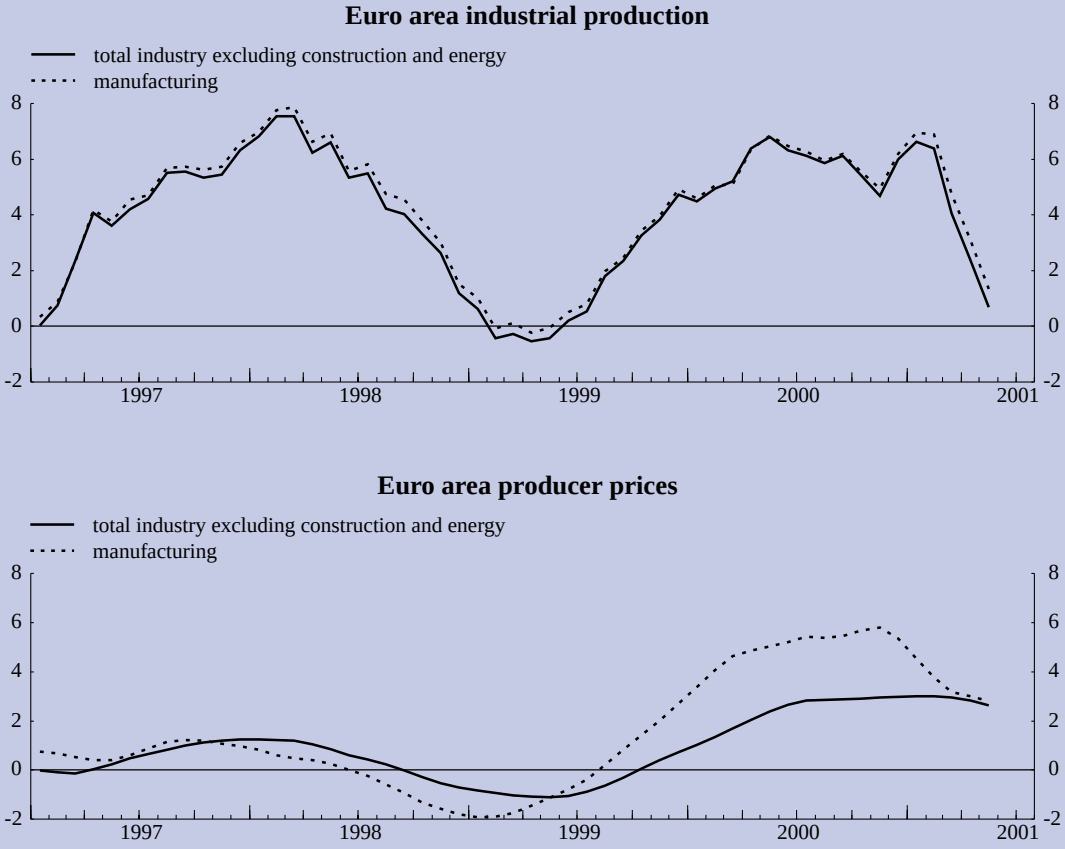
It should be noted that the coverage of "industry excluding construction and energy" – which corresponds to the total of the intermediate, capital and consumer goods industry – differs somewhat from the coverage of the conventional definition of manufacturing. One difference is that whereas the manufacture of coke, refined petroleum products and nuclear fuel is part of "manufacturing", it is now included under "energy" and thus is not part of "industry excluding construction and energy". Moreover, the "mining and quarrying of non-energy producing materials" is now included in "intermediate goods" and thus comes under "industry excluding construction and energy", whereas it is not included in "manufacturing". Reflecting the widespread use of the term "manufacturing" in economic discussion and analysis, in the future the ECB Monthly Bulletin will report

1 See also Commission Regulation (EC) No. 586/2001 of 26 March 2001.

data for both total industry excluding construction and energy, and the conventional manufacturing sector. While the differences between these two series are generally limited as regards the respective industrial production indices, they may be quite pronounced for the respective producer price indices (see the charts below). In particular, the strong increase in energy prices since early 1999 has led to higher output price increases in manufacturing (which includes the manufacture of coke and petroleum) than in industry excluding construction and all energy activities. Moreover, the recent increases in intermediate goods prices are now much smaller, following the exclusion of energy.

Euro area industrial production and producer prices

(annual percentage changes in three-month moving average)



Sources: Eurostat and ECB calculations.

3 Output, demand and labour market developments

First quarter real GDP growth revised slightly upwards, but domestic demand remained weak

According to Eurostat's second estimate, euro area real GDP growth was 0.6% quarter-on-quarter in the first quarter of 2001 (see Table 3), 0.1 percentage point higher compared with the first release. In terms of quarter-on-quarter growth rates, real GDP growth has thus been broadly constant since the third quarter of 2000. However, the year-on-year rate of growth fell from 3.8% to 2.6% between the second quarter of 2000 and the first quarter of 2001.

While the second estimate incorporated only a slight upward revision to quarter-on-quarter GDP growth, there have been more significant revisions to the main components

Table 3

Composition of real GDP growth in the euro area

(percentage changes, unless otherwise indicated; seasonally adjusted)

	Annual rates [1]								Quarterly rates [2]				
	1998	1999	2000	2000 Q1	2000 Q2	2000 Q3	2000 Q4	2001 Q1	2000 Q1	2000 Q2	2000 Q3	2000 Q4	2001 Q1
Real gross domestic product	2.9	2.5	3.4	3.5	3.8	3.3	2.9	2.6	0.9	0.8	0.6	0.6	0.6
of which:													
Domestic demand	3.5	3.1	2.8	2.8	3.4	2.9	2.4	1.7	0.8	0.8	0.3	0.4	0.1
Private consumption	3.1	3.0	2.6	2.6	3.2	2.5	2.1	1.8	0.6	0.9	0.2	0.3	0.4
Government consumption	1.0	1.5	1.9	2.0	2.2	1.7	1.9	1.4	0.9	0.3	0.1	0.6	0.4
Gross fixed capital formation	5.1	5.2	4.5	5.6	5.0	4.1	3.5	1.4	1.6	0.7	1.0	0.2	-0.4
Changes in inventories [3), 4)]	0.4	0.0	0.0	-0.3	0.0	0.2	0.0	0.1	-0.1	0.1	0.0	0.1	-0.1
Net exports [3)]	-0.6	-0.5	0.6	0.8	0.4	0.5	0.6	0.9	0.2	0.0	0.3	0.2	0.5
Exports [5)]	7.1	4.8	11.8	12.2	11.8	11.7	11.6	8.5	2.9	2.3	2.9	3.0	0.1
Imports [5)]	9.6	6.8	10.6	10.3	11.0	10.8	10.4	6.3	2.6	2.6	2.3	2.5	-1.2
Real gross value added:													
Agriculture and fishing [6)]	1.6	2.4	0.3	0.9	-0.1	0.7	-0.1	0.6	-1.0	-0.5	1.6	-0.2	-0.3
Industry	2.5	1.4	3.7	4.1	3.9	3.5	3.3	2.4	1.7	0.4	0.5	0.5	0.9
Services	3.1	2.9	3.6	3.5	3.7	3.6	3.5	3.0	1.0	0.8	0.8	0.8	0.6

Sources: Eurostat and ECB calculations.
Note: Data refer to the Euro 12 (including periods prior to 2001).
1) Annual rates: percentage change compared with the same period a year earlier.
2) Quarterly rates: percentage change compared with the previous quarter.
3) As a contribution to real GDP growth; in percentage points.
4) Including acquisitions less disposals of valuables.
5) Exports and imports cover goods and services and include internal cross-border trade in the euro area. Intra-euro area trade is not cancelled out in import and export figures used in national accounts. Consequently, these data are not fully comparable with balance of payments data.
6) Also includes hunting and forestry.

of GDP. As discussed in more detail in Box 4, revisions to the components are typically larger than the revisions to aggregate GDP, which have not been particularly large in more recent data releases. Compared with Eurostat's initial estimate for the first quarter of 2001, two points are worth highlighting in the second estimate. First, growth in investment and imports was revised upwards, from -0.9% to -0.4% and from -1.5% to -1.2% respectively. Second, the profile of consumption growth has been somewhat modified. The quarter-on-quarter growth rates now display a gradual increase: 0.2% and 0.3% in the third and fourth quarters of 2000 and 0.4% in the first quarter of 2001 (compared with 0.2%, 0.2% and 0.3% respectively in the previous release). However, in comparison with the first half of 2000 this still represents a significant slowdown, attributable primarily to the influence of adverse price developments.

Final domestic demand is now estimated to have contributed around 0.2 percentage point to quarter-on-quarter real GDP growth in the first quarter of 2001, while the net trade contribution is now estimated to have been 0.5 percentage point. Changes in inventories contributed negatively (-0.1 percentage point) to real GDP growth. Overall, the fact that quarter-on-quarter real GDP growth in the first quarter of 2001 was unchanged compared with the previous quarter reflects essentially the sharp decline in imports, while domestic demand remained weak.

Box 4

Revisions to quarterly national accounts data for the euro area

The successive releases of quarterly national accounts for the euro area by Eurostat include revisions to data previously published. These revisions improve the reliability of national accounts estimates but, at the same time, draw attention to the fact that national accounts data for recent quarters should be interpreted with some caution. This box discusses the main sources and the extent of revisions to euro area national accounts.

Several sources of revisions may be identified. First, some euro area countries do not yet report national accounts on a quarterly basis. Eurostat uses information from annual national accounts as it becomes available. Second, the geographical coverage of official national data increases over time. Quarterly data for individual euro area countries are not published at the same point in time. As a result, Eurostat estimates quarterly national accounts for the euro area as a whole on the basis of data available at the time. This information is complemented with estimates for countries that have not yet published data for the most recent quarters. Third, national accounts estimates in the individual countries are based on a wide range of information sources. The information set used for the compilation of national accounts increases over time, which is typically reflected in revisions to past data. Fourth, seasonal and working day adjustment factors are regularly revised, implying related changes to the published numbers. Overall, new and revised estimates at the country level usually imply revisions of euro area figures, both for the latest reported quarter and previous ones.

The table below shows the size of the revisions to quarter-on-quarter growth of real GDP and its components and some average characteristics observed for revisions since the first quarter of 1999.

Revisions between first and current estimates

(in percentage points of quarter-on-quarter growth unless otherwise indicated; seasonally adjusted)

	Most recent quarters					Sample period: 1999 Q1 – 2001 Q1			
	2000				2001	Average growth	Revisions		
	Q1	Q2	Q3	Q4	Q1		Average of absolute revisions	Number of revisions [1]	Maximum revisions
GDP	0.2	-0.1	-0.1	-0.1	0.0	0.8	0.2	5/3	0.4
Private consumption	0.6	-0.1	-0.2	-0.1	0.1	0.6	0.2	4/4	0.6
Government consumption	-0.1	0.3	-0.1	-0.1	0.0	0.4	0.1	2/5	0.4
Gross fixed capital formation	-0.5	0.7	-0.4	-0.2	0.6	0.9	0.6	5/3	1.2
Exports	-0.3	-1.2	-0.1	-0.4	0.0	2.3	0.8	4/4	2.3
Imports	-0.6	-1.6	-1.3	-0.7	0.3	2.0	1.0	5/4	2.5
Net trade [2]	-0.1	0.2	0.4	0.1	-0.1	0.2 [3]	0.2	6/3	0.7
Changes in inventories [2]	0.2	-0.4	-0.3	-0.1	0.0	0.1 [3]	0.3	2/6	0.7

Sources: Eurostat and ECB calculations based on rounded growth rates.
1) The first figure indicates the number of upward revisions and the second the number of downward revisions.
2) Contribution to quarter-on-quarter GDP growth.
3) Average of absolute values.

Revisions to overall real GDP have been limited in recent quarters

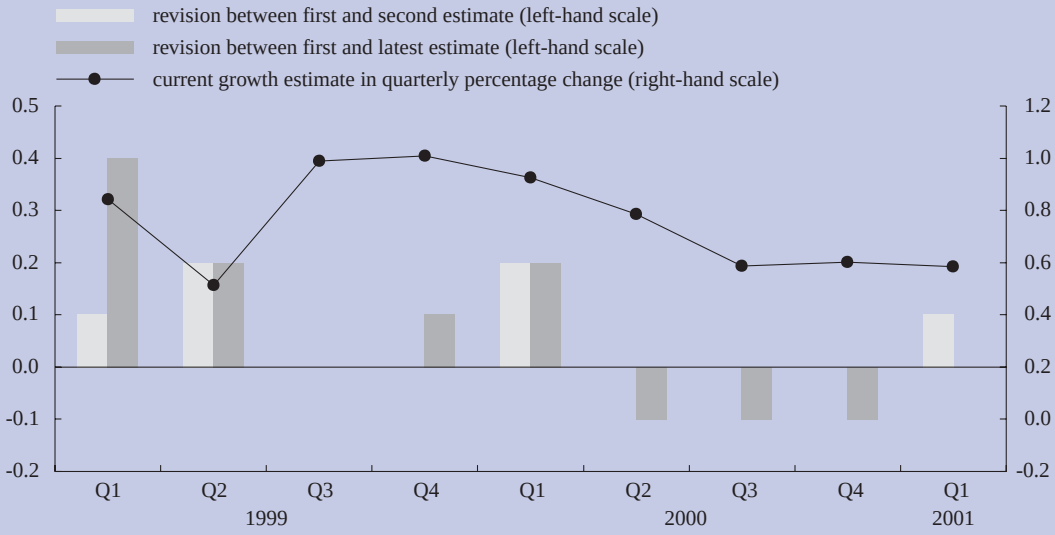
Data on quarter-on-quarter real GDP growth in the euro area have been revised upwards or downwards by 0.2 percentage point on average since the first quarter of 1999. In the four quarters up to the first quarter of this year, revisions have been smaller, between zero and 0.1 percentage point. Of course, further revisions to these data may occur in future releases, as a more comprehensive information set becomes available. However, two factors may have contributed to improving the accuracy of early GDP estimates. First, the geographical coverage has been higher in recent releases, especially for Eurostat's first estimate, at around 80%, compared with 60-70% previously (for the second estimate, data covering around 95% of the euro area are available). Data on real GDP for more euro area countries are now available within 70 days after the end of the quarter of reference, as specified in the September 2000 Action Plan on EMU Statistical Requirements (see the article entitled "Assessment of general economic statistics for the euro area" in the April 2001 issue of the Monthly

Bulletin for a presentation of the Action Plan and an example of publication lags in euro area countries). Second, the revisions due to the use of new definitions and methods implied by the introduction of ESA 95 by national statistical institutes as of the beginning of 1999 become smaller as the implementation process is completed in most countries.

GDP growth estimates do not seem to be biased as the number and the size of upward and downward revisions have been broadly equal. Moreover, there seems to be no systematic link between the sign and the size of revisions and actual GDP growth (see the chart below).

Estimates of GDP growth

(percentage point difference unless otherwise indicated)



Sources: Eurostat and ECB calculations based on rounded growth rates.

Revisions to the components of real GDP remain substantial

Revisions to the components of real GDP have been larger on average than those for overall GDP. This is partly accounted for by lower geographical coverage (at around 60% for Eurostat's first release and 85% for the second), notwithstanding the fact that for some components fluctuations are typically larger than those for GDP as a whole. In addition, estimates of GDP components tend to be generally less reliable. However, as for GDP as a whole, no specific bias has been observed.

As regards estimates of growth in *private consumption*, revisions have been generally limited to below 0.2 percentage point. In some cases, however, revisions have been larger, such as in the first quarter of 2000, where the difference between the first and current estimate (at 0.6 percentage point) is as large as the average quarter-on-quarter growth rate in private consumption observed since the beginning of 1999. Revisions to data on *gross fixed capital formation* have averaged 0.6 percentage point in absolute values (the average quarter-on-quarter growth rate in investment is 0.9%). Revisions to growth in *exports and imports* have been even larger, averaging 0.8 and 1.0 percentage point respectively. When compared with their average growth rate, these revisions are of a similar size to those of investment. Revisions to the contribution of net trade to GDP growth have been more limited, since euro area exports and imports comprise large shares of intra-area trade which tend to cancel each other out when the balance is compiled, although relatively large revisions have been observed in some quarters. Finally, revisions to the contribution of *changes in inventories* to GDP growth have been significant, frequently in the range of 0.2 to 0.4 percentage point. Early inventory estimates are

particularly unreliable as little statistical information is available and they are often compiled so as to balance the discrepancies appearing between the expenditure and output measures of GDP.

Overall, revisions to data on euro area real GDP growth have been limited, especially in the most recent releases. However, revisions to the components of GDP tend to be larger. Besides having accurate estimates of GDP growth, knowing its composition is essential as it affects the analysis of the prospects for growth and inflation. Further improvement can be expected in the future as the geographical coverage of the first estimate rises with increased availability of timely national estimates in line with the requirements of the EMU Action Plan.

Industrial production declined further in May 2001

Industrial production (excluding construction) fell by 0.1% month-on-month in May 2001, following a decline of 0.7% in April (see Table 4). The year-on-year growth rate was also negative in May 2001, at -0.1%, for the first time since May 1999. Production in the manufacturing sector followed a similar pattern, falling by 0.2% month-on-month in May 2001, after a decline of 1.3% in April. On a year-on-year basis, manufacturing output fell in May 2001, by 0.6%, for the first time since May 1999. Output developments in the manufacturing sector reflect the impact of the slowdown in foreign demand together with the weakness of euro area domestic demand.

As explained in Box 3 above, the latest release of industrial production figures also introduced an important change in the classification of industrial sectors based on harmonised definitions for the main industrial groupings. The changes in the composition and weights of the sectors for intermediate, capital and consumer goods arising from this harmonisation did not, however, alter the general picture. In this respect, developments in the main industrial groupings continue to display somewhat contrasting patterns. In the intermediate goods and capital goods sectors production in May 2001 showed a moderate

Table 4

Industrial production in the euro area

(annual percentage changes, unless otherwise indicated)

	1999	2000	2001 Mar.	2001 Apr.	2001 May	2001 Mar.	2001 Apr.	2001 May	2000 Dec.	2001 Jan.	2001 Feb.	2001 Mar.	2001 Apr.
						month-on-month			three-month moving averages				
Total industry excluding construction	2.0	5.6	2.8	1.1	-0.1	-0.3	-0.7	-0.1	1.4	1.1	-0.3	-0.7	-1.1
by main industrial groupings:													
Total indus. excl. construction and energy[1)]	1.8	5.9	2.8	0.4	-1.1	-0.5	-1.6	-0.1	1.7	2.2	-1.0	-1.9	-2.7
Intermediate goods	1.6	5.9	1.1	-0.2	-2.3	-0.8	-1.8	0.1	1.6	0.8	-1.4	-2.2	-2.6
Capital goods	2.3	9.0	5.6	1.2	0.4	-0.3	-2.0	0.3	2.1	2.7	0.7	-1.1	-2.2
Consumer goods	1.6	2.7	2.5	0.2	-0.9	0.1	-0.6	-0.2	0.6	0.6	-0.1	0.0	-0.3
Durable consumer goods	1.2	6.2	1.9	-2.9	-5.1	0.3	-1.9	-0.8	0.9	0.8	-1.0	-1.3	-2.1
Non-durable consumer goods	1.7	1.9	2.7	0.9	0.0	0.1	-0.4	-0.1	0.6	0.6	0.1	0.3	0.0
Energy	1.7	1.5	-2.2	1.5	3.2	-1.7	2.4	0.7	-1.8	-0.4	0.6	1.6	1.4
Manufacturing	2.0	6.0	3.4	1.1	-0.6	-0.2	-1.3	-0.2	2.1	1.8	-0.9	-1.4	-2.0

Sources: Eurostat and ECB calculations.

Notes: Annual percentage changes are calculated using data adjusted for variations in the number of working days; percentage changes on the previous month and three-month centred moving averages against the corresponding average three months earlier are calculated using seasonally and working day adjusted data. Data refer to the Euro 12 (including periods prior to 2001).

1) Manufacturing excluding manufacture of coke and refined petroleum products, but including non-energy mining and quarrying activities.

increase month-on-month, while it declined in the consumer goods sector. The slight increase in the growth rate of the capital goods sector in May 2001 was mainly driven by one sector, namely radio and telecommunication equipment. In the three-month period from March to May 2001, production in the intermediate and capital goods sectors decreased by 2.6% and 2.2% respectively compared with the December to February period. Production in the consumer goods sector fell by 0.2% month-on-month in May 2001 following a 0.6% fall in April. Output of both durable and non-durable consumer goods continued to decline, although the decrease in the non-durable consumer goods sector was less pronounced.

Industrial and consumer confidence declined in June 2001

As reported earlier, according to the European Commission Business Survey, euro area industrial confidence continued to fall in June 2001 and available country data suggest that it may have declined further in July (see Table 5). The Purchasing Managers' Index (PMI) for the euro area fell further to 47.3 in July from 47.9 in June. It remains therefore under the threshold of 50, which would signal a decline in manufacturing production. Overall, the evidence provided by the available industrial surveys would suggest that there has been a further decrease in industrial output in the course of the past few months (see Chart 14).

As reported earlier, consumer confidence in the euro area fell in June 2001 for the second consecutive month and, according to available national data, may have fallen again in July. The decline in consumer confidence over the past few months is likely to reflect the slowdown in the pace of unemployment reduction since the beginning of 2001 and past increases in inflation. Nevertheless, confidence has remained at relatively high levels.

The volume of retail sales decreased slightly by 0.1% in May 2001 following a rise of 0.5% in April. In the three-month period from March to May 2001, retail sales were up 0.3% compared with the December to February period. The year-on-year increase was 0.5%, down from 2.6% in January 2001.

Table 5

Results from European Commission Business and Consumer Surveys for the euro area

(seasonally adjusted data)

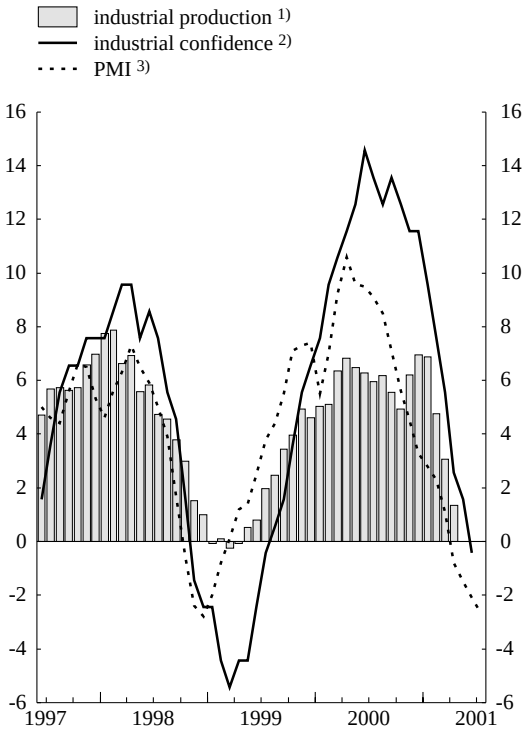
	1998	1999	2000	2000 Q3	2000 Q4	2001 Q1	2001 Q2	2001 Jan.	2001 Feb.	2001 Mar.	2001 Apr.	2001 May	2001 June
Economic sentiment index [1]	2.9	0.1	1.6	-0.3	-0.9	-0.6	-1.1	-0.2	-0.4	-0.5	-0.2	-0.4	-0.7
Consumer confidence indicator [2]	6	8	10	10	8	9	7	10	9	9	9	7	6
Industrial confidence indicator [2]	6	0	12	14	12	8	2	10	8	6	3	2	0
Construction confidence indicator [2]	2	14	22	23	20	19	17	21	18	18	18	18	15
Retail confidence indicator [2]	2	0	5	3	2	3	-1	5	5	-1	1	-2	-2
Business climate indicator [3]	0.7	-0.1	1.3	1.4	1.3	0.9	0.1	1.0	1.0	0.6	0.4	0.1	0.0
Capacity utilisation (%) [4]	82.9	81.9	83.9	84.3	84.5	84.1	.	84.4	-	-	83.7	-	-

Sources: European Commission Business and Consumer Surveys and the European Commission (DG ECFIN).
Note: Data refer to the Euro 12 (including periods prior to 2001).
1) Percentage changes compared with the previous period.
2) Percentage balances; data shown are calculated as deviations from the average over the period since January 1985.
3) Units are defined as points of standard deviation.
4) Data are collected in January, April, July and October of each year. The quarterly figures shown are the average of two successive surveys, i.e. the surveys conducted at the beginning of the quarter in question and at the beginning of the following quarter. Annual data are derived from quarterly averages.

Chart 14

Industrial production, industrial confidence and the PMI for the euro area

(monthly data)



Sources: Eurostat, European Commission Business and Consumer Surveys, Reuters and ECB calculations.
Note: When available, data refer to the Euro 12 (including periods prior to 2001).
1) Manufacturing; annual percentage changes in three-month moving averages; working day adjusted data.
2) Percentage balances; deviations from the average since January 1985.
3) Purchasing Managers' Index; deviations from the value of 50; positive values indicate an expansion of economic activity.

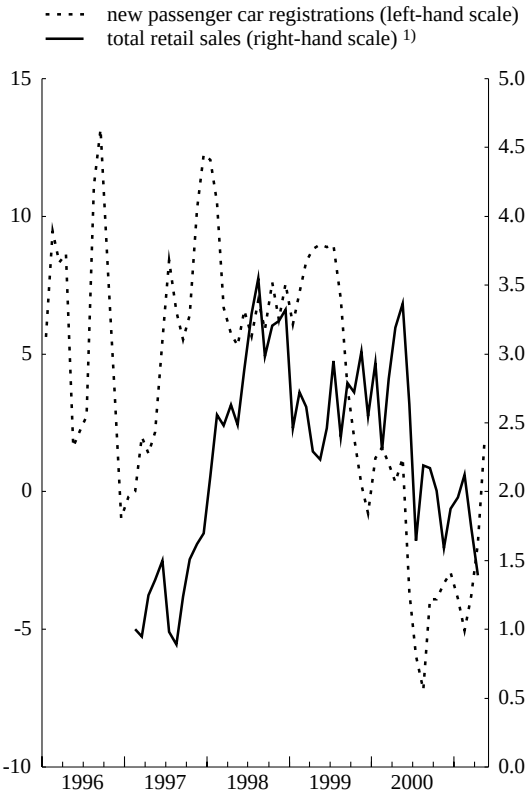
Bearing in mind that base effects had a negative impact on the year-on-year growth rate in May, the picture delivered by retail trade is still that of a moderate quarter-on-quarter increase since the beginning of the year. New passenger car registrations rose by 6.6% month-on-month in June 2001. For the second quarter as a whole, car registrations rose by 6.9% quarter-on-quarter, compared with 0.5% in the first quarter of this year. The year-on-year growth rate recovered to 1.8% in the second quarter of 2001 (see Chart 15). Overall, these indicators suggest that consumers' expenditure increased moderately in the second quarter despite slightly lower consumer confidence.

Overall, the latest information suggests a pattern of a continued moderation in growth in the second quarter of the year while the risks relating to the outlook for growth in the second half of the year remain sizeable. On the one hand, sound economic fundamentals, the decline in inflation, the impact of tax reductions and favourable financing conditions should continue to underpin domestic demand. On the other hand, there remains significant uncertainty arising mainly from the deterioration of world prospects, but also from the potential impact on domestic demand of changes in confidence.

Chart 15

New passenger car registrations and retail sales in the euro area

(annual percentage changes; three-month centred moving averages)



Sources: Eurostat and ACEA/A.A.A. (European Automobile Manufacturers' Association, Brussels).
Note: Data refer to the Euro 12 (including periods prior to 2001).
1) Calculated using seasonally adjusted data.

Table 6

Unemployment in the euro area

(as a percentage of the labour force; seasonally adjusted)

	1998	1999	2000	2000 Q3	2000 Q4	2001 Q1	2001 Q2	2001 Jan.	2001 Feb.	2001 Mar.	2001 Apr.	2001 May	2001 June
Total	10.8	10.0	8.9	8.8	8.6	8.4	8.3	8.5	8.4	8.4	8.3	8.3	8.3
Under 25 years [1]	21.5	19.5	17.5	17.3	16.8	16.5	16.3	16.6	16.5	16.4	16.4	16.3	16.3
25 years and over	9.3	8.6	7.8	7.6	7.5	7.3	7.2	7.4	7.3	7.3	7.2	7.2	7.2

Source: Eurostat.
Notes: According to ILO recommendations. Data refer to the Euro 12 (including periods prior to 2001).
1) In 2000 this category represented 23.6% of total unemployment.

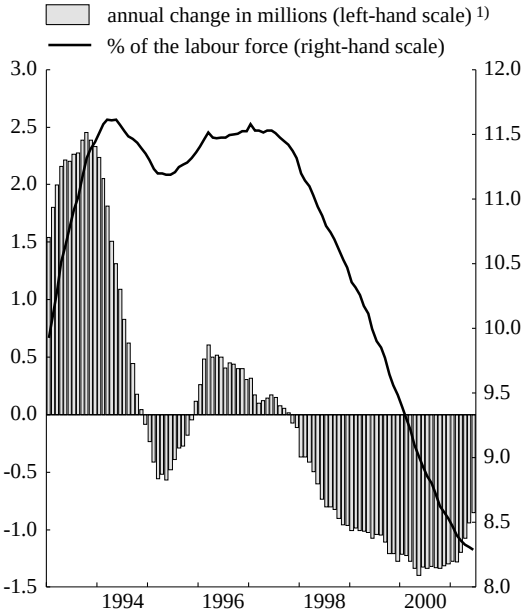
Unemployment rate unchanged in June 2001

In June 2001 the standardised rate of unemployment in the euro area stood at 8.3% of the labour force. It has thus remained unchanged since April 2001 (see Table 6). The unchanged unemployment rate conceals, however, a continued reduction in the number of unemployed. Indeed, the number of unemployed fell in June by around 26,000 compared with the previous month, slightly more than in May. In quarterly terms, the decline in the unemployment rate was 0.1 percentage point in the second quarter of 2001 compared with the previous quarter. This development confirms the slowdown in the pace of unemployment reduction in the first half of 2001 compared with the year 2000 (see Chart 16).

Chart 16

Unemployment in the euro area

(monthly data)



Source: Eurostat.
Note: Data refer to the Euro 12 (including periods prior to 2001).
1) Annual changes are not seasonally adjusted.

The unemployment rate of both those under 25 years and those aged 25 and above remained unchanged in June 2001 at 16.3% and 7.2% respectively. Although the rate at which unemployment is declining has slowed in both age groups, the slowdown is affecting the younger age group more. The slowdown in the decline in the unemployment rate for those under 25 years is significant, from 0.5 percentage point on average in the second half of 2000 to 0.2 percentage point in the first half of 2001. By contrast, in the first half of 2001, the pattern of decline in the unemployment rate of those aged 25 and above is comparable to that observed in the second half of 2000, around 0.2 percentage point on average in both periods.

Employment growth continued in the first quarter of 2001, albeit at a more moderate pace

According to national accounts data, employment in the first quarter of 2001 rose quarter-on-quarter by 0.4%. As expected, this was slightly below the rate of employment growth registered in the previous few quarters (see Table 7). It implies an annual

Table 7

Employment growth in the euro area

(annual percentage changes, unless otherwise indicated; seasonally adjusted)

	1998	1999	2000	2000 Q1	2000 Q2	2000 Q3	2000 Q4	2001 Q1	2000 Q1	2000 Q2	2000 Q3	2000 Q4	2001 Q1
									Quarterly rates [1]				
Whole economy *of which:*	1.6	1.6	2.0	1.9	2.1	2.0	2.1	2.0	0.5	0.5	0.5	0.6	0.4
Agriculture and fishing [2]	-1.3	-3.0	-1.1	-1.3	-1.5	-1.3	-0.5	-0.4	0.0	-0.4	-0.3	0.1	0.1
Industry	1.0	0.4	1.0	0.9	1.0	1.1	1.2	1.2	0.2	0.2	0.4	0.4	0.3
Excluding construction	1.2	0.3	0.8	0.2	0.8	1.0	1.1	1.3	0.1	0.3	0.3	0.3	0.4
Construction	0.4	0.8	1.7	2.6	1.2	1.4	1.6	1.1	0.4	0.0	0.6	0.6	-0.1
Services	2.1	2.5	2.7	2.6	2.9	2.7	2.8	2.5	0.7	0.7	0.6	0.7	0.5
Trade and transport [3]	1.6	2.2	2.7	2.6	2.9	2.6	2.5	2.1	0.6	0.6	0.7	0.6	0.2
Finance and business [4]	4.9	5.4	6.0	6.1	6.4	6.1	5.6	5.0	1.5	1.6	1.2	1.1	1.0
Public administration [5]	1.3	1.4	1.3	1.0	1.3	1.4	1.7	1.8	0.4	0.5	0.3	0.5	0.5

Sources: Eurostat and ECB calculations.
Note: Data refer to the Euro 12 (including periods prior to 2001).
1) Quarterly rates: percentage change compared with the previous quarter.
2) Also includes hunting and forestry.
3) Also includes repairs, communication, hotels and restaurants.
4) Also includes real estate and renting services.
5) Also includes education, health and other services.

growth rate of employment of 2.0% in the first quarter of 2001, compared with 2.1% in the last quarter of 2000. The slight slowdown in employment growth in the first quarter of 2001 followed a pattern of sustained employment growth throughout 2000, even though activity started to slow down in mid-2000. This confirms the lagged effect of activity on labour market developments.

The slower rate of total employment growth reflects mixed developments at the sectoral level. Employment in industry excluding construction increased in the first quarter of 2001 by 0.4% compared with the previous quarter, 0.1 percentage point more than in the previous quarter. However, recent data from the European Commission Business Surveys show lower employment expectations in manufacturing, pointing to lower employment growth in this sector in the second quarter of 2001. By contrast, employment in construction fell by 0.1% quarter-on-quarter in the first quarter of 2001, in line with the significant contraction registered in activity. As a result, employment in industry (including construction) increased by 0.3% compared with the fourth quarter of 2000, slightly below the average rate recorded in the second half of 2000 (0.4%). Turning to the services sector, the pace of net job creation slowed by 0.2 percentage point in the first quarter of 2001 to 0.5% quarter-on-quarter. This development, which may be reflecting the slowdown in domestic demand since mid-2000, was mainly due to the deceleration in employment growth in trade and transport, while in finance and business and public administration employment growth remained broadly unchanged. The composition of employment in the euro area and its longer-term pattern are both described in Box 5.

Box 5

Sectoral employment growth in the euro area

Total employment growth in the euro area rose to 2% in 2000, well above the average rate of around 0.5% a year recorded in the 1990s. At the same time, employment developments varied significantly across sectors, both in the recent past and in the 1990s as a whole. Developments in total employment growth reflect the differences in the cyclical behaviour across sectors, as well as the sectoral shares in total employment. This box summarises these differences over the past decade, based on the national accounts data that have recently become available. The sectoral breakdown comprises agriculture, industry (including and excluding construction) and services (trade and transport, finance and business, and public administration).

Employment growth was generated by the services sector in the 1990s

The increase in total employment in the euro area over the 1990s was entirely generated by the services sector and, as a result, its share in total employment rose by more than 6 percentage points to 68.6% in 2000 (see the table below). The most dynamic component of employment in services was the finance and business services sector, where employment grew at an average 3.6% a year between 1991 and 2000, compared with 0.8% in trade and transport and 1.3% in public administration. By contrast, employment in industry fell for most of the decade and its share in total employment declined by 4.7 percentage points in total between 1991 and 2000, to 27.1%. This declining share in total employment is partly related to an increase in outsourcing by firms in recent years, as reflected in the strong growth of business services. Within industry, employment in construction, although significantly more volatile than employment in manufacturing, decreased only slightly over the last decade (by -0.1% on average) and the share in total employment in construction remained fairly stable (slightly above 7%). Finally, employment in the agricultural sector continued to fall as productivity increased and its share in total employment was reduced to 4.3% (a fall of 2.2 percentage points since 1991).

Sectoral breakdown of employment in the euro area

(as a percentage of total employment unless otherwise indicated)

	Share in 1991	Share in 2000	Average % growth 1991-2000	
Whole economy	100.0	100.0	0.5	
Agriculture and fishing	6.5	4.3	-3.7	Includes agriculture; fishing; hunting and forestry
Industry	31.8	27.1	-1.2	
Excluding construction	24.4	20.0	-1.6	Includes manufacturing; mining and quarrying; utilities
Construction	7.4	7.1	-0.1	
Services	61.7	68.6	1.5	
Trade and transport	24.2	25.1	0.8	Includes wholesale and retail trade; hotels and restaurants; transport and communications
Finance and business	10.5	14.2	3.6	Includes financial intermediation; real estate; renting and business services
Public administration	27.0	29.3	1.3	Includes public administration; defence; social security services; education; health and social work; other community, social and personal services

Sources: Eurostat and ECB calculations.

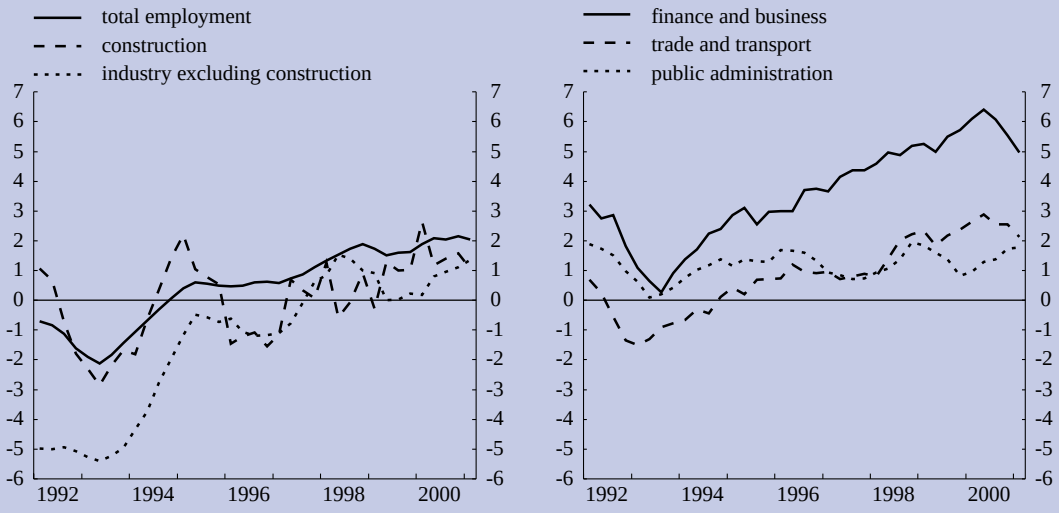
The cyclical behaviour of employment varies across sectors

Beside labour market reforms in some countries, euro area employment benefited from favourable developments in economic activity, notably in the second half of the 1990s. However, the influence of changes in the rate of economic growth on employment in individual sectors varied. Employment growth in industry had a major influence during the 1990s on cyclical developments in total employment (see the chart below). Both industry sub-sectors showed a greater volatility than that of services sub-sectors. Employment

growth in services also exhibited a cyclical behaviour, but tended to be more sustained during the 1990s. Indeed, employment in industry is more correlated with total economic activity than employment in services, to which both sectors react with some lag. Employment in services shows a particularly high correlation with domestic demand and private consumption, although responding again with some lag.

Recent employment developments, up to the first quarter of 2001, show a significant growth in employment in industry. However, according to survey data on employment expectations in manufacturing, employment growth in this sector is likely to decrease in the second quarter. This development, together with a somewhat lower net job creation in the services sector in line with the slowdown in domestic demand, should result in some cyclical slowdown in employment growth in the course of 2001.

Sectoral employment growth in the euro area
(annual percentage changes)



Sources: Eurostat and ECB calculations.

4 Exchange rate and balance of payments developments

Euro appreciated further in July 2001

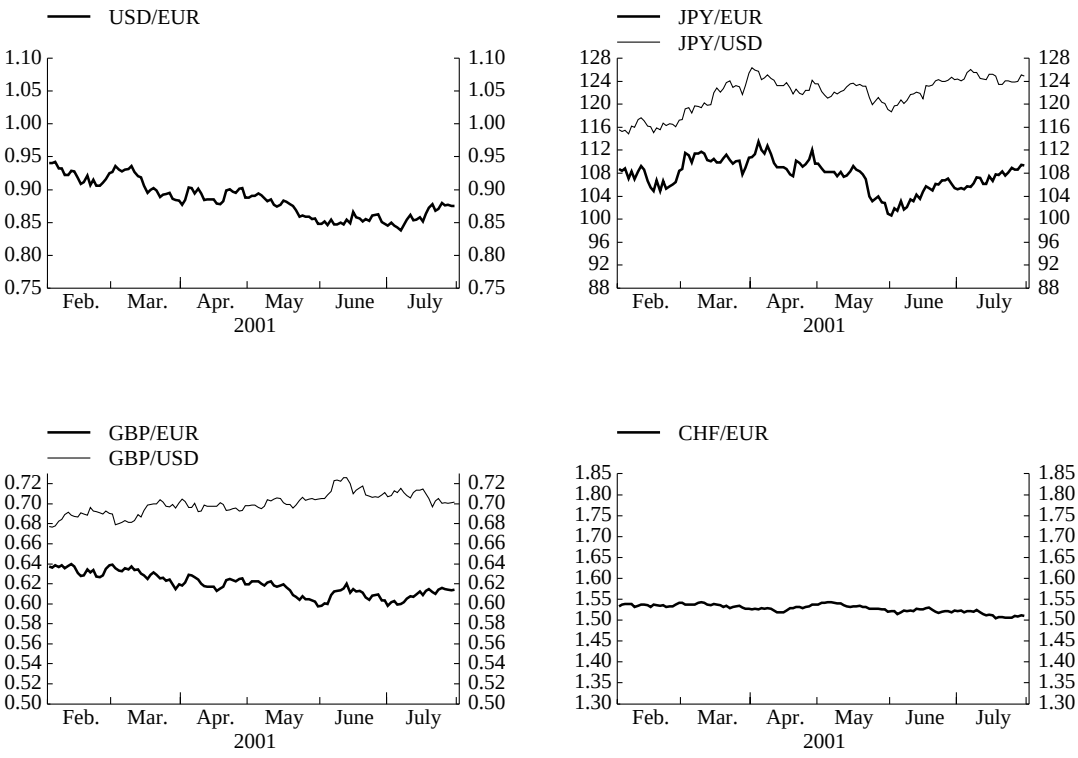
In July foreign exchange markets were characterised by an appreciation of the euro against most other major currencies. The appreciation of the euro took place against the background of continuing uncertainty over the outlook for the global economy and increased volatility in the financial markets of a number of emerging market economies.

Against the US dollar, the euro appreciated throughout July after an initial depreciation during the first few days of the month (see Chart 17). This development reflected a weakening of the US dollar against all major currencies, which seemed attributable mainly to continuing signs of slow economic growth in the United States as indicated by the ninth consecutive monthly decline in industrial production, deteriorating labour market conditions and the weaker than expected advance estimate of US GDP growth for the second quarter of this year. In addition, the deceleration in US economic activity, together with moderating oil prices, might have alleviated the more immediate inflationary risks coming from the recent fall in productivity growth. Expectations of lower inflation and slower economic growth

Chart 17

Patterns in exchange rates

(daily data)



Source: ECB.

contributed to a decline in US long-term interest rates in July, which may have exerted some downward pressure on the dollar. On 1 August, the euro was being quoted at USD 0.88, i.e. 4.0% higher than at the end of June, but 4.5% lower than its average value during 2000.

Against the Japanese yen, the euro appreciated in July in the context of signs of continuing weakness in the Japanese economy and losses on Japanese stock markets. The yen may also have been negatively affected by uncertainty over the scope and nature of the prospective structural reforms in Japan that was heightened in the run-up to the elections for the upper house of Parliament in late July. Against the US dollar the yen remained broadly stable in July, partly reflecting the recent weakness of the US currency. On 1 August the euro was recorded at JPY 110, i.e. 4.3% higher than at the end of June and 10.5% above its average value in 2000.

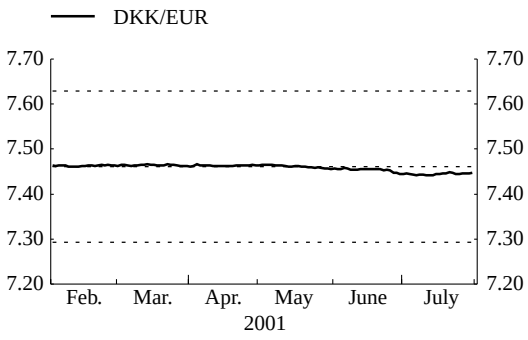
In July the euro also appreciated against the pound sterling – a movement initially attributed to market speculation regarding potential corporate takeover activity. Towards the end of the month, renewed political debate over the prospective participation of the United Kingdom in Stage Three of EMU appeared to have been interpreted by market participants as a supporting factor for the euro against the pound sterling. On 1 August, the euro was trading at GBP 0.62, which was 2.1% higher than at the end of June and 1.0% higher than its average value in 2000.

In July the Danish krone continued to move in a narrow range around its central parity against the euro within ERM II (see Chart 18). Against the Swedish krona, after sharp fluctuations in June, the euro appreciated moderately in July. However, outside the EU, the euro depreciated slightly against the Swiss franc, which appreciated against all major currencies

Chart 18

Patterns of exchange rates within ERM II

(daily data)



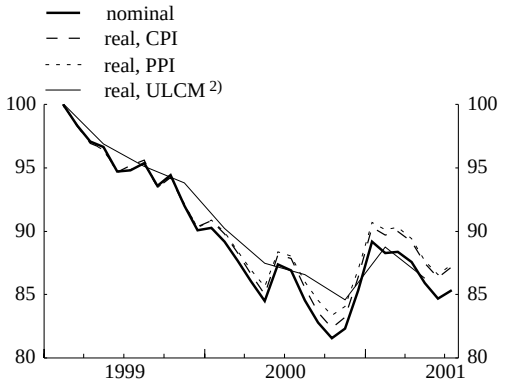
Source: ECB.
Note: The horizontal lines indicate the central parity (DKK 7.46) and the fluctuation bands (±2.25% for DKK).

Chart 19

Effective euro exchange rates

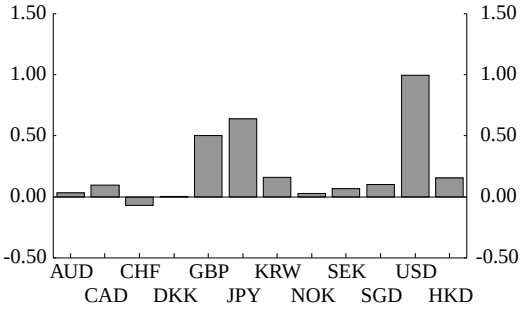
Nominal and real EERs [1]

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



Contributions to nominal EER changes [3]

(29 June 2001 - 1 August 2001; in percentage points)



Source: ECB.

1) *An upward movement of the index represents an appreciation of the euro. The latest observations are for July 2001 or, in the case of the ULCM-based REER, Q2 2001.*
2) *Unit Labour Costs in Manufacturing.*
3) *Changes are calculated using trade weights against 12 major partner currencies.*

in July. The general strength of the Swiss currency was most probably attributable to increasing financial market risk aversion against the background of high volatility in several emerging market currencies.

In nominal effective terms, as measured against the currencies of the euro area's 12 largest trading partners, the euro appreciated by 2.7% in July, and on 1 August the nominal effective exchange rate index of the euro stood around 1.2% higher than its average level in 2000. In real terms, the CPI, PPI and ULCM effective exchange rate indices of the euro followed the nominal index fairly closely (see Chart 19).

Current account deficit decreased slightly in May 2001

The current account deficit of the euro area decreased slightly to €0.8 billion in May 2001, compared with €1.0 billion in May 2000 (see Table 8). Although the surplus on both goods and services more than doubled when compared with the same month last year, this was largely offset by increases in the deficits on both income and current transfers.

In the first five months of 2001 the cumulated current account deficit decreased to €10.3 billion, compared with €19.4 billion in the same period in 2000. This was mainly due to a sharp increase in the cumulated goods surplus (€18.0 billion, compared with €7.9 billion in the same period in 2000) and a €1.2 billion decrease in the deficit for services, which was only partially offset by a €2.6 billion increase in the income deficit. Meanwhile, the deficit for current transfers was virtually unchanged. The increase in the cumulated goods surplus was mainly due to the fact that the growth in export values (14.0%) outpaced the growth in import values (11.6%), while the growth rates for both exports and imports were considerably lower than at the end of last year.

Seasonally adjusted data for the different components of the current account (see Box 6) show that the decrease in the current

account deficit in recent months was mainly due to a fall in the value of imports of goods, while export values have flattened out. Early estimates and preliminary trade volume and price data available for the Euro 11 up to May 2001 show that export volumes, after growing more slowly around the final quarter of 2000, have declined in recent months (see Charts 20 and 21). This seems to be partly due to the marked downturn in foreign demand, as evidenced by the deceleration of growth in export volumes to the United States, the United Kingdom and Japan. Meanwhile, the decrease in import values may be partly accounted for by a decline in the unit values of imports since the end of last

Table 8

Balance of payments of the euro area

(EUR billions; not seasonally adjusted)

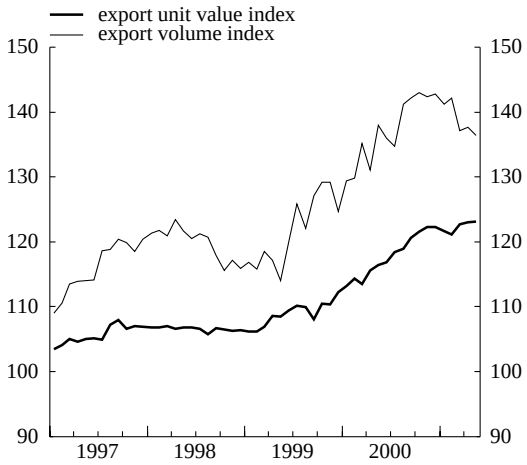
	2000 Jan. - May	2000 May	2001 Jan. - May	2001 Mar.	2001 Apr.	2001 May
Current account balance	-19.4	-1.0	-10.3	0.9	-3.3	-0.8
Credits	615.2	138.4	708.0	147.5	138.1	146.2
Debits	634.5	139.4	718.4	146.7	141.4	147.0
Goods balance	7.9	2.3	18.0	7.0	5.3	5.3
Exports	373.6	83.9	426.1	92.1	84.0	88.9
Imports	365.7	81.6	408.2	85.1	78.7	83.6
Services balance	-4.0	0.7	-2.8	-1.6	0.3	1.8
Exports	106.7	24.3	119.6	23.7	24.3	26.7
Imports	110.7	23.6	122.4	25.3	24.0	24.9
Income balance	-11.5	-1.1	-14.1	-0.5	-4.7	-2.6
Current transfers balance	-11.8	-2.9	-11.4	-4.0	-4.2	-5.3
Capital account balance	6.8	0.6	5.6	0.2	2.2	0.5
Financial account balance	65.6	10.9	20.0	18.9	11.8	-4.6
Direct investment	140.1	-8.5	-83.2	-33.1	0.1	-40.4
Abroad	-113.3	-33.7	-114.8	-26.0	-6.6	-48.4
Equity capital and reinvested earnings	-55.9	-15.1	-80.5	-13.6	-10.3	-41.6
Other capital, mostly intercompany loans	-57.4	-18.6	-34.4	-12.4	3.8	-6.7
In the euro area	253.4	25.2	31.6	-7.1	6.7	8.0
Equity capital and reinvested earnings	207.7	11.4	37.8	7.5	2.5	7.7
Other capital, mostly intercompany loans	45.7	13.8	-6.2	-14.6	4.2	0.3
Portfolio investment	-194.9	1.1	-34.2	6.2	-20.9	24.9
Equities	-254.6	-10.2	38.3	12.6	-2.8	48.7
Assets	-153.2	-18.6	-49.5	4.3	-11.3	-9.7
Liabilities	-101.4	8.5	87.8	8.3	8.5	58.4
Debt instruments	59.7	11.3	-72.5	-6.4	-18.1	-23.8
Assets	-51.3	-8.8	-63.7	-22.0	3.2	-12.1
Liabilities	111.0	20.0	-8.8	15.6	-21.3	-11.7
Memo item:						
Combined net direct and portfolio investment	-54.7	-7.4	-117.4	-26.9	-20.8	-15.4
Financial derivatives	5.2	0.4	1.7	3.0	1.1	3.4
Other investment	114.5	16.8	122.8	40.2	24.6	11.1
Reserve assets	0.6	1.1	12.9	2.7	7.0	-3.6
Errors and omissions	-53.0	-10.5	-15.3	-19.9	-10.7	4.9

Source: ECB.
Notes: Figures may not add up due to rounding.
For the financial account, a positive sign indicates an inflow, a negative sign an outflow; for reserve assets, a negative sign indicates an increase, a positive sign a decrease. A detailed set of tables on Euro 12 balance of payments data can be found in the "Past data for selected economic indicators for the euro area plus Greece" part of the "Euro area statistics" section of this issue of the ECB Monthly Bulletin and on the ECB's website.

Chart 20

Euro 11 export volume and unit value indices

(1995=100, seasonally adjusted)



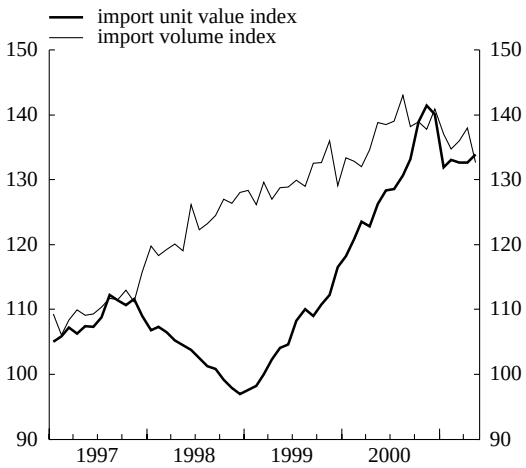
Source: ECB.

year, which was mainly due to the decline in oil prices. In addition, import volumes have also been falling for some time, owing initially to the competitiveness gains from the earlier euro depreciation and subsequently to the slower growth in euro area domestic demand.

Chart 21

Euro 11 import volume and unit value indices

(1995=100, seasonally adjusted)



Source: ECB.

Changing pattern in the financial account in 2001

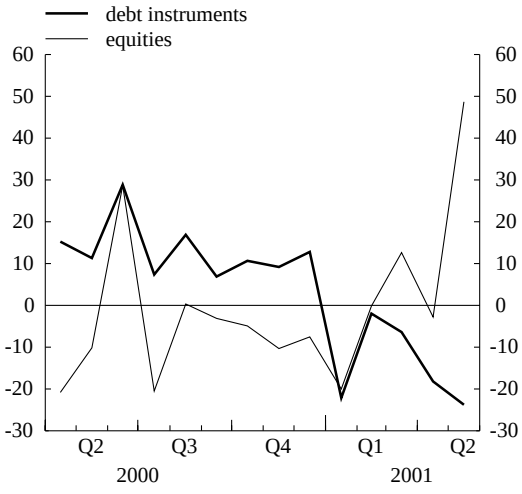
Direct and portfolio investment amounted to a combined net outflow of €15.5 billion in May 2001. This was slightly below the average for the net outflows recorded in the first five months of the year. For direct investments a relatively large net outflow of €40.4 billion was recorded in May 2001. The main contributor was "equity capital and reinvested earnings", which accounted for a net outflow of €33.9 billion. However, this net outflow was largely due to a single large takeover transaction that was settled mainly through an exchange of shares. By contrast, portfolio investment recorded a net inflow of €24.9 billion as a result of a substantial net inflow of equities of €48.7 billion stemming largely from the above-mentioned takeover. The net inflow of equities was only partially offset by a net outflow of bonds and notes of €23.8 billion.

Overall, the data of the financial account indicate that, despite a continuing net capital outflow from the euro area, there was a change in the pattern of capital flows in the first five months of 2001 (see Chart 22). In fact, after recording net outflows during most of 2000, portfolio investment in equities

Chart 22

Net portfolio investment flows

(EUR billions)



Source: ECB.

recorded a net inflow of €38.3 billion for the period from January to May 2001. By contrast, for debt instruments there has been a change from net inflows during 2000 to a substantial net outflow (€72.5 billion) in the first five months of 2001. These flow reversals may be partly explained by expectations of cuts in US interest rates. In this regard, capital gains expectations may have encouraged a flow of investment into US bonds.

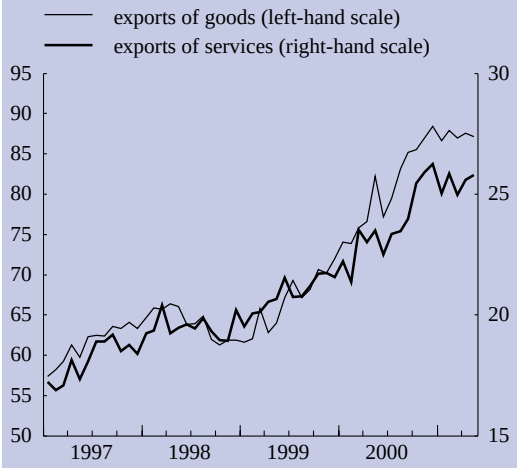
Box 6

Seasonal adjustment of the current account

Seasonally adjusted data for the euro area current account are now available (see Table 8.2 in the "Euro area statistics" section). The adjusted data for the credits and debits of the categories goods, services, income and current transfers are obtained using the X-12-ARIMA procedure (with working day adjustment). The seasonally adjusted total current account is then made to be equal to the aggregate of its seasonally adjusted components. Due to the modelling of the seasonal factors, the sum of the resulting data for seasonally adjusted months may not match the published non-seasonally adjusted annual aggregates. However, the resulting differences are negligible.

Identifying possible changes in trends in the components of the current account using unadjusted data is difficult, and comparing recent monthly data with the corresponding period of the previous year may be imprecise. By contrast, seasonally adjusted data can provide important insights into trends by giving a clearer picture of month-to-month developments. For example, the seasonally adjusted data suggest that growth in both euro area export and import values of goods and services has slowed in recent months, and give some indication of when this began. According to the charts below – displaying seasonally adjusted data – the value of exports of goods and services shows a significant positive response to both the depreciation of the euro and strong foreign demand over most of 1999 and 2000, but have been fairly flat since around the final quarter of last year partly due to the deceleration of growth in world demand. Similarly, after growing rapidly due to rising import prices and robust euro area demand, import values began to decline towards the end of 2000 against the background of recently falling import prices and slower economic activity in the euro area. Further analysis of these developments, using seasonally adjusted trade volume and price indices, is provided in the main text. However, it should be noted that the latter indices are based on external trade statistics which are not fully comparable with the goods item in the balance of payments statistics.

Euro 12 exports of goods and services
(values in EUR billions, seasonally adjusted)



Source: ECB.

Euro 12 imports of goods and services
(values in EUR billions, seasonally adjusted)

Source: ECB.

Fiscal policies and economic growth

This article discusses the role of fiscal policies in enhancing growth in the long term and their effects on economic activity in the short term. It stresses that the framework of rules and institutions that governs markets and policies must set the appropriate incentives for private agents and policy-makers to adopt growth and stability-oriented decisions. It also reviews the theoretical arguments and the available empirical evidence on the efficiency of fiscal policies in affecting the main determinants of long-term growth and in stabilising cyclical fluctuations of aggregate demand in the short term.

The article argues that stable, sustainable and efficient fiscal policies exert a favourable effect on long-term growth performance. They stimulate savings, capital formation, employment and innovation and also create a macroeconomic environment in which the task of a stability-oriented central bank is facilitated.

In the euro area, common rules on budgetary discipline coupled with the clear allocation of responsibilities for fiscal policies to national governments provide an appropriate framework for the implementation of stable and sustainable fiscal polices. The improvement of budgetary positions and the decline in public debt ratios in recent years are encouraging signs in this regard. As for the efficiency of fiscal policies, the article presents the key elements of the EU strategy to increase the contribution of public finances to economic growth. However, the responsibility for its implementation lies with national governments. Given the ambitious objectives of the common strategy, governments should not delay the necessary reforms of their national rules and institutions to strengthen the positive impact of fiscal policies on growth.

1 Introduction

When looking at the growth performance in the euro area countries in recent decades, two observations are noteworthy. First, growth has declined significantly since the 1960s. In the 1980s and 1990s, growth was below that in the United States. Second, rigidities in labour markets leading to relatively low employment and high unemployment rates coupled with a lack of structural reforms have often been cited as part of the explanation. The employment rate in the euro area is more than 15 percentage points lower than in the United States (see Charts 1 and 2). Examining some euro area fiscal indicators, it is apparent that the government sector plays a far larger role than in the United States. Government spending absorbs nearly half of GDP on average in the euro area as compared with less than one-third in the United States (see Chart 3). This requires a far higher level of taxes than in the United States (see Chart 4). Fiscal deficits are now relatively low on average, but this was not the case until a few years ago, so that average government debt in the euro area is still high, at 70% of GDP (see Charts 5 and 6).

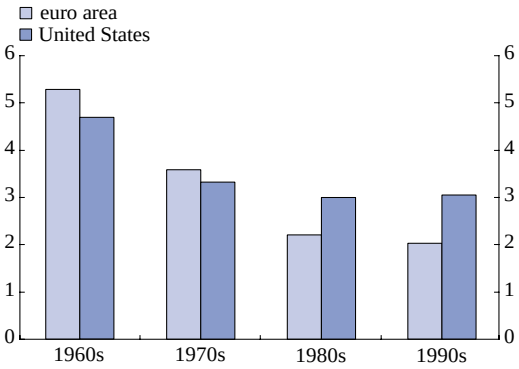
There is a broad consensus that these developments in fiscal policies contribute to the relatively weak growth performance in the euro area. Past deficits have been too high, resulting in the accumulation of significant debt that could undermine macroeconomic stability. The interest payments on debt also keep the tax burden much higher than is necessary to finance only primary expenditure. Fiscal policies have often been pro-cyclical, thereby not contributing appropriately to smoothing fluctuations in demand. Finally, overly high public spending holds back a sustainable reduction in distortionary taxation and inhibits the full exploitation of the growth potential of European economies.

The article argues that the institutional framework in which private and public agents perform their economic activities is crucial for growth. This framework of institutions comprises the legal rules and norms that constrain the behaviour of policy-makers and thereby define their incentives to act (such as the budget deficit ceiling of the Maastricht

Chart 1

Growth in the euro area and the United States, 1960s-1990s

(average changes of real GDP, in percentage points)

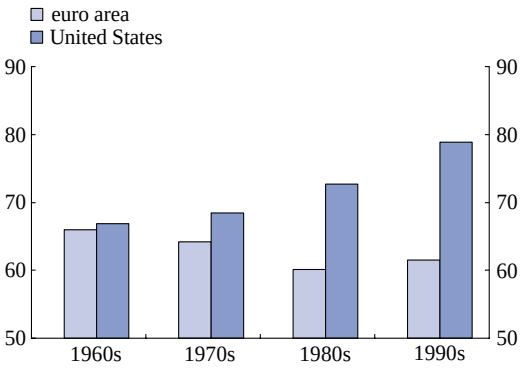


Sources: European Commission and ECB calculations.

Chart 2

Employment in the euro area and the United States, 1960s-1990s

(as percentage of population aged 15-64)

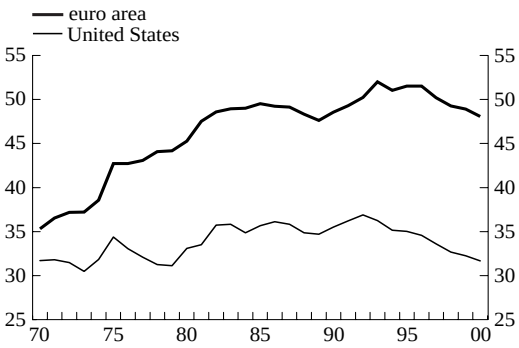


Sources: European Commission and ECB calculations.

Chart 3

General government expenditure in the euro area and the United States, 1970-2000

(as a percentage of GDP)

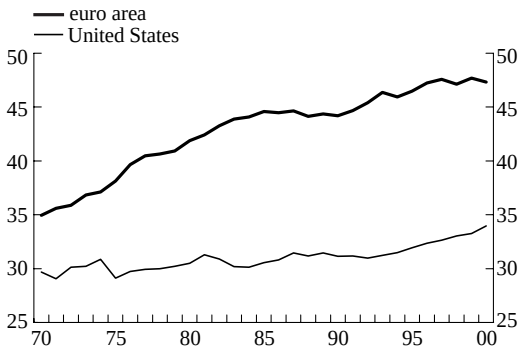


Sources: European Commission and ECB calculations.
Note: Euro area data exclude Luxembourg from 1988 to 1994.

Chart 4

General government revenue in the euro area and the United States, 1970-2000

(as a percentage of GDP)

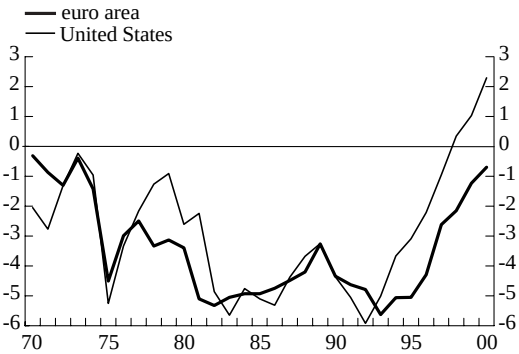


Sources: European Commission and ECB calculations.
Note: Euro area data exclude Luxembourg from 1988 to 1994.

Chart 5

General government balance in the euro area and the United States, 1970-2000

(as a percentage of GDP)

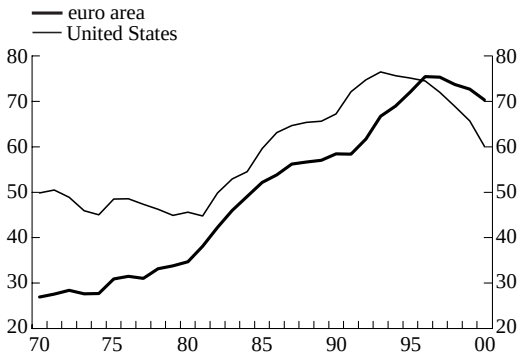


Sources: European Commission and ECB calculations.
Note: Euro area data exclude Luxembourg for 1988 and 1989.

Chart 6

General government debt in the euro area and the United States, 1970-2000

(as a percentage of GDP)



Sources: European Commission, OECD and ECB calculations.

Treaty). However, such institutions must not be confused with institutions which are organisations (such as the ECB or the European Commission). Growth-enhancing policies in the fiscal area can be achieved via changes in rules and institutions. Box 1 presents a conceptual approach to this issue.

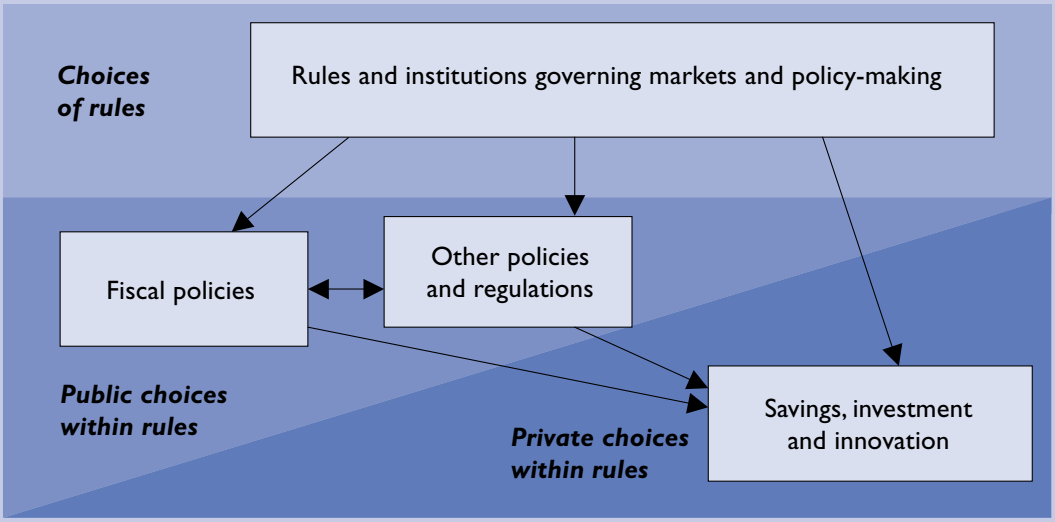
The following section examines how fiscal policies can influence the main determinants of long-term growth. Section 3 deals with the impact of fiscal policies on short-run economic activity and its stability. Section 4 reviews the rules and institutions framing fiscal policies in euro area countries in the light of the EU growth strategy recently proposed by the Commission and the ECOFIN Council. The article concludes that the current EU-wide rules support stability-oriented and sustainable fiscal policies and thereby foster growth. However, the efficiency of fiscal policies, which substantially affects the growth performance of different economies, remains a national responsibility. Euro area countries should pursue comprehensive reform of their rules and institutions in order to achieve more efficient fiscal policies and thus meet the EU strategy's ambitious targets.

Box 1

Rules and institutions, fiscal policies and growth

Rules and institutions are key to growth. They consist of the legal (and sometimes informal or cultural) constraints that determine the incentives for public and private agents to consume, save, invest, work and innovate. They shape growth directly through their effects on markets and indirectly in the way they constrain policies. Rules can affect the stability, sustainability and efficiency of fiscal policies and their interdependence with other policy areas. Diagram 1 illustrates the links between, on the one hand, rules and institutions and, on the other, growth-enhancing savings, investment and innovation.

Diagram 1: The links between rules and growth



Private initiative requires the secure functioning of markets, allowing appropriate returns from capital accumulation, work and innovation.

- Agents need to be sufficiently sure that they can benefit from the returns on their investment or innovation. In essence, two sets of rules guarantee this:
  - well-established property rights enhance the control over and security of returns on investment;

– rules promoting market exchange (e.g. via contract law, freedom to set prices) are a prerequisite for a market economy. Functioning markets generate information via the price mechanism which, in turn, induces agents to work, invest, specialise and innovate so as to make a profit.

- Rules must promote competition, secure adequate information and allow efficient risk management.

Rules should also guarantee that government actions do not undermine but rather support the functioning of markets.

- Government actions should be limited and well constrained by appropriate rules and institutions.
- Rules can enhance the efficiency of fiscal policies and reduce the scope for rent seeking. Examples include audit rules, public procurement rules and cost-benefit analysis in the context of deciding on public activities and regulation.
- Rules can also secure the stability of fiscal policies by preventing erratic changes in deficits, tax laws and expenditure programmes.
- Budgetary institutions and fiscal rules can prevent an expenditure and deficit bias in the political process that could create too large a public sector and undermine the stability and sustainability of public finances.

Interaction effects across policy domains and regulations are important and call for comprehensive reform of rules and institutions.

- The costs and benefits of public policies need to be assessed carefully and may differ depending on the institutional framework in which the policies are undertaken.
- Fiscal rules could improve fiscal discipline and thereby the credibility of monetary policies. Similar interdepencies exist, for example, between fiscal and labour market policies and fiscal and competition policies.
- Market rules can constrain fiscal policies and vice versa: the protection of property rights should prevent expropriatory taxation. Subsidised public services can inhibit if not eliminate private markets.

2 Fiscal policies and long-term growth

Growth is determined by capital formation, technological change, employment and savings

In the early literature on economic growth, population increases and technological progress alone determine exogenously the long-term growth rate of output. Policy changes could affect the equilibrium level of output (for example via raising capital investment and labour supply) but not the long-run growth rate.

By contrast, in the more recent endogenous growth literature long-term growth is explained by introducing additional elements. The latter include, for example, a knowledge-producing sector, defining capital in a broad way to include human capital and knowledge spillovers, or assuming that capital accumulation has large positive externalities. Investment in one sector can have positive spillover effects on the productivity of human and physical capital in other sectors. Investment in computers in one firm will allow the dissemination of computer literacy and may promote the use of computers in other firms and sectors.

This more recent literature considers the determinants of growth (physical and human capital investment, technological change, employment and savings) and predicts that policy changes can affect the long-run growth rate by influencing economic agents' decisions concerning these variables. Changes

in public expenditure and taxes that increase investment externalities, boost human capital or generate knowledge can then have effects on the level and the growth rate of output.

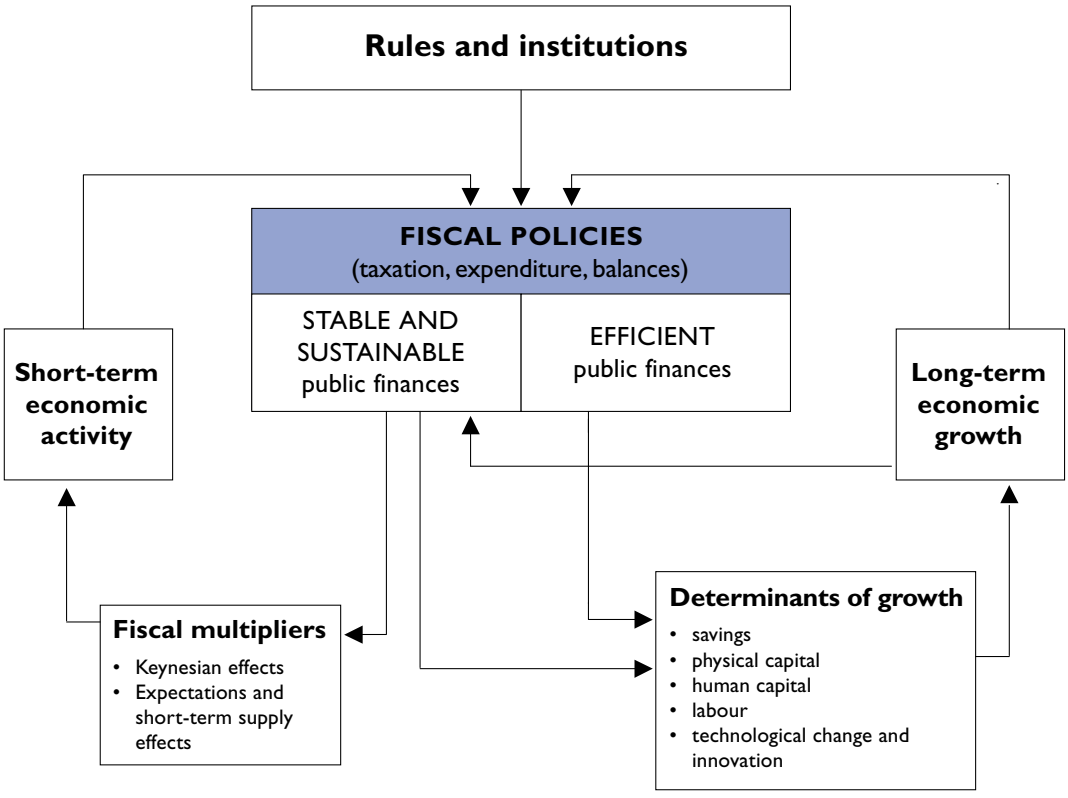
It is worth stressing that the influence of fiscal policies on growth can only be generated within an appropriate broader policy framework. Sound public budgets support a macroeconomic environment in which the task of a stability-oriented central bank is greatly facilitated, thereby securing an environment conducive to growth-enhancing savings and investment. Fiscal policies that foster employment or innovation create their strongest effect when they are not undermined by less favourable policies and regulations of labour markets, trade or competition. These channels of transmission and basic interdependencies between fiscal policies and long-term growth are depicted in Figure 1.

Fiscal policies, capital formation and technological change

Governments have traditionally focused their efforts to promote growth on capital formation, and more specifically on providing public infrastructures, including highways, certain transportation facilities, or water and sewers lines. Two arguments for government involvement in this domain have been used. First, infrastructure was often perceived as a natural monopoly where private providers would charge monopoly prices and give rise to potentially large inefficiencies. Second, there are instances where the consumption of infrastructure is difficult to control so that private provision could not take place. In recent years the role of the government as the single provider of infrastructure has been questioned, and much experience has been gained with the private provision and operation of infrastructure under public regulation and supervision.

Figure 1

The links between fiscal policies and economic growth and activity



There is reasonable evidence in industrialised countries on the positive effects of public investment on growth. Nevertheless, public investment can crowd out private sector investment in physical capital, either by directly replacing private investments or by drawing funds from an inelastic supply of savings such that the rising costs of capital make certain private projects unprofitable. Public support of private investment via tax incentives could also stimulate capital formation beyond what the market would provide on its own. However, there are adverse effects on growth stemming from the need to finance public activities with taxes. As regards physical capital formation by private firms, corporate income taxation increases the cost of capital, reducing the net return from capital. Hence it may discourage physical capital accumulation. Many studies find that investment is, in fact, negatively related to the cost of capital to a significant but not extremely large extent, especially in the short run.

Human capital accumulation is typically seen as being at the core of growth. Highly qualified workers are necessary, in particular, for countries to benefit from new technologies. Governments have traditionally favoured human capital formation via spending on education, including schools, universities, on-the-job training or adult education. Education is either provided by government directly, or privately provided education is financed (or supplemented) by public funds. In any case, public support for education seems to be essential for people who are "credit constrained", such as children or their parents who do not have the income and collateral that would grant access to credit to finance their "optimal" private education.

Most of the reliable empirical evidence suggests a significant impact of human capital accumulation on growth. Empirical studies also find that government spending on education and training has significant effects on future economic growth. However, if additional public spending on education is financed by higher taxes on labour, the net outcome might have a negative effect on human capital investment, depending on how progressive such taxes are. The more progressive a tax system, the more likely it is that it would discourage investment in education, because taxes may reduce the return on education more than they reduce the cost of investing in it.

Fiscal policies can also foster technological change and innovation, thereby boosting the economic growth rate. Investment in research and development is a key factor in determining technological change and innovation. There are two main reasons for insufficient private investment in research and development that could justify government involvement in such activities. First, private investors would not consider the positive spillovers to other sectors of the economy, which could suggest that higher investment is socially desirable. Second, private agents may not be able to exclude others from using the results of investment in research and development and would thus fail to invest sufficiently. Public intervention by direct means, such as provision and funding, and also indirectly through tax incentives, could bring the research and development undertaken closer to the social optimum. However, there are also pitfalls in the public support of research and development. Governments have an information disadvantage and will not necessarily support the research initiatives with the highest return. Moreover, public investment in research and development may not only be unproductive; it may even divert energy and resources from more productive ventures, thereby reducing innovation and growth.

The empirical evidence in industrial market economies points to a significant role of research and development in enhancing growth. It seems to indicate that current private investment in research and development in most countries is lower than the optimum.

Box 2

The contribution of public finances to growth: the EU growth strategy[1]

The European Council in Lisbon has set a new strategic goal for the European Union "... to become the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion." Public budgets can contribute to achieving this goal by fostering growth and employment through three channels – supporting a stable macroeconomic framework via sound public finances, making tax and benefit systems more employment friendly and redirecting public expenditures towards physical and human capital accumulation. Broadening the focus from achieving budgetary stability towards putting the emphasis on the overall contribution which public finances can make to growth and employment marks a new step in the fiscal policy agenda in EMU.

Sustaining sound public finances: after many years of striving to achieve sound public finance positions, the challenge now is to complete this goal and sustain these positions while at the same time lowering the tax burden (especially on low-paid labour), strengthening public investment in physical, human and knowledge capital and preparing for the budgetary consequences of ageing populations. Therefore:

- to meet the short-run challenges, and consistently with the Stability and Growth Pact, the Council and the Commission affirm the need to avoid pro-cyclical fiscal policies, especially by strict expenditure control. The Council and the Commission agree that in this respect cyclically-adjusted balances should be used as an additional tool when assessing budget positions. Further refinement of the method for determining the cyclical component of the budget balance will be pursued by the Commission in co-operation with the Economic and Financial Committee and the Economic Policy Committee.
- to meet the medium-term challenges, tax and expenditure reforms must be designed to achieve a sustainable reduction in the tax burden and maximise their contribution to growth and employment. To this end, tax cuts need to be accompanied with a firm control on and, where appropriate, reduction of public expenditure. They should also target the removal of rigidities, especially in the labour market. An appropriate balance and sequencing has to be drawn between running down public debt, cutting taxes, and financing public investment in key areas. This balance can vary according to the particular circumstances and priorities of Member States.
- to meet the long-term challenges, the Council and Commission agree that a three-pronged strategy is needed to tackle the economic and budgetary challenges of ageing populations. This should include a suitable combination of running down public debt at a faster pace, measures to raise employment rates (especially amongst women and older workers), and reform of pension systems to place them on a sound financial footing including greater recourse to the funding of public pensions. The ECOFIN Council intends to deepen its examination of the long-term sustainability of public finances, in particular in the framework of the multilateral surveillance and the stability and convergence programmes.

Making tax and benefit systems more employment friendly: some progress has been made towards making tax systems more employment-friendly, by lowering the fiscal burden on labour as well as reducing marginal tax rates. However, overall labour taxation (taxes and social security contributions) in many Member States still remains high by international standards, and reforms in some countries have been piecemeal. Much less progress was made in making benefit systems more employment friendly, and changes in net replacement rates have been relatively small. Only few Member States have developed in-work benefits to boost earnings of low-paid workers. The Council urges Member States to accelerate where appropriate the reforms of tax and benefits systems with the objective of making work pay and curbing unemployment traps.

Redirect public expenditures towards physical and human capital accumulation: recent trends show that levels of public investment have stopped declining and are starting to increase in some countries, a welcome development as it has been combined with efforts to increase efficiency via the introduction of market mechanisms. In restructuring public finances, priority should be given to education, training and R&D. Efforts to enhance physical and human capital accumulation must to a large extent come through expenditure restructuring. The Council urges Member States to pursue a balanced combination of spending restructuring, tax reforms, and other structural measures. Only through such a comprehensive strategy can the EU meet the Lisbon challenge.

1 *Highlights excerpted from the Joint Report of the Commission and the ECOFIN Council to the European Council, Stockholm 23-24 March 2001.*

From the policy point of view, redirecting public expenditures towards physical and human capital accumulation, giving priority to education, training and research and development, is one of the main aspects of the EU growth strategy (see Box 2, which provides an account of this strategy).

Fiscal policies and employment

The way in which fiscal policies affect employment is a complex issue, and the incentive and disincentive effects of public intervention need to be weighed carefully. For example, well-designed unemployment benefits not only provide important safety nets for people, they also allow workers to search longer for the most productive employment. However, this might lengthen the period of unemployment, which would have second-round effects on the productive potential of the economy, because long-term unemployed workers experience a depreciation of their human capital.

The possible drawbacks of social benefits are illustrated most clearly by their effects on labour supply. Unconditional and/or unlimited payment of unemployment benefits has frequently been cited as an important disincentive to work. Unemployment benefits can also reduce the pressure to reform an inefficient labour market with high unemployment because the jobless are provided with such benefits. Moreover, public pension systems have significant effects on labour supply (see Box 3 for the potential effects of pension reforms on the determinants of growth). Little penalisation or even active encouragement of early retirement have reduced labour supply. Early retirement prospects also constitute a disincentive for workers to maintain professional skills and engage in lifelong learning. Furthermore, early retirement incentives can facilitate labour shedding even when dismissal is very difficult. As a result, firms needing to reduce employment would cut their older workforce. This may be the more experienced rather than the least productive staff.

Labour market policies can, when properly designed and implemented, enhance labour supply and demand and consequently the rate of employment. Training programmes can facilitate skill maintenance and upgrading, thereby reducing skill-mismatch and human capital degradation among the long-term unemployed. Another challenge is the re-integration of groups which are difficult to employ, such as low-skilled people, long-term unemployed and older workers.

All these potentially beneficial effects of public policies cannot be assessed independently of the impact of the taxes required to finance them. Labour taxes, including social contributions, which are the main source of financing for these policies, raise labour costs and drive a wedge between gross wages (paid by the employer) and net wages (received by the employee). Where, owing to labour market rigidities, employers are forced to bear the costs of higher taxes, they would tend to reduce labour demand. The extent to which producers cut employment is measured by the elasticity of labour demand with respect to real labour costs. This elasticity does not seem to be very high on average but it is estimated to be higher for less skilled workers, who are often more easily replaced by physical capital and rationalisation than highly skilled workers. Decisions on labour supply could also be affected adversely by taxes if the tax burden results in a lower net wage received by the employee. Empirical evidence shows that effects of taxes on labour demand are greater than those on labour supply.

From the available empirical evidence it can be safely concluded that, on balance, it is often the combination of high labour taxes and generous benefit systems that results in employment disincentives. The disincentives are typically strongest for low-skilled/low-income workers. In the case of the latter, marginal effective tax rates, i.e. the loss via taxes and forgone benefits

Box 3

Pension reform and the determinants of growth

Reform of pay-as-you-go systems can support growth

With increasing awareness of the economic and fiscal implications of ageing populations, the reform of publicly financed pension systems has become a widely discussed issue in many industrialised countries. The effects of ageing are of particular concern for those euro area countries in which the old age dependency ratio is projected to double over the coming decades (for a more detailed discussion see the article entitled "Population ageing and fiscal policy in the euro area" in the July 2000 issue of the Monthly Bulletin). According to the Economic Policy Committee (EPC) report on ageing, this would push up public pension expenditure in the euro area from 11.2% of GDP on average by more than 4 percentage points of GDP over the same period. It would therefore impose large fiscal burdens on current and future generations, unless reforms were to be implemented swiftly. Reforms of pay-as-you-go systems can broadly follow two approaches: parametric reforms designed to adapt the existing system to the changing environment, and systemic reforms diversifying the financing of the system. Both approaches can support growth by improving fiscal sustainability and the efficiency of public finances.

Parametric reforms

Parametric reforms affect the financial viability of pay-as-you-go systems through changes in the regulatory parameters determining contributions and benefits.

- Such reforms improve the sustainability of the pension system and overall public finances; fiscal sustainability, in turn, positively affects macroeconomic stability and the environment for investment.
- By raising the effective retirement age and the participation of older people in the labour market, parametric reforms can increase the supply of labour.
- Longer working lives also increase the incentive for workers and enterprises to build up human capital. Higher human capital should boost productivity.
- Further reforms can strengthen the actual or perceived link between contributions and benefits, thus reducing the perceived tax on labour, with positive effects on its supply and demand. Such measures include increasing the importance of labour income in the pension formula or the introduction of notional accounts, i.e. an accounting framework that links individual contributions directly to future individual benefits.

Systemic reforms

Systemic reforms support pension financing through the introduction of an additional, fully funded pillar.

- Similar to parametric reforms, the diversification of pension finance improves fiscal sustainability and the overall economic environment.
- The introduction of funded schemes is expected to result in higher savings, providing a larger pool of resources to finance investment projects.
- Additional funds lead to a deepening of financial markets with favourable growth effects deriving from higher efficiency of capital allocation and lower costs of financial intermediation.
- As participants perceive their contributions to the funded pillar as savings rather than taxes, negative tax distortions of labour income are reduced and labour supply and demand rise.

Recent experience

The problem is well-identified and there is consensus on many of the specific reforms needed. Overall, however, progress on pension reform in the euro area has been disappointing and the postponement of decisive changes is evident in a number of countries. Moreover, the lack of an appropriate legal and fiscal framework for funded pensions in several Member States makes it difficult to increase private saving for retirement.

for each additional euro earned, are near or even above 100% for certain segments of the wage band in many euro area countries (the so-called unemployment trap).

The reform of the tax and benefit systems to make them more employment-friendly is also one of the key elements of the EU strategy to increase the contribution of public finances to growth.

Fiscal policies and savings

All investment needs to be financed by savings. Most savings come from the domestic economy while foreign savings normally only supplement domestic savings. Within the domestic economy, the private sector is by far the predominant source of saving.

Transfers to households, including social payments, are the main channel through which public spending affects private savings accumulation. In this context it has to be borne in mind that transfers could have a negative effect on savings.

Pensions are by now the most important item of public benefit systems and considerable increases in expenditure are expected for the future if current policies are maintained. Delaying effective retirement and introducing more funded pension schemes would imply more old-age-related savings. This is likely to have a positive impact on aggregate savings.

All in all, it seems reasonably safe to conclude from the empirical evidence that high taxes financing large public sectors tend to have a negative effect on savings, and thereby on investment and growth. Just as labour taxes discourage work, taxes on savings tend to discourage the latter and encourage consumption. Most prominently, corporate income taxes, but also other capital income taxes, are likely to cause a reduction in private savings by lowering their net return.

Low and stable deficits and sustainable fiscal accounts support long-term growth

Sound fiscal accounts are likely to have positive effects on aggregate savings and investment. If public investment spending remains unchanged, lower deficits will imply higher public savings. If the latter are not fully offset by lower private savings, total aggregate saving will increase. This, in turn, will boost private investment via a larger savings pool and lower real interest rates. However, the impact of improved public accounts on aggregate savings crucially depends on the degree of substitutability between public and private savings. Although the existing empirical evidence is somewhat inconclusive, it tends to reject the hypothesis of a full offsetting of government deficits by private savings. Thus, lower fiscal deficits tend to raise aggregate savings and improve long-run growth prospects.

Severe adverse growth repercussions can be expected when fiscal deficits result in significant public debt and undermine confidence in the long-term solvency of government. If public finances are not perceived as sustainable, governments in such a position have to pay a growing risk premium on the interest bill for their public debt, which, in turn, raises the fiscal deficit. A growing share of savings is then invested in government debt rather than in private investment (crowding out).

High deficits are unsustainable and undermine savings and investor confidence via another channel. If high public debt raises the spectre of government default – even if only in the distant future – people will perceive a growing risk of financial instability. The risk of instability will, in turn, deter savers and investors. In such an environment, the price mechanism as a guiding device for investment decisions will become less meaningful, as investors will not know whether price developments reflect instability or profit opportunities.

With fiscal sustainability in doubt, governments may be forced to raise taxes or cut spending at short notice, reducing the

stability and predictability of public policies. In extreme cases, governments may even face a liquidity problem which could undermine the proper operation of core government functions (e.g. if government wages are not paid or maintenance work is not conducted). In other words, unsustainable fiscal positions are likely to undermine the efficiency of public policies.

From the above, it can be concluded that sustainable and efficient fiscal policies are conducive to economic growth, as recognised in the EU growth strategy. They stimulate investment and innovation while minimising potential adverse repercussions through disincentives to save, invest, work and innovate. Lean public sectors with little unproductive spending and efficient tax systems, low public debt and the prospect of future liabilities being covered are consistent with high growth.

3 Short-run effects of fiscal policies on economic activity

To enhance growth, fiscal policies must not only be sustainable and efficient, they should also be conducive to economic stability in the short run. However, while there is broad agreement on the role of fiscal policies in establishing the appropriate incentives and framework for fostering sustainable growth, there is much less consensus on the possibility of fiscal policies affecting economic activity in a predictable way in the short term.

Automatic stabilisation is preferable to discretionary fine-tuning

There are several demand and supply channels through which fiscal policies can affect economic activity in the short term. Keynesian theories stress the demand-side effects on economic activity. A tightening of fiscal policy can have temporary contractionary effects on output, and a fiscal expansion can temporarily raise output via the aggregate demand channel. The change in demand owing to a change in government expenditures or taxes affects output via private agents' reactions to the change in disposable income derived from the government's measures. These are the so-called fiscal multiplier effects. Empirical studies bear out that these multiplier effects take place in normal circumstances. On the basis of this reasoning and evidence, and assuming that governments always know what fiscal response is needed and when, supporters of this approach prescribe activist fiscal policies to stabilise output.

Nevertheless, this argumentation has been contested and does not provide a sound justification for discretionary fiscal fine-tuning (or activist fiscal demand management). The government would need to know when to act and by how much to expand or tighten demand. Moreover, there are important implementation problems related to activist fiscal demand management.

Assuming that there is a macroeconomic shock resulting in an economic slowdown and that an expansionary reaction seems appropriate, it takes time to channel related measures through the administrative or legislative process and it takes even more time until such policies become effective. By that time, the macroeconomic shock giving rise to the decision may have already vanished. The measures could become pro-cyclical if they fall in the subsequent upswing. Instead, automatic stabilisation works through the immediate changes in some revenue and expenditure items (such as income taxes and unemployment benefits) induced by fluctuations in economic activity. More importantly, people can form expectations about these effects, thus facilitating their timely reaction. They also do not have to be changed and repealed over the business cycle.

If activist fiscal policies result in pro-cyclical policies rather than in the dampening of demand fluctuations, this could also make monetary policy oriented towards price stability more difficult. If inflationary or deflationary tendencies are reinforced, monetary policies might have to react more strongly than they would have had to without fiscal interventions.

In the case of activist fiscal policies, it may also be difficult to repeal the original decision at a later stage since this could generate resistance on the part of those who benefit from the measures. This could induce a systematically expansionary bias in fiscal policies and lead to unsustainable budget deficits over subsequent business cycles. In addition, an activist fiscal policy stance is more likely to create uncertainty about the future fiscal policy course and undermine the appropriate formation of expectations conducive to short-term output stabilisation. These factors could also have adverse effects on fiscal sustainability and reduce the long-term growth prospects of the economy.

Fiscal policies based on automatic stabilisation, therefore, seem more reliable than discretionary demand management in dampening normal cyclical fluctuations. Moreover, discretionary fiscal policies are only likely to prove effective in influencing economic activity in a predictable way if the sustainability of public finances is preserved. When there are doubts about the latter, other effects, rather than those of Keynesian multipliers, can become important.

Expectations and short-term supply effects can shape the short-term consequences of fiscal reform

A new strand of arguments which has further increased doubts about the effectiveness of activist fiscal demand management is of particular interest when considering the potential adverse effects of fiscal structural reform on short-run economic activity. Structural reforms that would also imply short-term fiscal consolidation are especially likely to have smaller or even opposite (non-Keynesian) effects on economic activity than those suggested by the Keynesian approach.

Expectations and short-term supply effects can result in non-Keynesian effects in such a way that fiscal consolidation could have expansionary effects. The negative effects of the fiscal multiplier following fiscal consolidations, for example, might be fully compensated for and even reversed by increases in private consumption owing to changes in households' expected permanent income and in the market value of household wealth. First, fiscal consolidation raises households' expected after-tax permanent income, as the related tax increases and expenditure decreases allow a reduction in the future tax burden. Second, real interest rates are likely to fall following credible fiscal consolidation. The market value of private wealth increases if market interest rates fall, thereby stimulating consumption.

The effect of fiscal measures on economic activity also depends on expectations associated with fiscal measures, their composition and their credibility. Non-Keynesian effects are larger when the measures enhance sustainability, as the risk of policy reversal is then minimal and their perceived credibility rises. Cuts in welfare spending, excessive social security and government employment and wages are often mentioned in this context. These measures indicate that the government is serious about reform, since they are often politically unpopular. They also typically enhance sustainability.

Empirical findings of this strand of literature support the argument that successful budget adjustments, in the sense of lasting consolidation, seem to stem from expenditure cuts, in particular reductions in excessive social benefits and public employment. Non-Keynesian effects from tax increases have been deemed important in the context of large consolidations and high debt levels. This supports the relevance of such

effects when fiscal measures strengthen sustainability.

In summary, sound public finances should rely on automatic stabilisation rather than on discretionary fine-tuning to dampen the cyclical fluctuations of aggregate demand. They should also contribute to macroeconomic stability and facilitate the monetary policy-makers' task of maintaining price stability. Moreover, non-Keynesian effects could improve the short-term output effects of fiscal structural reform aimed at consolidating public finances and making them more efficient. There is the potential for a virtuous circle: sound fiscal policies can enhance economic stability in an environment of stable prices and sustainable public finances. This, coupled with fiscal structural reform, can foster economic growth that, in turn, facilitates further reform.

4 Rules and institutions for growth-enhancing fiscal policies

According to the arguments presented in the previous sections, rules and institutions in the fiscal area conducive to growth and economic stability should aim to achieve two objectives. First, they should guarantee budgetary discipline and preserve the sustainability of public finances, thus contributing to macroeconomic stability and indirectly to maintaining price stability. Second, rules and institutions should promote the efficiency of the public sector and the predictability of fiscal policies and provide the appropriate incentives for private agents to enhance long-term growth.

With regard to the first objective, the framework of fiscal rules and institutions in the EU has enabled Member States to come a long way towards stability-oriented and sustainable public finances. However, progress towards the second objective of more efficient fiscal policy, which is an exclusive responsibility of Member States, and which is sometimes referred to as "the quality of public finances", has been more limited. EU Member States agreed in the ECOFIN Council on the main lines of a policy strategy to maximise the contribution of public finances to growth and employment in order to attain the ambitious objectives set by the Lisbon European Council. However, the incentives to implement this strategy are insufficient and the absence of reforms in the framework of national rules and institutions is an important reason for this.

The current fiscal rules in the EU provide the appropriate framework for preserving sound and stability-oriented public finances. One of the main concerns in the process of moving towards Monetary Union in the EU was how to prevent unsound and unsustainable fiscal policies in the euro area, as had emerged in the 1970s and 1980s. A continuation of such policies would have jeopardised Monetary Union and prosperity. Hence governments agreed, first in the Maastricht Treaty, later complemented by the Stability and Growth Pact, on certain rules of budgetary discipline in the EU, keeping, however, full autonomy of fiscal policies under the responsibility of national governments.

These fiscal rules arguably promote the first objective mentioned above. The 3% ceiling for the deficit to GDP ratio, and more forcefully the medium-term target of fiscal positions "close to balance or in surplus", should secure sound fiscal policies where automatic stabilisation can operate freely to smooth output fluctuations. Discretionary policy changes should not jeopardise the long-term sustainability of public finances. A sound budgetary position should also secure a widening margin for a policy of alleviating the tax burden – at least over time by allowing steady debt reduction. A well-defined procedure of prevention, monitoring and sanction mechanisms strengthens the credibility of this constraint. Moreover, the 60% ceiling for the debt to GDP ratio established in the Treaty, coupled with the

prohibition on government bailouts when debt becomes unsustainable and the prohibition on monetary financing, aim at strengthening the soundness of public accounts.

The Stability and Growth Pact framework, however, does not render national fiscal rules and institutions redundant. On the contrary, the latter can and must continue to contribute to sustainable public finances, thereby complementing EU-wide rules. National budget processes underpinning a prudent fiscal position are particularly important to secure appropriate budget preparation and execution. If national budget institutions are effective in achieving fiscal commitments, this will reduce the likelihood of slippages, thereby strengthening the credibility of the Stability and Growth Pact. "Internal stability pacts" at the country level – especially in Member States where sub-national layers of government are granted substantial autonomy – formalise the joint responsibility for the final budget outcome across all levels of government. This should prevent local or regional governments from undoing the fiscal consolidation efforts made by the central government.

On the whole, the success of the new institutional framework embodied in the Treaty and the Stability and Growth Pact in promoting budgetary discipline seems to confirm the importance of rules and institutions. Fiscal deficits have come down and sound budgetary positions have been achieved in the majority of euro area countries. The volatility of fiscal balances is much reduced and public debt is declining. This is no reason for complacency, and countries with imbalances remain, but major progress has been achieved compared with the situation only a few years ago.

Fiscal structural reforms

As regards progress with the fiscal structural reform agenda, however, much less has been achieved. Taxes have come down, but tax cuts are often not part of a comprehensive reform strategy. Moreover, they have not been accompanied by sufficient expenditure restraint, thereby delaying the achievement of the Stability and Growth Pact targets in some countries. Hence, tax cuts in some countries have turned out to be pro-cyclical and have contributed to short-term upward pressures on prices. Benefit reforms, including urgently needed pension reforms, have been largely piecemeal and half-hearted. Consequently, in the euro area the public sector and the tax burden remain much larger than in most competitor countries and employment rates remain low.

An important reason for this slow progress lies with inappropriate national rules and institutions. Expenditure reform is perhaps the most important area in which changes in the fiscal policy framework could make a difference and, as a second round effect, permit further tax reductions. It is also crucial to connect taxation and the social benefit system in a compatible way to prevent employment and investment disincentives. Developing a framework that includes privately managed, funded pensions and the privatisation of public sector goods and services provision on a larger scale could result in more efficient fiscal policies and significant expenditure savings. Moreover, a further strengthening of fiscal transparency, better control mechanisms to enhance the efficiency of public policies and regulation, and better dissemination of modern technology and management practices in public administration are also frequently suggested as ways of reinforcing countries' institutional frameworks, and thereby the efficiency of fiscal policies.

Finally, it is worth stressing that rules on fiscal policies alone are not enough to increase long-term potential growth in the euro area, and expectations as to what can be achieved from fiscal reform alone should not be unrealistic. There are important shortcomings in other policy domains and there can be strong interaction.

5 Concluding remarks

This article has looked at the role fiscal policies can play in enhancing long-term growth and short-term economic stability. As regards long-term growth, sustainable and efficient fiscal policies are warranted. They stimulate investment and innovation while minimising potential adverse repercussions through disincentives to save, invest, work and innovate. And they facilitate the task of monetary policy-makers to maintain price stability. In fact, there is likely to be a virtuous circle of reforms boosting fiscal efficiency and sustainability, with the resulting environment of strong growth and rising employment facilitating further reform. To set such a virtuous circle in motion should be the objective of any fiscal reform strategy.

As regards short-term economic activity, sound public finances relying on automatic stabilisation are conducive to economic stabilisation in normal circumstances. They enhance the sustainability of public finances (and thereby growth) and facilitate price stability-oriented monetary policy. Moreover, non-Keynesian effects could improve the short-term output effects of fiscal structural reforms.

The framework of rules and institutions that governs markets and policy-making must set the appropriate incentives to adopt growth and stability-oriented decisions and policies. The existing EU rules on budgetary discipline provide such incentives and promote sound and sustainable public finances. It is no coincidence that significant progress has been made in this direction in all euro area countries. By contrast, progress in achieving more efficient fiscal policies via structural reforms has been far more limited. Responsibility lies with national governments. Changes to the rules and institutions in euro area countries are important so that governments conduct their activities in the most efficient manner. This will permit a lasting reduction of high public spending ratios and distortionary taxes. In conjunction with other reforms, it will enable countries to achieve the ambitious targets in terms of economic growth and employment set at the Lisbon summit.

Product market reforms in the euro area

Structural reforms aimed at increasing competition and reducing distortions in euro area goods and services markets are likely to have substantial economic benefits and lower the adjustment costs associated with economic shocks. Considerable progress has been made with regard to the integration of euro area product markets and the opening-up of previously sheltered economic sectors. Furthermore, the use of national state aid in the euro area has been significantly reduced. However, much progress remains to be made in all areas of product market reform covered in this article. Against this background, the ECB attaches the utmost importance to the continuation and acceleration of the structural reform process in euro area goods and services markets.

1 Introduction

Structural reforms in product markets (covering both goods and services) have two main aims. First, they aim to intensify the level of competition in the economy. This can be done by increasing the integration of euro area goods and services markets and by deregulating previously sheltered economic sectors. Second, product market reforms aim to reduce potentially harmful distortions caused by different forms of government intervention such as an overly generous use of state aid.

Increased competition and fewer distortions in product markets are likely to have considerable economic benefits, such as downward price effects and improved longer-term employment and growth prospects, as a result of increased competitiveness. Furthermore, well-defined reforms in goods and services markets can increase the flexibility of the economy at large and thereby lower the adjustment costs associated with economic shocks.

This article starts by providing a general overview of the economic benefits of product market reforms. Since a monetary policy viewpoint is taken, emphasis is given to the impact of product market reforms on prices. In view of the fact that product market reforms are a wide and somewhat heterogeneous topic, touching upon developments and policy changes in a large number of fields, their analysis requires a selective approach. This article therefore focuses on the state of progress in enhancing product market integration in the euro area, opening up network industries and reducing the use of state aid. The article concludes with a description of the procedures for further reforms in euro area goods and services markets.

2 Economic benefits of product market reform

Product market reforms that succeed in increasing competition should lead to cost reductions, lower profit margins and productivity gains as a result of, for example, organisational changes and increased innovation. This in turn is expected to have a temporary downward effect on consumer price inflation. Over time, as industries and consumers adjust to the new, more competitive environment, the initial supply-side effect of lower prices in the affected industries is likely to be accompanied by increased demand for goods and services. The relative magnitude of the supply and demand effects and their distribution across the different sectors of the economy will determine the overall readjustment of relative prices. This is the main long-term price effect to be expected from increased competition in goods and services markets, since in the long run changes in the overall price level are fundamentally determined by monetary developments.

Previously sheltered sectors of the economy are often characterised by a low level of

labour productivity. Consequently, increased competition in these industries frequently results in initial sector-specific employment losses. Over time, however, sectoral employment generally increases owing to higher demand. Furthermore, as other sectors become more competitive as a result of cheaper inputs, the employment prospects in the economy at large improve and the long-run net employment effects of product market reforms are therefore usually positive. Nevertheless, the necessary reallocation of labour within and between different sectors can be facilitated by appropriate labour market policies, which can also help to increase public acceptance of product market reforms.

The cost reductions and improvements in innovation associated with an increased level of competition in product markets are likely to improve the competitiveness of both the sectors undergoing reform as well as the economy as a whole. It is difficult to assess empirically the economy-wide gains from product market reform, and to date few attempts have been made to analyse the extent to which product market regulations affect macroeconomic outcomes such as employment and growth. However, there is some evidence that policies which foster competition and flexible product markets can yield substantial macroeconomic benefits. Studies by the Organisation for Economic Co-operation and Development (OECD), for example, find a negative relationship between the strictness of product market regulation on the one hand and the employment rate and total factor productivity growth, i.e. the increase in the overall efficiency of the economic process, on the other (see Box 1).[1]

Whereas the economic benefits outlined above are applicable to all economies, flexible product markets are of particular importance for the euro area. This is due to the fact that countries participating in EMU are no longer able to use country-specific monetary and exchange rate policies to address economic shocks. Hence, the importance of national structural policy measures designed to improve the flexibility of markets has increased. If product markets were to become more efficient and responsive as a result of structural reforms and price adjustments were to be carried out more swiftly, the adjustment costs associated with economic shocks may become lower. Demand shocks, for example, require relative price adjustments in line with the changed demand pattern, shifts in factors of production within or between sectors, or a combination of all adjustment mechanisms. The necessary adjustments are likely to be easier and faster if product market regulations facilitate the entry and exit of firms, thus allowing for a swift reallocation of economic resources. Reducing the entry costs for companies, for example by lifting regulatory burdens, promotes the creation of firms. The exit of firms that are no longer competitive is facilitated by a reduction in the use of state aid and other policy measures designed to protect the existing market structure. The repercussions of a faster reallocation of resources on unemployment depends, inter alia, on the flexibility of the labour market, which in turn is related to factors such as the employability of the workforce and the sectoral and geographic mobility of labour.

A reduction of structural rigidities in product markets may also facilitate the conduct of the stability-oriented monetary policy of the ECB. First, a more rapid reallocation of factors of production owing to product market reforms is likely to result in a faster adjustment of the economy to shocks, which should be conducive to the mitigation of business cycle developments. Second, the increase in the potential level of output and employment growth – made possible by a more efficient allocation of factors of production owing to lower entry and exit barriers to firms – may help to reduce the degree of price pressures that is associated with a given level of economic activity.

1 *On recent productivity developments in the euro area see the article entitled "New technologies and productivity in the euro area" in the July 2001 issue of the ECB Monthly Bulletin.*

Box 1

Links between the strictness of product market regulation, employment and productivity growth

The OECD International Regulation Database (IRD) provides a broad overview of the strictness of product market regulation in OECD member countries. The database contains more than 1,100 observations per country, referring mostly to 1998. The main sources of information for the database are the responses of OECD member countries to an ad hoc questionnaire developed by OECD staff as well as publicly available information.

On the basis of the economy-wide and sector-specific information contained in the database, it is possible to construct summary indicators of product market regulation. These are measures designed to express the stringency of the overall regulatory environment in different countries, from least to most restrictive (using a scale of 0 to 6, with 0 being the least and 6 the most restrictive regulatory environment).[1]

Chart A: Product market regulation and employment rates

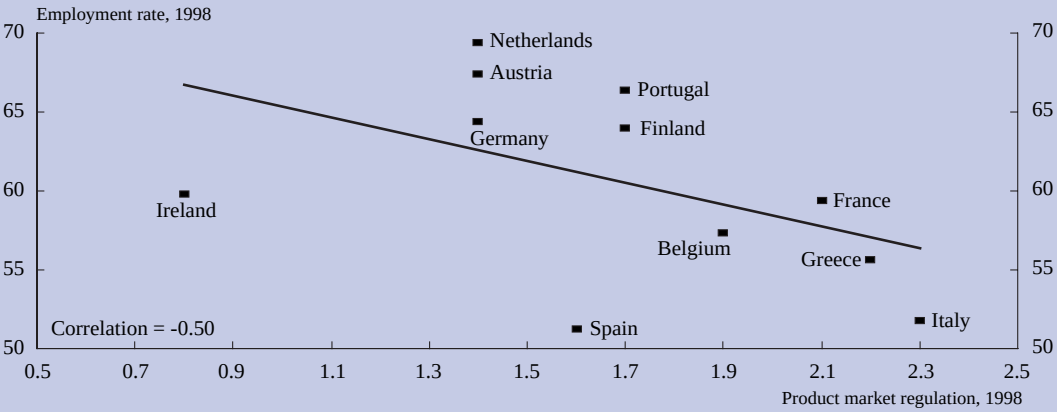
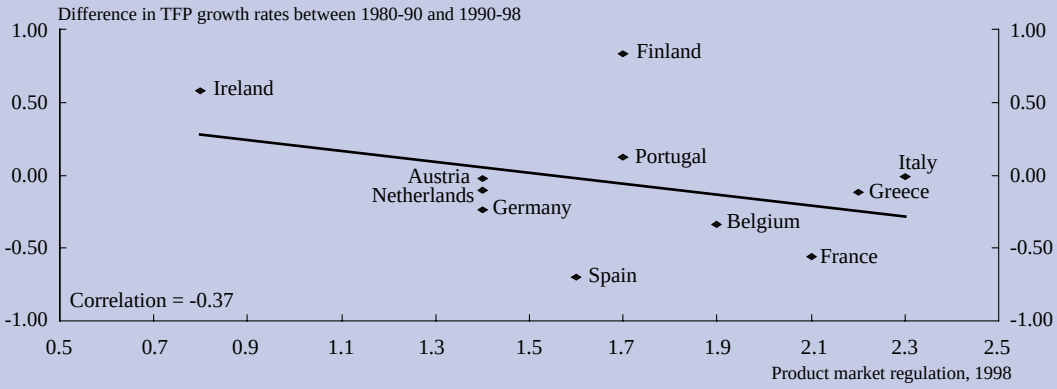


Chart B: Product market regulation and total factor productivity



Source: OECD.

Charts A and B plot the summary indicators for product market regulation for 11 euro area countries (the indicator is not available for Luxembourg) against two macroeconomic indicators: first, the employment rates (as a percentage of the workforce) in 1998 and, second, the difference between the average growth rate of total factor productivity (TFP) during the period from 1980 to 1990 and the average TFP growth rate during the period from 1990 to 1998.

1 *A more detailed description of the database and the summary indicators can be found in G. Nicoletti, "Regulation in Services: OECD Patterns and Economic Implications", OECD Economics Department, Working Paper No. 287, Paris, 2001.*

The figures illustrate that in 1998, the reference year for the database, there appeared to be substantial differences between the euro area countries in the strictness of the overall regulatory environment for product markets. Furthermore, the charts tentatively indicate a negative correlation between the strictness of product market regulations on the one hand and the macroeconomic performance of a country in terms of employment rates and TFP growth (i.e. the increase in the overall efficiency of the economic process) on the other.

It should be kept in mind that summary indicators of product market integration are subject to a number of substantial caveats, such as the imperfect international comparability of many forms of product market regulation. Furthermore, the IRD refers only to 1998. Recent regulatory reforms are therefore not taken into account. Notwithstanding these shortcomings, analyses along the lines provided above allow some tentative conclusions to be made on the link between the strictness of product market regulation and macroeconomic performance.

3 Enhancing product market integration in the euro area

The creation of a single market for goods and services has advanced the integration of product markets throughout the EU and hence the euro area considerably. Since product market integration and the resulting increase in competition can be expected to have exerted downward pressure on traded goods and services prices, the decline in price dispersion for most categories of goods and services across the EU Member States during the period from 1995 to 1999 is an important indicator of progress in product market integration. Fuel and power prices were the only exceptions to the general declining trend. However, the cross-border retail trade in fuel and power products still remains limited (see Table 1).

However, the interpretation of changes in price dispersion is subject to a number of caveats. First, continuing differences in indirect taxation across the EU Member States contribute to price dispersion. Second, the gradual convergence of productivity and living standards across Member States is likely to exert some limited upward pressure on price developments in non-traded goods and services prices in Member States and regions with relatively low GDP per capita levels (what is known as the Balassa-Samuelson effect). The small inflation differentials resulting from this effect are likely to contribute to a reduction of price level differences between EU Member States and are expected to decline over time.

Despite the clear advances in EU and euro area product market integration, the internal market remains incomplete. One of the reasons for this are deficits in the implementation of Internal Market Directives into Member States' national legislation,

Table 1

Price dispersion in the EU for goods and services, 1995-99

(coefficient of variation; VAT included)

	1995	1996	1997	1998	1999	Change 1995-99
Private final consumption	0.18	0.16	0.15	0.14	0.14	-0.04
Non-durable goods	0.15	0.14	0.13	0.12	0.11	-0.04
Durable goods	0.16	0.13	0.12	0.12	0.11	-0.05
Fuel and power	0.18	0.17	0.16	0.18	0.20	0.02
Services	0.17	0.16	0.16	0.13	0.13	-0.04

Source: European Commission, "Economic Reform: Report on the functioning of Community product and capital markets 2000" ("Cardiff report").

which limits the de jure integration of product markets (see Chart 1).

The average share of non-implemented Internal Market Directives in the euro area countries declined from around 6.8% in November 1997 to around 2.7% in May 2001. This is slightly above the corresponding figures for the EU, namely 6.3% (November 1997) and 2.5% (May 2001). Although this decline indicates an improved national transposition record, by May 2001 10.8% of all Internal Market Directives had not yet been transposed in all euro area countries. This figure has remained almost constant over the last two years. The degree of non-transposition differs significantly between the various policy areas. The most problematic areas appear to be transport policy, public procurement and consumer policy. More than 30% of the Internal Market Directives in these fields have not yet been transposed in all euro area countries. Other important areas in which the de jure integration of the internal market remains incomplete are social policy and telecommunications, where the transposition of around 20% of the Directives is still incomplete.

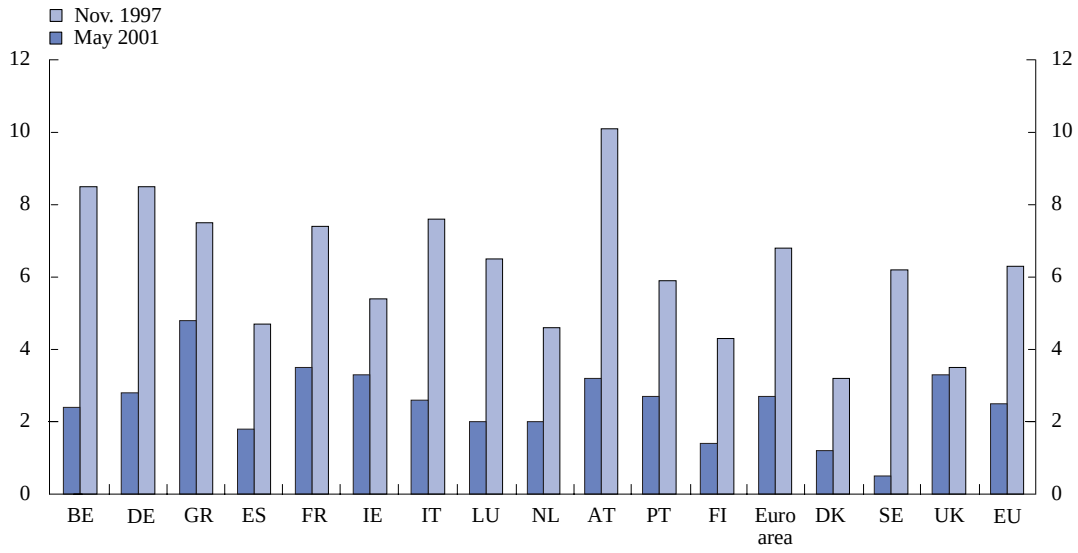
In the 2001 Broad Economic Policy Guidelines (BEPGs) the ECOFIN Council urges the Member States to reduce the internal market transposition deficits to less than 1.5% by spring 2002. Since the economic importance of the different Internal Market Directives varies significantly, a summary measure of the transposition deficit, giving equal weight to all Directives, is of limited use in assessing the economic implications of the transposition deficit. This notwithstanding, a reduction of the deficit to 1.5% would certainly constitute a significant advancement with regard to product market integration and could be expected to contribute to a further increase in competition. However, since the current transposition deficits appear to be caused mainly by backlogs in the national policy-making process, a number of Member States will have to intensify considerably their administrative and political efforts regarding the transposition of EU law in order to meet this target.

Other indicators of progress with regard to product market integration are business surveys designed to identify remaining obstacles for cross-border business activities.

Chart 1

Non-implementation of Internal Market Directives

(as a percentage of the total number of Directives)



Source: European Commission, "Single Market Scoreboard", No. 8, May 2001.
Note: Figures for the euro area and the EU are unweighted averages of the figures for the Member States.

Table 2

Remaining obstacles for businesses in the internal market

(as a percentage of interviewed businesses)

	1999	2000	Change
Additional costs to render products or services compatible with national specifications	37	33	-4
Unusual testing, certification or approval procedures	31	31	0
State aid favouring competitors	29	27	-2
Difficulties related to the VAT system and VAT procedures	27	26	-1
Inappropriate legal appeal mechanisms (breaches of contract)	n.a.	24	n.a.
Discriminatory tax treatment of your operations	17	24	+7
Lack of legal security of cross-border contracts/transactions	17	23	+6
Restrictions on market access; existence of exclusive networks	23	20	-3
Lack of protection against piracy and counterfeiting	18	18	0
Costly financing arrangements for cross-border transactions	18	18	0
Discriminatory practices of awarding authorities in public procurement markets	15	16	+1
Requested rights or licences in hands of local competitors	15	15	0
Difficulties in the temporary posting of staff abroad	8	13	+5
Requirement to establish branch in another Member State	15	13	-2
Other legislative or regulatory obstacles	15	10	-5
Ban to market a product/service legally marketed in another Member State	9	9	0

Source: European Commission, "Single Market Scoreboard, No. 7, November 2000.
Note: The survey is based on 3,240 interviews conducted in 2000 and 3,395 interviews conducted in 1999. The surveys cover large, medium-sized and small firms from the services, distribution, manufacturing and construction sectors.

Such obstacles are illustrative of the extent to which EU product markets are de facto integrated. This concept goes beyond the de jure integration by means of Directives and other legal instruments and also encompasses problems that have not yet been legally addressed or that cannot be legally addressed. The latest available survey conducted for the European Commission, relating to 2000, indicates increasing overall satisfaction of EU businesses with the operation of the internal market. However, notwithstanding this positive overall picture, the surveys show that the range of remaining obstacles for businesses to participate in the internal market is considerable (see Table 2).

Although business surveys are subject to the general caveat that they reflect only the views of a particular group of economic agents, the results indicate that progress with regard to the removal of the remaining obstacles is limited. With regard to some of the most frequently mentioned hurdles, such as the additional costs of complying with national product or service specifications or the use of state aid in favour of competitors, the situation appears to have improved somewhat. The significance of certain other important obstacles, such as unusual testing, certification or approval procedures or costly financial arrangements for cross-border transactions, however, remains unchanged. Furthermore, a number of problems related to cross-border business activity in the EU, for example discriminatory tax treatment and the lack of legal security for cross-border transactions, even appear to have increased. More generally, the survey results suggest that considerable efforts in a range of policy areas are still required in order to also ensure the de facto completion of the internal market.

The integration of services markets across the EU and hence the euro area is generally less advanced than the integration of goods markets. In fact, the intensity of intra-EU trade in services in relation to the sector's size has declined since the early 1990s. This is in stark contrast with the increase in goods trade, where market integration is more advanced. The lack of competition associated with the insufficient integration of services markets is particularly harmful as the economic significance of services is steadily increasing. Moreover, new information and

communication technologies (ICTs) reduce the need for some services industries to be located close to their customers. Most of the barriers to trade in services appear to be due to national regulations, such as the administrative procedures for setting up subsidiaries in other Member States. The European Commission recently unveiled a two-year strategy to remove bureaucratic obstacles and barriers to cross-border trade in services, which is therefore of considerable economic importance for the euro area and the EU as a whole.

To sum up, over the last decade the integration of euro area product markets has made great strides forward, but progress remains to be made in a number of important areas. First, remaining deficiencies in the de jure integration of product markets, such as the non-transposition of Internal Market Directives, have to be overcome. Second, further efforts are required to identify and remove technical and administrative hurdles to the operation of the internal market for goods and services which, taken together, have a crucial impact on the level of de facto integration and competition in the internal market. This in turn will have important repercussions on price developments and price dispersion in the euro area.

4 Opening-up of sheltered sectors: regulatory reform in network industries

Many of the recent reforms in euro area goods and services markets focused on regulatory changes in network industries. Until a few years ago, these industries were typically characterised by the existence of one large, vertically integrated and publicly owned incumbent. Arguably the most important reason for this monopolistic market structure is the presence of a bottleneck infrastructure with natural monopoly characteristics. It would be extremely expensive and economically inefficient to install, for example, competing electricity transmission systems or rail networks. Furthermore, in the past governments frequently pursued non-economic objectives related to network industries, such as universal service obligations, equal prices across geographic regions and the security of the supply of essential services. More recently, however, the question emerged as to what extent competition could be introduced in network industries by granting universal access to the bottleneck infrastructure. This requires specific regulations in order to ensure non-discriminatory access for potential competitors under "fair" conditions. Furthermore, regulatory oversight has to ensure that non-economic objectives, such as universal service obligations, quality standards and the security of supply, are guaranteed. A further common feature of network industries is that they are not only sizeable in their own right, but provide important inputs for a wide range of economic sectors, which further increases their economic importance. [2]

Significant progress has been made in the liberalisation of the *telecommunications sector*. As from 1 January 1998, free competition in the provision of voice telephony and telecommunications infrastructure was introduced in the EU and by 2001 the last country-specific temporary derogation from the implementation of the relevant EC Directives had expired. Although a number of impediments to the de facto implementation of competition in this sector still need to be resolved, the introduction of competition in this industry is now well advanced. In view of the progress made so far the 2001 BEPGs no longer refer to the telecommunications sector as a priority industry for further regulatory reforms.

2 *A more detailed analysis of the regulatory reform process in the telecommunications, electricity and gas sectors can be found in the ECB publication entitled "Price effects of regulatory reform in selected network industries", March 2001.*

The network industries mentioned in the 2001 BEPGs, namely energy (electricity and gas), postal services, air transport and railways, are currently in very different stages of the regulatory reform process. However, the introduction of competition in all these sectors, with the exception of the air transport industry, is less advanced than in the telecommunications industry. Taken together, the products and services produced in network industries have a share of slightly less than 5% of the overall euro area Harmonised Index for Consumer Prices (HICP). The economic implications of the regulatory reform process in these industries are of importance with regard to price developments and therefore with regard to monetary policy.

Turning first to *energy markets,* the EC Electricity Market Directive (96/92/EC) had to be transposed into national legislation by 19 February 1999. The Directive called for an initial liberalisation of at least 25% of the national electricity markets, a share which is due to increase to one-third of these markets by 2003. The EC Gas Directive (98/30/EC) had to be transposed into national legislation by 10 August 2000. The Directive called for an initial liberalisation of at least 20% of the national gas markets, a share that is due to increase to one-third of these markets by 2008.

Most euro area countries envisage either opening up a larger share of their electricity and gas markets to competition than stipulated by the relevant EC Directives or fully liberalising their energy markets. At the current juncture, around 60% of the euro area electricity market and 39% of the euro area gas market are open to competition. On the basis of member countries' intentions in 2001, the share of the euro area electricity market that will be open to competition will increase to no more than around 70% by 2008, with most of the additional opening-up of the market due to take place by 2004. The share of the euro area gas market to be opened up to competition is set to increase to 54% by 2008.

As illustrated in Box 2 recent developments in the HICP sub-indices for telephone and telefax services and electricity, in relation to the overall euro area HICP, indicate that regulatory reforms have had a moderating impact on euro area price developments in these two sectors. Consumer prices for gas in the euro area do not appear to have been influenced by the partial introduction of competition as yet. However, this is not unexpected, since the first steps towards regulatory reform in this sector were only taken recently.

With regard to the level of competition, the *postal sector* is divided into two parts. Parcel and express services operate in a broadly competitive environment, whereas the delivery of letters is highly regulated in most Member States. With effect from February 1999 the Postal Directive (97/67/EC) opened up about 3% of the regulated national postal services markets to competition. In 2000 the European Commission proposed to open up an additional 20% of these markets by 2003, with a view to a further opening-up of the market by 2007. However, at the time of publication, the EU Council of Telecommunications Ministers had not yet reached a political agreement on these proposals.

Whereas progress at the EU level remains limited, the experience of the few Member States that have liberalised their postal markets beyond the minimum requirements of the Postal Directive appears to have been broadly positive. Increased competition has led to substantial price reductions in the parcel post, bulk and direct mail markets, which has resulted mainly in direct benefits for producers. Pioneers of postal liberalisation have not experienced problems in the provision of universal services, even in remote areas with low population density.

The provision of *air transport services* within the EU was gradually opened up, culminating in April 1997 in the introduction of cabotage, i.e. the right of a Member State carrier to operate a route within the territory of

Box 2

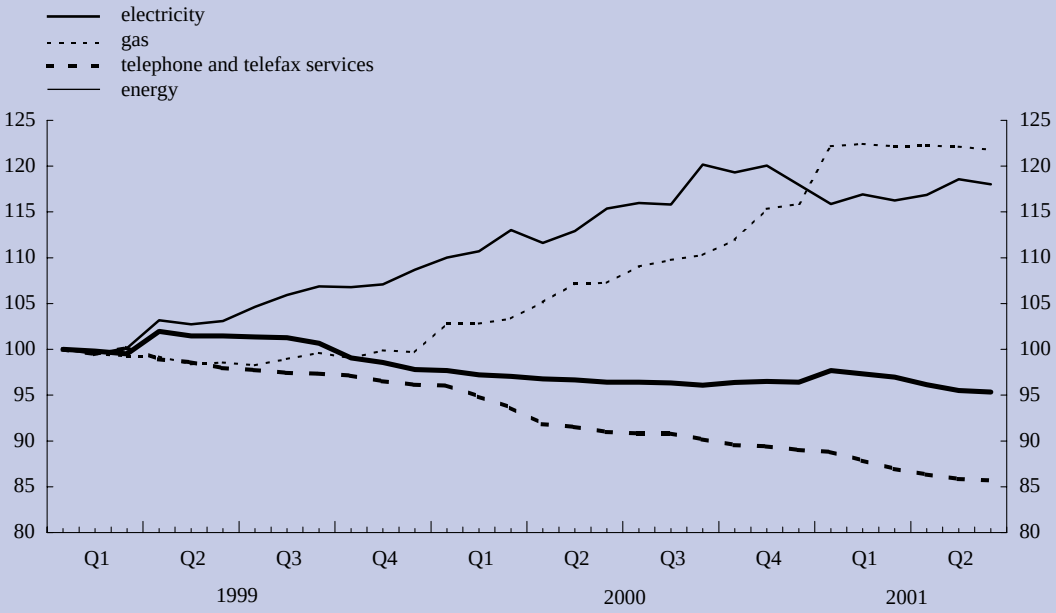
Consumer price developments in selected network industries

As from 1 January 1998 free competition in the provision of voice telephony and telecommunications infrastructure was introduced in most EU Member States. Furthermore, the transposition of the EC Electricity Market Directive into national law resulted in a partial opening-up of the electricity market as from February 1999, with the partial opening-up of the gas market following in August 2000. These regulatory reforms are expected to result in a higher level of competition in these industries and downward pressure on consumer prices.

The chart below shows recent developments in the HICP sub-indices for telephone and telefax services, electricity and gas relative to changes in the overall euro area HICP for the period from 1999 to 2001. The chart also contains the HICP sub-index for energy, which provides a useful benchmark for the assessment of changes in the electricity and gas indices.

HICP sub-indices relative to the overall HICP for the euro area

(index January 1999 = 100; monthly data)



Source: Eurostat.

With regard to the HICP sub-index for telephone and telefax services, a marked downward trend compared with the overall HICP is discernible throughout the period under review. The electricity sub-index also shows a downward trend, although the decline is much weaker than that for the telephone and telefax services sub-index. However, in view of the strong increase of the overall sub-index for energy during most of the period from 1999 to 2001, mainly on account of the rise in oil prices, the decline in electricity prices in relation to the overall HICP is remarkable. The HICP sub-index for gas follows the developments of the overall energy index closely, although with a considerable time lag. This is due to the link between oil and gas prices. Given that the liberalisation of the European gas markets is still in its early stages, it cannot be expected that the HICP sub-index for gas will already reflect progress in regulatory reform.

Overall, the chart indicates that the introduction of competition in network industries is likely to result in downward price effects in the industries concerned. However, it is important to keep in mind that such reforms are only one of the factors determining relative price developments in these industries. Other important elements include technological progress (in the case of telecommunications) and tax changes and energy price variations (in the case of electricity and gas).

Table 3

Average changes in air traffic fares between euro area capitals, 1997-2000 [1)]

(unweighted average of fare changes in the euro area countries as a percentage)

	Business fare	Economy fare	Promotion fare
One carrier	+23.2 (11)	-15.5 (11)	-6.5 (11)
Two carriers	+14.1 (10)	-16.4 (11)	-2.7 (11)
Three carriers	+7.7 (7)	-7.9 (7) [-17.8 (6)] [2)]	-5.4 (8)
Four carriers	-14.5 (2)	+13.3 (3) [-23.5 (2)] [2)]	-11.8 (4)

Sources: European Commission, "Economic Reform: Report on the functioning of Community product and capital markets 2000" ("Cardiff report") and ECB calculations.

1) The figures in brackets indicate the number of euro area countries for which the category is applicable. For example, in all euro area countries (except Finland, where no data are available) at least one carrier offered business fare services. However, only two countries had four carriers offering business fare services.

2) Figures in square brackets exclude one euro area country with highly atypical price developments.

another Member State. The liberalisation of the industry appears to have contributed to the dynamic development of air transport services, resulting in a considerable increase in the number of carriers, routes and employees. The national airlines' market share of domestic and international routes within the EU declined as part of the industry's restructuring process, although the previous "flag carriers" remain the dominant service providers.

The extent to which regulatory reforms in air transport services resulted in downward price effects is strongly related to the number of operators serving the route and hence the level of competition (see Table 3). More specifically, economy and promotion fares tended to fall, whereas prices for business fares increased in most euro area countries. Since economy and promotion fares compete not only with the fares of other operators serving the same route but also with fares for indirect flights and charter services, the level of competition in this market segment tends to be higher than in the business segment.

A report by the European Commission published in 1999 on changes in the European airline industry found that the share of routes with more than two competitors had increased since the start of the liberalisation process. However, in 1997, the reference year of the study, more than 90% of EU air routes were still monopolistic or duopolistic. While this is partly due to the limited market volume on many routes, air transport competition is also limited by infrastructure bottlenecks, notably the scarcity of available slots at major airports. According to current rules established carriers will not normally lose their take-off and landing slots however little they actually use them. Although a Council Regulation adopted in October 1993 (Regulation EEC 95/93) stipulates that 50% of unused or newly created slots must be set aside for newcomers to the market, the availability of peak-time slots at congested airports has not increased substantially. Against this background the European Commission is expected to come up with new proposals in order to reform the allocation procedures for take-off and landing slots. Furthermore, the European Commission has taken the initiative to remove further infrastructure bottlenecks that reduce the level of competition in the air transport industry, in particular the overloaded air space due to the lack of an integrated EU air traffic control system.

Regulatory reforms in the EU rail *transport* industry are still in the early stages. However, a conciliatory agreement reached between the European Council and the European Parliament in November 2000 brought about some progress by calling for, inter alia:

- a gradual opening-up of the European rail freight network to all licensed rail operators. Seven years after the entry into force of the Council Directive operators will have access to the whole rail network for international rail freight transport;
- the separation of essential functions of the railway industry, such as infrastructure management and rail services;
- the establishment of an independent regulator in each Member State; and
- a reduction of the technical barriers between the different national rail networks.

Furthermore, the European Commission intends to present a second package of measures on the opening-up of domestic rail freight and passenger markets no later than December 2001. These measures are likely to foster productivity in the rail transport industry and contribute to lower prices for rail services depending on the extent to which they will result in a reduction of the regulatory burden for rail transport and an increased level of de facto competition.

Summing up, the introduction of competition in network industries can result in considerable downward price effects and other general economic benefits, such as improved longer-term employment and growth prospects. However, an appropriate regulatory framework which ensures non-discriminatory access to the bottleneck infrastructure is indispensable in order to create de facto competition in these sectors. In other words, the "quality" of the regulatory framework has a considerable impact on the extent to which potential price falls due to regulatory reforms in network industries will be achieved.

5 Reducing distortions: the use of national state aid in the euro area

The control of state aid is an important element of EU competition policy and a reduction of the use of state aid is a frequently reiterated demand in discussions on product market reforms in the euro area. The underlying rationale for limiting state aid is the assumption that subsidies often reduce aggregate economic welfare by weakening the incentives for firms to improve their efficiency and by enabling the less efficient to survive or even expand at the expense of the more efficient. Furthermore, state aid has to be financed by means of general taxes, which increases the overall importance of the state in the economy and aggravates the distortions caused by state aid. Finally, state aid may distort intra-EU trade, which in turn may lead to intra-EU friction and retaliatory measures, thereby endangering the benefits of the internal market.

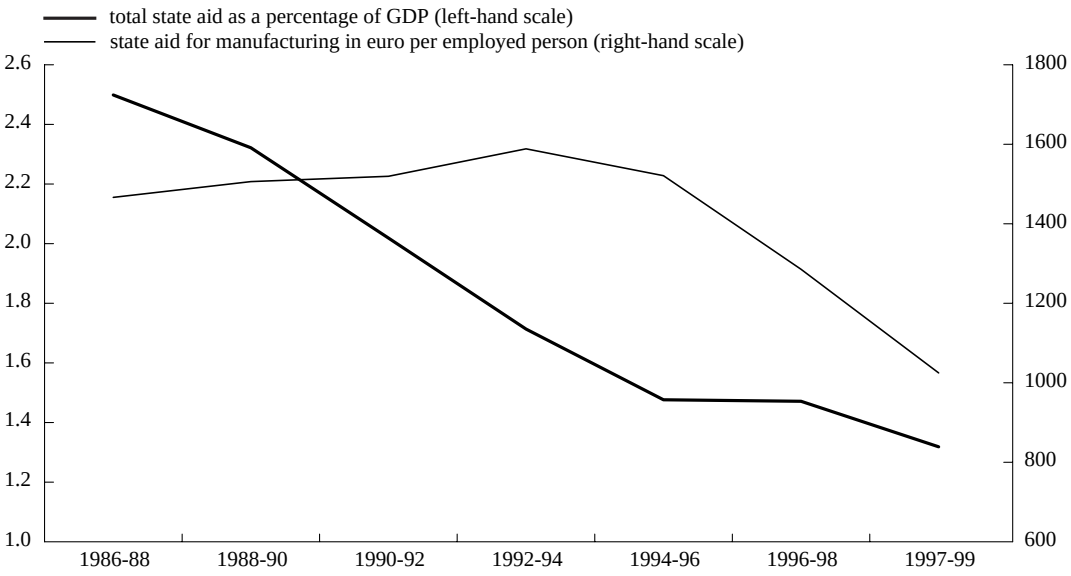
Assessments of the economic repercussions of state aid have to differentiate between the main categories of state aid, namely *sector-specific aid, region-specific aid* and general or *horizontal state aid*. Sector-specific aid affects the sectoral structure of the economy and has the strongest distortive effects on the allocation of resources. Horizontal state aid such as financial support for research and development investments is available for all sectors of the economy. However, public subsidies for particular economic activities such as research and development tend to be asymmetrically distributed across different industries. Horizontal state aid is therefore also likely to lead to distortions of the allocation of resources, although these are likely to be less pronounced than in the case of sector-specific aid. The implications of region-specific aid are likely to fall between those of the other two categories, depending on, inter alia, the relative economic importance of the supported regions and the sectoral structure of the region concerned.

The overall use of national state aid in the euro area nearly halved during the period from 1986 to 1999, but it is still at a sizeable level of around 1.3% of GDP (see Chart 2). Developments with regard to national state

Chart 2

Overall national state aid and state aid for manufacturing in the euro area

(three-year averages of overall state aid as a percentage of euro area GDP and state aid for manufacturing in the euro area in euro per employee)



Sources: European Commission, "Surveys on State aid" (various issues), and ECB calculations.

aid for the manufacturing sector are somewhat different. Expressed in euro per industrial employee national state aid for manufacturing rose slightly until the period from 1992 to 1994 and fell gradually in the period thereafter. Financial support provided within the framework of the EU's Common Agricultural Policy (CAP) and the EU's regional policy is not included in these figures. This is due to the CAP's exclusive focus on agriculture and to the fact that a large share of the financial assistance provided through the EU's regional policy does not directly benefit private enterprises.

Over the period from 1986 to 1999 the relative importance of horizontal state aid for the manufacturing sector as a share of total national state aid for manufacturing remained relatively stable at around 40%. The share of region-specific state aid to industry increased over time, mainly at the expense of sector-specific state aid for industry. The latter declined gradually from 23.5% during the period from 1986 to 1988 to 9.1% during the period from 1997 to 1999.

In sum, there have been significant reductions in national subsidies to enterprises in the euro area, particularly during the 1990s, but overall state aid remains considerable. Furthermore, particular efforts are needed to reduce the share of the most distortive form of state aid, namely sector-specific public support to enterprises.

6 Procedures for further product market reforms in the euro area

Articles 98 and 99 (1) of the Treaty establishing the European Community (the "Treaty") require EU Member States to regard their economic policies as a matter of common concern and to co-ordinate them in the context of the BEPGs. This also applies to the co-ordination of product market reforms in the EU and the euro area.

The responsibility for product market reforms in the euro area rests to a large extent with the Member States, although the

European Community also plays an important role in many areas related to product market reform. In its role as guardian of the Treaty, the European Commission initiates legal action against the delayed implementation of Internal Market Directives by Member States or blocks state aid that is not compatible with the relevant articles of the Treaty. With regard to the introduction of competition in previously sheltered sectors of the economy, the allocation of responsibilities depends on the industry-specific situation. In the telecommunications sector, for example, the legal provisions for opening up the market are largely in place. It is now primarily up to the regulatory authorities of the Member States to safeguard and further increase the de facto level of competition in this market. Moreover, the European Commission retains an important role in monitoring the process and may initiate changes to the existing legal framework if further measures are required to increase competition. In network industries that are not yet fully open to competition (energy, postal services, air transport and railways) Member States can decide to exceed the binding minimum opening requirements (if any) set by the Council of Ministers. Furthermore, it would be up to the Member States to undertake additional product market reforms in policy areas in which they retain the exclusive policy-making competence. These are product market areas that are not subject to an explicit EU policy and that do not conflict with horizontal EU policy objectives such as the completion of the internal market.

Turning to the current procedures for implementing product market reforms, the Cardiff European Council in June 1998 called for a reinforced monitoring of structural reforms in the EU, which initiated what is known as the "Cardiff process". As part of the Cardiff process Member States present national reports on reforms concerning the functioning of product and capital markets and the European Commission prepares a report on the functioning of Community product and capital markets (i.e. the "Cardiff Report"). Furthermore, the Economic Policy Committee (EPC), comprised of delegates from the Member States, the European Commission and the ECB, conducts an annual in-depth peer review of economic reforms in Member States. This process complements the assessment provided in the Commission's Cardiff Report and results in the EPC's *Annual Report on Structural Reforms*. The latter report focuses on the situation in the EU Member States and covers a somewhat broader range of issues than the Cardiff Report. Both reports feed into the BEPGs, which are the key instrument for economic policy co-ordination in the EU, including the reform of product markets. Furthermore, the BEPGs serve as a point of reference for the ex post policy assessment partly conducted by the European Commission and published in its *Report on the Implementation of the BEPG*. The monitoring of structural reforms in the Cardiff process is implemented by a "light procedure". Unlike the Stability and Growth Pact for fiscal policies, the Cardiff process does not foresee sanctions in the case of non-compliance. Instead, the instruments used in this procedure are peer pressure and an extensive reporting, monitoring and evaluation system, as well as the identification of best practices, i.e. successful initiatives undertaken in one Member State that might also be applied in others.

At its summit in Lisbon in March 2000 the European Council further emphasised the need for progress in product market reform as a key condition for the EU to achieve its strategic goal "to become the most competitive and dynamic knowledge-based economy in the world". Furthermore, it was decided that the annual spring meetings of the European Council should define, inter alia, mandates concerning structural reforms and ensure that the Member States and the Community institutions follow them up. The first such meeting took place at the Stockholm European Council in March 2001. The number of concrete decisions taken concerning product market reforms was limited. Shortly before the Council meeting, the European Commission proposed that Member States should fully liberalise their

electricity and gas markets by 2005 at the latest. The European Council generally welcomed the opening-up of these markets, but no precise timetables were adopted. The "open sky" initiative, which aims to alleviate existing air transport capacity bottlenecks in the EU by integrating the national air control systems, was delayed.

This notwithstanding, the European Council agreed on a comprehensive list of follow-up activities in order to maintain and further enhance the momentum of reform initiated in Lisbon. These activities are reflected in the BEPGs priority areas for product market reform. The next follow-up meeting to Lisbon, scheduled for spring 2002, will provide a further opportunity to assess the current pace of product market reform in the euro area and the EU.

7 Concluding remarks

Structural reforms in euro area product markets aim to increase the level of competition in the economy and to reduce potentially harmful distortions. This in turn should result in considerable economic benefits such as downward price effects and improved longer-term employment and growth prospects. Furthermore, well-defined reforms in goods and services markets can reduce the adjustment costs of changes in economic circumstances.

The integration of euro area product markets and, more recently, the introduction of competition in previously sheltered economic sectors has advanced considerably, but there are a number of important issues which remain to be addressed. There is also a need for a further reduction in the levels of state aid in general and sector-specific state aid in particular. Against this background, the ECB strongly welcomes the increasing political importance that is given to further progress in product market reform and encourages the competent policy-makers in this field to build upon the momentum generated at the Lisbon European Council in March 2000.

The ECB attaches the utmost importance to product market reforms in the euro area and will continue to monitor and analyse closely the ongoing developments in this field for two main reasons. First, in order to be able to assess the timing and magnitude of the downward price effects that these reforms are likely to bring about. Second, in order to detect any further economic effects that reforms in goods and services markets may trigger. Furthermore, the ECB will contribute to the ongoing work on goods and services market reform through its participation in the EPC and other competent Community bodies as well as through further analyses of the economic implications of product market reform.

Consolidation in central counterparty clearing in the euro area

Since the introduction of the euro in 1999, there has been a dramatic rise in securities trading (in particular equities trading) in the euro area. As a result, it has become increasingly convenient for market participants to settle market transactions on a net basis instead of on a transaction by transaction basis. Moreover, the increasing size of the risks involved and the growing role of anonymous trading have reinforced the need for market participants to have the risks associated with the netting process managed by a central counterparty (a financial institution which interposes itself between buyers and sellers).

Several central counterparty clearing houses already exist in the euro area, but they mainly handle derivatives. There are also a number of projects under consideration or under implementation relating to securities. However, economies of scale and network externalities would favour a higher degree of concentration. As a result, a group of major global investment banks has supported the idea that Europe needs only one central counterparty clearing house, which would be multi-currency and multi-product (equities, bonds, derivatives and commodities).

The ECB is carefully monitoring and analysing these developments. Indeed, central counterparty clearing could affect the smooth execution of monetary policy operations, the sound functioning of payment and settlement systems and the stability of the financial markets in general. The consolidation process adds to the complexity of the issue: on the one hand, consolidation in central counterparty clearing could help to increase efficiency in the clearing and settlement of securities; on the other hand, the potential systemic consequences of a central counterparty's failure increase with its size.

This article describes how central counterparty clearing houses function, discusses questions related to consolidation and analyses issues of concern for central banks. The ECB is obviously more directly interested in issues related to its "domestic" infrastructure, i.e. systems that mainly or exclusively handle assets denominated in euro.

1 The functioning of central counterparty clearing

What does a central counterparty clearing house do?

A clearing house determines the obligations that result from debit and credit positions arising from the trading of financial assets and calculates the amounts which need to be settled, typically through securities settlement systems. Financial obligations may be settled one by one, i.e. on a gross basis. They may also be settled net, whereby only the difference between debit and credit positions is settled. "Settlement netting" refers to situations when a clearing house or a securities settlement system computes positions without taking risks itself. "Central counterparty netting" refers to situations when the clearing house interposes itself as a buyer to the seller and as a seller to the buyer, thus creating two new contracts which replace the original single contract. The legal process of replacing the original counterparties and becoming the single counterparty for all participants is generally called novation.

Netting can be bilateral or multilateral (see Box 1). Bilateral netting reduces the bilateral flows between each pair of counterparties to one single "net" obligation. Multilateral netting provides for the netting of all obligations stemming from participants in the system and produces one single obligation due to or from each counterparty within the netting group. Central counterparty clearing houses use multilateral netting because it minimises the number of obligations to be settled.

However, central counterparty clearing houses do not necessarily have to be used for clearing, since transactions can be sent directly after trading to the relevant securities settlement system for settlement.

Box 1

The securities clearing and settlement process

One of the main services which central counterparties provide is netting. It is important to distinguish between two types of netting arrangements. In some cases, netting means the pure calculation of net obligations arising from trades without affecting the underlying contracts. In other cases, netting results in the substitution of the original contractual obligations for equivalent obligations with a central counterparty interposed between the seller and the buyer. The terminology commonly used for these two types of netting varies. In this article, "settlement netting" is used to describe the case where net obligations are calculated without any impact on the contractual obligations. "Netting by novation" is used to describe the netting process which also includes the replacement of the original contracts. Settlement netting can be provided not only by central counterparties, but also by securities settlement systems which mainly offer custody services and final delivery of securities from the seller to the buyer. By contrast, netting by novation can only be provided if a third party becomes the legal counterparty in a trade, i.e. the central counterparty.

Chart A

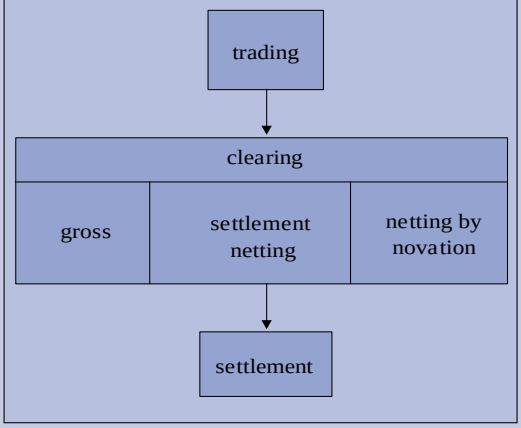


Chart B

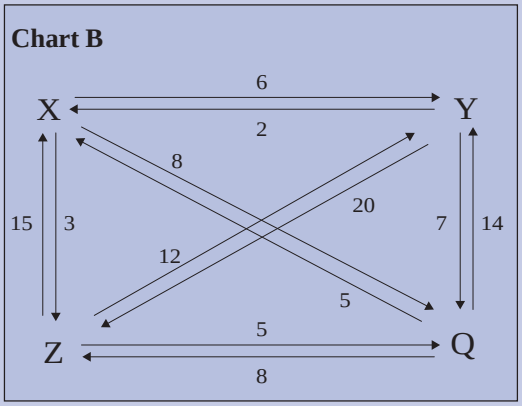
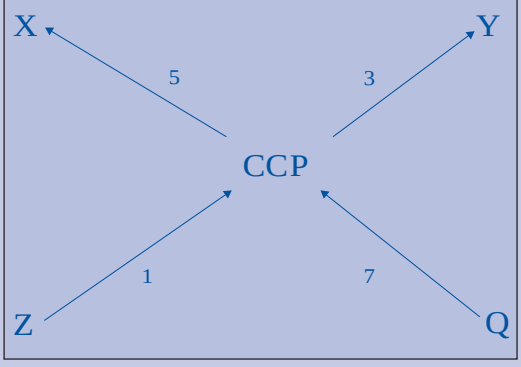


Chart B may help to illustrate the effect of multilateral netting. Four market participants (X, Y, Z and Q) are assumed to be trading with one another. Chart B indicates the amounts of a specific asset which the individual market participants are consequently assumed to owe one another.

All obligations due to or from each market participant are further assumed to be replaced by substituting a central counterparty which receives the assets from net debtors and distributes them to net creditors. In Chart B, the counterparties X and Y are net creditors, while Z and Q are net debtors. For instance, X is to receive assets of 15+2+5 and is to deliver assets of 3+6+8, which results in a net amount of 5 to be received. In cases where there are three or more market participants, the positions of any net creditor may not mirror that of any single net debtor, so the existence of an intermediary is indispensable. The result of introducing multilateral netting is depicted in Chart C.

This example demonstrates that netting can be used to reduce the number of settlements (in the previous example down to four). In addition, if the central counterparty assesses the risks against their clearing members at a net level, the netting of obligations may also reduce the margin required to collateralise current and potential future credit exposures.

Chart C



What are the main benefits of central counterparty clearing?

Many of the benefits of central counterparty clearing can be attributed to *multilateral netting*. Multilateral netting allows for a substantial reduction in the number of settlements and, therefore, in operational costs, including settlement fees. In addition, "netting by novation" (see Box 1), a service offered by central counterparty clearing houses, allows for a reduction in individual contractual obligations, thus affecting market participants' books and balance sheets. To the extent that national legislation limits the trading volume of a participant to a certain fraction of its balance sheet, netting by novation could create more trading opportunities for that participant. Netting by novation may help to reduce the margin required to collateralise current and potential future credit exposures. Central counterparty clearing may also help to reduce the capital required to support participants' trading activity. In addition, central counterparty clearing helps to *sustain anonymity* where the trade execution process itself is anonymous, which can be a valuable service when market participants fear a market impact as a result of their trading activities.

In addition to multilateral netting, central counterparty clearing creates benefits mainly by providing *risk management services*. When engaging in a securities trade, market participants are exposed to the risk that their trading counterparties will not settle their obligations when due (liquidity risk) or will not settle their obligations at all (counterparty credit risk). In order to protect themselves against such risks, market participants can take protective measures such as exposure limits and collateralisation. Central counterparty clearing houses manage risks for their members, replacing exposures to multiple counterparties with a single exposure to a single central counterparty. Central counterparties thus enable market participants to trade without having to worry about the creditworthiness of individual counterparties. This does not mean that central counterparty clearing houses eliminate counterparty credit risk, but they manage and redistribute it much more efficiently than market participants could do in isolation.

Central counterparty clearing creates benefits not only for individual participants, but also for the economy as a whole. For instance, since the interposition of a single counterparty makes it easier for market participants to manage counterparty credit risk, the number of trading opportunities increases. *As a result, market liquidity increases, trading is stimulated, transaction costs diminish and the functioning of capital markets improves.*

What are the main risks to which a central counterparty clearing house is exposed?

Like any market participant, central counterparty clearing houses are exposed to legal risks and to technical risks. These are not specific to central counterparty clearing houses and are, therefore, not analysed any further here. However, it is particularly important that these risks are appropriately mitigated because of their potentially systemic implications.

As the counterparty to its members, the clearing house is exposed to the risk that one or more clearing members may default. In the field of securities, this may trigger, in particular, principal risk and replacement cost risk. Principal risk is the risk run by the clearing house if it delivers a security, but is not able to receive the related payment, or if it makes a payment, but does not receive the security it bought. In principle, this risk has been largely eliminated by the introduction of delivery versus payment mechanisms in securities settlement systems. It is, however, very important that central counterparties settle their obligations only in settlement systems which can demonstrate that they have put in place delivery versus payment mechanisms which are effective and legally sound.

Central counterparty clearing houses are also exposed to replacement cost risk, a type of risk which is not prevented by delivery versus payment mechanisms. Replacement costs result from the need for the solvent party to buy (or sell) the securities which have not been delivered (paid for) at a time when market conditions may have developed unfavourably. This kind of risk cannot be eliminated and has, therefore, to be mitigated.

What are the main risk management procedures employed by central counterparty clearing houses?

Safeguards against the default or insolvency of a participant can be divided into three categories. First, there are safeguards designed to minimise the probability of failure of a market participant. In particular, financial and operational requirements for membership in the central counterparty clearing house are used for this purpose. Second, there are safeguards designed to minimise the loss to the central counterparty if a clearing member fails. This category relates to margin required to collateralise the current and the potential future credit exposures arising from the trades of a participant. Participants have to deposit margin requirements in the form of cash or high-quality bonds. Another way to minimise losses is to limit the build-up of such exposures by periodically settling positions, especially in the derivatives markets. In highly volatile markets, sophisticated systems are used to calculate, if needed during the day, additional margin requirements which have to be provided immediately. Third, there are safeguards designed to cover losses which exceed the value of the defaulting member's margin collateral. For this purpose, central counterparty clearing houses maintain own resources and guarantees such as capital, guarantee funds, insurance schemes and member guarantees.

Why is there growing demand for central counterparty clearing services?

There are several reasons why demand for services provided by central counterparty clearing houses has increased, particularly within the euro area. First, the growing volumes in securities trading (and in particular in equities trading) have increased the demand for netting. Second, the internationalisation of securities trading, the introduction of new electronic trading platforms, the switch to order-driven anonymous trading systems in national stock exchanges, and cross-border mergers of stock exchanges have made it increasingly difficult for trading parties to control counterparty risk themselves. There is, therefore, a rapidly growing need for guaranteed clearing and settlement. The introduction of the euro and the progressive merger of 12 domestic markets, which it entails, have made these two factors particularly relevant in the euro area.

2 The need for consolidation

What is the situation in the euro area today?

In the euro area, most countries have established central counterparty clearing houses which are attached to particular local organised markets (stock exchanges or derivatives exchanges), most of which provide services mainly, or exclusively, for derivatives. As a result, the central counterparty clearing houses in the euro area have traditionally confined their services to single countries.

However, the pattern of a single central counterparty clearing house serving one market in one country is changing. For instance, Euronext (the result of a merger of the Amsterdam, Brussels, and Paris exchanges) intends to use Clearnet, formerly the central counterparty of the Paris

exchange, as the single central counterparty clearing house for the group. Eurex Clearing, the central counterparty clearing house of the Eurex exchanges in Frankfurt and Zürich, has also indicated plans to expand its services to securities. This means that by merging institutions which provide the same services, Clearnet and Eurex have experienced some horizontal integration. However, until now in the euro area, vertical integration within the securities market infrastructure – the so-called "silos" – has been much more pronounced than horizontal integration. Vertical integration is the integration between institutions providing different services along the value chain (i.e. trading, clearing, settlement and custody). This is the case, for instance, in Germany where the Deutsche Börse provides the trading platform and is the main shareholder of both the central counterparty clearing house (Eurex) and the settlement system (Clearstream Germany).

Why is there a need to consolidate?

The introduction of the euro has accelerated the consolidation process in the securities markets infrastructure within the euro area. Developments in technology and legal harmonisation at the European level are also highlighting the need for further consolidation. In this context, competition and network externalities are further increasing the pressure for a more integrated and efficient infrastructure both at the global and at the domestic level.

The increasing number of transactions and the availability of several (traditional and/or automated) platforms to trade the same securities has made it increasingly useful for market participants to settle market transactions in a single location and on a net basis rather than on a gross basis. Moreover, the increasing size of the transactions and the growing role of anonymous trading have reinforced the need for market participants to have the risks associated with the netting process managed by a central counterparty.

At present, there are several central counterparty clearing houses operating in the euro area. There are also several projects under consideration to set up new central counterparty clearing houses in countries where there is currently no such market infrastructure. However, the need for multiple central counterparty clearing houses could be challenged on the grounds that economies of scale and network externalities favour a high degree of concentration. In particular, an uncontrolled proliferation of clearing infrastructures could create inefficiencies. For instance, the existence of a fragmented infrastructure would oblige banks and investment firms to participate in more than one central counterparty clearing house, and therefore to maintain several interfaces and to cope with different standards, market practices and clearing rules. Service providers may also face inefficiencies in terms of multiple investments used to maintain, enhance and develop central counterparty technology.

As yet it is still unclear which model of integration will eventually prevail in the euro area. Indeed, there are a number of barriers to consolidation, including legal difficulties, a lack of standardisation and vested interests. Other forms of integration in central counterparty clearing such as joint ventures and interoperability could also be considered. Interoperability enables co-operation between central counterparties at a technical level by agreeing on common processes, methods, protocols and networks. A common feature of all of these approaches is that they could help to improve the efficiency of the systems. However, they should only be considered as "second best" in the event that consolidation proves too difficult to achieve in the short run.

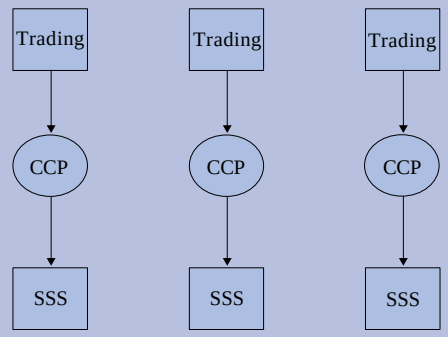
Is securities clearing a natural monopoly?

The present situation in Europe has led the European Securities Forum, a group of global market participants, to promote the

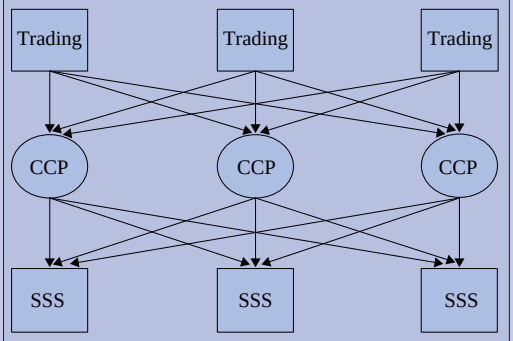
Box 2

Consolidation models

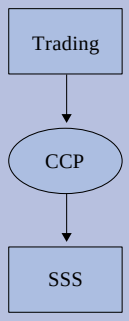
Model 1: silos



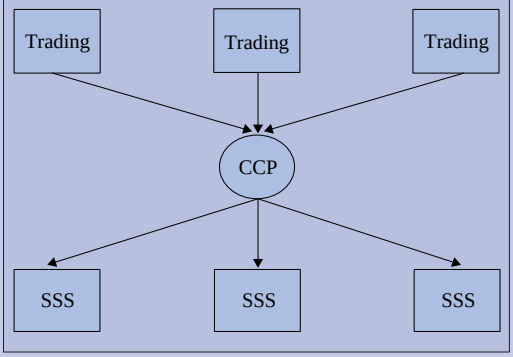
Model 2: perfect competition



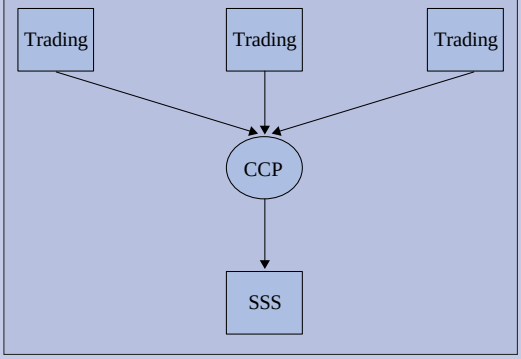
Model 3: full integration



Model 4: single pan-European central counterparty



Model 5: fully integrated post-trade processing



At least five integration models can be identified as illustrated above.

The first model represents the situation which is emerging today: consolidation takes place around a few "silos" which offer integrated services for trading, clearing and settlement. In the short run, silos facilitate automated processing (straight-through settlement), but, in the long run, they may perpetuate the drawbacks of the monopoly solution (absence of competition) and those of fragmentation (limited economies of scale).

The second model represents a situation in which clearing houses would be created in many countries, but in which market operators would be free to choose which infrastructure they wish to use at the level of trading, clearing and settlement. In theory, this model would allow competition to play its role efficiently. However, it would be very expensive to implement because it would multiply the number of infrastructures. Costs for users would be high because of the low degree of economies of scale. User costs could even increase further owing to the absence of a high degree of standardisation and the number of interfaces required. In any case, this model may not be stable in the medium term because market forces would probably soon eliminate some elements of this complex infrastructure.

At the other extreme, the third model represents full integration at all levels (trading, clearing, and settlement) with only a single entity serving the whole euro area (or even the whole of Europe). This solution would entail maximum benefits from economies of scale and network externalities. However, the model would trigger the traditional drawbacks of monopolies. There would be no freedom of choice for the users and no competition.

Another model would derive from a situation where there would be horizontal integration only at the level of central counterparty clearing, where the network externalities and economies of scale are thought to be the greatest. Competition would be maintained at the trading and settlement levels.

Eventually, if the cost saving potentials were equally large in both clearing and settlement, the fifth model could result from the consolidation process. It depicts a situation that would allow for full integration in clearing and settlement, but leave trading subject to competition.

establishment of a single pan-European central counterparty clearing house. They have expressed concerns that the current securities clearing and settlement systems in Europe might soon become unable to process the expected increase in trading in European securities. Moreover, market participants active in several European markets are worried by the prospect of having to finance several identical market infrastructures in several different countries. Furthermore, the costs of cross-border transactions in Europe are said to be at least ten times higher than the costs of domestic transactions. This obviously constitutes a handicap for European capital markets in comparison to the United States.

According to the European Securities Forum proposal, the single central counterparty clearing house would not only be pan-European (i.e. multi-currency), but also multi-product. Indeed, technically, a clearing process could be used to clear a wide range of products. And if the market movements of different products are correlated, their clearing in a single place would also allow for a reduction in margin requirements (for instance, margin against a long position in a bond futures contract might be offset against margin against a matching short position in the "cash" market (i.e. in bonds).

The United States, which is often given as a model for the consolidation of central counterparty clearing houses in Europe, still has separate central counterparties for different products. But there are also plans to foster consolidation across products[1].

This proposal raises the important issue of whether or not central counterparty clearing is a natural monopoly. Indeed, the theoretical case for a high degree of concentration exists (economies of scale and network

1 *In the United States, there are several central counterparty clearing houses in operation, each of which focuses on the clearing of different products. The National Securities Clearing Corporation (NSCC) is the sole clearing house for all equity, corporate debt and municipal bond transactions. Other central counterparty clearing houses provide services for various kinds of options and futures. Central counterparty clearing in the United States has thus achieved full consolidation at the level of each product type, but there is little consolidation in clearing across different products.*

externalities). However, the question of whether or not central counterparty clearing should be regarded as a natural monopoly is controversial. It is clear that, in the short term, a single infrastructure would maximise network externalities and economies of scale. However, these short-term advantages have to be balanced against the inefficiencies traditionally triggered in the long run by the absence of competition (lack of dynamism, lack of innovation). At a time when former natural monopolies, in the fields of telecommunications, energy and transportation for instance, are being progressively dismantled, the emergence of new monopolies in the financial sector might be questionable.

It is often argued that appropriate governance could mitigate the risk of inefficiencies. This generally means that a single central counterparty clearing house should be governed by its users. However, it is not certain that this would be sufficient because there will inevitably be conflicts of interest between different categories of user (e.g. between global players and local players) or between the owners/management of the clearing house and its users. Global custodians and central counterparty clearing houses are also potential competitors, because global custodians provide netting facilities to smaller participants such as fund managers and brokers/dealers.

In any case, the market should decide whether consolidation means that only one system should remain. But, obviously, if this is the case, appropriate regulation should be set up in order to mitigate the risk that monopoly positions will be abused.

Even if securities clearing could be considered as a natural monopoly, the logical geographical scope of the monopoly is likely to be the euro area. Each major monetary area tends to have its own domestic market infrastructure (i.e. its own payment systems, securities settlement systems and stock exchanges etc.). In particular, infrastructure may trigger liquidity problems which can only be addressed by the competent local authorities, in particular by central banks. Now that the demand for securities clearing is growing significantly, it would appear logical for a coherent domestic infrastructure to develop within the euro area in the field of central counterparty clearing.

The existence of a domestic infrastructure does not prevent the emergence of international infrastructures, such as the Continuous Linked Settlement Bank in the field of payment systems or the International Central Securities Depositories in the field of securities settlement. However, international infrastructures are superimposed on domestic ones and are not designed to replace them.

3 The interests of central banks in central counterparty clearing

Why are central banks interested in the smooth functioning of securities clearing and settlement systems?

In the second half of the 1990s, central banks around the world started to devote more attention to the consequences of the very substantial increase in securities trading. The possible consequences of major disruptions in the securities clearing and settlement process were analysed in depth. In particular, central banks forced securities settlement systems to adopt delivery versus payment mechanisms. More recently, market willingness to adopt the use of central counterparty clearing houses has encouraged central banks to become more aware of the risks involved.

Central banks have an interest in ensuring the smooth functioning of securities clearing and settlement systems because of the potential impact a major disruption may have on two of their key responsibilities: the smooth implementation of monetary policy and the smooth functioning of payment systems.

Monetary policy can be affected because central banks provide liquidity to banks through collateralised loans. If collateral cannot be delivered on time, the implementation of the chosen monetary policy stance would be affected. Moreover, disruptions in the functioning of securities clearing and settlement systems could substantially affect financial markets.

In the area of payment systems, central banks have two main concerns: first, that collateral to secure overdraft positions might not be delivered in time; and, second, that a disruption in the securities clearing and settlement process might prevent market participants from receiving funds on time, which they had intended to use to make other payments. In both cases, the risk of bottlenecks in the payment systems would be very large. In practice, the development of delivery versus payment mechanisms to safeguard securities settlement, and the development of real-time gross settlement to safeguard payments, have created interdependencies between payment systems and securities clearing and settlement systems.

What are the central banks' main concerns?

In relation to securities clearing, the central banks' main concerns can be summarised as follows:

- *Concentration of risk*: central counterparties concentrate risk more than any individual participant in a decentralised market; as a result, the consequences of an inappropriate design of the system or of inappropriate management would be correspondingly larger than for individual market participants.

- *Moral hazard*: given the potential systemic effects of the failure of a major clearing house, there is a risk that the market participants will assume that central banks will bail out an ailing central counterparty ("too big to fail" effect).

- *Information asymmetry*: market participants may hesitate to trade with counterparties they have little information about. This is particularly true in times of financial crisis when there is a general suspicion that counterparties may be close to collapse. The existence of a single counterparty reduces the level of information asymmetry only if there are no doubts about the solvency and competency of the central counterparty clearing house itself. If there were fears about the solvency of a central counterparty, the whole market might stop trading.

- *Race to the bottom*: competition between central counterparties entails the risk that these service providers may try to improve competitiveness by applying more lenient risk management standards.

- *Contagion effects*: clearing houses typically undertake activities which support the securities settlement process, such as the matching and netting of trade orders. Problems on the clearing side could, therefore, spill over to the settlement side. Moreover, in the case of cross-product clearing and/or cross-currency clearing, there is a risk of contagion from one market to another in the event of the failure of a central counterparty (or even in the event of doubts over the creditworthiness of the central counterparty).

Given the potential systemic implications of securities clearing and settlement systems, the establishment of standards for risk management is essential. The process of setting standards has already started, with initiatives being driven by market participants or pursued in the framework of international co-operation between regulatory bodies. The European Association of Central Counterparty Clearing Houses (EACH) has developed standards for central counterparties which should now be assessed by the appropriate authorities.

Euro area statistics

Contents

Enlargement of the euro area on 1 January 2001 to include Greece

In the "Euro area statistics" section of the Monthly Bulletin, reference statistical series relating to the euro area cover the Member States comprising the euro area at the time to which the statistics relate. Thus euro area data up to end-2000 cover the Euro 11; from the beginning of 2001 they cover the Euro 12. Exceptions to this rule are indicated where appropriate.

In the tables, the break is shown by means of a line denoting the enlargement of the euro area. In the charts, the break is indicated by a dotted line. Absolute and percentage changes for 2001 calculated from a base in 2000 use, as far as possible, a series which takes into account the impact of the entry of Greece.

For analytical purposes, data for the euro area plus Greece up to end-2000 are shown in the additional tables starting on page 71* (for details, see the general notes).

Conventions used in the tables

"-"	data do not exist/data not applicable
"."	data are not yet available
"…"	nil or negligible
"billion"	10^9
(p)	provisional
s.a.	seasonally adjusted

Euro area overview table

Summary table of economic indicators for the euro area

(annual percentage changes, unless otherwise indicated)

1. Monetary developments and interest rates

	M1 [1]	M2 [1]	M3 [1] [2]		MFI loans to euro area residents excluding MFIs and general government [1]	Securities issued by non-financial and non-monetary financial corporations [1]	3-month interest rate (EURIBOR, % per annum, period averages)	10-year government bond yield (% per annum, period averages)
				3-month moving average (centred)				
	1	2	3	4	5	6	7	8
1999	12.3	6.8	5.6	-	10.0	19.3	2.96	4.66
2000	8.0	4.4	5.5	-	9.6	20.5	4.40	5.44
2000 Q3	6.8	4.0	5.2	-	9.5	19.0	4.74	5.44
Q4	5.7	3.8	4.9	-	9.6	18.7	5.02	5.28
				Euro area enlargement				
2001 Q1	2.6	3.1	4.7	-	9.1	23.3	4.75	4.99
Q2	2.3	3.5	5.0	-	8.2	.	4.60	5.19
2001 Feb.	2.3	3.0	4.7	4.6	9.0	23.7	4.76	5.02
Mar.	1.6	3.0	4.5	4.6	8.7	26.1	4.71	4.94
Apr.	1.4	3.2	4.6	4.8	8.4	24.0	4.69	5.10
May	2.9	3.5	5.1	5.3	8.0	26.3	4.64	5.26
June	3.8	4.3	6.1	.	7.8	.	4.45	5.21
July	.	.	.	.	.	.	4.47	5.25

2. Price and real economy developments

	HICP	Industrial producer prices	Hourly labour costs (whole economy)	Real GDP	Industrial production (excluding construction)	Capacity utilisation in manufacturing (percentages)	Employment (whole economy)	Unemployment (% of labour force)
	9	10	11	12	13	14	15	16
1999	1.1	-0.4	2.3	2.5	2.0	81.8	1.6	9.9
2000	2.3	5.4	3.4	3.4	5.6	83.8	2.0	8.8
2000 Q3	2.5	5.8	3.5	3.3	5.8	83.9	2.0	8.7
Q4	2.7	6.1	3.4	2.9	5.5	84.7	2.1	8.5
				Euro area enlargement				
2001 Q1	2.5	4.5	3.1	2.6	4.0	84.4	2.0	8.4
Q2	3.1	.	.	.	.	83.7	.	8.3
2001 Feb.	2.6	4.5	-	-	4.1	-	-	8.4
Mar.	2.6	4.2	-	-	2.8	-	-	8.4
Apr.	2.9	4.2	-	-	1.1	-	-	8.3
May	3.4	3.7	-	-	-0.1	-	-	8.3
June	3.0	.	-	-	.	-	-	8.3
July	.	.	-	-	.	-	-	.

3. Balance of payments, reserve assets and exchange rates

(EUR billions, unless otherwise indicated)

	Balance of payments (net flows)				Reserve assets (end-of-period positions)	Effective exchange rate of the euro: broad group (1999 Q1 = 100)		US dollar/euro exchange rate
	Current and capital accounts	Goods	Direct investment	Portfolio investment		Nominal	Real (CPI)	
	17	18	19	20	21	22	23	24
1999	7.7	83.4	-120.6	-41.7	372.3	96.6	95.8	1.066
2000	-24.3	52.2	-22.8	-128.9	377.7	88.2	86.3	0.924
2000 Q3	-4.5	17.9	-94.3	3.5	408.0	87.3	85.3	0.905
Q4	-10.5	10.4	-58.4	8.4	377.7	85.9	83.6	0.868
				Euro area enlargement				
2001 Q1	-3.3	7.4	-42.9	-38.2	393.4	91.4	88.9	0.923
Q2	.	.	.	.	410.2	89.5	86.8	0.873
2001 Feb.	3.8	3.6	0.2	-2.1	384.3	91.0	88.6	0.922
Mar.	1.0	7.0	-33.1	6.2	393.4	91.4	89.0	0.910
Apr.	-1.1	5.3	0.1	-20.9	386.7	91.0	88.4	0.892
May	-0.3	5.3	-40.4	24.9	409.0	89.3	86.6	0.874
June	.	.	.	.	410.2	88.1	85.3	0.853
July	.	.	.	.	.	89.1	86.1	0.861

Sources: ECB, European Commission (Eurostat and Economic and Financial Affairs DG) and Reuters.
For more information on the data, see the relevant tables in the "Euro area statistics" section.

1) Monthly growth rates refer to the end of the period, whereas quarterly and annual growth rates are calculated as period averages. Growth rates for M1, M2, M3 and loans are calculated on the basis of seasonally adjusted monthly stocks and flows.

2) Excluding holdings of money market fund shares/units by non-residents of the euro area.

I Monetary policy statistics

Table 1.1

Consolidated financial statement of the Eurosystem

(EUR millions)

1. Assets

	Gold and gold receivables	Claims on non-euro area residents in foreign currency	Claims on euro area residents in foreign currency	Claims on non-euro area residents in euro	Lending to euro area credit institutions in euro			
						Main refinancing operations	Longer-term refinancing operations	Fine-tuning reverse operations
	1	2	3	4	5	6	7	8
2001 2 Mar.	118,612	261,032	21,542	5,612	237,017	182,000	54,999	0
9	118,612	260,395	21,156	5,831	225,058	169,999	54,999	0
16	118,612	257,433	21,235	5,824	249,571	194,000	54,999	0
23	118,612	256,078	23,197	5,791	241,408	186,000	54,999	0
30	118,464	271,583	20,123	5,410	244,282	184,999	59,102	0
6 Apr.	118,464	269,050	21,952	5,335	227,143	167,984	59,102	0
13	118,464	269,145	21,763	4,915	211,297	142,948	59,102	0
20	118,464	268,162	21,809	5,125	256,277	196,950	59,102	0
27	118,464	266,450	23,097	5,136	236,228	176,999	59,100	0
4 May	118,464	266,005	22,816	5,182	217,129	84,995	59,100	0
11	118,464	265,647	23,056	5,295	218,172	158,996	59,100	0
18	118,464	270,299	20,613	5,622	210,191	150,999	59,100	0
25	118,464	267,707	23,033	5,365	221,196	162,002	59,100	0
1 June	118,464	269,198	22,368	5,174	226,403	167,001	59,100	0
8	118,464	269,037	22,207	5,225	224,204	165,001	59,100	0
15	118,464	269,055	22,943	5,322	214,433	155,000	59,100	0
22	118,454	270,437	23,176	5,303	217,891	158,001	59,100	0
29	128,512	279,018	22,540	5,654	236,201	176,000	59,999	0
6 July	128,512	280,463	22,357	5,362	226,190	166,000	59,999	0
13	128,512	280,417	23,247	5,687	214,057	154,000	59,999	0
20	128,492	280,794	23,804	5,688	212,051	152,000	59,999	0
27	128,405	279,768	24,046	5,626	233,033	172,999	60,001	0

2. Liabilities

	Banknotes in circulation	Liabilities to euro area credit institutions in euro						Other liabilities to euro area credit institutions in euro	Debt certificates issued
			Current accounts (covering the minimum reserve system)	Deposit facility	Fixed-term deposits	Fine-tuning reverse operations	Deposits related to margin calls		
	1	2	3	4	5	6	7	8	9
2001 2 Mar.	355,137	118,928	118,887	41	0	0	0	7,584	3,784
9	355,046	110,334	110,292	42	0	0	0	7,602	3,784
16	352,886	127,324	126,675	648	0	0	1	7,601	3,784
23	350,384	113,375	108,462	4,912	0	0	1	7,414	3,784
30	351,685	126,879	126,738	141	0	0	0	6,116	3,784
6 Apr.	356,089	119,056	118,997	59	0	0	0	6,065	3,784
13	360,869	99,094	99,063	31	0	0	0	6,102	3,784
20	353,674	160,289	159,406	103	0	0	780	6,097	3,784
27	352,680	133,176	133,145	23	0	0	8	6,070	3,784
4 May	355,925	121,749	121,639	106	0	0	4	6,083	3,784
11	353,624	126,337	126,264	72	0	0	1	6,278	3,784
18	350,877	124,887	124,774	111	0	0	2	6,295	3,784
25	350,233	121,103	120,955	146	0	0	2	6,228	3,784
1 June	352,925	127,020	126,953	65	0	0	2	6,052	3,784
8	353,479	127,240	127,184	50	0	0	6	6,197	3,784
15	351,772	122,114	122,005	109	0	0	0	6,195	3,784
22	348,463	131,206	130,178	1,023	0	0	5	6,097	3,784
29	350,199	117,841	117,569	272	0	0	0	6,097	3,784
6 July	353,648	132,775	132,595	126	0	0	54	4,324	3,784
13	352,516	127,995	127,199	791	0	0	5	4,393	3,784
20	349,789	131,736	130,396	1,337	0	0	3	4,219	3,784
27	348,282	128,542	128,516	24	0	0	2	4,116	3,784

Source: ECB.

Structural reverse operations	Marginal lending facility	Credits related to margin calls	Other claims on euro area credit institutions in euro	Securities of euro area residents in euro	General government debt in euro	Other assets	Total	
9	10	11	12	13	14	15	16	
0	7	11	820	27,555	70,207	89,142	831,539	2001 2 Mar.
0	17	43	822	27,368	70,207	88,741	818,190	9
0	524	48	503	27,363	70,207	89,364	840,112	16
0	348	61	318	27,428	70,211	89,734	832,777	23
0	128	53	554	27,880	70,211	89,452	847,959	30
0	9	48	431	27,880	70,211	88,643	829,109	6 Apr.
0	9,191	56	530	28,306	70,211	90,089	814,720	13
0	142	83	706	27,666	70,168	90,392	858,769	20
0	64	65	462	27,786	70,168	91,481	839,272	27
72,999	25	10	616	27,869	70,168	91,426	819,675	4 May
0	51	25	313	27,889	70,174	91,888	820,898	11
0	65	27	329	27,838	70,168	91,417	814,941	18
0	66	28	383	27,785	70,168	91,326	825,427	25
0	273	29	276	27,979	70,168	90,401	830,431	1 June
0	57	46	241	28,128	70,168	89,766	827,440	8
0	292	41	241	28,110	70,168	90,313	819,049	15
0	760	30	242	28,024	70,168	90,749	824,444	22
0	175	27	538	27,665	70,168	92,471	862,767	29
0	173	18	339	28,085	70,158	91,424	852,890	6 July
0	25	33	412	27,967	70,157	91,914	842,370	13
0	11	41	374	28,040	70,157	92,545	841,946	20
0	11	22	252	28,100	70,157	92,673	862,061	27

Liabilities to other euro area residents in euro	Liabilities to non-euro area residents in euro	Liabilities to euro area residents in foreign currency	Liabilities to non-euro area residents in foreign currency	Counterpart of special drawing rights allocated by the IMF	Other liabilities	Revaluation accounts	Capital and reserves	Total	
10	11	12	13	14	15	16	17	18	
57,893	9,787	4,981	13,138	7,168	78,447	119,274	55,418	831,539	2001 2 Mar.
53,188	9,841	4,936	12,450	7,168	79,148	119,274	55,419	818,190	9
61,006	10,653	4,902	9,896	7,168	79,265	119,274	56,353	840,112	16
69,459	9,972	4,795	11,110	7,168	79,689	119,274	56,353	832,777	23
60,504	8,542	3,772	12,978	6,984	82,491	126,268	57,956	847,959	30
53,735	8,328	3,796	12,767	6,984	73,302	126,268	58,935	829,109	6 Apr.
54,424	8,438	3,790	13,345	6,984	72,721	126,268	58,901	814,720	13
43,892	8,530	3,789	12,868	6,984	73,693	126,268	58,901	858,769	20
53,869	8,444	3,780	12,399	6,984	72,574	126,268	59,244	839,272	27
42,408	8,847	3,782	12,263	6,984	72,337	126,268	59,245	819,675	4 May
40,734	8,549	3,779	12,947	6,984	72,369	126,268	59,245	820,898	11
38,409	8,694	3,784	13,611	6,984	72,036	126,270	59,310	814,941	18
52,925	8,880	3,758	13,596	6,984	71,777	126,258	59,901	825,427	25
49,626	8,622	3,756	14,173	6,984	70,779	126,258	60,452	830,431	1 June
46,793	8,529	3,915	13,854	6,984	69,943	126,258	60,464	827,440	8
43,787	8,754	3,833	14,548	6,984	70,556	126,258	60,464	819,049	15
41,828	8,685	3,887	15,897	6,984	70,890	126,258	60,465	824,444	22
69,722	10,226	3,902	16,977	7,183	75,031	141,340	60,465	862,767	29
44,537	8,692	3,928	18,044	7,183	74,177	141,340	60,458	852,890	6 July
38,900	8,722	4,099	18,460	7,183	74,520	141,340	60,458	842,370	13
37,574	8,530	4,221	18,534	7,183	74,578	141,340	60,458	841,946	20
62,784	8,570	3,995	18,575	7,183	74,432	141,340	60,458	862,061	27

Table 1.2

Key ECB interest rates

(levels in percentages per annum; changes in percentage points)

With effect from [1]	Deposit facility		Main refinancing operations			Marginal lending facility	
			Fixed rate tenders	Variable rate tenders			
			Fixed rate	Minimum bid rate			
	Level 1	Change 2	Level 3	Level 4	Change 5	Level 6	Change 7
1999 1 Jan.	2.00	-	3.00	-	-	4.50	-
4 [2]	2.75	0.75	3.00	-	...	3.25	-1.25
22	2.00	-0.75	3.00	-	...	4.50	1.25
9 Apr.	1.50	-0.50	2.50	-	-0.50	3.50	-1.00
5 Nov.	2.00	0.50	3.00	-	0.50	4.00	0.50
2000 4 Feb.	2.25	0.25	3.25	-	0.25	4.25	0.25
17 Mar.	2.50	0.25	3.50	-	0.25	4.50	0.25
28 Apr.	2.75	0.25	3.75	-	0.25	4.75	0.25
9 June	3.25	0.50	4.25	-	0.50	5.25	0.50
28 [3]	3.25	...	-	4.25	...	5.25	...
1 Sep.	3.50	0.25	-	4.50	0.25	5.50	0.25
6 Oct.	3.75	0.25	-	4.75	0.25	5.75	0.25
			Euro area enlargement				
2001 11 May	3.50	-0.25	-	4.50	-0.25	5.50	-0.25

Source: ECB.

1) *The date refers to the deposit and marginal lending facilities. For main refinancing operations, unless otherwise indicated, changes in the rate are effective from the first operation following the date indicated.*
2) *On 22 December 1998 the ECB announced that, as an exceptional measure between 4 and 21 January 1999, a narrow corridor of 50 basis points would be applied between the interest rates for the marginal lending facility and the deposit facility, aimed at facilitating the transition to the new regime by market participants.*
3) *On 8 June 2000 the ECB announced that, starting from the operation to be settled on 28 June 2000, the main refinancing operations of the Eurosystem would be conducted as variable rate tenders. The minimum bid rate refers to the minimum interest rate at which counterparties may place their bids.*

Table 1.3

Eurosystem monetary policy operations allotted through tenders [1]

(EUR millions; interest rates in percentages per annum)

1. Main refinancing operations [2]

Date of settlement	Bids (amount)	Allotment (amount)	Fixed rate tenders	Variable rate tenders			
			Fixed rate	Minimum bid rate	Marginal rate [3]	Weighted average rate	Running for (...) days
	1	2	3	4	5	6	7
2001 7 Feb.	104,384	100,000	-	4.75	4.75	4.75	14
14	65,307	65,307	-	4.75	4.75	4.75	12
21	200,526	155,000	-	4.75	4.78	4.83	14
26	109,632	27,000	-	4.75	4.78	4.79	16
7 Mar.	189,927	143,000	-	4.75	4.76	4.77	14
14	130,260	51,000	-	4.75	4.77	4.78	14
21	182,057	135,000	-	4.75	4.77	4.78	14
28	57,526	50,000	-	4.75	4.75	4.75	14
4 Apr.	129,101	118,000	-	4.75	4.75	4.75	15
11	24,949	24,949	-	4.75	4.75	4.75	14
19	257,706	172,000	-	4.75	4.86	4.91	11
25	83,303	5,000	-	4.75	4.78	4.80	12
30	147,324	80,000	-	4.75	4.77	4.78	15
7 May	164,985	79,000	-	4.75	4.78	4.78	16
15	160,715	72,000	-	4.50	4.54	4.56	15
23	157,987	90,000	-	4.50	4.53	4.54	14
30	159,877	77,000	-	4.50	4.55	4.55	14
6 June	120,631	88,000	-	4.50	4.51	4.53	14
13	135,442	67,000	-	4.50	4.51	4.52	14
20	148,877	91,000	-	4.50	4.51	4.52	14
27	155,894	85,000	-	4.50	4.54	4.55	14
4 July	104,399	81,000	-	4.50	4.50	4.51	14
11	141,842	73,000	-	4.50	4.51	4.52	14
18	136,104	79,000	-	4.50	4.51	4.52	14
25	126,040	94,000	-	4.50	4.51	4.52	14
1 Aug.	100,746	71,000	-	4.50	4.50	4.51	14

2. Longer-term refinancing operations

Date of settlement	Bids (amount)	Allotment (amount)	Fixed rate tenders	Variable rate tenders		
			Fixed rate	Marginal rate [3]	Weighted average rate	Running for (...) days
	1	2	3	4	5	6
1999 14 Jan.	79,846	15,000	-	3.13	-	42
14	39,343	15,000	-	3.10	-	70
14	46,152	15,000	-	3.08	-	105
25 Feb.	77,300	15,000	-	3.04	-	91
25 Mar.	53,659	15,000	-	2.96	2.97	98
29 Apr.	66,911	15,000	-	2.53	2.54	91
27 May	72,294	15,000	-	2.53	2.54	91
1 July	76,284	15,000	-	2.63	2.64	91
29	64,973	15,000	-	2.65	2.66	91
26 Aug.	52,416	15,000	-	2.65	2.66	91
30 Sep.	41,443	15,000	-	2.66	2.67	84
28 Oct.	74,430	25,000	-	3.19	3.42	91
25 Nov.	74,988	25,000	-	3.18	3.27	98
23 Dec.	91,088	25,000	-	3.26	3.29	98
2000 27 Jan.	87,052	20,000	-	3.28	3.30	91
2 Mar.	72,960	20,000	-	3.60	3.61	91
30	74,929	20,000	-	3.78	3.80	91
27 Apr.	64,094	20,000	-	4.00	4.01	91
1 June	64,317	20,000	-	4.40	4.42	91
29	41,833	20,000	-	4.49	4.52	91
27 July	40,799	15,000	-	4.59	4.60	91
31 Aug.	35,417	15,000	-	4.84	4.87	91
28 Sep.	34,043	15,000	-	4.84	4.86	92
26 Oct.	43,085	15,000	-	5.06	5.07	91
30 Nov.	31,999	15,000	-	5.03	5.05	91
29 Dec.	15,869	15,000	-	4.75	4.81	90
		Euro area enlargement				
2001 25 Jan.	31,905	20,000	-	4.66	4.69	90
1 Mar.	45,755	20,000	-	4.69	4.72	91
29	38,169	19,101	-	4.47	4.50	91
25 Apr.	43,416	20,000	-	4.67	4.70	92
31 May	46,448	20,000	-	4.49	4.51	91
28 June	44,243	20,000	-	4.36	4.39	91
26 July	39,369	20,000	.	4.39	4.42	91

3. Other tender operations

Date of settlement	Type of operation	Bids (amount)	Allotment (amount)	Fixed rate tenders	Variable rate tenders		
				Fixed rate	Marginal rate [3]	Weighted average rate	Running for (...) days
	1	2	3	4	5	6	7
2000 5 Jan.	Collection of fixed-term deposits	14,420	14,420	-	3.00	3.00	7
21 June	Reverse transaction	18,845	7,000	-	4.26	4.28	1
			Euro area enlargement				
2001 30 Apr.	Reverse transaction	105,377	73,000	-	4.77	4.79	7

Source: ECB.

1) The amounts shown may differ slightly from those in Table 1.1, columns 6 to 8, due to operations allotted but not settled.

2) On 8 June 2000 the ECB announced that, starting from the operation to be settled on 28 June 2000, the main refinancing operations of the Eurosystem would be conducted as variable rate tenders. The minimum bid rate refers to the minimum interest rate at which counterparties may place their bids.

3) The marginal rate refers to the lowest rate at which funds were allotted.

Table 1.4

Minimum reserve statistics

1. Reserve base of credit institutions subject to reserve requirements [1) 2)]

(EUR billions; end of period)

Reserve base as at:	Total	Liabilities to which a 2% reserve coefficient is applied			Liabilities to which a 0% reserve coefficient is applied		
		Deposits (overnight, up to 2 years' agreed maturity and notice period)	Debt securities up to 2 years' agreed maturity	Money market paper	Deposits (over 2 years' agreed maturity and notice period)	Repos	Debt securities over 2 years' agreed maturity
	1	2	3	4	5	6	7
2000 June	9,539.4	5,316.9	120.4	184.7	1,250.6	506.7	2,160.1
July	9,590.1	5,348.0	119.8	192.3	1,258.0	489.9	2,182.2
Aug.	9,686.5	5,393.8	122.9	197.1	1,269.0	502.5	2,201.3
Sep.	9,773.3	5,465.7	123.6	193.6	1,270.2	502.1	2,218.2
Oct.	9,931.2	5,531.9	127.6	201.1	1,283.2	534.2	2,253.2
Nov. [3]	10,074.5	5,653.4	130.0	199.9	1,282.2	561.5	2,247.6
Dec. [3]	10,071.5	5,711.3	136.7	187.2	1,273.6	528.3	2,234.3
			Euro area enlargement				
2001 Jan.	10,164.2	5,712.6	139.2	196.7	1,275.6	574.6	2,265.6
Feb.	10,247.4	5,724.4	145.3	201.2	1,284.7	597.8	2,294.0
Mar.	10,503.6	5,883.5	151.1	203.4	1,292.6	654.7	2,318.3
Apr.	10,554.6	5,924.3	154.5	202.8	1,292.1	657.7	2,323.2
May	10,687.3	5,984.7	166.6	198.9	1,307.5	693.2	2,336.4
June [p]	10,698.0	6,012.1	176.2	196.3	1,314.1	656.5	2,342.9

Source: ECB.

1) Liabilities vis-à-vis other credit institutions subject to the ESCB's minimum reserve system, the ECB and participating national central banks, are excluded from the reserve base. If a credit institution cannot provide evidence of the amount of its issues of debt securities with a maturity of up to two years and of money market paper held by the institutions mentioned above, it may deduct a certain percentage of these liabilities from its reserve base. This percentage was 10% for calculating the reserve base until November 1999, and 30% thereafter.

2) Maintenance periods start on the 24th of the month and run to the 23rd of the following month; the required reserve is calculated from the reserve base as at the end of the preceding month.

3) Includes the reserve base of credit institutions in Greece (EUR 134.4 billion in November and 134.6 billion in December 2000, EUR 107.3 billion and EUR 110.3 billion of which qualify for the 2% coefficient respectively). On a transitional basis, credit institutions located in participating Member States could choose to deduct from their own reserve base liabilities to credit institutions in Greece. Starting from the reserve base as at end-January 2001 the standard treatment applies.

2. Reserve maintenance [1)]

(EUR billions; interest rates as annual percentages)

Maintenance period ending in:	Required reserves [2)]	Actual reserves [3)]	Excess reserves [4)]	Deficiencies [5)]	Interest rate on minimum reserves [6)]
	1	2	3	4	5
2000 Aug.	111.8	112.3	0.5	0.0	4.32
Sep.	112.6	113.1	0.5	0.0	4.57
Oct.	113.7	114.2	0.5	0.0	4.69
Nov.	115.1	115.5	0.4	0.0	4.81
Dec.	116.6	117.2	0.6	0.0	4.78
		Euro area enlargement			
2001 Jan. [7]	118.5	119.0	0.5	0.0	4.77
Feb.	120.1	120.6	0.5	0.0	4.76
Mar.	120.4	120.9	0.5	0.0	4.77
Apr.	120.8	121.3	0.5	0.0	4.77
May	124.2	124.8	0.7	0.0	4.71
June	125.0	125.6	0.6	0.0	4.52
July	126.4	127.0	0.6	0.0	4.51
Aug. [p]	127.1	-	-	-	-

Source: ECB.

1) This table contains full data for completed maintenance periods and required reserves for the current maintenance period.

2) The amount of reserve requirement of each individual credit institution is first calculated by applying the reserve ratio for the corresponding categories of liabilities to the eligible liabilities, using the balance sheet data as at the end of each calendar month; subsequently, each credit institution deducts from this figure a lump-sum allowance of EUR 100,000. The resulting reserve requirements are then aggregated at the euro area level.

3) Aggregate average daily holdings of credit institutions required to hold a positive amount of reserves on their reserve accounts over the maintenance period.

4) Average actual reserve holdings over the maintenance period in excess of the required reserves, computed on the basis of those credit institutions that have fulfilled the reserve requirement.

5) Average shortfalls of actual reserve holdings from required reserves over the maintenance period, computed on the basis of those credit institutions that have not fulfilled the reserve requirement.

6) This rate equals the average, over the maintenance period, of the ECB's rate (weighted according to the number of calendar days) on the Eurosystem's main refinancing operations (see Table 1.3).

*7) Owing to the adoption of the euro by Greece on 1 January 2001, the reserve requirement is an average, weighted by the number of calendar days, of the reserve requirements for the Euro 11 from 24 to 31 December 2000 and the reserve requirements for the Euro 12 from 1 to 23 January 2001 (i.e. 8/31 * EUR 116.9 billion + 23/31 * EUR 119.1 billion).*

Table 1.5

Banking system's liquidity position [1)]

(EUR billions; period averages of daily positions)

Maintenance period ending in:	Liquidity-providing factors					Liquidity-absorbing factors					Credit institutions' current accounts [4)]	Base money [5)]
		Monetary policy operations of the Eurosystem										
	Eurosystem's net assets in gold and foreign currency	Main refinancing operations	Longer-term refinancing operations	Marginal lending facility	Other liquidity-providing operations [2)]	Deposit facility	Other liquidity-absorbing operations [2)]	Banknotes in circulation	Central government deposits with the Eurosystem	Other factors (net) [3)]		
	1	2	3	4	5	6	7	8	9	10	11	12
1999 Oct.	349.7	143.0	45.0	0.3	0.0	0.6	0.0	342.5	45.4	45.9	103.5	446.7
Nov.	351.8	140.5	53.7	0.3	0.0	0.4	0.0	343.1	51.5	47.3	104.2	447.6
Dec.	351.7	150.4	65.0	0.3	0.0	1.0	0.0	354.3	59.0	47.5	105.6	460.8
2000 Jan.	362.3	138.5	75.0	1.9	0.0	0.5	3.3	363.0	41.0	61.2	108.7	472.3
Feb.	367.8	130.9	70.5	0.1	0.0	0.2	0.0	347.6	49.2	64.2	108.1	455.9
Mar.	369.2	136.1	66.2	0.2	0.0	0.3	0.0	347.6	51.7	63.5	108.6	456.4
Apr.	377.1	136.7	61.0	0.2	0.0	0.9	0.0	349.7	45.6	69.1	109.7	460.3
May	378.8	142.6	60.0	0.4	0.0	2.3	0.0	353.8	41.9	71.8	112.0	468.2
June	378.1	140.9	59.9	0.3	0.2	0.8	0.0	354.1	38.3	72.1	114.2	469.1
July	380.8	157.9	59.9	0.4	0.0	0.5	0.0	357.0	50.4	76.8	114.1	471.7
Aug.	382.0	163.1	55.4	0.1	0.0	0.3	0.0	359.2	48.8	80.0	112.4	471.9
Sep.	381.6	173.1	51.1	0.3	0.0	0.2	0.0	354.8	56.6	81.2	113.3	468.3
Oct.	396.3	176.5	45.7	0.5	0.0	0.2	0.0	354.5	47.4	102.5	114.4	469.1
Nov.	398.6	183.7	45.0	0.2	0.0	0.2	0.0	352.7	49.8	109.2	115.7	468.6
Dec.	394.4	210.4	45.0	0.4	0.0	0.2	0.0	360.4	61.1	111.1	117.4	478.0
Euro area enlargement												
2001 Jan.	383.7	205.3	45.0	0.5	0.0	0.6	0.0	368.3	52.2	94.2	119.1	488.0
Feb.	377.9	188.9	49.8	2.6	0.0	0.4	0.0	354.8	57.0	86.3	120.7	476.0
Mar.	375.6	185.2	54.1	0.4	0.0	0.5	0.0	353.0	53.0	87.7	121.0	474.5
Apr.	382.1	172.4	58.4	2.2	0.0	0.5	0.0	354.6	49.5	89.1	121.4	476.4
May	384.4	144.0	59.1	0.4	17.0	0.6	0.0	352.7	39.4	87.5	124.8	478.1
June	385.0	161.7	59.1	0.2	0.0	0.4	0.0	351.1	41.3	87.5	125.7	477.3
July	397.6	161.9	59.9	0.2	0.0	0.4	0.0	350.8	42.5	98.8	127.1	478.3

Source: ECB.

1) *The banking system's liquidity position is defined as the current account holdings in euro of credit institutions in the euro area with the Eurosystem. Amounts are derived from the consolidated financial statement of the Eurosystem.*
2) *Includes monetary policy operations initiated by national central banks in Stage Two and outstanding at the start of Stage Three (excluding outright operations and the issuance of debt certificates).*
3) *Remaining items in the consolidated financial statement of the Eurosystem.*
4) *Equal to the difference between the sum of liquidity-providing factors (items 1 to 5) and the sum of liquidity-absorbing factors (items 6 to 10).*
5) *Calculated as the sum of the deposit facility (item 6), banknotes in circulation (item 8) and credit institutions' current account holdings (item 11).*

2 Monetary developments in the euro area

Table 2.1

Aggregated balance sheet of the Eurosystem

(EUR billions (not seasonally adjusted; end of period))

1. Assets

	Loans to euro area residents				Holdings of securities other than shares issued by euro area residents				Holdings of shares/ other equity issued by euro area residents			External assets [1]	Fixed assets	Re-maining assets	Total
		MFIs [1]	General govern-ment	Other euro area residents		MFIs	General govern-ment	Other euro area residents		MFIs	Other euro area residents				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1998	225.2	204.6	20.4	0.1	87.8	1.1	86.2	0.5	5.5	1.8	3.7	322.3	7.9	49.3	698.0
1999 Q2	807.8	787.2	20.4	0.2	92.4	1.5	90.0	0.9	8.7	4.4	4.3	498.6	9.7	46.6	1,463.7
Q3	471.7	451.1	20.4	0.2	92.4	1.4	89.9	1.1	8.7	4.3	4.4	427.9	9.8	47.5	1,058.0
Q4	444.6	424.3	19.7	0.5	89.1	1.9	86.1	1.1	14.1	4.3	9.8	400.6	9.9	56.2	1,014.5
2000 Q1	443.4	424.5	18.4	0.5	96.2	2.4	92.7	1.1	14.4	4.3	10.1	439.1	9.8	48.9	1,051.8
2000 June	580.7	561.8	18.4	0.5	97.4	2.6	93.6	1.2	14.7	4.4	10.4	454.8	10.0	51.7	1,209.3
July	501.4	482.6	18.4	0.5	98.2	2.5	94.5	1.2	14.7	4.4	10.3	449.7	10.1	51.5	1,125.6
Aug.	482.5	463.7	18.4	0.5	98.5	2.8	94.4	1.3	14.7	4.4	10.3	435.4	10.2	52.3	1,093.5
Sep.	493.1	474.4	18.2	0.5	98.5	2.9	94.6	1.0	14.6	4.4	10.2	459.1	10.2	54.3	1,129.8
Oct.	478.8	460.1	18.2	0.5	98.7	2.6	94.9	1.2	15.0	4.4	10.7	454.7	10.5	53.9	1,111.6
Nov.	431.5	412.8	18.2	0.5	98.8	2.6	94.9	1.4	15.4	4.4	11.1	402.8	10.3	54.2	1,013.0
Dec.	445.0	427.4	17.1	0.5	97.4	2.5	93.6	1.3	15.3	4.3	11.0	380.7	11.2	56.1	1,005.7
Euro area enlargement															
2001 1 Jan.	*457.0*	*429.3*	*27.1*	*0.6*	*105.3*	*2.5*	*101.4*	*1.3*	*15.3*	*4.3*	*11.0*	*394.2*	*11.3*	*57.4*	*1,040.4*
2001 Jan.	401.5	373.7	27.2	0.6	104.5	2.6	100.8	1.0	15.5	4.7	10.8	390.4	11.4	54.0	977.3
Feb.	398.8	371.0	27.2	0.6	105.2	2.5	101.5	1.2	14.9	4.6	10.3	386.2	11.3	53.6	970.1
Mar.	401.7	373.9	27.2	0.6	105.0	2.7	101.2	1.1	14.8	4.6	10.2	396.8	11.3	54.4	983.9
Apr.	376.1	348.3	27.2	0.6	106.5	2.6	102.7	1.3	14.7	4.6	10.1	390.3	11.7	53.6	952.9
May	398.5	370.7	27.2	0.6	106.4	2.9	102.3	1.3	14.3	4.6	9.7	398.9	11.8	53.2	983.1
June [p]	426.1	398.3	27.2	0.6	105.8	3.1	101.5	1.2	14.2	4.6	9.6	414.7	11.9	54.4	1,027.1

2. Liabilities

	Currency in circulation	Deposits of euro area residents				Money market paper	Debt securities issued	Capital and reserves	External liabilities [1]	Remaining liabilities	Total
			MFIs [1]	Central government	Other general government/ other euro area residents						
	1	2	3	4	5	6	7	8	9	10	11
1998	359.1	152.0	94.2	54.4	3.5	8.5	5.3	97.1	18.6	57.4	698.0
1999 Q2	356.1	743.2	691.3	43.1	8.9	4.9	5.3	139.9	171.4	43.0	1,463.7
Q3	359.7	405.3	347.7	50.1	7.6	3.3	5.3	145.5	88.8	50.1	1,058.0
Q4	393.3	341.5	279.3	53.4	8.8	3.3	4.6	174.3	49.8	47.6	1,014.5
2000 Q1	366.2	372.1	319.8	43.1	9.1	1.7	4.6	186.5	75.1	45.7	1,051.8
2000 June	374.3	497.9	432.8	52.6	12.5	1.7	4.6	193.4	92.0	45.4	1,209.3
July	377.7	414.9	354.7	49.7	10.5	1.7	4.6	196.0	84.6	46.1	1,125.6
Aug.	373.2	401.0	336.1	53.8	11.2	1.7	4.6	199.4	66.6	46.9	1,093.5
Sep.	373.5	404.2	346.1	45.6	12.5	0.0	4.6	221.2	75.0	51.4	1,129.8
Oct.	372.6	388.1	323.3	51.1	13.7	0.0	4.6	225.3	69.5	51.6	1,111.6
Nov.	372.2	334.6	265.6	54.9	14.0	0.0	3.8	221.4	29.3	51.7	1,013.0
Dec.	390.2	327.3	270.4	47.1	9.8	0.0	3.8	197.5	29.9	57.0	1,005.7
Euro area enlargement											
2001 1 Jan.	*399.3*	*346.2*	*288.0*	*47.9*	*10.4*	*0.0*	*5.6*	*199.2*	*30.9*	*59.1*	*1,040.4*
2001 Jan.	373.1	313.3	250.9	51.5	10.9	0.0	5.5	196.8	30.6	58.0	977.3
Feb.	370.6	313.1	249.7	52.0	11.4	0.0	5.5	194.8	27.9	58.3	970.1
Mar.	370.5	312.6	253.4	46.8	12.4	0.0	5.5	204.6	26.8	63.8	983.9
Apr.	372.5	289.9	234.8	41.2	13.8	0.0	5.5	205.6	25.3	54.1	952.9
May	369.5	317.5	266.5	36.0	15.1	0.0	5.5	212.1	27.6	50.9	983.1
June [p]	368.8	342.2	274.1	51.8	16.3	0.0	5.6	223.7	32.6	54.2	1,027.1

Source: ECB.

1) Since the end of November 2000, balances arising from the TARGET system are netted by novation on a daily basis. This implies that the bilateral positions of each NCB vis-à-vis the ECB and other NCBs have been replaced by a single net bilateral position vis-à-vis the ECB. For the TARGET gross end-month positions in 1999 and in 2000 (January to October), see the corresponding footnote in the February 2000 and December 2000 issues of the ECB Monthly Bulletin.

Table 2.2

Aggregated balance sheet of the euro area MFIs, excluding the Eurosystem

(EUR billions (not seasonally adjusted; end of period))

1. Assets

	Loans to euro area residents				Holdings of securities other than shares issued by euro area residents				Money market paper	Holdings of shares/ other equity issued by euro area residents			External assets	Fixed assets	Remaining assets	Total
		MFIs	General government	Other euro area residents		MFIs	General government	Other euro area residents			MFIs	Other euro area residents				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1998	9,088.3	3,154.6	822.0	5,111.7	2,020.9	720.7	1,112.0	188.1	107.3	521.0	168.5	352.6	1,591.7	150.6	776.8	14,256.6
1999 Q2	9,462.4	3,321.6	817.8	5,323.0	2,142.6	801.1	1,128.9	212.5	102.8	585.8	171.5	414.3	1,660.3	151.7	867.4	14,973.0
Q3	9,580.5	3,377.2	810.7	5,392.6	2,183.8	828.8	1,137.5	217.5	112.1	587.9	180.5	407.3	1,668.8	153.4	814.2	15,100.8
Q4	9,778.0	3,413.1	828.2	5,536.7	2,179.8	828.4	1,124.6	226.7	129.9	650.7	211.3	439.4	1,720.6	154.0	919.1	15,532.1
2000 Q1	10,020.0	3,510.6	821.3	5,688.1	2,225.3	869.5	1,128.0	227.8	131.9	729.6	230.2	499.4	1,823.0	152.0	977.6	16,059.2
2000 June	10,126.9	3,463.8	817.2	5,845.8	2,211.1	894.9	1,073.2	243.0	155.2	704.0	210.0	494.0	1,888.5	154.2	1,021.1	16,261.0
July	10,080.7	3,391.1	815.5	5,874.1	2,218.0	920.6	1,046.3	251.2	152.8	700.3	201.6	498.8	1,920.8	154.8	1,070.0	16,297.5
Aug.	10,139.2	3,442.9	803.6	5,892.6	2,216.6	927.1	1,034.2	255.3	152.9	704.1	203.7	500.4	1,980.4	155.1	1,108.0	16,456.2
Sep.	10,239.1	3,461.2	799.8	5,978.1	2,231.5	940.5	1,033.8	257.2	145.6	707.6	204.1	503.6	1,999.6	155.8	1,030.0	16,509.3
Oct.	10,304.1	3,481.4	801.7	6,021.0	2,222.9	939.1	1,020.6	263.1	151.7	709.4	206.0	503.3	2,056.6	157.5	1,100.7	16,702.8
Nov.	10,387.8	3,522.7	808.8	6,056.3	2,216.7	937.0	1,017.3	262.3	157.8	732.0	227.2	504.8	2,081.5	157.5	1,048.9	16,782.1
Dec.	10,419.8	3,510.6	818.7	6,090.5	2,192.4	932.7	995.8	263.8	146.0	750.9	240.3	510.6	2,022.2	158.7	1,022.3	16,712.2
Euro area enlargement																
2001 1 Jan.	*10,527.9*	*3,547.5*	*826.7*	*6,153.6*	*2,253.8*	*932.9*	*1,054.6*	*266.3*	*146.0*	*762.2*	*243.0*	*519.3*	*2,005.0*	*161.6*	*1,046.4*	*16,904.1*
2001 Jan.	10,598.7	3,583.7	830.9	6,184.2	2,249.7	935.3	1,044.8	269.5	156.0	779.2	247.4	531.8	2,069.8	160.4	1,066.6	17,080.4
Feb.	10,668.2	3,640.2	822.7	6,205.4	2,287.3	954.3	1,054.7	278.4	158.3	788.0	248.7	539.3	2,093.5	161.0	1,054.3	17,210.6
Mar.	10,805.2	3,707.5	825.3	6,272.3	2,318.9	968.4	1,064.0	286.5	162.1	812.5	255.4	557.0	2,235.7	160.8	1,096.8	17,592.0
Apr.	10,775.7	3,646.8	817.2	6,311.7	2,336.6	975.4	1,068.7	292.6	168.1	836.3	259.5	576.9	2,218.0	161.5	1,110.5	17,606.8
May	10,799.5	3,655.5	812.1	6,331.9	2,379.0	991.2	1,089.0	298.8	169.0	836.2	258.5	577.6	2,269.8	162.8	1,131.5	17,747.9
June [p]	10,871.1	3,681.1	810.3	6,379.7	2,392.5	995.5	1,096.4	300.5	170.3	798.6	253.6	545.0	2,275.6	163.9	1,160.0	17,832.0

2. Liabilities

	Currency in circulation	Deposits of euro area residents								Money market fund shares/ units	Debt securities issued	Money market paper	Capital and reserves	External liabilities	Remaining liabilities	Total
			MFIs	Central government	Other general government/ other euro area residents	Overnight	With agreed maturity	Redeemable at notice	Repurchase agreements							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1998	0.4	8,286.3	3,305.2	95.4	4,885.7	1,387.1	1,928.9	1,393.2	176.5	241.4	2,099.8	161.6	754.6	1,507.0	1,205.5	14,256.6
1999 Q2	0.5	8,466.2	3,443.7	81.9	4,940.6	1,484.3	1,965.9	1,323.9	166.5	291.9	2,265.3	183.2	794.3	1,688.0	1,283.6	14,973.0
Q3	0.6	8,529.0	3,510.4	83.2	4,935.4	1,471.5	1,981.4	1,321.9	160.6	293.2	2,325.7	204.1	806.4	1,710.3	1,231.4	15,100.8
Q4	0.7	8,733.1	3,589.0	88.6	5,055.4	1,537.0	2,042.8	1,331.4	144.2	293.4	2,361.3	242.1	849.6	1,798.9	1,253.1	15,532.1
2000 Q1	0.7	8,809.6	3,612.5	87.1	5,110.0	1,568.0	2,052.7	1,312.0	177.3	325.1	2,421.0	248.8	890.7	2,018.8	1,344.6	16,059.2
2000 June	0.6	8,849.9	3,623.7	93.4	5,132.8	1,596.1	2,078.1	1,291.3	167.3	344.7	2,478.1	261.1	898.5	2,032.6	1,395.4	16,261.0
July	0.6	8,770.1	3,545.4	85.0	5,139.7	1,594.6	2,088.5	1,284.6	172.0	342.1	2,502.5	272.6	903.8	2,076.0	1,429.7	16,297.5
Aug.	0.0	8,801.9	3,579.6	86.8	5,135.5	1,566.4	2,120.2	1,279.6	169.4	346.3	2,529.4	276.1	906.8	2,142.5	1,453.3	16,456.2
Sep.	0.0	8,858.5	3,599.9	113.7	5,144.9	1,577.0	2,124.2	1,272.3	171.4	334.8	2,550.2	272.2	913.5	2,192.0	1,388.0	16,509.3
Oct.	0.0	8,903.8	3,630.1	121.3	5,152.4	1,577.0	2,141.3	1,263.5	170.6	337.6	2,574.0	281.3	917.9	2,258.1	1,430.1	16,702.8
Nov.	0.0	8,957.1	3,669.8	113.9	5,173.4	1,594.9	2,147.4	1,257.6	173.5	342.9	2,570.2	278.5	930.8	2,277.2	1,425.3	16,782.1
Dec.	0.0	9,057.4	3,679.5	117.4	5,260.4	1,648.9	2,158.3	1,278.3	174.9	323.3	2,563.2	262.2	940.0	2,186.4	1,379.7	16,712.2
Euro area enlargement																
2001 1 Jan.	*0.0*	*9,201.4*	*3,700.7*	*118.4*	*5,382.3*	*1,663.4*	*2,196.6*	*1,329.7*	*195.2*	*323.3*	*2,563.4*	*262.2*	*958.5*	*2,188.1*	*1,404.5*	*16,904.1*
2001 Jan.	0.0	9,191.1	3,727.3	95.6	5,368.2	1,613.2	2,210.2	1,331.0	213.8	337.2	2,594.7	274.9	965.0	2,301.9	1,415.6	17,080.4
Feb.	0.0	9,222.3	3,742.1	103.6	5,376.7	1,614.6	2,221.7	1,324.7	215.8	347.0	2,630.5	280.2	969.7	2,328.1	1,432.9	17,210.6
Mar.	0.0	9,324.8	3,806.1	103.6	5,415.2	1,624.1	2,241.1	1,324.0	225.9	358.8	2,662.1	278.5	982.3	2,512.7	1,472.8	17,592.0
Apr.	0.0	9,302.2	3,747.8	111.3	5,443.2	1,653.5	2,239.9	1,324.9	224.9	367.0	2,675.5	277.9	986.4	2,527.3	1,470.4	17,606.8
May	0.0	9,336.6	3,746.4	110.9	5,479.3	1,677.0	2,242.2	1,322.7	237.3	378.2	2,706.9	271.0	991.0	2,594.7	1,469.6	17,747.9
June [p]	0.0	9,411.2	3,788.7	112.7	5,509.8	1,712.3	2,238.1	1,332.1	227.2	381.9	2,726.5	266.9	1,001.1	2,563.2	1,481.3	17,832.0

Source: ECB.

Table 2.3

Consolidated balance sheet of the euro area MFIs, including the Eurosystem

(EUR billions (not seasonally adjusted; end of period))

1. Assets: levels

	Loans to euro area residents			Holdings of securities other than shares issued by euro area residents			Holdings of shares/ other equity issued by other euro area residents	External assets [2]	Fixed assets	Remaining assets	Total
		General government	Other euro area residents		General government	Other euro area residents					
	1	2	3	4	5	6	7	8	9	10	11
1999 Dec.	6,385.1	847.9	5,537.2	1,438.5	1,210.7	227.8	449.2	2,121.2	164.0	931.1	11,489.2
2000 Jan.	6,422.0	840.6	5,581.5	1,450.4	1,221.7	228.7	453.4	2,166.3	162.3	955.5	11,609.8
Feb.	6,453.5	836.1	5,617.3	1,465.5	1,230.7	234.8	468.7	2,203.4	161.8	972.6	11,725.7
Mar.	6,528.3	839.7	5,688.6	1,449.6	1,220.7	228.9	509.5	2,262.0	161.8	994.1	11,905.4
Apr.	6,591.4	842.4	5,749.0	1,435.6	1,198.6	237.0	522.2	2,362.9	162.6	1,034.3	12,109.1
May	6,614.9	835.8	5,779.1	1,432.0	1,187.9	244.2	535.9	2,351.4	163.0	1,035.3	12,132.6
June	6,681.9	835.6	5,846.3	1,411.0	1,166.8	244.2	504.3	2,343.3	164.2	1,039.0	12,143.7
July	6,708.5	833.8	5,874.6	1,393.1	1,140.7	252.4	509.0	2,370.5	164.9	1,086.3	12,232.3
Aug.	6,715.1	822.0	5,893.1	1,385.2	1,128.6	256.6	510.7	2,415.8	165.2	1,124.9	12,316.9
Sep.	6,796.6	818.0	5,978.5	1,386.6	1,128.4	258.2	513.8	2,458.7	166.0	1,049.9	12,371.5
Oct.	6,841.4	819.9	6,021.5	1,379.8	1,115.5	264.3	514.0	2,511.3	168.0	1,118.7	12,533.2
Nov.	6,883.8	827.0	6,056.8	1,375.9	1,112.2	263.7	515.8	2,484.3	167.7	1,067.7	12,495.2
Dec.	6,926.8	835.9	6,090.9	1,354.6	1,089.4	265.1	521.5	2,402.9	169.9	1,035.7	12,411.3
					Euro area enlargement						
2001 1 Jan.	*7,008.1*	*853.9*	*6,154.2*	*1,423.6*	*1,156.0*	*267.6*	*530.3*	*2,399.2*	*172.9*	*1,059.7*	*12,593.8*
2001 Jan.	7,042.9	858.1	6,184.8	1,416.2	1,145.6	270.6	542.7	2,460.2	171.7	1,082.7	12,716.4
Feb.	7,055.8	849.9	6,206.0	1,435.7	1,156.1	279.6	549.6	2,479.7	172.3	1,071.6	12,764.8
Mar.	7,125.5	852.5	6,272.9	1,452.8	1,165.2	287.6	567.2	2,632.5	172.0	1,116.1	13,066.1
Apr.	7,156.6	844.4	6,312.3	1,465.2	1,171.4	293.8	586.9	2,608.3	173.3	1,126.9	13,117.2
May	7,171.8	839.3	6,332.5	1,491.4	1,191.3	300.1	587.3	2,668.7	174.6	1,147.2	13,241.1
June [p]	7,217.8	837.5	6,380.3	1,499.7	1,198.0	301.7	554.6	2,690.3	175.8	1,177.8	13,316.0

2. Liabilities: levels

	Currency in circulation	Deposits of central government	Deposits of other general government/ other euro area residents					Money market fund shares/ units and money market paper	Debt securities issued	Capital and reserves	External liabilities [2]	Remaining liabilities	Excess of inter-MFI liabilities	Total
				Overnight	With agreed maturity	Redeemable at notice	Repurchase agreements							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1999 Dec.	349.9	142.0	5,064.2	1,545.8	2,042.8	1,331.4	144.2	408.9	1,535.5	808.4	1,848.7	1,300.7	30.9	11,489.2
2000 Jan.	333.0	133.7	5,089.6	1,574.8	2,028.0	1,331.7	155.0	412.4	1,534.8	825.6	1,935.0	1,339.1	6.7	11,609.8
Feb.	331.1	144.6	5,095.4	1,568.2	2,045.9	1,321.9	159.5	430.9	1,550.5	828.6	1,966.4	1,357.5	20.6	11,725.7
Mar.	334.6	130.2	5,119.1	1,577.1	2,052.7	1,312.0	177.3	443.7	1,553.7	842.6	2,093.9	1,390.3	-2.7	11,905.4
Apr.	337.7	131.8	5,157.8	1,612.6	2,061.0	1,304.4	179.8	451.6	1,573.6	852.4	2,212.8	1,411.7	-20.4	12,109.1
May	337.5	113.9	5,156.4	1,598.0	2,080.6	1,296.6	181.2	456.7	1,575.9	853.5	2,220.3	1,424.8	-6.5	12,132.6
June	341.2	146.0	5,145.3	1,608.7	2,078.2	1,291.3	167.3	452.3	1,585.1	877.5	2,124.7	1,440.9	30.8	12,143.7
July	343.0	134.7	5,150.2	1,605.1	2,088.5	1,284.6	172.0	463.6	1,584.0	893.9	2,160.6	1,475.8	26.4	12,232.3
Aug.	337.9	140.6	5,146.7	1,577.6	2,120.2	1,279.6	169.4	471.2	1,604.1	898.2	2,209.0	1,500.2	9.1	12,316.9
Sep.	338.9	159.3	5,157.4	1,589.5	2,124.2	1,272.3	171.4	461.5	1,611.4	926.3	2,267.0	1,439.4	10.4	12,371.5
Oct.	336.7	172.3	5,166.1	1,590.7	2,141.3	1,263.5	170.6	467.2	1,636.8	932.8	2,327.5	1,481.6	12.0	12,533.2
Nov.	336.8	168.8	5,187.5	1,608.9	2,147.4	1,257.6	173.5	463.6	1,634.4	920.7	2,306.5	1,477.0	-0.1	12,495.2
Dec.	347.5	164.6	5,270.2	1,658.7	2,158.3	1,278.3	174.9	439.6	1,631.7	892.9	2,216.3	1,436.7	11.8	12,411.3
						Euro area enlargement								
2001 1 Jan.	*355.3*	*166.2*	*5,392.7*	*1,673.4*	*2,197.0*	*1,329.7*	*195.2*	*439.6*	*1,632.4*	*910.4*	*2,219.0*	*1,463.7*	*11.9*	*12,593.8*
2001 Jan.	335.2	147.1	5,379.1	1,623.7	2,210.6	1,331.0	213.8	456.1	1,662.3	909.7	2,332.5	1,473.6	20.8	12,716.4
Feb.	334.2	155.6	5,388.1	1,625.6	2,222.1	1,324.7	215.8	468.8	1,679.2	911.2	2,356.0	1,491.1	-19.5	12,764.8
Mar.	335.4	150.3	5,427.6	1,636.2	2,241.5	1,324.0	225.9	475.2	1,696.5	926.8	2,539.5	1,536.7	-21.9	13,066.1
Apr.	335.3	152.5	5,457.0	1,667.0	2,240.2	1,324.9	224.9	476.8	1,703.1	927.9	2,552.6	1,524.5	-12.5	13,117.2
May	332.0	146.9	5,494.3	1,691.7	2,242.6	1,322.7	237.3	480.2	1,718.4	939.9	2,622.3	1,520.4	-13.3	13,241.1
June [p]	332.2	164.5	5,526.1	1,728.2	2,238.5	1,332.1	227.2	478.5	1,733.5	966.6	2,595.7	1,535.6	-16.5	13,316.0

Source: ECB.

1) Calculated from monthly differences in levels adjusted for reclassifications, other revaluations, exchange rate variations and any other changes which do not arise from transactions.

2) See Table 2.1, footnote 1.

3. Assets: flows [1]

	Loans to euro area residents			Holdings of securities other than shares issued by euro area residents			Holdings of shares/ other equity issued by other euro area residents	External assets [2]	Fixed assets	Remaining assets	Total
	1	General government 2	Other euro area residents 3	4	General government 5	Other euro area residents 6	7	8	9	10	11
2000 Jan.	32.6	-7.5	40.1	15.0	13.8	1.2	3.9	22.2	-1.6	24.3	96.5
Feb.	32.1	-4.4	36.5	15.5	9.3	6.2	13.7	31.7	-0.4	17.0	109.6
Mar.	72.0	4.5	67.4	-13.8	-7.0	-6.8	39.1	33.4	0.0	22.5	153.2
Apr.	55.9	2.3	53.6	-14.7	-21.4	6.7	11.7	13.1	0.8	32.9	99.7
May	22.4	-6.3	28.8	0.0	-7.5	7.5	12.4	11.3	0.5	1.0	47.5
June	60.5	-0.5	60.9	-17.1	-18.1	1.0	-31.9	7.8	1.4	4.5	25.3
July	22.3	-1.3	23.5	-19.3	-26.9	7.6	3.6	-3.6	0.7	46.9	50.7
Aug.	7.0	-8.6	15.6	-6.2	-9.8	3.6	1.9	3.8	0.3	38.5	45.4
Sep.	67.3	-4.1	71.4	0.3	-3.1	3.4	3.0	17.7	0.7	-75.9	13.1
Oct.	40.6	1.9	38.6	-8.0	-15.4	7.4	1.4	10.0	3.2	68.9	116.0
Nov.	49.1	7.2	41.9	-2.2	-1.4	-0.8	1.0	7.9	-0.3	-51.0	4.4
Dec.	60.9	9.8	51.1	-14.4	-17.7	3.4	5.5	6.9	1.2	-22.2	37.9
					Euro area enlargement						
2001 Jan.	34.0	2.9	31.1	-3.5	-7.5	4.1	12.8	61.3	-1.0	22.3	126.0
Feb.	13.5	-8.2	21.7	18.1	8.6	9.4	7.5	15.4	0.5	-12.0	43.1
Mar.	62.0	2.3	59.7	18.1	9.5	8.6	17.0	102.5	0.1	46.0	246.2
Apr.	32.9	-8.1	41.0	14.7	8.2	6.5	16.7	-19.4	1.2	9.9	56.1
May	3.7	-5.6	9.3	38.8	32.3	6.5	1.1	4.6	1.4	18.8	68.4
June [p]	50.7	-1.7	52.3	10.1	7.8	2.4	-33.4	18.1	1.2	30.3	77.0

4. Liabilities: flows [1]

	Currency in circulation	Deposits of central government	Deposits of other general government/ other euro area residents					Money market fund shares/ units and money market paper	Debt securities issued	Capital and reserves	External liabilities [2]	Remaining liabilities	Excess of inter-MFI liabilities	Total
				Overnight	With agreed maturity	Redeemable at notice	Repurchase agreements							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2000 Jan.	-16.9	-8.3	23.0	28.1	-16.0	0.3	10.7	0.4	-2.5	18.6	66.8	42.4	-27.0	96.5
Feb.	-1.8	10.9	5.4	-6.8	17.5	-9.9	4.5	18.4	15.6	4.4	26.3	16.5	13.9	109.6
Mar.	3.5	-14.5	20.5	7.6	5.0	-10.0	17.8	12.3	1.2	12.7	107.2	33.5	-23.2	153.2
Apr.	3.3	1.6	33.0	33.4	4.9	-7.7	2.4	-0.4	19.1	9.3	35.8	14.6	-16.5	99.7
May	-0.2	-17.9	1.6	-11.3	20.3	-8.9	1.4	8.2	6.3	2.8	28.9	11.8	6.0	47.5
June	3.6	32.1	-7.9	12.0	-0.7	-5.3	-13.9	-4.4	15.8	18.8	-78.0	19.2	26.1	25.3
July	1.9	-11.3	1.1	-5.0	7.4	-6.1	4.7	10.9	-7.1	15.2	8.5	38.5	-7.0	50.7
Aug.	-5.1	5.9	-7.9	-29.3	29.3	-5.1	-2.7	6.3	11.7	4.7	11.8	33.4	-15.4	45.4
Sep.	1.0	18.7	4.6	10.8	-0.9	-7.4	2.0	-10.1	3.3	19.1	43.2	-65.7	-1.1	13.1
Oct.	-2.2	13.1	3.3	-0.8	13.8	-8.8	-0.8	4.5	16.3	5.1	20.0	46.5	9.4	116.0
Nov.	0.1	-3.6	26.0	20.0	8.8	-5.8	3.0	-2.5	5.3	-11.9	11.8	-7.5	-13.4	4.4
Dec.	10.7	-4.2	95.9	53.8	19.8	20.9	1.5	-13.4	5.2	-24.0	-16.1	-22.2	5.9	37.9
						Euro area enlargement								
2001 Jan.	-20.1	-19.1	-15.8	-49.5	13.8	1.3	18.6	18.2	24.4	-1.6	115.5	18.0	6.4	126.0
Feb.	-1.0	8.7	8.4	1.6	11.2	-6.3	1.9	12.7	16.3	2.0	19.9	16.4	-40.3	43.1
Mar.	1.3	-5.2	33.3	8.6	15.4	-0.8	10.1	5.0	13.1	17.8	138.2	51.1	-8.2	246.2
Apr.	-0.1	2.2	29.7	30.7	-0.9	0.9	-1.1	0.6	5.5	1.8	17.9	-11.5	10.0	56.1
May	-3.3	-5.6	29.5	21.9	-2.3	-2.5	12.4	1.6	2.5	8.6	14.5	23.3	-2.6	68.4
June [p]	0.2	17.6	32.8	36.8	-3.4	9.4	-10.1	-1.6	18.2	20.2	-22.6	15.6	-3.3	77.0

Table 2.4

Monetary aggregates [1] and counterparts

(EUR billions (not seasonally adjusted) and percentage growth rates, unless otherwise indicated)

1. Monetary aggregates: levels at the end of the period

	M1				M2			
	Currency in circulation	Overnight deposits	Total	Index Dec. 98=100 [3]	Deposits with agreed maturity up to 2 years	Deposits redeemable at notice up to 3 months	Total	Index Dec. 98=100 [3]
	1	2	3	4	5	6	7	8
1999 Dec.	349.9	1,614.1	1,964.0	109.97	881.6	1,287.7	4,133.3	105.24
2000 Jan.	333.0	1,642.4	1,975.4	110.55	864.8	1,288.9	4,129.1	105.09
Feb.	331.1	1,634.3	1,965.4	109.99	879.9	1,278.0	4,123.4	104.98
Mar.	334.6	1,642.8	1,977.4	110.58	888.2	1,267.5	4,133.1	105.16
Apr.	337.7	1,680.9	2,018.6	112.78	896.3	1,260.1	4,174.9	106.11
May	337.5	1,662.8	2,000.3	111.95	914.1	1,251.9	4,166.3	105.98
June	341.2	1,674.1	2,015.3	112.85	912.7	1,244.6	4,172.5	106.21
July	343.0	1,672.3	2,015.3	112.78	922.8	1,236.8	4,174.9	106.20
Aug.	337.9	1,643.1	1,981.0	110.75	953.3	1,230.4	4,164.6	105.84
Sep.	338.9	1,654.4	1,993.4	111.38	956.1	1,220.3	4,169.8	105.92
Oct.	336.7	1,656.8	1,993.6	111.28	972.2	1,211.1	4,176.8	105.99
Nov.	336.8	1,675.2	2,012.1	112.42	984.9	1,202.3	4,199.3	106.65
Dec.	347.5	1,728.8	2,076.4	116.23	990.2	1,221.4	4,288.1	109.15
				Euro area enlargement				
2001 1 Jan.	*355.3*	*1,743.5*	*2,098.8*	-	*1,027.1*	*1,271.5*	*4,397.4*	-
2001 Jan.	335.2	1,692.7	2,027.9	112.31	1,041.5	1,275.1	4,344.5	107.85
Feb.	334.2	1,693.0	2,027.2	112.26	1,054.2	1,269.8	4,351.1	108.00
Mar.	335.4	1,703.3	2,038.7	112.79	1,070.3	1,269.8	4,378.8	108.58
Apr.	335.3	1,735.9	2,071.2	114.58	1,071.6	1,273.4	4,416.2	109.51
May	332.0	1,759.2	2,091.2	115.53	1,072.5	1,273.1	4,436.8	109.84
June [p]	332.2	1,795.5	2,127.7	117.57	1,069.4	1,283.2	4,480.3	110.94

2. Monetary aggregates: flows [4]

	M1				M2			
	Currency in circulation	Overnight deposits	Total	Annual growth rate [3] (%)	Deposits with agreed maturity up to 2 years	Deposits redeemable at notice up to 3 months	Total	Annual growth rate [3] (%)
	1	2	3	4	5	6	7	8
2000 Jan.	-16.9	27.4	10.4	9.3	-17.7	1.1	-6.1	4.2
Feb.	-1.8	-8.2	-10.1	10.7	16.5	-10.9	-4.4	5.3
Mar.	3.5	7.2	10.6	10.1	7.1	-10.6	7.1	5.1
Apr.	3.3	36.0	39.2	11.4	5.7	-7.6	37.3	5.5
May	-0.2	-14.7	-14.9	8.7	19.0	-9.2	-5.1	4.7
June	3.6	12.6	16.2	7.1	0.3	-7.3	9.2	4.3
July	1.9	-3.2	-1.3	6.9	8.3	-7.5	-0.5	3.7
Aug.	-5.1	-31.1	-36.3	7.1	28.9	-6.5	-13.9	4.3
Sep.	1.0	10.3	11.3	6.2	1.7	-10.1	2.9	4.1
Oct.	-2.2	0.4	-1.8	5.8	13.8	-9.3	2.7	3.7
Nov.	0.1	20.3	20.4	5.1	14.6	-8.6	26.4	3.7
Dec.	10.7	57.5	68.2	5.7	10.9	19.3	98.4	3.7
				Euro area enlargement				
2001 Jan.	-20.1	-50.6	-70.7	1.6	14.7	3.6	-52.5	2.6
Feb.	-1.0	0.0	-1.0	2.1	12.4	-5.4	6.0	2.9
Mar.	1.3	8.4	9.6	2.0	13.8	-0.1	23.3	3.3
Apr.	-0.1	32.5	32.4	1.6	1.5	3.6	37.5	3.2
May	-3.3	20.4	17.1	3.2	-3.3	-0.5	13.4	3.6
June [p]	0.2	36.7	36.8	4.2	-2.6	10.1	44.4	4.5

Source: ECB.

1) Monetary aggregates comprise monetary liabilities of MFIs and central government (Post Office, Treasury) vis-à-vis non-MFI euro area residents excluding central government.

2) Excluding holdings of money market fund shares/units by non-residents of the euro area.

M3 [2]					
Repurchase agreements	Money market fund shares/ units and money market paper [2]	Debt securities up to 2 years	Total	Index Dec. 98=100 [3]	
9	10	11	12	13	
144.2	408.9	88.8	4,775.1	106.03	1999 Dec.
155.0	412.4	87.2	4,783.7	106.10	2000 Jan.
159.5	430.9	90.9	4,804.5	106.59	Feb.
177.3	443.7	90.7	4,844.8	107.40	Mar.
179.8	451.6	89.7	4,896.0	108.30	Apr.
181.2	456.7	87.5	4,891.6	108.36	May
167.3	452.3	86.8	4,878.9	108.20	June
172.0	463.6	76.7	4,887.3	108.30	July
169.4	471.2	81.0	4,886.2	108.14	Aug.
171.4	461.5	81.5	4,884.2	108.04	Sep.
170.6	467.2	88.2	4,902.8	108.30	Oct.
173.5	463.6	97.3	4,933.8	109.12	Nov.
174.9	439.6	106.4	5,009.0	111.24	Dec.
		Euro area enlargement			
195.2	*439.6*	*106.6*	*5,138.8*	-	*2001 1 Jan.*
213.8	456.1	106.9	5,121.4	110.90	2001 Jan.
215.8	468.8	115.1	5,150.7	111.52	Feb.
225.9	475.2	119.6	5,199.5	112.44	Mar.
224.9	476.8	125.3	5,243.2	113.36	Apr.
237.3	480.2	133.9	5,288.2	114.08	May
227.2	478.5	144.0	5,329.9	115.02	June [p]

M3 [2]					
Repurchase agreements	Money market fund shares/ units and money market paper [2]	Debt securities up to 2 years	Total	Annual growth rate [3] (%)	
9	10	11	12	13	
10.7	0.4	-1.9	3.2	5.2	2000 Jan.
4.5	18.4	3.7	22.2	6.2	Feb.
17.8	12.3	-1.0	36.3	6.6	Mar.
2.4	-0.4	1.4	40.8	6.7	Apr.
1.4	8.2	-1.7	2.8	6.0	May
-13.9	-4.4	1.7	-7.4	5.3	June
4.7	10.9	-10.7	4.5	5.1	July
-2.7	6.3	3.2	-7.1	5.5	Aug.
2.0	-10.1	0.6	-4.6	5.0	Sep.
-0.8	4.5	5.4	11.8	4.9	Oct.
3.0	-2.5	10.3	37.1	4.7	Nov.
1.5	-13.4	9.1	95.7	4.9	Dec.
		Euro area enlargement			
18.6	18.2	0.1	-15.5	4.5	2001 Jan.
1.9	12.7	8.1	28.7	4.6	Feb.
10.1	5.0	4.0	42.4	4.7	Mar.
-1.1	0.6	5.5	42.6	4.7	Apr.
12.4	1.6	6.0	33.3	5.3	May
-10.1	-1.6	10.5	43.2	6.3	June [p]

3) For the calculations of the index and the growth rates, see the Technical notes.
4) Calculated from monthly differences in levels adjusted for reclassifications, other revaluations, exchange rate variations and any other changes which do not arise from transactions.

Table 2.4 (cont'd)

Monetary aggregates [1] and counterparts

(EUR billions and percentage growth rates, unless otherwise indicated)

3. Seasonally adjusted levels at the end of the period

	M2							
	M1				Other short-term deposits [5]		Total	Index Dec. 98=100 [4]
	Currency in circulation	Overnight deposits	Total	Index Dec. 98=100 [4]	Total	Index Dec. 98=100 [4]		
	1	2	3	4	5	6	7	8
1999 Dec.	340.8	1,574.3	1,915.0	107.23	2,151.8	100.48	4,066.8	103.55
2000 Jan.	335.7	1,628.5	1,964.3	109.93	2,135.6	99.68	4,099.8	104.34
Feb.	336.0	1,645.7	1,981.7	110.90	2,145.1	100.19	4,126.8	105.06
Mar.	336.5	1,661.2	1,997.7	111.72	2,145.7	100.16	4,143.5	105.42
Apr.	337.2	1,675.2	2,012.4	112.43	2,150.4	100.27	4,162.9	105.80
May	338.8	1,661.5	2,000.3	111.94	2,162.8	100.85	4,163.1	105.90
June	339.4	1,646.3	1,985.7	111.20	2,163.2	100.95	4,148.9	105.61
July	338.8	1,658.2	1,997.0	111.75	2,170.5	101.21	4,167.5	106.01
Aug.	338.8	1,675.6	2,014.3	112.61	2,183.2	101.73	4,197.5	106.68
Sep.	339.4	1,674.4	2,013.8	112.52	2,191.2	102.04	4,204.9	106.81
Oct.	339.8	1,678.6	2,018.4	112.67	2,200.9	102.38	4,219.3	107.06
Nov.	338.4	1,679.8	2,018.1	112.76	2,207.9	102.81	4,226.1	107.33
Dec.	338.2	1,676.6	2,014.8	112.79	2,198.3	102.62	4,213.1	107.25
				Euro area enlargement				
2001 1 Jan.	*345.7*	*1,690.9*	*2,036.6*	-	*2,284.7*	-	*4,321.3*	-
2001 Jan.	338.8	1,690.3	2,029.1	112.38	2,296.1	103.15	4,325.2	107.37
Feb.	338.9	1,710.8	2,049.7	113.50	2,308.7	103.70	4,358.3	108.18
Mar.	337.3	1,715.0	2,052.3	113.54	2,328.2	104.47	4,380.6	108.62
Apr.	336.0	1,725.3	2,061.3	114.04	2,340.6	105.04	4,401.9	109.16
May	332.8	1,752.2	2,085.0	115.19	2,343.8	104.98	4,428.8	109.64
June [p]	330.5	1,759.0	2,089.5	115.45	2,357.4	105.62	4,446.9	110.11

4. Seasonally adjusted flows [7]

	M2										
	M1					Other short-term deposits [5]			Total	Monthly growth rate [4] (%)	Annual growth rate [4] (%)
	Currency in circulation	Overnight deposits	Total	Monthly growth rate [4] (%)	Annual growth rate [4] (%)	Total	Monthly growth rate [4] (%)	Annual growth rate [4] (%)			
	1	2	3	4	5	6	7	8	9	10	11
2000 Jan.	-5.0	53.3	48.3	2.5	9.2	-17.2	-0.8	0.1	31.1	0.8	4.3
Feb.	0.2	17.1	17.3	0.9	10.7	11.0	0.5	1.0	28.3	0.7	5.4
Mar.	0.5	14.2	14.7	0.7	10.3	-0.7	0.0	0.8	14.0	0.3	5.1
Apr.	0.8	11.8	12.7	0.6	10.5	2.2	0.1	0.7	14.9	0.4	5.2
May	1.6	-10.3	-8.7	-0.4	9.0	12.5	0.6	1.1	3.8	0.1	4.8
June	0.6	-14.0	-13.4	-0.7	7.3	2.1	0.1	1.6	-11.3	-0.3	4.2
July	-0.6	10.6	10.0	0.5	6.4	5.8	0.3	1.2	15.7	0.4	3.6
Aug.	0.0	15.4	15.4	0.8	7.2	11.0	0.5	1.7	26.4	0.6	4.3
Sep.	0.7	-2.3	-1.6	-0.1	6.4	6.7	0.3	2.0	5.1	0.1	4.1
Oct.	0.3	2.3	2.6	0.1	5.9	7.3	0.3	2.0	9.9	0.2	3.9
Nov.	-1.4	3.0	1.6	0.1	5.3	9.1	0.4	2.5	10.7	0.3	3.8
Dec.	-0.1	0.7	0.5	0.0	5.2	-3.9	-0.2	2.1	-3.4	-0.1	3.6
					Euro area enlargement						
2001 Jan.	-7.3	-0.7	-8.0	-0.4	2.2	11.9	0.5	3.5	3.9	0.1	2.9
Feb.	0.1	20.1	20.2	1.0	2.3	12.3	0.5	3.5	32.6	0.8	3.0
Mar.	-1.6	2.3	0.7	0.0	1.6	17.1	0.7	4.3	17.8	0.4	3.0
Apr.	-1.3	10.2	8.9	0.4	1.4	12.6	0.5	4.8	21.6	0.5	3.2
May	-3.2	24.0	20.8	1.0	2.9	-1.2	-0.1	4.1	19.6	0.4	3.5
June [p]	-2.3	7.1	4.8	0.2	3.8	14.2	0.6	4.6	19.0	0.4	4.3

Source: ECB.

1) Monetary aggregates comprise monetary liabilities of MFIs and central government (Post Office, Treasury) vis-à-vis non-MFI euro area residents excluding central government.

2) Excluding holdings of money market fund shares/units by non-residents of the euro area.

3) Loans, with other components of credit, are shown without seasonal adjustment on page 20.*

4) For the calculations of the index and the growth rates, see the Technical notes.

M3 [2]				Loans to other euro area residents (excluding government) [3]		
Marketable instruments [6]		Total	Index Dec. 98=100 [4]			
Total	Index Dec. 98=100 [4]			Total	Index Dec. 98=100 [4]	
9	10	11	12	13	14	
667.3	116.09	4,734.1	105.12	5,515.4	109.09	1999 Dec.
669.0	115.79	4,768.8	105.77	5,578.4	110.26	2000 Jan.
678.0	117.33	4,804.8	106.60	5,627.6	111.24	Feb.
700.3	120.97	4,843.8	107.37	5,686.1	112.32	Mar.
706.7	121.07	4,869.5	107.71	5,743.6	113.32	Apr.
706.8	121.72	4,869.9	107.88	5,789.0	114.19	May
701.9	121.29	4,850.8	107.58	5,825.4	114.79	June
712.7	122.97	4,880.2	108.14	5,855.3	115.28	July
717.1	123.30	4,914.6	108.77	5,916.6	116.43	Aug.
718.6	123.53	4,923.6	108.91	5,989.4	117.59	Sep.
735.0	125.90	4,954.2	109.44	6,032.1	118.34	Oct.
737.9	126.81	4,963.9	109.79	6,062.8	119.07	Nov.
749.1	130.65	4,962.2	110.20	6,072.6	119.60	Dec.
		Euro area enlargement				
770.3	-	*5,091.6*	-	*6,135.7*	-	*2001 1 Jan.*
791.6	134.53	5,116.9	110.80	6,182.5	120.52	2001 Jan.
796.2	135.27	5,154.5	111.60	6,218.8	121.24	Feb.
806.1	136.63	5,186.6	112.16	6,269.1	122.08	Mar.
811.6	137.36	5,213.5	112.72	6,303.9	122.79	Apr.
829.5	139.67	5,258.3	113.44	6,341.7	123.31	May
844.2	142.25	5,291.1	114.18	6,357.4	123.70	June [p]

M3 [2]							Loans to other euro area residents (excluding government) [3]			
Marketable instruments [6]			Total	Monthly growth rate [4] (%)	Annual growth rate [4] (%)	3-month moving average (centred) (%)				
Total	Monthly growth rate [4] (%)	Annual growth rate [4] (%)					Total	Monthly growth rate [4] (%)	Annual growth rate [4] (%)	
12	13	14	15	16	17	18	19	20	21	
-1.8	-0.3	12.4	29.4	0.6	5.3	6.0	58.9	1.1	8.8	2000 Jan.
8.9	1.3	11.8	37.3	0.8	6.3	6.1	49.8	0.9	9.5	Feb.
21.0	3.1	15.9	35.0	0.7	6.6	6.4	54.7	1.0	9.8	Mar.
0.6	0.1	13.9	15.5	0.3	6.3	6.3	50.6	0.9	10.4	Apr.
3.8	0.5	13.9	7.6	0.2	6.0	5.9	44.1	0.8	10.2	May
-2.5	-0.4	11.9	-13.8	-0.3	5.3	5.4	30.2	0.5	9.4	June
9.7	1.4	14.5	25.4	0.5	5.1	5.3	25.1	0.4	9.1	July
1.9	0.3	13.1	28.3	0.6	5.5	5.2	58.5	1.0	9.5	Aug.
1.3	0.2	11.0	6.4	0.1	5.0	5.2	58.7	1.0	10.0	Sep.
13.8	1.9	12.1	23.8	0.5	5.0	4.9	38.4	0.6	9.8	Oct.
5.3	0.7	10.2	15.9	0.3	4.7	4.9	37.3	0.6	9.3	Nov.
22.4	3.0	12.5	19.0	0.4	4.8	4.8	26.7	0.4	9.6	Dec.
				Euro area enlargement						
23.3	3.0	16.2	27.2	0.5	4.8	4.8	47.1	0.8	9.3	2001 Jan.
4.4	0.6	15.3	37.0	0.7	4.7	4.6	36.9	0.6	9.0	Feb.
8.0	1.0	12.9	25.8	0.5	4.5	4.6	43.0	0.7	8.7	Mar.
4.3	0.5	13.5	25.9	0.5	4.6	4.8	36.4	0.6	8.4	Apr.
13.7	1.7	14.8	33.2	0.6	5.1	5.3	26.8	0.4	8.0	May
15.3	1.8	17.3	34.3	0.7	6.1	-	20.3	0.3	7.8	June [p]

5) Other short-term deposits comprise deposits with an agreed maturity of up to two years and deposits redeemable at notice of up to three months.
6) Marketable instruments comprise repurchase agreements, money market fund shares/units (excluding holdings by non-residents of the euro area) and money market paper together with debt securities issued with an original maturity of up to two years.
7) Calculated from monthly differences in levels adjusted for reclassifications, other revaluations, exchange rate variations and any other changes which do not arise from transactions.

Table 2.4 (cont'd)

Monetary aggregates [1] and counterparts

(EUR billions (not seasonally adjusted) and percentage growth rates, unless otherwise indicated)

5. Main counterparts of M3: levels at the end of the period

	Longer-term MFI liabilities				Credit [2]				Net external assets	Fixed assets
	Deposits with agreed maturity over 2 years	Deposits redeemable at notice over 3 months	Debt securities over 2 years	Capital and reserves	Credit to government	Credit to other euro area residents	Of which loans	Index Dec. 98 =100 [3]		
	1	2	3	4	5	6	7	8	9	10
1999 Dec.	1,161.6	112.2	1,446.8	808.4	2,058.6	6,214.3	5,537.2	109.52	272.5	164.0
2000 Jan.	1,163.6	111.4	1,447.7	825.6	2,062.3	6,263.5	5,581.5	110.32	231.3	162.3
Feb.	1,166.4	112.4	1,459.7	828.6	2,066.9	6,320.9	5,617.3	111.04	237.1	161.8
Mar.	1,164.9	113.2	1,463.0	842.6	2,060.4	6,427.0	5,688.6	112.37	168.2	161.8
Apr.	1,165.1	112.8	1,483.9	852.4	2,041.0	6,508.3	5,749.0	113.43	150.1	162.6
May	1,167.0	114.0	1,488.5	853.5	2,023.7	6,559.1	5,779.1	114.00	131.1	163.0
June	1,165.8	115.5	1,498.3	877.5	2,002.3	6,594.9	5,846.3	115.20	218.6	164.2
July	1,166.2	116.6	1,507.2	893.9	1,974.5	6,636.0	5,874.6	115.66	209.9	164.9
Aug.	1,167.3	118.2	1,523.1	898.2	1,950.6	6,660.4	5,893.1	115.97	206.8	165.2
Sep.	1,168.5	120.5	1,529.9	926.3	1,946.4	6,750.6	5,978.5	117.38	191.7	166.0
Oct.	1,169.4	121.3	1,548.6	932.8	1,935.4	6,799.8	6,021.5	118.13	183.7	168.0
Nov.	1,162.8	124.0	1,537.2	920.7	1,939.2	6,836.3	6,056.8	118.96	177.8	167.7
Dec.	1,168.4	126.4	1,525.2	892.9	1,925.3	6,877.6	6,090.9	119.96	186.6	169.9
					Euro area enlargement					
2001 1 Jan.	*1,170.2*	*127.7*	*1,525.8*	*910.4*	*2,009.9*	*6,952.1*	*6,154.2*	-	*180.2*	*172.9*
2001 Jan.	1,169.4	127.9	1,555.3	909.7	2,003.7	6,998.0	6,184.8	120.57	127.7	171.7
Feb.	1,168.2	128.0	1,564.2	911.2	2,006.0	7,035.2	6,206.0	120.99	123.7	172.3
Mar.	1,171.4	127.6	1,576.9	926.8	2,017.7	7,127.7	6,272.9	122.15	93.0	172.0
Apr.	1,168.9	125.6	1,577.8	927.9	2,015.7	7,193.0	6,312.3	122.95	55.7	173.3
May	1,170.3	123.4	1,584.5	939.9	2,030.6	7,219.9	6,332.5	123.13	46.4	174.6
June [p]	1,169.3	123.2	1,589.5	966.6	2,035.5	7,236.6	6,380.3	124.15	94.6	175.8

6. Main counterparts of M3: flows [4]

	Longer-term MFI liabilities				Credit [2]				Net external assets	Fixed assets
	Deposits with agreed maturity over 2 years	Deposits redeemable at notice over 3 months	Debt securities over 2 years	Capital and reserves	Credit to government	Credit to other euro area residents	Of which loans	Annual growth rate [3] (%)		
	1	2	3	4	5	6	7	8	9	10
2000 Jan.	1.6	-0.9	-0.6	18.6	6.3	45.2	40.1	8.8	-44.6	-1.6
Feb.	1.0	1.0	11.9	4.4	4.9	56.4	36.5	9.5	5.4	-0.4
Mar.	-2.0	0.8	2.2	12.7	-2.4	99.7	67.4	9.9	-73.8	0.0
Apr.	-0.8	-0.4	17.6	9.3	-19.2	72.0	53.6	10.5	-22.7	0.8
May	1.3	1.2	8.0	2.8	-13.8	48.7	28.8	10.3	-17.6	0.5
June	-1.0	1.5	14.0	18.8	-18.6	30.1	60.9	9.4	85.9	1.4
July	-0.8	1.4	3.6	15.2	-28.2	34.8	23.5	9.1	-12.0	0.7
Aug.	0.4	1.7	8.5	4.7	-18.4	21.1	15.6	9.5	-7.9	0.3
Sep.	-2.5	2.2	2.7	19.1	-7.2	77.8	71.4	10.0	-25.5	0.7
Oct.	0.0	0.8	10.8	5.1	-13.5	47.4	38.6	9.8	-10.0	3.2
Nov.	-5.9	2.7	-5.0	-11.9	5.8	42.1	41.9	9.3	-3.9	-0.3
Dec.	8.9	2.5	-4.0	-24.0	-7.9	59.9	51.1	9.5	22.9	1.2
					Euro area enlargement					
2001 Jan.	-0.9	0.2	24.3	-1.6	-4.6	47.9	31.1	9.3	-54.2	-1.0
Feb.	-1.2	0.1	8.2	2.0	0.4	38.7	21.7	9.0	-4.6	0.5
Mar.	1.5	-0.4	9.1	17.8	11.9	85.3	59.7	8.7	-35.6	0.1
Apr.	-2.4	-2.0	0.0	1.8	0.0	64.3	41.0	8.4	-37.2	1.2
May	0.9	-2.2	-3.5	8.6	26.7	16.9	9.3	8.0	-9.9	1.4
June [p]	-0.9	-0.3	7.7	20.2	6.1	21.3	52.3	7.8	40.7	1.2

1) Monetary aggregates comprise monetary liabilities of MFIs and central government (Post Office, Treasury) vis-à-vis non-MFI euro area residents excluding central government.
2) Credit comprises loans granted to non-MFIs resident in the euro area and holdings of securities issued by non-MFIs resident in the euro area.
3) For the calculations of the index and the growth rates, see the Technical notes.
4) Calculated from monthly differences in levels adjusted for reclassifications, other revaluations, exchange rate variations and any other changes which do not arise from transactions.

Table 2.5

Outstanding MFI loans by counterpart, type and original maturity [1)]

(EUR billions (not seasonally adjusted; end of period))

1. Loans to non-financial sectors other than government

	Non-financial corporations [2) 3)]				Households [2) 3)]	Consumer credit [4)]			Lending for house purchase [4)]			Other lending			Non-profit institutions serving households [2)]
		Up to 1 year	Over 1 and up to 5 years	Over 5 years		Up to 1 year	Over 1 and up to 5 years	Over 5 years	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Up to 1 year	Over 1 and up to 5 years	Over 5 years [3)]	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1999 Q3	2,353.5	832.2	362.8	1,158.4	2,661.7	85.9	157.3	196.6	19.6	64.4	1,568.6	136.0	96.2	337.1	36.2
Q4	2,427.5	858.8	372.9	1,195.8	2,726.7	88.4	156.4	195.6	19.9	60.4	1,626.4	141.7	98.5	339.3	37.4
2000 Q1	2,501.3	902.0	392.3	1,207.0	2,775.0	89.1	162.5	200.5	20.2	58.9	1,659.7	141.0	100.4	342.8	39.0
Q2	2,561.7	919.1	406.0	1,236.7	2,826.0	93.6	161.7	201.8	21.3	60.7	1,698.5	144.9	102.2	341.4	37.6
Q3	2,633.9	954.6	422.5	1,256.8	2,888.1	96.5	165.1	208.2	22.8	63.1	1,747.0	142.5	100.9	342.1	37.5
Q4	2,684.8	968.4	428.6	1,287.8	2,941.1	98.2	165.5	212.8	23.1	62.5	1,790.7	146.4	101.7	340.1	38.2
						Euro area enlargement									
2001 Q1 [(p)]	2,792.0	1,030.6	442.2	1,319.3	2,986.4	100.2	169.4	213.0	22.0	62.1	1,826.3	146.4	101.9	345.0	37.2

2. Loans to non-monetary financial corporations

	Non-monetary financial intermediaries except insurance corporations and pension funds [2)]				Insurance corporations and pension funds [2)]			
		Up to 1 year	Over 1 and up to 5 years	Over 5 years		Up to 1 year	Over 1 and up to 5 years	Over 5 years
	1	2	3	4	5	6	7	8
1999 Q3	299.4	181.9	53.8	63.7	41.9	33.1	2.8	6.0
Q4	315.7	191.4	55.1	69.2	29.4	20.7	2.7	5.9
2000 Q1	335.7	207.1	56.2	72.4	37.1	25.7	4.0	7.4
Q2	381.7	246.0	60.8	74.9	38.8	29.1	3.8	5.8
Q3	385.6	247.0	64.8	73.8	33.0	25.3	2.9	4.8
Q4	394.9	252.6	68.8	73.5	31.5	21.8	4.1	5.6
				Euro area enlargement				
2001 Q1 [(p)]	417.9	272.4	71.5	74.0	34.5	24.9	4.0	5.6

3. Loans to government

	General government [2)]											
		Central government [5)]	Other general government									
			State government				Local government				Social security funds	
				Up to 1 year	Over 1 and up to 5 years	Over 5 years		Up to 1 year	Over 1 and up to 5 years	Over 5 years		
	1	2	3	4	5	6	7	8	9	10	11	
1999 Q3	831.1	206.4	278.4	10.1	21.3	247.0	329.5	19.9	10.5	299.1	16.8	
Q4	847.9	199.5	292.9	15.0	25.1	252.7	339.9	20.6	11.7	307.7	15.6	
2000 Q1	839.7	193.8	291.9	13.2	27.4	251.3	338.1	21.3	10.8	306.0	16.0	
Q2	835.6	186.8	290.0	9.9	28.1	252.1	339.0	21.6	11.5	305.9	19.7	
Q3	818.0	173.3	288.4	8.9	27.2	252.4	337.8	21.5	11.1	305.2	18.5	
Q4	835.9	173.1	297.3	13.7	28.1	255.4	350.9	22.8	12.3	315.7	14.6	
					Euro area enlargement							
2001 Q1 [(p)]	851.4	188.9	295.3	9.9	30.1	255.3	351.8	24.1	12.4	315.2	15.5	

Source: ECB.

1) *Outstanding amounts are not adjusted for reclassifications, other revaluations or exchange rate variations. Data are partially estimated. For further details, see the technical notes.*
2) *Corresponding ESA 95 sector codes: non-financial corporations, S.11; households, S.14; non-profit institutions serving households, S.15; non-monetary financial intermediaries except insurance corporations and pension funds (corresponding to other financial intermediaries in the ESA 95), S.123 (including financial auxiliaries, S.124); insurance corporations and pension funds, S.125; general government, S.13.*
3) *As a result of the implementation of a new reporting scheme in January 1999, data prior to the first quarter of 1999 are not directly comparable with those referring to later periods.*
4) *The definitions of consumer credit and lending for house purchase are not fully consistent across the euro area.*
5) *A maturity breakdown is not available for loans to central government.*

Table 2.6

Outstanding deposits held with MFIs, by counterpart and instrument [1)]

(EUR billions (not seasonally adjusted; end of period))

1. Deposits held by non-financial sectors other than government

	Non-financial corporations [2) 3)]					Households [2) 3)]				
		Overnight	With agreed maturity	Redeemable at notice	Repos		Overnight	With agreed maturity	Redeemable at notice	Repos
	1	2	3	4	5	6	7	8	9	10
1999 Q3	747.4	429.6	270.1	25.6	22.1	3,239.2	845.0	1,077.0	1,283.3	33.9
Q4	772.7	446.0	281.3	23.9	21.5	3,306.4	871.6	1,100.2	1,295.3	39.4
2000 Q1	787.9	440.2	292.2	24.4	31.1	3,297.7	887.2	1,093.5	1,274.7	42.4
Q2	818.6	459.7	307.9	24.1	26.9	3,287.2	888.3	1,097.7	1,254.6	46.6
Q3	843.7	464.2	329.9	24.7	25.0	3,273.6	874.4	1,112.3	1,235.3	51.6
Q4	872.7	497.4	324.9	24.1	26.3	3,339.6	907.1	1,133.9	1,241.6	57.1
					Euro area enlargement					
2001 Q1 [p]	900.3	480.6	348.8	37.4	33.5	3,446.2	904.4	1,189.4	1,273.6	78.9

2. Deposits held by non-monetary financial corporations

	Non-monetary financial intermediaries except insurance corporations and pension funds [2) 3)]					Insurance corporations and pension funds [2)]				
		Overnight	With agreed maturity	Redeemable at notice	Repos		Overnight	With agreed maturity	Redeemable at notice	Repos
	1	2	3	4	5	6	7	8	9	10
1999 Q3	391.2	122.5	173.0	5.2	90.5	436.6	32.0	389.8	3.3	11.5
Q4	398.9	143.1	181.7	4.7	69.3	447.7	32.2	400.4	3.3	11.9
2000 Q1	435.3	162.2	180.1	5.6	87.4	458.8	35.4	407.0	3.2	13.1
Q2	425.3	164.5	178.7	5.3	76.8	460.7	34.6	411.0	3.5	11.6
Q3	424.4	158.6	184.2	5.1	76.6	464.4	34.1	413.7	3.7	12.9
Q4	428.4	153.7	194.8	5.9	74.0	477.6	40.6	418.4	3.2	15.3
					Euro area enlargement					
2001 Q1 [p]	444.7	154.7	194.8	5.8	89.4	481.4	36.4	423.1	3.5	18.3

3. Deposits held by government

	General government [2)]																
		Central government	Other general government														
			State government					Local government					Social security funds				
				Overnight	With agreed maturity	Redeemable at notice	Repos		Overnight	With agreed maturity	Redeemable at notice	Repos		Overnight	With agreed maturity	Redeemable at notice	Repos
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1999 Q3	261.9	133.3	27.3	8.3	18.7	0.1	0.2	54.6	24.5	25.6	3.4	1.1	46.7	17.1	27.3	0.9	1.5
Q4	280.5	142.0	31.2	9.7	21.1	0.1	0.2	59.2	27.1	27.5	3.4	1.2	48.2	16.0	30.6	0.7	0.7
2000 Q1	269.7	130.2	28.1	7.7	20.2	0.1	0.1	58.6	25.8	27.7	3.3	1.8	52.7	18.7	31.9	0.7	1.4
Q2	299.6	146.0	31.6	10.0	21.5	0.1	0.1	62.7	28.7	28.7	3.1	2.3	59.3	23.0	32.7	0.5	3.0
Q3	310.5	159.3	30.3	9.4	20.7	0.1	0.1	63.2	27.4	30.8	2.9	2.1	57.8	21.5	32.8	0.5	3.1
Q4	316.5	164.6	30.6	10.6	19.8	0.1	0.1	68.2	30.9	33.0	3.0	1.4	53.2	18.5	33.3	0.5	0.9
							Euro area enlargement										
2001 Q1 [p]	303.6	150.5	31.0	9.8	20.9	0.1	0.1	65.1	28.6	31.1	2.8	2.5	57.1	22.6	32.1	0.5	2.0

Source: ECB.

1) Outstanding amounts are not adjusted for reclassifications, other revaluations or exchange rate variations. Data are partially estimated. For further details, see the technical notes.

2) Corresponding ESA 95 sector codes: non-financial corporations, S.11; households, S.14; non-profit institutions serving households, S.15; non-monetary financial intermediaries except insurance corporations and pension funds (corresponding to other financial intermediaries in the ESA 95), S.123 (including financial auxiliaries, S.124); insurance corporations and pension funds, S.125; general government, S.13.

3) As a result of the implementation of a new reporting scheme in January 1999, data prior to the first quarter of 1999 are not directly comparable with those referring to later periods.

Table 2.7

Main outstanding MFI claims on and liabilities to non-residents of the euro area [1)]

(EUR billions (not seasonally adjusted; end of period))

1. Eurosystem [2)]

	Loans to non-residents				Holdings of securities other than shares issued by non-residents				Holdings of shares and other equity issued by non-residents			Deposits held by non-residents			
		Banks [3) 4)]	Non-banks			Banks [3)]	Non-banks			Banks [3)]	Other		Banks [3)]	Non-banks	
			General government	Other			General government	Other						General government	Other
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1999 Q3	108.1	99.0	6.8	2.3	176.2	4.0	168.1	4.1	0.4	0.1	0.3	82.6	80.6	0.4	1.5
Q4	59.6	45.6	10.5	3.5	193.9	5.7	184.4	3.8	0.6	0.1	0.5	43.2	39.8	0.3	3.2
2000 Q1	89.9	78.8	8.9	2.2	202.7	4.8	192.2	5.7	0.5	0.1	0.4	68.3	66.7	0.2	1.4
Q2	104.6	91.5	10.3	2.7	201.9	4.5	193.4	4.0	0.4	0.1	0.3	85.3	82.8	0.5	2.0
Q3	83.7	72.7	8.2	2.7	221.9	5.3	211.2	5.5	1.0	0.1	0.9	67.9	64.6	1.0	2.4
Q4	30.3	20.9	7.0	2.3	205.8	5.2	195.7	4.9	1.0	0.1	0.9	23.2	19.9	1.1	2.2
						Euro area enlargement									
2001 Q1 [(p)]	37.3	26.0	7.9	3.4	211.4	4.6	201.4	5.4	1.2	0.1	1.1	19.8	15.5	1.5	2.8

2. MFIs excluding the Eurosystem

	Loans to non-residents				Holdings of securities other than shares issued by non-residents				Holdings of shares and other equity issued by non-residents			Deposits held by non-residents			
		Banks [3) 4)]	Non-banks			Banks [3)]	Non-banks			Banks [3)]	Other		Banks [3)]	Non-banks	
			General government	Other			General government	Other						General government	Other
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1999 Q3	1,259.5	829.9	67.3	362.2	320.2	105.4	88.7	126.1	87.5	39.9	47.6	1,696.1	1,249.7	62.2	384.2
Q4	1,287.2	842.5	68.2	376.5	339.4	111.8	88.7	138.9	92.3	38.3	54.0	1,782.6	1,302.8	72.0	407.8
2000 Q1	1,339.4	865.5	70.5	403.4	370.5	124.6	98.9	146.9	111.3	47.3	64.0	2,000.8	1,468.0	71.2	461.6
Q2	1,353.3	886.4	70.6	396.3	415.1	148.4	109.5	157.2	117.9	50.7	67.2	1,967.1	1,422.5	76.7	467.8
Q3	1,416.1	906.4	71.0	438.6	443.2	162.9	110.3	170.0	138.5	58.0	80.5	2,117.8	1,513.2	80.7	523.8
Q4	1,439.3	924.3	71.8	443.2	439.6	165.9	94.9	178.8	140.6	61.5	79.1	2,115.8	1,530.6	83.5	501.6
						Euro area enlargement									
2001 Q1 [(p)]	1,609.9	1,030.8	69.2	509.9	467.6	185.5	86.7	195.4	157.7	65.4	92.2	2,421.5	1,767.6	87.5	566.4

3. MFIs including the Eurosystem

	Loans to non-residents				Holdings of securities other than shares issued by non-residents				Holdings of shares and other equity issued by non-residents			Deposits held by non-residents			
		Banks [3) 4)]	Non-banks			Banks [3)]	Non-banks			Banks [3)]	Other		Banks [3)]	Non-banks	
			General govern-ment	Other			General govern-ment	Other						General govern-ment	Other
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1999 Q3	1,367.5	928.9	74.1	364.5	496.4	109.4	256.8	130.2	87.9	40.0	47.9	1,778.7	1,330.3	62.7	385.7
Q4	1,346.8	888.1	78.7	380.0	533.3	117.5	273.1	142.7	92.8	38.4	54.5	1,825.8	1,342.5	72.3	410.9
2000 Q1	1,429.3	944.3	79.4	405.7	573.2	129.4	291.1	152.6	111.8	47.4	64.4	2,069.1	1,534.7	71.4	463.0
Q2	1,457.9	977.9	81.0	399.0	617.1	153.0	302.9	161.3	118.3	50.8	67.5	2,052.4	1,505.4	77.2	469.8
Q3	1,499.7	979.1	79.3	441.4	665.1	168.2	321.5	175.4	139.4	58.0	81.4	2,185.7	1,577.8	81.7	526.2
Q4	1,469.5	945.2	78.8	445.5	645.4	171.1	290.6	183.7	141.6	61.6	80.0	2,139.1	1,550.5	84.6	503.9
						Euro area enlargement									
2001 Q1 [(p)]	1,647.1	1,056.8	77.1	513.3	679.0	190.0	288.1	200.8	158.8	65.5	93.3	2,441.4	1,783.0	89.1	569.2

Source: ECB.

1) Outstanding amounts are not adjusted for reclassifications, other revaluations or exchange rate variations. Data are partially estimated. For further details, see the technical notes.

2) New reporting rules as from January 1999 caused significant breaks in the first quarter of 1999.

3) The term "banks" is used in this table to indicate institutions of a similar type to MFIs resident outside the euro area.

4) Deposits placed by MFIs with banks located outside the euro area are included.

Table 2.8

Currency analysis of certain liabilities and assets of the euro area MFIs [1)]

(EUR billions (not seasonally adjusted; end of period))

Liabilities outstanding

1. Deposits placed by euro area residents

	MFIs								Non-MFIs							
	All currencies	Euro [2)]	Other EU currencies	Other currencies	USD	JPY	CHF	Other	All currencies	Euro [2)]	Other EU currencies	Other currencies	USD	JPY	CHF	Other
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1999 Q3	3,858.1	3,450.8	53.0	354.3	251.2	24.4	57.9	20.9	5,076.3	4,915.1	27.5	133.7	96.7	16.3	12.2	8.5
Q4	3,868.4	3,456.8	46.6	364.9	261.7	29.5	54.7	19.0	5,206.2	5,041.1	25.8	139.3	101.4	17.3	11.7	8.9
2000 Q1	3,932.4	3,496.3	55.0	381.1	265.8	32.5	60.5	22.3	5,249.3	5,074.7	30.5	144.1	105.1	17.6	11.9	9.5
Q2	4,056.4	3,620.9	52.8	382.7	265.3	34.8	62.3	20.2	5,291.3	5,111.2	27.9	152.2	113.0	17.1	13.2	9.0
Q3	3,946.0	3,485.3	58.1	402.7	279.6	38.3	64.9	20.0	5,316.7	5,127.5	29.1	160.1	121.0	16.5	12.5	10.1
Q4	3,949.8	3,526.6	47.5	375.8	264.9	34.4	61.0	15.6	5,434.8	5,256.5	27.3	150.9	115.1	14.6	11.3	10.0
							Euro area enlargement									
2001 Q1 [p]	4,082.7	3,583.4	55.8	443.5	318.8	38.7	66.8	19.2	5,576.2	5,366.2	31.3	178.7	130.4	23.9	12.3	12.1

2. Deposits placed by non-residents of the euro area

	Banks [3)]								Non-banks							
	All currencies	Euro [2)]	Other EU currencies	Other currencies	USD	JPY	CHF	Other	All currencies	Euro [2)]	Other EU currencies	Other currencies	USD	JPY	CHF	Other
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1999 Q3	1,330.3	566.3	127.2	636.8	512.7	40.2	54.1	29.8	448.4	208.6	41.7	198.0	158.4	18.5	10.7	10.4
Q4	1,342.5	532.7	114.2	695.7	570.4	45.9	51.0	28.4	483.3	218.9	44.2	220.1	180.8	17.4	12.1	9.8
2000 Q1	1,534.7	605.5	151.1	778.1	615.3	66.4	65.8	30.6	534.4	244.1	51.4	238.9	195.3	21.6	11.4	10.8
Q2	1,505.4	598.7	134.0	772.7	613.8	60.9	63.2	34.8	547.0	243.3	52.1	251.6	203.7	22.0	15.1	10.7
Q3	1,577.8	612.0	145.4	820.4	661.5	63.1	63.4	32.4	607.9	252.7	61.0	294.2	245.5	23.1	13.8	11.8
Q4	1,550.5	590.3	126.8	833.5	684.6	53.1	65.7	30.1	588.5	254.0	64.0	270.5	225.5	20.5	12.3	12.2
							Euro area enlargement									
2001 Q1 [p]	1,783.0	703.5	140.4	939.2	769.8	64.9	69.2	35.2	658.3	291.8	70.7	295.8	251.9	17.8	14.2	11.9

3. Debt securities and money market paper issued by euro area MFIs

	Debt securities								Money market paper							
	All currencies	Euro [2)]	Other EU currencies	Other currencies	USD	JPY	CHF	Other	All currencies	Euro [2)]	Other EU currencies	Other currencies	USD	JPY	CHF	Other
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1999 Q3	2,331.0	2,072.0	38.9	220.2	128.4	43.6	31.2	17.0	207.4	187.8	1.8	17.8	11.6	3.2	2.4	0.6
Q4	2,365.9	2,101.0	40.0	224.8	128.6	48.2	30.7	17.3	245.4	220.5	1.8	23.1	15.4	4.2	2.3	1.2
2000 Q1	2,425.5	2,139.7	43.1	242.8	136.3	53.8	33.8	18.8	250.5	226.0	1.8	22.7	14.5	4.6	2.0	1.7
Q2	2,482.6	2,185.5	40.6	256.6	145.5	58.9	33.6	18.6	262.8	234.9	1.4	26.4	17.2	5.4	2.5	1.4
Q3	2,554.8	2,226.6	47.7	280.5	158.2	65.3	37.4	19.7	272.2	233.6	2.2	36.4	26.6	5.7	2.8	1.3
Q4	2,566.9	2,246.0	46.5	274.4	157.3	62.1	35.4	19.7	262.2	215.8	2.4	44.1	34.0	5.6	2.9	1.5
							Euro area enlargement									
2001 Q1 [p]	2,663.1	2,325.5	48.5	289.1	169.6	62.0	37.2	20.3	276.0	224.6	2.6	48.7	40.8	3.4	2.6	1.9

Source: ECB.

1) Outstanding amounts are not adjusted for reclassifications, other revaluations or exchange rate variations. Data are partially estimated. For further details, see the technical notes.

2) Including items expressed in the national denominations of the euro.

3) The term "banks" is used in this table to indicate institutions of a similar type to MFIs resident outside the euro area.

Table 2.8 (cont'd)

Currency analysis of certain liabilities and assets of the euro area MFIs [1)]

(EUR billions (not seasonally adjusted; end of period))

Assets outstanding

4. Loans to euro area residents

	MFIs								Non-MFIs							
	All currencies	Euro [2)]	Other EU currencies	Other currencies	USD	JPY	CHF	Other	All currencies	Euro [2)]	Other EU currencies	Other currencies	USD	JPY	CHF	Other
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1999 Q3	3,828.3	-	-	-	-	-	-	-	6,223.9	6,003.4	24.5	196.0	105.7	23.8	60.4	6.2
Q4	3,837.4	-	-	-	-	-	-	-	6,385.1	6,151.9	23.4	209.9	115.8	28.3	62.0	3.8
2000 Q1	3,935.1	-	-	-	-	-	-	-	6,528.3	6,261.2	34.0	233.1	128.3	35.1	65.9	3.7
Q2	4,025.6	-	-	-	-	-	-	-	6,681.9	6,388.3	35.4	258.1	144.9	38.4	70.5	4.3
Q3	3,935.6	-	-	-	-	-	-	-	6,796.5	6,485.4	34.8	276.3	155.8	44.4	72.2	4.0
Q4	3,938.0	-	-	-	-	-	-	-	6,926.8	6,622.6	32.4	271.7	151.5	41.2	74.3	4.7
	Euro area enlargement															
2001 Q1 [p]	4,080.0	-	-	-	-	-	-	-	7,120.9	6,780.3	36.1	304.5	176.7	45.6	76.8	5.4

5. Holdings of securities other than shares issued by euro area residents

	Issued by MFIs								Issued by non-MFIs							
	All currencies	Euro [2)]	Other EU currencies	Other currencies	USD	JPY	CHF	Other	All currencies	Euro [2)]	Other EU currencies	Other currencies	USD	JPY	CHF	Other
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1999 Q3	830.2	796.1	7.5	26.6	17.1	5.4	2.0	2.2	1,446.0	1,415.7	3.1	27.2	13.5	11.0	1.6	1.2
Q4	830.3	795.7	8.1	26.5	17.4	5.0	2.5	1.6	1,438.6	1,406.0	5.6	27.0	13.5	11.0	1.2	1.3
2000 Q1	871.8	834.7	11.6	25.5	16.4	5.0	2.4	1.7	1,449.6	1,417.1	4.8	27.6	14.2	11.3	1.2	0.8
Q2	897.5	858.1	12.5	26.9	17.8	4.9	2.6	1.7	1,411.0	1,377.3	6.0	27.7	14.7	10.5	1.6	0.9
Q3	943.4	898.7	10.6	34.1	24.5	5.3	2.5	1.9	1,386.6	1,353.3	3.6	29.7	16.6	11.0	1.2	0.9
Q4	935.3	895.0	10.8	29.5	19.7	5.9	2.1	1.7	1,354.6	1,320.7	5.6	28.2	16.7	9.7	1.0	0.9
	Euro area enlargement															
2001 Q1 [p]	971.7	931.5	9.7	30.6	20.5	6.4	1.8	1.8	1,456.1	1,415.9	5.0	35.2	20.6	12.8	1.1	0.6

6. Loans to non-residents of the euro area

	Banks [3)]								Non-banks							
	All currencies	Euro [2)]	Other EU currencies	Other currencies	USD	JPY	CHF	Other	All currencies	Euro [2)]	Other EU currencies	Other currencies	USD	JPY	CHF	Other
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1999 Q3	928.9	443.9	78.0	406.9	292.5	42.7	28.6	43.1	438.6	153.2	37.6	247.8	209.3	10.6	17.2	10.7
Q4	888.1	384.3	74.9	428.9	317.3	49.2	30.0	32.5	458.7	146.6	41.4	270.7	234.0	11.1	19.4	6.2
2000 Q1	944.3	423.4	95.5	425.4	306.9	49.3	33.0	36.2	485.1	154.7	40.8	289.6	248.9	13.9	20.4	6.3
Q2	977.9	462.9	92.1	422.9	308.4	44.9	33.2	36.4	480.0	149.6	42.0	288.4	246.1	14.1	21.4	6.8
Q3	979.1	445.8	90.9	442.4	331.8	42.1	33.8	34.7	520.6	156.0	46.1	318.5	273.9	14.5	23.3	6.9
Q4	945.2	409.7	89.2	446.3	337.9	44.1	32.6	31.7	524.3	163.3	45.3	315.8	271.2	11.5	25.9	7.2
	Euro area enlargement															
2001 Q1 [p]	1,056.8	471.0	99.0	486.8	370.9	45.7	32.3	37.8	590.4	196.4	48.7	345.3	299.1	11.8	26.7	7.8

7. Holdings of securities other than shares issued by non-residents of the euro area

	Issued by banks [3)]								Issued by non-banks							
	All currencies	Euro [2)]	Other EU currencies	Other currencies	USD	JPY	CHF	Other	All currencies	Euro [2)]	Other EU currencies	Other currencies	USD	JPY	CHF	Other
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1999 Q3	109.4	46.0	7.9	55.6	42.5	6.9	2.8	3.3	386.9	87.2	24.6	275.1	240.5	23.5	4.1	7.1
Q4	117.5	50.0	8.6	58.9	44.1	8.0	3.0	3.8	415.8	98.9	23.6	293.3	258.2	23.0	4.2	8.0
2000 Q1	129.4	52.8	9.0	67.6	51.7	7.8	3.0	5.1	443.7	94.9	27.8	321.1	279.3	27.1	5.6	9.1
Q2	153.0	59.4	13.7	79.8	63.7	7.9	2.7	5.5	464.1	95.7	28.3	340.1	299.4	26.9	4.5	9.3
Q3	168.2	60.6	17.1	90.4	75.1	8.2	2.7	4.4	496.9	109.1	32.2	355.6	312.0	30.3	4.2	9.0
Q4	171.1	61.1	19.7	90.3	75.6	7.7	2.4	4.6	474.3	111.5	31.7	331.0	290.6	27.1	3.6	9.7
	Euro area enlargement															
2001 Q1 [p]	190.0	67.9	22.2	99.9	85.9	7.4	2.5	4.2	489.0	118.8	25.4	344.7	305.5	26.4	2.6	10.2

3 Financial markets and interest rates in the euro area

Table 3.1

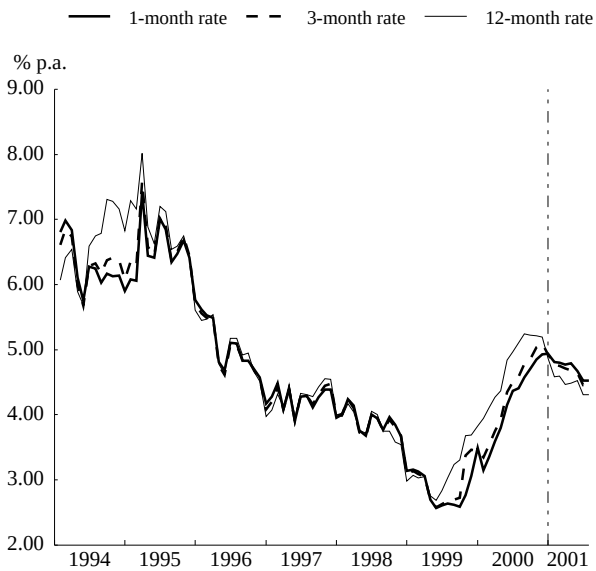
Money market interest rates [1]

(percentages per annum)

	Euro area [4]					United States [6]	Japan [6]
	Overnight deposits [2] [3]	1-month deposits [5]	3-month deposits [5]	6-month deposits [5]	12-month deposits [5]	3-month deposits	3-month deposits
	1	2	3	4	5	6	7
1996	4.04	4.95	4.92	4.89	4.93	5.51	0.57
1997	3.98	4.23	4.24	4.25	4.28	5.76	0.62
1998	3.09	3.84	3.83	3.78	3.77	5.57	0.66
1999	2.74	2.86	2.96	3.06	3.19	5.42	0.22
2000	4.12	4.24	4.40	4.55	4.78	6.53	0.28
2000 July	4.31	4.41	4.58	4.84	5.11	6.73	0.22
Aug.	4.42	4.57	4.78	5.01	5.25	6.69	0.32
Sep.	4.59	4.70	4.85	5.04	5.22	6.67	0.41
Oct.	4.76	4.85	5.04	5.10	5.22	6.78	0.52
Nov.	4.83	4.92	5.09	5.13	5.19	6.75	0.55
Dec.	4.83	4.94	4.93	4.91	4.87	6.54	0.62
			Euro area enlargement				
2001 Jan.	4.75	4.81	4.77	4.68	4.58	5.73	0.50
Feb.	4.99	4.80	4.76	4.67	4.59	5.35	0.41
Mar.	4.78	4.78	4.71	4.58	4.47	4.96	0.19
Apr.	5.06	4.79	4.69	4.57	4.49	4.63	0.10
May	4.65	4.67	4.64	4.57	4.53	4.11	0.07
June	4.54	4.53	4.45	4.35	4.31	3.83	0.07
July	4.51	4.52	4.47	4.39	4.31	3.75	0.08
2001 6 July	4.53	4.54	4.47	4.42	4.38	3.81	0.08
13	4.52	4.53	4.48	4.40	4.33	3.76	0.08
20	4.33	4.52	4.48	4.39	4.31	3.71	0.08
27	4.52	4.52	4.46	4.37	4.27	3.70	0.08

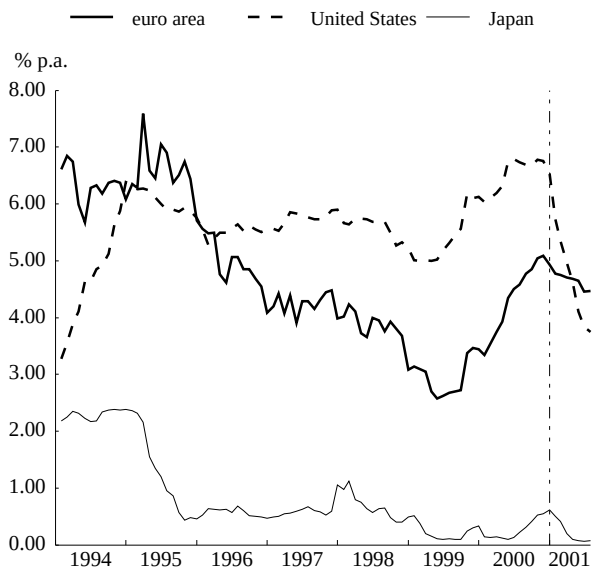
Euro area money market rates

(monthly)



3-month money market rates

(monthly)



Sources: Reuters and ECB.

1) With the exception of the overnight rate to December 1998, monthly and yearly values are period averages.

2) Interbank deposit bid rates to December 1998. From January 1999 column 1 shows the euro overnight index average (EONIA).

3) End-of-period rates to December 1998; period averages thereafter.

4) Before January 1999 synthetic euro area rates were calculated on the basis of national rates weighted by GDP.

5) From January 1999, euro interbank offered rates (EURIBOR). Up to December 1998, London interbank offered rates (LIBOR) where available.

6) London interbank offered rates (LIBOR).

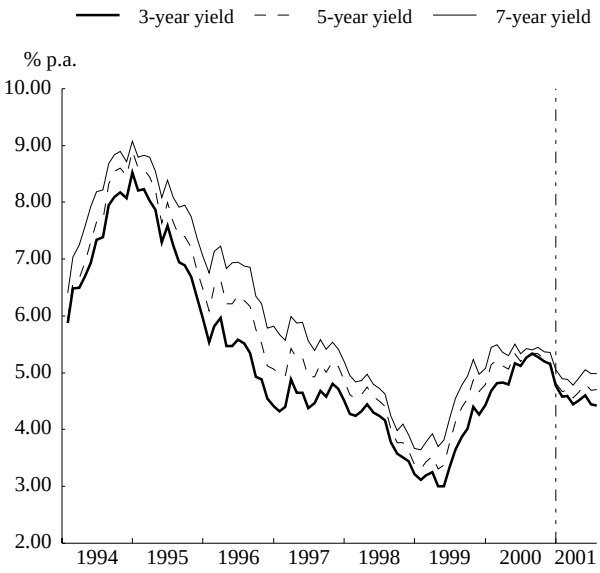
Table 3.2

Government bond yields [1]

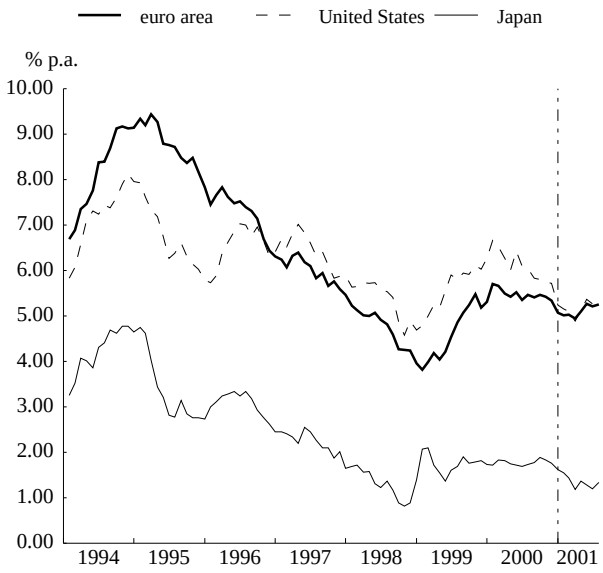
(percentages per annum)

	Euro area [2]					United States	Japan
	2 years 1	3 years 2	5 years 3	7 years 4	10 years 5	10 years 6	10 years 7
1996	4.17	4.41	5.06	5.82	7.23	6.54	3.03
1997	4.33	4.51	4.87	5.20	5.99	6.45	2.15
1998	3.16	3.22	3.38	3.67	4.71	5.33	1.30
1999	3.38	3.63	4.01	4.38	4.66	5.64	1.75
2000	4.90	5.03	5.19	5.37	5.44	6.03	1.76
2000 July	5.19	5.27	5.32	5.43	5.45	6.04	1.72
Aug.	5.28	5.34	5.35	5.40	5.40	5.83	1.77
Sep.	5.22	5.28	5.33	5.44	5.47	5.80	1.88
Oct.	5.17	5.20	5.24	5.37	5.42	5.74	1.83
Nov.	5.12	5.15	5.19	5.35	5.34	5.72	1.75
Dec.	4.74	4.77	4.82	5.05	5.07	5.23	1.62
			Euro area enlargement				
2001 Jan.	4.55	4.57	4.67	4.90	5.01	5.14	1.54
Feb.	4.56	4.59	4.69	4.88	5.02	5.10	1.43
Mar.	4.44	4.44	4.56	4.78	4.94	4.89	1.19
Apr.	4.49	4.51	4.66	4.90	5.10	5.13	1.36
May	4.56	4.60	4.80	5.05	5.26	5.37	1.28
June	4.39	4.44	4.70	4.99	5.21	5.26	1.19
July	4.33	4.42	4.70	4.99	5.25	5.23	1.33
2001 6 July	4.39	4.48	4.76	5.05	5.31	5.37	1.25
13	4.36	4.46	4.75	5.04	5.31	5.26	1.31
20	4.30	4.38	4.65	4.92	5.19	5.12	1.38
27	4.23	4.31	4.58	4.86	5.12	5.10	1.32

Euro area government bond yields
(monthly)



10-year government bond yields
(monthly)



Sources: Reuters, ECB, Federal Reserve and Bank of Japan.

1) *To December 1998, 2, 3, 5 and 7-year euro area yields are end-of-period values and 10-year yields are period averages. Thereafter, all yields are period averages.*
2) *To December 1998, euro area yields are calculated on the basis of harmonised national government bond yields weighted by GDP. Thereafter, the weights are the nominal outstanding amounts of government bonds in each maturity band.*

Table 3.3

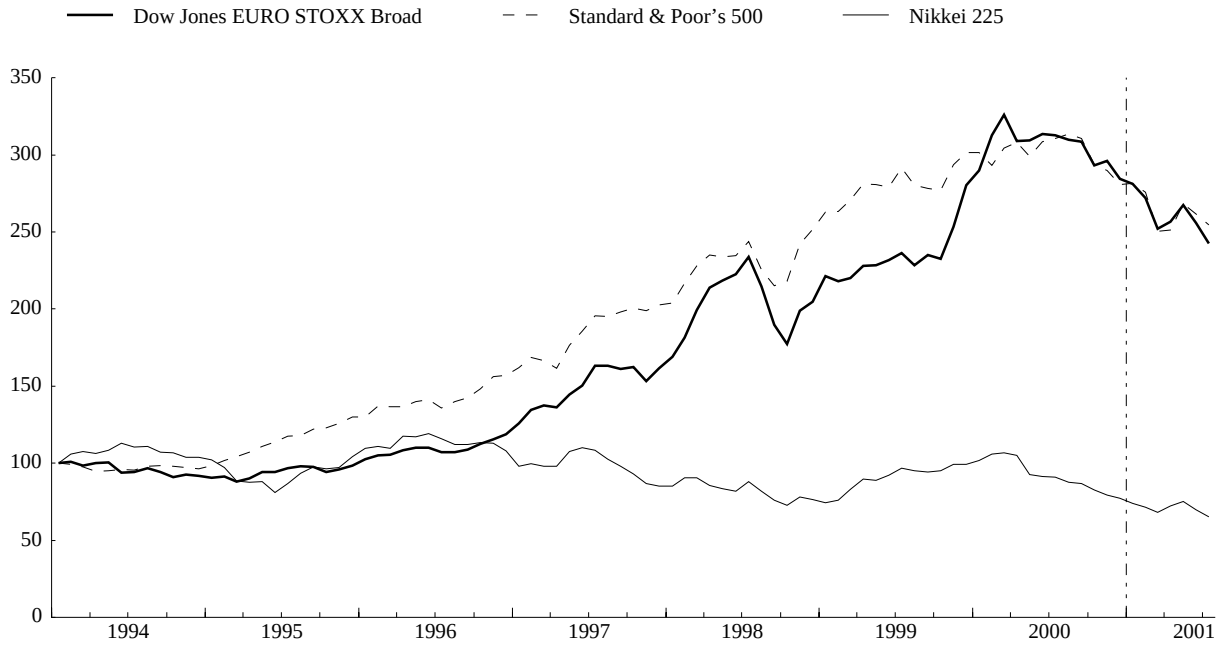
Stock market indices

(index levels, in points) [1]

	Dow Jones EURO STOXX indices												United States	Japan
	Benchmark		Main economic sector indices											
	Broad	50	Basic materials	Consumer cyclical	Consumer non-cyclical	Energy	Financial	Industrial	Techno-logy	Utilities	Tele-communi-cations	Health-care	Standard & Poor's 500	Nikkei 225
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1996	151.6	1,657.5	181.1	146.8	180.6	159.5	129.9	134.7	150.0	166.3	202.3	230.1	671.2	21,061.7
1997	207.6	2,319.6	233.4	191.9	231.9	227.3	184.4	168.0	227.7	205.5	324.1	301.7	873.9	18,373.4
1998	280.5	3,076.3	257.9	245.0	295.5	249.3	281.3	218.4	333.6	282.4	488.1	348.9	1,085.3	15,338.4
1999	325.8	3,787.3	279.2	262.9	327.7	286.0	295.7	285.1	470.4	306.2	717.7	392.6	1,327.8	16,829.9
2000	423.9	5,075.5	299.1	292.9	324.3	342.3	350.7	378.0	963.1	341.7	1,072.5	476.0	1,426.7	17,162.7
2000 July	433.8	5,227.8	283.1	297.8	328.2	345.7	360.4	384.3	1,044.6	333.9	1,083.0	502.2	1,472.1	16,961.1
Aug.	429.9	5,152.0	290.0	301.3	331.1	363.1	375.9	380.3	982.6	334.1	951.6	545.8	1,485.5	16,329.9
Sep.	428.1	5,132.9	280.3	298.7	329.5	376.4	371.4	371.8	1,015.4	335.1	910.2	553.4	1,470.6	16,170.4
Oct.	406.4	4,893.2	281.2	278.4	331.5	373.7	366.3	349.4	864.6	336.3	824.3	561.2	1,390.1	15,342.7
Nov.	410.8	4,962.5	302.9	274.9	346.0	365.0	379.7	359.6	864.7	339.6	796.2	571.6	1,373.8	14,743.5
Dec.	394.5	4,787.1	319.1	257.4	330.2	337.9	365.9	354.3	865.0	326.7	715.4	554.6	1,329.7	14,409.7
						Euro area enlargement								
2001 Jan.	390.2	4,729.7	317.3	261.6	314.4	339.7	371.9	354.0	792.1	318.7	727.8	524.3	1,334.2	13,739.7
Feb.	377.1	4,525.9	320.2	260.4	319.0	349.5	364.5	355.7	656.6	317.8	654.4	549.5	1,305.5	13,274.1
Mar.	349.9	4,199.2	311.0	241.7	305.7	340.6	334.5	334.5	567.8	300.6	602.9	524.7	1,186.8	12,684.9
Apr.	356.3	4,305.2	308.4	242.6	304.8	352.5	339.4	329.9	587.4	311.5	635.0	534.6	1,189.2	13,436.7
May	370.8	4,481.8	316.5	258.9	312.0	371.8	345.9	345.9	662.4	311.0	623.9	553.2	1,270.7	14,014.3
June	355.1	4,289.7	306.4	241.8	316.9	379.2	341.0	328.6	553.5	320.9	538.3	580.1	1,238.7	12,974.9
July	336.2	4,037.8	302.7	233.8	316.6	349.9	328.2	306.5	449.5	324.2	512.0	565.7	1,205.9	12,140.1
2001 6 July	338.8	4,076.5	303.7	231.9	319.4	357.7	334.6	308.5	444.6	322.1	512.8	573.5	1,190.6	12,306.1
13	337.1	4,044.4	304.9	235.1	315.7	353.7	329.0	308.3	439.2	327.1	511.9	573.7	1,215.7	12,355.2
20	329.9	3,947.5	303.7	228.8	315.1	341.7	320.6	302.5	431.9	325.0	501.5	556.2	1,210.9	11,908.4
27	332.4	3,986.5	299.4	234.4	310.8	350.7	318.0	302.8	454.8	323.2	504.7	557.1	1,205.8	11,798.1

Dow Jones EURO STOXX Broad, Standard & Poor's 500 and Nikkei 225

(base month: January 1994 = 100; monthly)



Source: Reuters.

1) Monthly and yearly values are period averages.

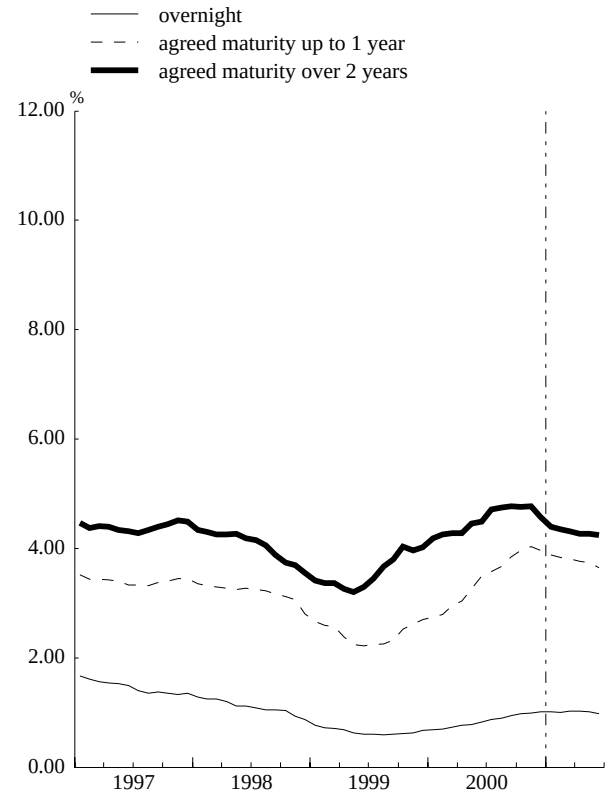
Table 3.4

Retail bank interest rates

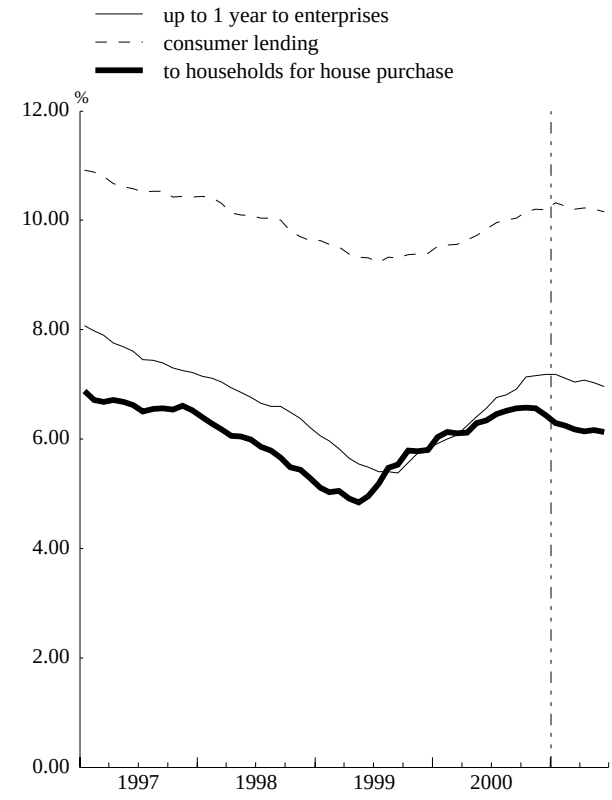
(percentages per annum; period averages)

	Deposit interest rates						Lending interest rates			
	Overnight	With agreed maturity			Redeemable at notice		To enterprises		To households	
		Up to 1 year	Up to 2 years	Over 2 years	Up to 3 months	Over 3 months	Up to 1 year	Over 1 year	Consumer lending	For house purchase
	1	2	3	4	5	6	7	8	9	10
1998	1.10	3.20	3.22	4.06	2.61	3.25	6.73	5.80	10.06	5.87
1999	0.65	2.44	2.45	3.57	2.15	2.76	5.65	5.10	9.39	5.29
2000	0.85	3.45	3.44	4.52	2.25	3.79	6.60	6.23	9.86	6.34
2000 June	0.83	3.49	3.49	4.48	2.16	3.87	6.56	6.23	9.84	6.34
July	0.87	3.58	3.58	4.71	2.33	3.94	6.77	6.37	9.95	6.46
Aug.	0.89	3.67	3.67	4.75	2.36	4.06	6.81	6.44	10.00	6.51
Sep.	0.94	3.85	3.83	4.77	2.38	4.20	6.92	6.44	10.03	6.56
Oct.	0.97	3.96	3.96	4.76	2.40	4.14	7.13	6.60	10.15	6.57
Nov.	0.99	4.04	4.03	4.77	2.47	4.25	7.16	6.63	10.20	6.56
Dec.	1.01	3.96	3.95	4.58	2.49	4.21	7.18	6.45	10.19	6.43
				Euro area enlargement						
2001 Jan.	1.01	3.88	3.87	4.39	2.52	4.01	7.19	6.40	10.32	6.29
Feb.	1.01	3.84	3.83	4.35	2.50	3.99	7.11	6.44	10.26	6.24
Mar.	1.02	3.81	3.81	4.32	2.50	3.99	7.04	6.31	10.20	6.18
Apr.	1.03	3.76	3.76	4.26	2.50	3.91	7.07	6.34	10.23	6.14
May	1.01	3.74	3.74	4.27	2.48	3.91	7.03	6.34	10.20	6.17
June	0.98	3.65	3.65	4.25	2.45	3.85	6.96	6.25	10.16	6.13

Deposit interest rates
(monthly)



Lending interest rates
(monthly)



Source: ECB.
These euro area retail bank interest rates should be used with caution and for statistical purposes only, primarily to analyse their development over time rather than their level. They are calculated as the weighted average of national interest rates provided by the national central banks. The national rates represent those rates that are currently available from national sources and which are judged to fit the standard categories. These national rates have been aggregated to derive information for the euro area, in some cases relying on proxies and working assumptions due to the heterogeneity observed in the national financial instruments across MU Member States. Furthermore, the national interest rates are not harmonised in terms of their coverage (new business and/or outstanding amounts), the nature of the data (nominal or effective) or the compilation method. The country weights for the euro area retail bank interest rates are derived from MFI balance sheet statistics or close proxies. The weights reflect the country-specific proportions of the relevant instruments within the euro area, measured as outstanding amounts. The weights are adjusted monthly, so that interest rates and weights always refer to the same month.

Table 3.5

Securities issues other than shares by original maturity, residency of the issuer and currency denomination

(EUR billions; transactions during the period and end-of-period stocks; nominal values)

1. Short-term

	By euro area residents									
					In euro [1]				In other	
	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions
	1	2	3	4	5	6	7	8	9	10
2000 May	278.4	261.8	16.6	659.9	267.0	251.3	15.6	613.4	11.5	10.5
June	262.1	260.3	1.9	661.9	245.4	249.4	-4.1	608.7	16.7	10.8
July	287.1	282.6	4.4	669.4	269.7	266.4	3.2	613.3	17.4	16.2
Aug.	276.6	276.2	0.4	672.7	261.0	258.6	2.4	616.1	15.6	17.6
Sep.	311.5	315.2	-3.7	671.4	293.4	298.7	-5.3	611.4	18.1	16.5
Oct.	355.2	342.5	12.7	686.5	338.2	330.3	7.9	618.8	17.0	12.1
Nov.	302.1	302.4	-0.3	687.0	283.7	290.1	-6.4	612.7	18.4	12.2
Dec.	246.0	278.6	-32.6	654.0	229.7	264.5	-34.8	578.7	16.3	14.1
				Euro area enlargement						
2001 Jan.	376.2	346.8	29.5	687.9	358.5	326.2	32.3	615.9	17.7	20.6
Feb.	404.8	390.8	14.0	703.2	384.1	373.6	10.5	626.0	20.7	17.2
Mar.	452.6	436.4	16.2	723.3	432.7	417.7	14.9	643.3	20.0	18.7
Apr.	442.0	431.8	10.2	734.3	424.2	412.8	11.4	654.5	17.8	19.0
May	477.5	480.9	-3.4	735.6	456.4	460.5	-4.0	651.7	21.1	20.5

2. Long-term

	By euro area residents									
					In euro [1]				In other	
	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions
	1	2	3	4	5	6	7	8	9	10
2000 May	127.7	90.4	37.4	6,205.1	115.2	78.6	36.6	5,715.3	12.5	11.8
June	102.2	66.3	35.9	6,238.8	87.9	52.9	34.9	5,752.6	14.3	13.3
July	132.8	80.0	52.8	6,296.7	106.4	71.1	35.3	5,787.0	26.4	8.9
Aug.	107.7	61.4	46.4	6,355.9	83.7	52.6	31.0	5,819.3	24.0	8.7
Sep.	111.9	77.0	35.0	6,395.8	91.3	66.8	24.5	5,844.6	20.7	10.2
Oct.	126.4	88.9	37.5	6,446.3	102.4	77.0	25.4	5,871.2	24.1	11.9
Nov.	106.4	77.5	28.9	6,463.0	92.3	65.5	26.9	5,897.3	14.1	12.1
Dec.	99.1	102.3	-3.2	6,437.8	86.8	87.1	-0.3	5,899.8	12.3	15.2
				Euro area enlargement						
2001 Jan.	151.7	145.2	6.5	6,534.5	135.9	133.3	2.6	5,993.7	15.8	11.9
Feb.	136.2	84.4	51.8	6,587.1	115.8	70.1	45.7	6,041.5	20.4	14.3
Mar.	154.6	101.4	53.3	6,650.9	127.1	86.9	40.2	6,083.8	27.5	14.5
Apr.	112.3	72.2	40.1	6,689.6	97.4	64.3	33.1	6,116.4	14.9	7.9
May	118.1	69.4	48.6	6,755.3	109.9	63.9	46.0	6,162.7	8.2	5.6

3. Total

	By euro area residents									
					In euro [1]				In other	
	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions
	1	2	3	4	5	6	7	8	9	10
2000 May	406.2	352.2	54.0	6,864.9	382.1	329.9	52.2	6,328.7	24.0	22.2
June	364.3	326.6	37.7	6,900.7	333.3	302.4	30.9	6,361.3	31.1	24.2
July	419.9	362.6	57.3	6,966.0	376.0	337.5	38.5	6,400.2	43.8	25.1
Aug.	384.3	337.6	46.7	7,028.6	344.7	311.3	33.5	6,435.4	39.6	26.3
Sep.	423.4	392.2	31.2	7,067.2	384.7	365.5	19.2	6,456.0	38.8	26.7
Oct.	481.6	431.4	50.2	7,132.8	440.6	407.3	33.2	6,490.0	41.0	24.1
Nov.	408.5	379.9	28.6	7,150.0	376.1	355.6	20.5	6,510.0	32.4	24.3
Dec.	345.1	380.9	-35.8	7,091.8	316.5	351.6	-35.1	6,478.5	28.6	29.3
				Euro area enlargement						
2001 Jan.	527.9	492.0	35.9	7,222.4	494.4	459.5	34.9	6,609.5	33.5	32.5
Feb.	540.9	475.2	65.8	7,290.3	499.9	443.7	56.2	6,667.4	41.1	31.5
Mar.	607.3	537.8	69.5	7,374.1	559.8	504.6	55.2	6,727.1	47.5	33.2
Apr.	554.3	504.0	50.3	7,423.8	521.6	477.1	44.5	6,770.8	32.7	26.9
May	595.6	550.4	45.2	7,490.8	566.3	524.3	42.0	6,814.4	29.3	26.0

Sources: ECB and BIS (for issues by non-residents of the euro area).
1) Including items expressed in the national denominations of the euro.

currencies		By non-residents of the euro area in euro [1]				Total in euro [1]				
Net issues	Amounts outstanding	Issues (during quarter)	Redemptions (during quarter)	Net issues (during quarter)	Amounts outstanding (end-quarter)	Issues (during quarter)	Redemptions (during quarter)	Net issues (during quarter)	Amounts outstanding (end-quarter)	
11	12	13	14	15	16	17	18	19	20	
1.0	46.5	.	.	.	.	.	.	.	.	2000 May
5.9	53.2	37.5	31.0	6.5	43.2	790.3	771.6	18.7	652.0	June
1.2	56.1	.	.	.	.	.	.	.	.	July
-2.0	56.6	.	.	.	.	.	.	.	.	Aug.
1.6	60.0	38.2	39.5	-1.3	45.2	862.2	863.3	-1.1	656.6	Sep.
4.8	67.7	.	.	.	.	.	.	.	.	Oct.
6.1	74.3	.	.	.	.	.	.	.	.	Nov.
2.2	75.3	43.4	32.9	10.5	53.6	895.0	917.9	-22.9	632.3	Dec.
				Euro area enlargement						
-2.8	72.0	.	.	.	.	.	.	.	.	2001 Jan.
3.5	77.2	.	.	.	.	.	.	.	.	Feb.
1.3	80.0	47.8	46.5	1.3	57.3	1,223.0	1,164.0	59.0	700.5	Mar.
-1.3	79.8	.	.	.	.	.	.	.	.	Apr.
0.7	83.9	.	.	.	.	.	.	.	.	May

currencies		By non-residents of the euro area in euro [1]				Total in euro [1]				
Net issues	Amounts outstanding	Issues (during quarter)	Redemptions (during quarter)	Net issues (during quarter)	Amounts outstanding (end-quarter)	Issues (during quarter)	Redemptions (during quarter)	Net issues (during quarter)	Amounts outstanding (end-quarter)	
11	12	13	14	15	16	17	18	19	20	
0.8	489.7	.	.	.	.	.	.	.	.	2000 May
1.0	486.2	47.0	23.7	23.3	664.6	352.8	221.3	131.5	6,417.2	June
17.5	509.7	.	.	.	.	.	.	.	.	July
15.3	536.6	.	.	.	.	.	.	.	.	Aug.
10.4	551.2	64.7	34.1	30.7	697.5	346.1	224.5	121.5	6,542.1	Sep.
12.1	575.1	.	.	.	.	.	.	.	.	Oct.
2.0	565.7	.	.	.	.	.	.	.	.	Nov.
-2.9	538.0	62.2	20.5	41.7	739.4	343.7	250.0	93.7	6,639.2	Dec.
				Euro area enlargement						
3.8	540.8	.	.	.	.	.	.	.	.	2001 Jan.
6.1	545.6	.	.	.	.	.	.	.	.	Feb.
13.0	567.1	93.3	35.7	57.5	784.8	472.1	326.0	146.1	6,868.5	Mar.
7.0	573.2	.	.	.	.	.	.	.	.	Apr.
2.6	592.6	.	.	.	.	.	.	.	.	May

currencies		By non-residents of the euro area in euro [1]				Total in euro [1]				
Net issues	Amounts outstanding	Issues (during quarter)	Redemptions (during quarter)	Net issues (during quarter)	Amounts outstanding (end-quarter)	Issues (during quarter)	Redemptions (during quarter)	Net issues (during quarter)	Amounts outstanding (end-quarter)	
11	12	13	14	15	16	17	18	19	20	
1.8	536.2	.	.	.	.	.	.	.	.	2000 May
6.9	539.5	84.5	54.7	29.8	707.9	1,143.1	992.9	150.2	7,069.1	June
18.8	565.8	.	.	.	.	.	.	.	.	July
13.3	593.2	.	.	.	.	.	.	.	.	Aug.
12.1	611.2	102.9	73.6	29.3	742.7	1,208.3	1,087.8	120.5	7,198.7	Sep.
17.0	642.8	.	.	.	.	.	.	.	.	Oct.
8.1	640.0	.	.	.	.	.	.	.	.	Nov.
-0.7	613.3	105.6	53.4	52.2	793.0	1,238.7	1,167.9	70.8	7,271.5	Dec.
				Euro area enlargement						
1.0	612.8	.	.	.	.	.	.	.	.	2001 Jan.
9.6	622.8	.	.	.	.	.	.	.	.	Feb.
14.3	647.1	141.1	82.3	58.8	842.0	1,695.1	1,490.0	205.1	7,569.1	Mar.
5.8	653.0	.	.	.	.	.	.	.	.	Apr.
3.2	676.5	.	.	.	.	.	.	.	.	May

Table 3.6

Euro-denominated securities other than shares by original maturity, residency and sector of the issuer [1)]

(EUR billions; end of period; nominal values)

Amounts outstanding

1. Short-term

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2000 May	613.4	259.5	5.5	76.0	270.2	2.2	.	.	.	.
June	608.7	258.9	4.2	76.1	267.2	2.2	43.2	18.9	11.7	10.9
July	613.3	264.7	4.6	77.3	263.7	2.9	.	.	.	.
Aug.	616.1	263.7	4.3	79.4	266.4	2.3	.	.	.	.
Sep.	611.4	256.4	4.1	81.1	267.1	2.8	45.2	15.0	13.0	15.7
Oct.	618.8	259.7	4.5	86.3	265.6	2.7	.	.	.	.
Nov.	612.7	254.4	4.6	86.9	263.9	3.0	.	.	.	.
Dec.	578.7	244.0	4.5	86.0	241.4	2.9	53.6	20.6	14.7	17.0
					Euro area enlargement					
2001 Jan.	615.9	257.1	5.0	89.4	261.5	2.9	.	.	.	.
Feb.	626.0	260.3	4.9	93.1	265.4	2.2	.	.	.	.
Mar.	643.3	265.1	5.1	94.5	276.5	2.2	57.3	20.6	17.8	17.8
Apr.	654.5	269.1	5.5	92.4	285.3	2.2	.	.	.	.
May	651.7	260.7	5.5	99.0	284.1	2.3	.	.	.	.

2. Long-term

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2000 May	5,715.3	2,108.5	208.4	259.0	3,040.1	99.3	.	.	.	.
June	5,752.6	2,115.5	215.6	265.9	3,056.5	99.0	664.6	192.4	86.9	136.9
July	5,787.0	2,133.3	227.3	272.0	3,054.2	100.2	.	.	.	.
Aug.	5,819.3	2,147.1	233.0	275.4	3,062.3	101.5	.	.	.	.
Sep.	5,844.6	2,162.5	232.6	275.8	3,072.0	101.8	697.5	199.3	94.8	152.3
Oct.	5,871.2	2,173.3	237.7	280.2	3,076.1	103.9	.	.	.	.
Nov.	5,897.3	2,175.4	241.9	284.8	3,089.7	105.5	.	.	.	.
Dec.	5,899.8	2,175.7	254.0	287.7	3,075.8	106.5	739.4	219.0	102.8	160.6
					Euro area enlargement					
2001 Jan.	5,993.7	2,199.7	251.7	284.5	3,150.6	107.1	.	.	.	.
Feb.	6,041.5	2,229.9	256.8	288.6	3,157.4	108.8	.	.	.	.
Mar.	6,083.8	2,240.4	264.7	299.2	3,169.0	110.5	784.8	241.6	108.9	184.5
Apr.	6,116.4	2,247.6	269.4	303.2	3,183.5	112.7	.	.	.	.
May	6,162.7	2,255.9	278.1	310.4	3,205.4	112.9	.	.	.	.

3. Total

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2000 May	6,328.7	2,368.1	213.9	335.0	3,310.2	101.5	.	.	.	.
June	6,361.3	2,374.4	219.9	342.0	3,323.8	101.2	707.9	211.4	98.6	147.8
July	6,400.2	2,398.0	231.9	349.2	3,317.9	103.1	.	.	.	.
Aug.	6,435.4	2,410.7	237.3	354.8	3,328.6	103.9	.	.	.	.
Sep.	6,456.0	2,418.8	236.7	356.9	3,339.1	104.6	742.7	214.4	107.7	168.0
Oct.	6,490.0	2,433.0	242.2	366.5	3,341.7	106.6	.	.	.	.
Nov.	6,510.0	2,429.8	246.5	371.7	3,353.6	108.5	.	.	.	.
Dec.	6,478.5	2,419.7	258.5	373.7	3,317.2	109.5	793.0	239.6	117.5	177.6
					Euro area enlargement					
2001 Jan.	6,609.5	2,456.8	256.7	374.0	3,412.1	110.0	.	.	.	.
Feb.	6,667.4	2,490.2	261.7	381.7	3,422.8	111.0	.	.	.	.
Mar.	6,727.1	2,505.4	269.8	393.6	3,445.5	112.7	842.0	262.2	126.7	202.3
Apr.	6,770.8	2,516.8	274.9	395.6	3,468.8	114.8	.	.	.	.
May	6,814.4	2,516.6	283.7	409.4	3,489.5	115.2	.	.	.	.

Sources: ECB and BIS (for issues by non-residents of the euro area).

1) Including items expressed in the national denominations of the euro.

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
.	.	.	.	.	.	.	.	.	.	2000 May
0.2	0.3	1.2	652.0	277.9	15.9	86.9	267.4	2.6	1.2	June
.	.	.	.	.	.	.	.	.	.	July
.	.	.	.	.	.	.	.	.	.	Aug.
0.2	0.5	0.8	656.6	271.4	17.0	96.8	267.3	3.2	0.8	Sep.
.	.	.	.	.	.	.	.	.	.	Oct.
.	.	.	.	.	.	.	.	.	.	Nov.
0.1	0.4	0.8	632.3	264.6	19.2	103.0	241.5	3.3	0.8	Dec.
				Euro area enlargement						
.	.	.	.	.	.	.	.	.	.	2001 Jan.
.	.	.	.	.	.	.	.	.	.	Feb.
0.2	0.3	0.4	700.5	285.7	22.9	112.3	276.7	2.5	0.4	Mar.
.	.	.	.	.	.	.	.	.	.	Apr.
.	.	.	.	.	.	.	.	.	.	May

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
.	.	.	.	.	.	.	.	.	.	2000 May
99.2	29.7	119.4	6,417.2	2,307.9	302.6	402.8	3,155.8	128.7	119.4	June
.	.	.	.	.	.	.	.	.	.	July
.	.	.	.	.	.	.	.	.	.	Aug.
100.5	33.4	117.3	6,542.1	2,361.8	327.3	428.1	3,172.4	135.2	117.3	Sep.
.	.	.	.	.	.	.	.	.	.	Oct.
.	.	.	.	.	.	.	.	.	.	Nov.
101.1	38.8	117.2	6,639.2	2,394.7	356.8	448.3	3,176.9	145.3	117.2	Dec.
				Euro area enlargement						
.	.	.	.	.	.	.	.	.	.	2001 Jan.
.	.	.	.	.	.	.	.	.	.	Feb.
89.7	42.5	117.6	6,868.5	2,482.0	373.5	483.7	3,258.8	153.0	117.6	Mar.
.	.	.	.	.	.	.	.	.	.	Apr.
.	.	.	.	.	.	.	.	.	.	May

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
.	.	.	.	.	.	.	.	.	.	2000 May
99.4	30.1	120.6	7,069.1	2,585.8	318.5	489.8	3,423.2	131.3	120.6	June
.	.	.	.	.	.	.	.	.	.	July
.	.	.	.	.	.	.	.	.	.	Aug.
100.7	33.8	118.1	7,198.7	2,633.2	344.4	524.9	3,439.8	138.4	118.1	Sep.
.	.	.	.	.	.	.	.	.	.	Oct.
.	.	.	.	.	.	.	.	.	.	Nov.
101.2	39.2	118.0	7,271.5	2,659.3	376.0	551.3	3,418.4	148.6	118.0	Dec.
				Euro area enlargement						
.	.	.	.	.	.	.	.	.	.	2001 Jan.
.	.	.	.	.	.	.	.	.	.	Feb.
89.9	42.8	118.0	7,569.1	2,767.6	396.5	596.0	3,535.5	155.5	118.0	Mar.
.	.	.	.	.	.	.	.	.	.	Apr.
.	.	.	.	.	.	.	.	.	.	May

Table 3.6 (cont'd)

Euro-denominated securities other than shares by original maturity, residency and sector of the issuer [1)]

(EUR billions; transactions during the month or quarter; nominal values)

Gross issues

1. Short-term

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2000 May	267.0	175.9	2.1	53.0	34.7	1.4	.	.	.	.
June	245.4	159.7	3.2	46.6	34.9	1.0	37.5	16.6	9.3	10.0
July	269.7	167.6	2.6	56.1	41.5	1.8	.	.	.	.
Aug.	261.0	168.2	2.0	51.2	38.1	1.6	.	.	.	.
Sep.	293.4	196.7	2.8	55.6	36.3	2.0	38.2	12.1	10.6	14.5
Oct.	338.2	237.8	2.6	60.3	35.5	1.9	.	.	.	.
Nov.	283.7	189.7	3.0	55.9	33.6	1.5	.	.	.	.
Dec.	229.7	162.1	2.1	45.9	18.0	1.6	43.4	16.2	11.4	14.7
					Euro area enlargement					
2001 Jan.	358.5	238.6	3.4	66.9	47.7	1.9	.	.	.	.
Feb.	384.1	275.9	2.2	63.1	41.4	1.5	.	.	.	.
Mar.	432.7	312.8	3.1	67.0	48.1	1.6	47.8	16.8	14.2	15.9
Apr.	424.2	301.6	3.2	69.4	48.5	1.4	.	.	.	.
May	456.4	341.5	2.8	71.0	39.2	1.9	.	.	.	.

2. Long-term

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2000 May	115.2	54.2	7.3	4.5	47.6	1.5	.	.	.	.
June	87.9	34.1	10.6	8.4	34.4	0.4	47.0	18.4	5.8	15.3
July	106.4	44.9	15.5	8.8	35.0	2.1	.	.	.	.
Aug.	83.7	38.1	8.3	4.0	31.5	1.8	.	.	.	.
Sep.	91.3	40.8	5.0	3.6	40.8	1.0	64.7	21.1	10.0	22.9
Oct.	102.4	43.3	7.5	5.7	43.3	2.5	.	.	.	.
Nov.	92.3	33.6	8.6	8.1	39.0	3.0	.	.	.	.
Dec.	86.8	38.7	18.4	4.5	23.1	2.0	62.2	27.3	9.2	12.6
					Euro area enlargement					
2001 Jan.	135.9	56.2	4.0	0.8	72.1	2.8	.	.	.	.
Feb.	115.8	57.6	8.7	5.0	42.1	2.4	.	.	.	.
Mar.	127.1	45.2	11.3	14.4	53.3	2.8	93.3	33.5	10.0	30.3
Apr.	97.4	41.5	7.2	7.1	39.1	2.6	.	.	.	.
May	109.9	38.4	9.3	9.0	52.9	0.3	.	.	.	.

3. Total

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2000 May	382.1	230.1	9.4	57.5	82.3	2.9	.	.	.	.
June	333.3	193.8	13.7	55.0	69.4	1.4	84.5	35.0	15.1	25.4
July	376.0	212.6	18.1	64.9	76.5	3.9	.	.	.	.
Aug.	344.7	206.2	10.3	55.2	69.6	3.4	.	.	.	.
Sep.	384.7	237.6	7.8	59.2	77.0	3.1	102.9	33.2	20.6	37.5
Oct.	440.6	281.1	10.1	66.0	78.8	4.5	.	.	.	.
Nov.	376.1	223.3	11.6	64.0	72.6	4.5	.	.	.	.
Dec.	316.5	200.8	20.5	50.4	41.1	3.7	105.6	43.5	20.6	27.3
					Euro area enlargement					
2001 Jan.	494.4	294.8	7.4	67.7	119.8	4.7	.	.	.	.
Feb.	499.9	333.5	10.9	68.1	83.5	3.9	.	.	.	.
Mar.	559.8	358.0	14.5	81.4	101.5	4.4	141.1	50.2	24.2	46.2
Apr.	521.6	343.1	10.4	76.5	87.6	4.0	.	.	.	.
May	566.3	379.9	12.1	80.0	92.1	2.1	.	.	.	.

Sources: ECB and BIS (for issues by non-residents of the euro area).

1) Including items expressed in the national denominations of the euro.

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
.	.	.	.	.	.	.	.	.	.	2000 May
0.1	0.3	1.1	790.3	493.6	17.4	161.0	113.1	4.1	1.1	June
.	.	.	.	.	.	.	.	.	.	July
.	.	.	.	.	.	.	.	.	.	Aug.
0.2	0.4	0.4	862.2	544.7	17.9	177.5	116.0	5.8	0.4	Sep.
.	.	.	.	.	.	.	.	.	.	Oct.
.	.	.	.	.	.	.	.	.	.	Nov.
0.1	0.3	0.7	895.0	605.8	19.1	176.8	87.2	5.4	0.7	Dec.
				Euro area enlargement						
.	.	.	.	.	.	.	.	.	.	2001 Jan.
.	.	.	.	.	.	.	.	.	.	Feb.
0.2	0.3	0.4	1,223.0	844.1	23.0	212.9	137.4	5.3	0.4	Mar.
.	.	.	.	.	.	.	.	.	.	Apr.
.	.	.	.	.	.	.	.	.	.	May

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
.	.	.	.	.	.	.	.	.	.	2000 May
4.7	1.5	1.4	352.8	152.3	29.3	36.3	128.4	5.3	1.4	June
.	.	.	.	.	.	.	.	.	.	July
.	.	.	.	.	.	.	.	.	.	Aug.
3.5	5.8	1.3	346.1	144.9	38.9	39.4	110.8	10.8	1.3	Sep.
.	.	.	.	.	.	.	.	.	.	Oct.
.	.	.	.	.	.	.	.	.	.	Nov.
3.0	6.0	4.0	343.7	143.0	43.7	30.9	108.5	13.6	4.0	Dec.
				Euro area enlargement						
.	.	.	.	.	.	.	.	.	.	2001 Jan.
.	.	.	.	.	.	.	.	.	.	Feb.
7.4	7.6	4.6	472.1	192.5	34.0	50.5	175.0	15.5	4.6	Mar.
.	.	.	.	.	.	.	.	.	.	Apr.
.	.	.	.	.	.	.	.	.	.	May

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
.	.	.	.	.	.	.	.	.	.	2000 May
4.9	1.7	2.5	1,143.1	645.9	46.6	197.2	241.5	9.4	2.5	June
.	.	.	.	.	.	.	.	.	.	July
.	.	.	.	.	.	.	.	.	.	Aug.
3.7	6.2	1.7	1,208.3	689.5	56.8	216.9	226.9	16.5	1.7	Sep.
.	.	.	.	.	.	.	.	.	.	Oct.
.	.	.	.	.	.	.	.	.	.	Nov.
3.1	6.3	4.7	1,238.7	748.8	62.8	207.7	195.7	19.0	4.7	Dec.
				Euro area enlargement						
.	.	.	.	.	.	.	.	.	.	2001 Jan.
.	.	.	.	.	.	.	.	.	.	Feb.
7.6	7.8	5.0	1,695.1	1,036.7	57.0	263.3	312.4	20.8	5.0	Mar.
.	.	.	.	.	.	.	.	.	.	Apr.
.	.	.	.	.	.	.	.	.	.	May

Table 3.6 (cont'd)

Euro-denominated securities other than shares by original maturity, residency and sector of the issuer [1)]

(EUR billions; transactions during the month or quarter; nominal values)

Net issues

1. Short-term

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2000 May	15.6	12.6	-0.7	3.8	0.5	-0.6	.	.	.	.
June	-4.1	-3.2	0.6	0.1	-1.6	0.0	6.5	3.4	-0.2	2.7
July	3.2	4.5	0.4	1.1	-3.5	0.7	.	.	.	.
Aug.	2.4	-1.4	-0.3	2.1	2.6	-0.6	.	.	.	.
Sep.	-5.3	-8.0	-0.3	1.7	0.7	0.4	-1.3	-5.4	0.4	4.0
Oct.	7.9	3.8	0.4	5.2	-1.5	-0.1	.	.	.	.
Nov.	-6.4	-5.6	0.1	0.6	-1.8	0.3	.	.	.	.
Dec.	-34.8	-11.1	-0.1	-1.1	-22.5	0.0	10.5	6.2	2.3	2.0
					Euro area enlargement					
2001 Jan.	32.3	13.0	0.6	3.4	14.9	0.5	.	.	.	.
Feb.	10.5	3.7	-0.1	3.6	3.9	-0.7	.	.	.	.
Mar.	14.9	2.7	0.2	1.0	11.1	-0.1	1.3	-0.9	2.5	0.0
Apr.	11.4	4.3	0.4	-2.0	8.8	0.0	.	.	.	.
May	-4.0	-9.7	0.1	6.5	-1.1	0.2	.	.	.	.

2. Long-term

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2000 May	36.6	23.0	4.8	0.4	7.2	1.3	.	.	.	.
June	34.9	4.9	7.2	6.6	16.4	-0.3	23.3	10.8	3.5	8.5
July	35.3	19.0	11.7	5.9	-2.4	1.2	.	.	.	.
Aug.	31.0	12.6	5.4	3.5	8.1	1.4	.	.	.	.
Sep.	24.5	11.4	2.8	0.4	9.7	0.3	30.7	5.8	7.7	14.9
Oct.	25.4	9.5	5.3	4.4	4.1	2.1	.	.	.	.
Nov.	26.9	2.8	4.2	4.6	13.6	1.6	.	.	.	.
Dec.	-0.3	-2.5	12.2	2.9	-13.9	1.0	41.7	19.6	7.6	8.3
					Euro area enlargement					
2001 Jan.	2.6	22.2	-2.3	-3.2	-14.8	0.7	.	.	.	.
Feb.	45.7	28.3	5.1	3.9	6.8	1.7	.	.	.	.
Mar.	40.2	8.9	7.3	10.6	11.7	1.8	57.5	22.3	6.2	25.9
Apr.	33.1	8.0	4.4	4.0	14.5	2.2	.	.	.	.
May	46.0	8.1	8.7	7.2	21.9	0.2	.	.	.	.

3. Total

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2000 May	52.2	35.6	4.1	4.2	7.6	0.7	.	.	.	.
June	30.9	1.7	7.9	6.7	14.8	-0.2	29.8	14.3	3.3	11.2
July	38.5	23.5	12.0	7.0	-5.9	1.9	.	.	.	.
Aug.	33.5	11.2	5.2	5.6	10.8	0.7	.	.	.	.
Sep.	19.2	3.4	2.6	2.1	10.4	0.7	29.3	0.4	8.1	18.9
Oct.	33.2	13.3	5.7	9.6	2.6	2.0	.	.	.	.
Nov.	20.5	-2.8	4.3	5.2	11.9	1.9	.	.	.	.
Dec.	-35.1	-13.6	12.1	1.9	-36.4	1.0	52.2	25.8	9.9	10.4
					Euro area enlargement					
2001 Jan.	34.9	35.2	-1.8	0.2	0.1	1.2	.	.	.	.
Feb.	56.2	31.9	5.0	7.4	10.7	1.0	.	.	.	.
Mar.	55.2	11.6	7.5	11.6	22.8	1.7	58.8	21.4	8.7	25.9
Apr.	44.5	12.3	4.8	2.1	23.2	2.2	.	.	.	.
May	42.0	-1.6	8.8	13.7	20.7	0.4	.	.	.	.

Sources: ECB and BIS (for issues by non-residents of the euro area).

1) Including items expressed in the national denominations of the euro.

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
.	.	.	.	.	.	.	.	.	.	2000 May
0.0	0.0	0.5	18.7	8.4	-0.3	12.1	-1.6	-0.4	0.5	June
.	.	.	.	.	.	.	.	.	.	July
.	.	.	.	.	.	.	.	.	.	Aug.
0.0	0.1	-0.5	-1.1	-10.2	0.3	8.9	-0.1	0.6	-0.5	Sep.
.	.	.	.	.	.	.	.	.	.	Oct.
.	.	.	.	.	.	.	.	.	.	Nov.
-0.1	0.0	0.0	-22.9	-6.7	2.7	6.8	-25.8	0.1	0.0	Dec.
Euro area enlargement										
.	.	.	.	.	.	.	.	.	.	2001 Jan.
.	.	.	.	.	.	.	.	.	.	Feb.
0.1	-0.1	-0.4	59.0	18.5	3.2	8.0	30.0	-0.3	-0.4	Mar.
.	.	.	.	.	.	.	.	.	.	Apr.
.	.	.	.	.	.	.	.	.	.	May

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
.	.	.	.	.	.	.	.	.	.	2000 May
3.3	-0.1	-2.6	131.5	60.4	18.2	22.3	31.5	1.8	-2.6	June
.	.	.	.	.	.	.	.	.	.	July
.	.	.	.	.	.	.	.	.	.	Aug.
1.2	3.4	-2.3	121.5	48.7	27.6	24.6	16.6	6.3	-2.3	Sep.
.	.	.	.	.	.	.	.	.	.	Oct.
.	.	.	.	.	.	.	.	.	.	Nov.
0.6	5.4	0.1	93.7	29.4	29.3	20.2	4.4	10.1	0.1	Dec.
Euro area enlargement										
.	.	.	.	.	.	.	.	.	.	2001 Jan.
.	.	.	.	.	.	.	.	.	.	Feb.
-0.2	6.0	-2.5	146.1	81.6	16.3	37.1	3.4	10.2	-2.5	Mar.
.	.	.	.	.	.	.	.	.	.	Apr.
.	.	.	.	.	.	.	.	.	.	May

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
.	.	.	.	.	.	.	.	.	.	2000 May
3.3	-0.1	-2.1	150.2	68.8	17.9	34.4	29.9	1.4	-2.1	June
.	.	.	.	.	.	.	.	.	.	July
.	.	.	.	.	.	.	.	.	.	Aug.
1.2	3.5	-2.9	120.5	38.5	27.9	33.5	16.5	6.9	-2.9	Sep.
.	.	.	.	.	.	.	.	.	.	Oct.
.	.	.	.	.	.	.	.	.	.	Nov.
0.5	5.4	0.2	70.8	22.7	32.0	27.0	-21.4	10.3	0.2	Dec.
Euro area enlargement										
.	.	.	.	.	.	.	.	.	.	2001 Jan.
.	.	.	.	.	.	.	.	.	.	Feb.
-0.2	5.9	-2.9	205.1	100.1	19.5	45.1	33.4	9.8	-2.9	Mar.
.	.	.	.	.	.	.	.	.	.	Apr.
.	.	.	.	.	.	.	.	.	.	May

4 HICP and other prices in the euro area

Table 4.1

Harmonised Index of Consumer Prices [1]

(not seasonally adjusted, annual percentage changes, unless otherwise indicated)

1. Total index and goods and services

	Total		Goods		Services		Total (s.a.)		Goods (s.a.)	Services (s.a.)
	Index 1996 = 100		Index 1996 = 100		Index 1996 = 100		Index 1996 = 100	% change on previous period	Index 1996 = 100	Index 1996 = 100
Weight in the total (%) [2]	100.0	100.0	61.9	61.9	38.1	38.1	100.0	100.0	61.9	38.1
	1	2	3	4	5	6	7	8	9	10
1998	102.7	1.1	101.8	0.7	104.4	1.9	-	-	-	-
1999	103.8	1.1	102.7	0.9	106.0	1.5	-	-	-	-
2000	106.3	2.3	105.4	2.7	107.8	1.7	-	-	-	-
2000 Q2	105.9	2.1	105.1	2.3	107.4	1.7	105.7	0.6	104.9	107.5
Q3	106.6	2.5	105.7	2.9	108.5	1.8	106.6	0.8	105.9	108.0
Q4	107.2	2.7	106.7	3.2	108.2	1.8	107.3	0.7	106.8	108.5
2000 July	106.4	2.3	105.2	2.7	108.5	1.7	106.2	0.1	105.4	107.9
Aug.	106.5	2.3	105.4	2.7	108.6	1.8	106.4	0.2	105.7	108.0
Sep.	107.0	2.8	106.4	3.4	108.2	1.8	107.0	0.6	106.5	108.2
Oct.	107.0	2.7	106.5	3.2	108.1	1.9	107.1	0.1	106.6	108.4
Nov.	107.3	2.9	106.9	3.4	108.2	1.8	107.4	0.3	106.9	108.5
Dec.	107.4	2.6	106.8	3.0	108.4	1.8	107.4	0.0	106.8	108.7
				Euro area enlargement						
2001 Q1	107.8	2.5	107.1	2.7	109.3	2.2	107.8	0.5	107.1	109.3
Q2	109.2	3.1	108.8	3.5	110.1	2.5	109.1	1.1	108.6	110.2
2001 Jan.	107.3	2.4	106.5	2.6	109.0	2.2	107.5	0.1	106.7	109.2
Feb.	107.9	2.6	107.1	2.8	109.5	2.2	107.8	0.3	107.1	109.3
Mar.	108.3	2.6	107.7	2.8	109.5	2.2	108.1	0.3	107.5	109.5
Apr.	108.8	2.9	108.3	3.4	109.9	2.4	108.7	0.5	108.0	110.1
May	109.4	3.4	109.1	3.8	110.0	2.5	109.2	0.5	108.8	110.1
June	109.5	3.0	109.1	3.4	110.4	2.5	109.3	0.1	108.9	110.3

2. Breakdown of goods and services

	Goods						Services				
	Food [3]			Industrial goods			Housing	Transport	Communi-cation	Recreation and personal	Miscellan-eous
	Total	Processed food [3]	Unprocessed food	Total	Non-energy industrial goods	Energy					
Weight in the total (%) [2]	20.3	12.3	8.0	41.6	32.1	9.5	10.0	6.2	2.4	13.9	5.6
	11	12	13	14	15	16	17	18	19	20	21
1998	1.6	1.4	1.9	0.1	0.9	-2.6	2.3	1.7	-1.0	2.2	1.8
1999	0.6	0.9	0.0	1.0	0.6	2.4	1.8	2.1	-4.4	2.0	1.8
2000	1.4	1.1	1.7	3.4	0.7	13.3	1.6	2.6	-4.2	2.3	2.4
2000 Q2	0.9	1.0	0.7	3.1	0.6	12.3	1.5	2.5	-4.9	2.5	2.5
Q3	1.9	1.1	3.1	3.4	0.6	13.6	1.6	2.6	-4.2	2.5	2.5
Q4	2.2	1.3	3.5	3.7	1.0	13.7	1.8	2.8	-4.6	2.4	2.1
2000 July	1.6	1.0	2.6	3.2	0.5	13.4	1.5	2.5	-4.3	2.5	2.6
Aug.	2.0	1.1	3.3	3.0	0.6	11.9	1.6	2.5	-4.0	2.6	2.6
Sep.	2.1	1.3	3.3	4.0	0.8	15.5	1.6	2.7	-4.3	2.4	2.3
Oct.	2.0	1.2	3.2	3.9	1.0	14.6	1.8	2.7	-4.9	2.5	2.2
Nov.	2.2	1.4	3.5	4.1	1.0	15.2	1.8	2.8	-4.4	2.4	2.0
Dec.	2.4	1.4	3.9	3.3	1.1	11.3	1.8	2.8	-4.6	2.2	2.1
					Euro area enlargement						
2001 Q1	3.3	1.9	5.3	2.5	1.2	7.2	1.9	3.2	-4.3	3.1	2.3
Q2	5.0	2.8	8.5	2.8	1.5	7.3	1.8	3.6	-2.8	3.3	2.5
2001 Jan.	2.7	1.6	4.5	2.6	1.1	7.8	1.9	3.3	-4.6	3.0	2.3
Feb.	3.1	2.0	4.7	2.7	1.1	8.2	1.9	3.2	-4.2	3.1	2.3
Mar.	3.9	2.2	6.7	2.3	1.3	5.6	1.8	3.1	-4.0	3.1	2.4
Apr.	4.4	2.5	7.3	2.9	1.5	7.8	1.7	3.6	-2.8	3.1	2.4
May	5.3	2.8	9.2	3.1	1.6	8.6	1.8	3.6	-2.8	3.5	2.5
June	5.4	3.0	9.0	2.4	1.6	5.5	1.8	3.5	-2.7	3.4	2.6

Sources: Eurostat and ECB calculations.

1) Extended coverage from January 2000 and January 2001. The change affects annual percentage changes during 2000 and 2001, in particular services (miscellaneous). See the general notes for a brief explanation.

2) Referring to the index period 2001.

3) Including alcoholic beverages and tobacco.

Table 4.2

Selected other price indicators

1. Industry and commodity prices

(annual percentage changes, unless otherwise indicated)

	Industrial producer prices											World market prices of raw materials [1]		Oil prices [2] (EUR per barrel)
	Industry excluding construction [3]									Construction [4]	Manufacturing		Total excluding energy	
	Total		Industry excluding construction and energy						Energy					
	Index, 1995 = 100		Total	Intermediate goods	Capital goods	Consumer goods								
						Total	Durable consumer goods	Non-durable consumer goods						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1996	100.3	0.3	0.3	-1.8	1.4	1.8	2.1	1.8	0.8	1.4	0.9	6.5	-6.9	16.0
1997	101.4	1.1	0.6	0.1	0.3	1.3	0.7	1.3	3.1	1.2	0.8	10.0	12.9	17.0
1998	100.6	-0.7	0.2	-0.4	0.7	0.6	0.7	0.6	-5.1	0.3	-0.6	-21.2	-12.5	12.0
1999	100.2	-0.4	-0.5	-1.5	0.2	0.1	0.6	0.0	0.6	1.1	0.2	17.8	-3.1	17.1
2000	105.6	5.4	2.5	4.9	0.6	1.6	1.4	1.6	18.6	2.3	5.1	51.7	18.1	31.0
2000 Q2	104.8	5.2	2.6	5.4	0.6	1.4	1.2	1.5	17.6	2.1	5.2	53.7	18.3	28.8
Q3	106.4	5.8	2.9	5.7	0.7	1.7	1.5	1.8	19.3	2.0	5.4	46.7	18.0	33.7
Q4	107.9	6.1	3.0	5.2	0.8	2.4	1.7	2.5	19.9	3.0	5.3	37.7	16.4	34.5
2000 July	105.8	5.6	2.8	5.6	0.7	1.6	1.4	1.7	18.7	-	5.3	42.0	14.3	30.5
Aug.	106.2	5.6	2.9	5.7	0.6	1.7	1.5	1.7	17.8	-	5.1	47.5	18.3	33.3
Sep.	107.3	6.2	2.9	5.7	0.6	1.8	1.6	1.9	21.3	-	5.8	50.3	21.4	37.2
Oct.	108.0	6.6	2.9	5.4	0.7	2.1	1.6	2.2	23.0	-	6.0	56.6	23.1	36.8
Nov.	108.2	6.3	2.9	5.2	0.8	2.4	1.7	2.5	21.3	-	5.6	45.6	18.2	37.7
Dec.	107.7	5.4	3.0	4.9	0.8	2.6	1.7	2.8	15.5	-	4.5	13.7	8.6	28.8
Euro area enlargement														
2001 Q1	108.2	4.5	3.0	4.0	0.9	3.3	2.1	3.5	11.0	2.7	3.2	4.8	1.4	28.4
Q2	.	.	.	.	.	.	.	.	.	.	.	5.2	-0.9	31.7
2001 Jan.	107.9	4.8	3.0	4.5	0.9	3.0	1.9	3.1	12.5	-	3.6	8.4	3.3	27.5
Feb.	108.2	4.5	2.9	4.0	0.9	3.2	2.1	3.4	11.2	-	3.2	6.5	1.7	29.9
Mar.	108.4	4.2	2.9	3.5	0.9	3.7	2.2	3.9	9.2	-	2.8	-0.2	-0.8	28.1
Apr.	108.7	4.2	2.6	2.5	1.0	3.7	2.3	3.9	11.0	-	3.0	11.1	-1.1	29.8
May	108.9	3.7	2.3	1.9	1.0	3.6	2.3	3.8	9.3	-	2.7	1.9	-4.0	32.7
June	.	.	.	.	.	.	.	.	.	-	.	3.4	2.5	32.5
July	.	.	.	.	.	.	.	.	.	-	.	-1.0	-1.0	29.4

2. Deflators of gross domestic product [5]

(annual percentage changes, unless otherwise indicated; seasonally adjusted)

	Total		Domestic demand				Exports [6]	Imports [6]
				Private consumption	Government consumption	Gross fixed capital formation		
	Index, 1995 = 100							
	15	16	17	18	19	20	21	22
1996	102.0	2.0	2.1	2.4	2.2	0.9	0.9	0.8
1997	103.6	1.5	1.8	2.0	1.7	1.0	1.7	2.5
1998	105.4	1.7	1.3	1.4	1.7	0.9	-0.1	-1.4
1999	106.6	1.2	1.3	1.1	2.2	1.0	-0.4	-0.3
2000	108.0	1.3	2.5	2.2	1.8	2.4	4.5	8.2
1999 Q1	106.3	1.5	0.9	0.8	1.9	0.5	-2.1	-4.3
Q2	106.6	1.2	1.1	1.0	2.2	0.7	-1.4	-1.9
Q3	106.8	1.1	1.5	1.1	2.3	1.1	-0.2	0.8
Q4	107.1	1.0	1.8	1.5	2.4	1.5	1.9	4.2
2000 Q1	107.5	1.2	2.4	2.1	1.9	2.1	3.8	7.8
Q2	107.9	1.2	2.4	2.0	1.6	2.4	4.6	8.2
Q3	108.3	1.4	2.5	2.4	1.8	2.5	5.1	8.5
Q4	108.6	1.5	2.7	2.5	1.8	2.7	5.1	8.6
Euro area enlargement								
2001 Q1	109.9	1.9	2.4	2.4	2.3	2.5	3.7	4.9

Sources: Eurostat, except columns 12 and 13 (HWWA, Institut für Wirtschaftsforschung, Hamburg), column 14 (Thomson Financial Datastream) and columns 15 to 22 (ECB calculations based on Eurostat data).

1) To December 1998, in ECU; from January 1999, in euro.

2) Brent Blend (for one-month forward delivery). To December 1998, in ECU; from January 1999, in euro.

3) Breakdown in accordance with the harmonised definition of Main Industrial Groupings.

4) Residential buildings, based on non-harmonised data.

5) Data to end-1998 are based on national data expressed in domestic currency.

6) Deflators for exports and imports refer to goods and services and include cross-border trade within the euro area.

5 Real economy indicators in the euro area

Table 5.1

National accounts [1]

GDP and expenditure components

1. Current prices

(EUR billions (ECU billions to end-1998), seasonally adjusted)

	GDP								
	Total	Domestic demand					External balance [3]		
		Total	Private consumption	Government consumption	Gross fixed capital formation	Changes in inventories [2]	Total	Exports [3]	Imports [3]
	1	2	3	4	5	6	7	8	9
1996	5,534.0	5,408.4	3,142.9	1,142.4	1,121.7	1.4	125.7	1,658.0	1,532.3
1997	5,650.1	5,501.1	3,199.6	1,150.8	1,138.0	12.7	149.0	1,828.5	1,679.6
1998	5,884.1	5,742.6	3,331.3	1,176.8	1,201.4	33.1	141.5	1,946.0	1,804.6
1999	6,142.3	6,034.9	3,488.5	1,228.5	1,282.4	35.5	107.3	2,042.2	1,934.8
2000	6,431.8	6,359.0	3,658.0	1,274.9	1,371.5	54.6	72.8	2,391.4	2,318.6
1999 Q4	1,562.0	1,537.2	887.3	311.2	328.2	10.4	24.9	540.2	515.4
2000 Q1	1,583.5	1,561.8	899.2	315.0	336.3	11.2	21.7	564.1	542.4
Q2	1,600.6	1,583.4	911.6	317.3	340.8	13.7	17.2	584.1	566.8
Q3	1,616.7	1,599.0	919.6	319.9	345.7	13.9	17.7	609.3	591.6
Q4	1,631.0	1,614.8	927.7	322.8	348.7	15.7	16.2	634.0	617.8
				Euro area enlargement					
2001 Q1	1,685.8	1,658.9	958.9	331.4	356.7	11.8	27.0	641.5	614.5

2. Constant prices

(ECU billions at 1995 prices, seasonally adjusted)

	GDP								
	Total	Domestic demand					External balance [3]		
		Total	Private consumption	Government consumption	Gross fixed capital formation	Changes in inventories [2]	Total	Exports [3]	Imports [3]
	10	11	12	13	14	15	16	17	18
1996	5,383.3	5,262.9	3,045.0	1,112.0	1,106.0	-0.1	120.5	1,637.7	1,517.2
1997	5,506.9	5,352.7	3,092.7	1,121.4	1,131.4	7.3	154.2	1,807.2	1,653.0
1998	5,664.6	5,540.0	3,189.3	1,132.3	1,188.8	29.5	124.6	1,935.6	1,811.0
1999	5,807.0	5,713.9	3,284.3	1,149.5	1,249.6	30.5	93.0	2,028.5	1,935.5
2000	6,002.2	5,874.3	3,369.1	1,172.1	1,305.0	28.2	128.0	2,270.2	2,142.3
1999 Q4	1,471.6	1,444.8	829.8	289.2	317.9	7.9	26.8	529.7	502.9
2000 Q1	1,485.2	1,455.7	835.1	291.7	323.0	5.9	29.5	545.5	516.0
Q2	1,496.8	1,467.8	842.9	292.7	325.1	7.2	29.0	558.3	529.3
Q3	1,505.6	1,472.6	844.3	293.0	328.1	7.1	33.0	574.7	541.7
Q4	1,514.6	1,478.2	846.8	294.7	328.8	7.9	36.5	591.7	555.3
				Euro area enlargement					
2001 Q1	1,550.3	1,509.5	869.3	299.6	334.1	6.6	40.9	598.2	557.4
(annual percentage changes)									
1996	1.4	1.0	1.6	1.7	1.2	-	-	4.3	3.1
1997	2.3	1.7	1.6	0.8	2.3	-	-	10.4	9.0
1998	2.9	3.5	3.1	1.0	5.1	-	-	7.1	9.6
1999	2.5	3.1	3.0	1.5	5.1	-	-	4.8	6.9
2000	3.4	2.8	2.6	2.0	4.4	-	-	11.9	10.7
1999 Q4	3.4	3.2	2.9	1.7	5.4	-	-	10.0	9.7
2000 Q1	3.5	2.7	2.5	2.0	5.5	-	-	12.3	10.4
Q2	3.7	3.3	3.2	2.2	4.9	-	-	11.9	11.1
Q3	3.3	2.9	2.5	1.8	4.0	-	-	11.8	10.8
Q4	2.9	2.3	2.0	1.9	3.4	-	-	11.7	10.4
				Euro area enlargement					
2001 Q1	2.6	1.7	1.8	1.4	1.4	-	-	8.5	6.3

Source: Eurostat.

1) See the first section of the general notes for a brief explanation of features of current price data expressed in ECU up to end-1998.

2) Including acquisitions less disposals of valuables.

3) Exports and imports cover goods and services and include cross-border trade within the euro area. They are not fully consistent with Tables 8 and 9.

Value added by activity

3. Current prices

(EUR billions (ECU billions to end-1998), seasonally adjusted)

	Gross value added							Intermediate consumption of FISIM [1]	Taxes less subsidies on products
	Total	Agriculture, hunting, forestry and fishing activities	Manufacturing, energy and mining	Construction	Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate, renting and business activities	Public administration, education, health and other services		
	1	2	3	4	5	6	7	8	9
1996	5,172.4	139.7	1,207.0	300.7	1,059.5	1,333.2	1,132.4	200.6	562.2
1997	5,266.5	138.1	1,227.7	292.1	1,086.6	1,377.7	1,144.3	199.6	583.1
1998	5,468.2	137.9	1,274.2	295.3	1,137.3	1,443.9	1,179.7	200.0	615.8
1999	5,681.7	135.5	1,297.2	309.0	1,175.9	1,539.8	1,224.4	203.1	663.7
2000	5,949.6	137.2	1,368.7	321.2	1,224.4	1,632.3	1,265.9	209.9	692.1
1999 Q4	1,442.9	33.8	328.9	78.7	298.1	393.8	309.5	51.8	170.9
2000 Q1	1,465.0	33.8	336.4	80.2	301.6	399.6	313.3	52.5	170.9
Q2	1,480.3	34.0	341.0	80.0	304.9	405.0	315.4	53.1	173.4
Q3	1,496.3	34.7	344.7	79.9	307.2	411.8	317.9	52.4	172.9
Q4	1,508.1	34.7	346.6	81.0	310.6	415.9	319.3	51.9	174.8
				Euro area enlargement					
2001 Q1	1,558.6	36.9	359.1	83.9	321.3	428.1	329.3	52.7	180.0

4. Constant prices

(ECU billions at 1995 prices, seasonally adjusted)

	Gross value added							Intermediate consumption of FISIM [1]	Taxes less subsidies on products
	Total	Agriculture, hunting, forestry and fishing activities	Manufacturing, energy and mining	Construction	Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate, renting and business activities	Public administration, education, health and other services		
	10	11	12	13	14	15	16	17	18
1996	5,040.2	139.5	1,178.0	295.5	1,039.5	1,288.2	1,099.4	200.1	543.2
1997	5,158.4	140.2	1,216.1	290.4	1,071.7	1,330.1	1,109.8	207.5	556.0
1998	5,308.3	142.3	1,252.3	291.8	1,111.8	1,384.7	1,125.4	214.1	570.3
1999	5,437.4	145.8	1,268.7	296.9	1,146.7	1,442.5	1,136.9	221.8	591.3
2000	5,628.8	146.1	1,323.2	300.1	1,191.7	1,513.0	1,154.7	231.2	604.7
1999 Q4	1,376.4	36.8	321.1	74.9	290.6	367.0	285.9	56.6	151.8
2000 Q1	1,392.6	36.4	327.2	75.7	294.1	372.0	287.2	56.9	149.5
Q2	1,402.0	36.2	329.7	74.9	297.0	375.8	288.3	57.5	152.3
Q3	1,412.3	36.8	332.2	74.6	298.5	380.9	289.2	58.2	151.5
Q4	1,421.9	36.7	334.1	74.8	302.0	384.3	290.0	58.7	151.4
				Euro area enlargement					
2001 Q1	1,455.5	38.7	342.5	76.0	310.5	392.2	295.6	59.8	154.6
(annual percentage changes)									
1996	1.4	5.5	-0.3	-1.8	0.9	3.6	1.7	2.5	1.4
1997	2.3	0.4	3.2	-1.7	3.1	3.3	0.9	3.7	2.3
1998	2.9	1.5	3.0	0.5	3.7	4.1	1.4	3.2	2.6
1999	2.4	2.4	1.3	1.7	3.1	4.2	1.0	3.6	3.7
2000	3.5	0.2	4.3	1.1	3.9	4.9	1.6	4.2	2.3
1999 Q4	3.2	3.0	3.0	2.6	3.8	4.6	1.1	3.4	5.5
2000 Q1	3.6	0.8	4.3	3.0	3.7	5.0	1.4	4.7	2.7
Q2	3.7	-0.2	4.5	1.3	4.3	4.8	1.8	4.7	4.6
Q3	3.5	0.6	4.3	0.2	3.7	5.0	1.6	3.8	2.0
Q4	3.3	-0.3	4.0	-0.1	3.9	4.7	1.4	3.8	-0.3
				Euro area enlargement					
2001 Q1	2.8	0.6	3.5	-2.1	3.2	4.1	1.4	3.8	1.3

Source: Eurostat.

1) The use of financial intermediation services indirectly measured (FISIM) is treated as intermediate consumption which is not allocated among branches.

Table 5.2

Selected other real economy indicators [1)]

1. Industrial production

(annual percentage changes, unless otherwise indicated)

	Total	Industry excluding construction [2)]									Construction	Manufacturing
		Total		Industry excluding construction and energy						Energy		
		Index (s.a.) 1995 = 100		Total	Inter-mediate goods	Capital goods	Consumer goods					
							Total	Durable consumer goods	Non-durable consumer goods			
	1	2	3	4	5	6	7	8	9	10	11	12
1997	3.7	104.7	4.2	4.6	6.2	4.9	2.4	2.0	2.5	0.2	0.0	4.8
1998	3.8	109.2	4.3	4.5	3.6	7.5	2.8	5.2	2.4	1.1	0.3	4.8
1999	2.1	111.4	2.0	1.8	1.6	2.3	1.6	1.2	1.7	1.5	2.7	2.0
2000	5.3	117.6	5.6	5.9	5.9	9.0	2.5	6.2	1.8	1.7	2.0	6.0
2000 Q2	5.7	117.5	6.1	6.3	6.2	8.8	4.0	8.6	3.1	2.1	1.9	6.5
Q3	5.2	118.2	5.8	6.1	5.8	9.6	2.8	5.4	2.3	2.7	0.6	6.2
Q4	5.1	119.8	5.5	6.0	5.5	9.8	2.4	4.4	2.0	-0.6	1.3	6.2
2000 Aug.	6.2	118.3	6.9	7.6	8.4	11.2	2.7	6.3	2.2	2.5	1.9	7.5
Sep.	4.6	118.7	5.1	5.5	4.2	9.3	2.9	4.6	2.5	2.4	-0.4	5.6
Oct.	3.5	118.4	3.9	3.9	4.0	6.3	1.0	2.7	0.6	1.7	-0.7	4.2
Nov.	4.1	119.6	4.5	4.8	4.7	8.3	1.3	1.9	1.2	-0.5	0.3	5.1
Dec.	8.0	121.5	8.2	9.7	8.3	15.0	5.2	9.4	4.3	-2.7	4.8	9.6
Euro area enlargement												
2001 Q1	3.6	119.5	4.0	4.0	2.6	7.5	2.6	2.0	2.7	-1.2	-2.6	4.8
Q2	.	.	.	.	.	.	.	.	.	.	.	.
2001 Jan.	5.0	119.2	5.3	5.6	4.6	10.0	2.7	3.8	2.4	-1.1	0.9	6.3
Feb.	3.9	119.8	4.1	4.0	2.4	7.5	2.7	0.4	3.2	-0.3	-1.9	4.8
Mar.	2.1	119.4	2.8	2.8	1.1	5.6	2.5	1.9	2.7	-2.2	-6.2	3.4
Apr.	0.7	118.6	1.1	0.4	-0.2	1.2	0.2	-2.9	0.9	1.5	-7.0	1.1
May	.	118.5	-0.1	-1.1	-2.3	0.4	-0.9	-5.1	0.0	3.2	.	-0.6
June	.	.	.	.	.	.	.	.	.	.	.	.

2. Retail sales and car registrations

(annual percentage changes, unless otherwise indicated)

	Retail sales (s.a.)								New passenger car registrations	
	Current prices		Constant prices							
	Total		Total		Food, beverages, tobacco	Non-food			Thousands [3)] (s.a.)	
	Index 1995 = 100		Index 1995 = 100				Textiles, clothing, footwear	Household equipment		
	13	14	15	16	17	18	19	20	21	22
1997	104.1	2.2	101.6	1.2	1.1	1.3	0.7	1.4	861	4.2
1998	107.9	3.6	104.6	2.9	2.2	3.6	2.1	4.5	923	7.2
1999	111.6	3.4	107.3	2.6	3.1	2.5	1.3	3.0	973	5.4
2000	116.1	4.1	109.8	2.3	1.9	2.2	1.7	4.6	953	-2.2
2000 Q2	115.8	4.8	110.0	3.3	2.9	3.2	1.7	5.4	976	0.9
Q3	116.8	4.3	110.0	2.1	1.4	2.2	3.0	3.9	926	-7.9
Q4	117.9	3.6	110.4	1.6	1.2	1.4	0.6	3.5	926	-3.2
2000 Aug.	116.7	3.9	109.9	1.7	1.4	1.8	1.5	2.3	935	-4.3
Sep.	117.5	5.6	110.3	2.9	1.9	3.4	6.8	4.2	945	-1.6
Oct.	117.8	3.8	110.4	1.6	1.3	1.2	0.9	2.6	912	-7.0
Nov.	118.1	3.4	110.3	1.3	0.8	1.3	0.2	4.3	929	-3.3
Dec.	117.9	3.7	110.5	1.8	1.4	1.6	0.6	3.4	936	1.9
Euro area enlargement										
2001 Q1	119.3	4.3	111.1	2.1	1.9	2.3	2.5	0.8	953	-5.0
Q2	.	.	.	.	.	.	.	.	1,018	1.8
2001 Jan.	119.3	5.0	111.2	2.6	2.0	2.9	5.3	2.2	944	-5.6
Feb.	119.2	3.1	111.2	1.5	1.8	1.3	0.2	0.2	956	-6.1
Mar.	119.4	4.7	111.0	2.3	1.9	2.7	2.1	-0.1	958	-3.6
Apr.	120.3	3.8	111.6	1.4	1.6	1.2	1.0	0.1	977	-1.8
May	120.8	3.0	111.4	0.5	0.2	0.4	-0.2	-1.0	1,005	0.0
June	.	.	.	.	.	.	.	.	1,071	7.5

Sources: Eurostat, except columns 21 and 22 (ECB calculation based on data from the ACEA/A.A.A., European Automobile Manufacturers' Association).

1) Adjusted for variations in the number of working days.

2) Breakdown in accordance with the harmonised definition of Main Industrial Groupings.

3) Monthly averages.

Table 5.3

Business and consumer surveys

(percentage balances, seasonally adjusted, unless otherwise indicated)

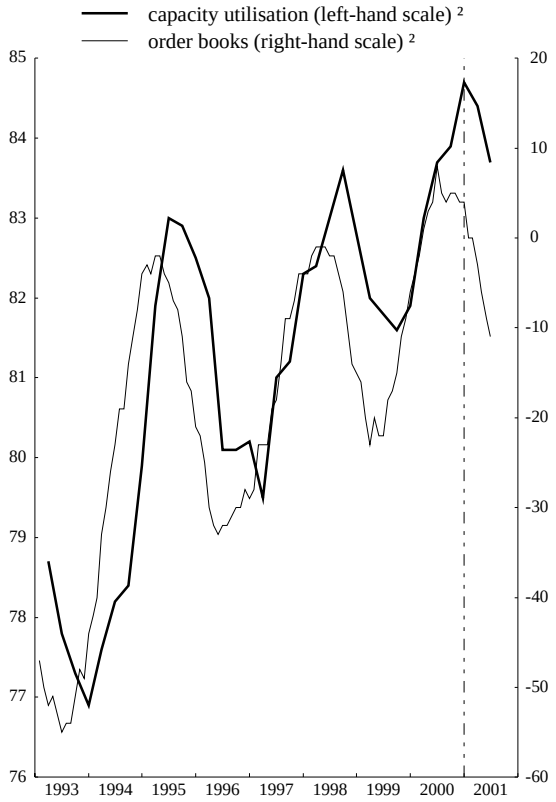
	Manufacturing industry				Construction confidence indicator	Retail trade confidence indicator	Consumer confidence indicator
	Confidence indicator	Production expectations	Assessment of order books	Capacity utilisation [1] (percentages)			
	1	2	3	4	5	6	7
1997	-4	11	-15	81.0	-33	-9	-15
1998	-1	11	-5	83.0	-19	-3	-5
1999	-7	7	-17	81.8	-7	-5	-3
2000	5	17	3	83.8	1	-1	-1
2000 Q2	6	17	5	83.7	2	3	0
Q3	6	18	5	83.9	2	-2	-1
Q4	5	18	4	84.7	0	-3	-2
2000 June	8	19	8	-	3	7	-1
July	7	19	5	-	2	-3	0
Aug.	6	18	4	-	5	-3	1
Sep.	6	18	5	-	-1	-1	-3
Oct.	6	19	5	-	2	-1	-3
Nov.	5	17	4	-	-1	-3	-3
Dec.	5	18	4	-	-2	-4	-1
			Euro area enlargement				
2001 Q1	1	12	-1	84.4	-1	-2	-2
Q2	-5	5	-9	83.7	-3	-6	-4
2001 Jan.	3	14	0	-	1	0	-1
Feb.	1	12	0	-	-2	0	-2
Mar.	-1	9	-3	-	-2	-6	-2
Apr.	-4	6	-6	-	-2	-4	-2
May	-5	6	-9	-	-2	-7	-4
June	-7	3	-11	-	-5	-7	-5

Consumer and industrial confidence indicators

(percentage balances; monthly, seasonally adjusted)

Capacity utilisation and order books

(capacity utilisation, percentages, quarterly; order books, percentage balances, monthly; seasonally adjusted)



Source: European Commission Business and Consumer Surveys.

1) Data on capacity utilisation are collected in January, April, July and October. Annual data are averages of the four quarterly surveys.

2) Manufacturing.

Table 5.4

Labour market indicators

1. Employment and unemployment in the whole economy [1]

(annual percentage changes, unless otherwise indicated)

	Employment						Unemployment (s.a.)			
	Total		By employment status		By selected sector		Total		Adult [2]	Youth [2]
	Index, 1995 = 100		Employees	Self-employed	Industry excluding construction	Services	Millions	% of labour force	% of labour force	% of labour force
	1	2	3	4	5	6	7	8	9	10
1996	100.5	0.5	0.5	0.5	-1.0	1.6	14.728	11.5	9.8	23.9
1997	101.4	0.8	0.9	0.1	-0.3	1.4	14.817	11.5	9.9	23.2
1998	103.0	1.6	1.8	0.6	1.2	2.1	14.064	10.8	9.4	21.2
1999	104.7	1.6	2.1	-0.4	0.3	2.5	12.966	9.9	8.6	19.1
2000	106.8	2.0	2.4	0.4	0.8	2.7	11.664	8.8	7.7	17.1
2000 Q2	106.5	2.1	2.5	0.1	0.8	2.9	11.787	8.9	7.8	17.3
Q3	107.1	2.0	2.3	0.5	1.0	2.7	11.493	8.7	7.6	16.9
Q4	107.7	2.1	2.3	1.3	1.1	2.8	11.211	8.5	7.4	16.3
2000 June	-	-	-	-	-	-	11.672	8.9	7.7	17.1
July	-	-	-	-	-	-	11.584	8.8	7.7	17.0
Aug.	-	-	-	-	-	-	11.505	8.7	7.6	16.9
Sep.	-	-	-	-	-	-	11.389	8.6	7.5	16.7
Oct.	-	-	-	-	-	-	11.283	8.5	7.5	16.5
Nov.	-	-	-	-	-	-	11.208	8.5	7.4	16.3
Dec.	-	-	-	-	-	-	11.143	8.4	7.4	16.2
Euro area enlargement										
2001 Q1	108.1	2.0	2.3	0.8	1.3	2.5	11.467	8.4	7.3	16.5
Q2	.	.	.	.	.	.	11.320	8.3	7.2	16.3
2001 Jan.	-	-	-	-	-	-	11.551	8.5	7.4	16.6
Feb.	-	-	-	-	-	-	11.456	8.4	7.3	16.5
Mar.	-	-	-	-	-	-	11.395	8.4	7.3	16.4
Apr.	-	-	-	-	-	-	11.342	8.3	7.2	16.4
May	-	-	-	-	-	-	11.322	8.3	7.2	16.3
June	-	-	-	-	-	-	11.295	8.3	7.2	16.3

2. Labour costs and productivity

(annual percentage changes)

	Unit labour cost in the whole economy, and components (s.a.)			Labour cost indices [3]					Earnings per employee in manufacturing
	Unit labour cost	Compensation per employee	Labour productivity	Total	By component		By selected sector		
					Wages and salaries	Employers' social contributions and other costs	Industry excluding construction	Services	
	11	12	13	14	15	16	17	18	19
1996	1.9	3.0	1.1	3.4	3.0	4.4	3.6	4.0	3.7
1997	0.6	2.2	1.6	2.6	2.6	2.7	2.2	2.7	2.3
1998	0.1	1.4	1.3	1.7	2.2	0.8	1.6	1.5	2.2
1999	1.3	2.2	0.9	2.3	2.6	1.7	2.7	1.9	2.7
2000	1.1	2.5	1.3	3.4	3.8	2.6	3.4	3.1	2.6
1999 Q1	1.6	1.7	0.1	1.9	2.2	1.3	2.3	1.4	2.8
Q2	1.7	2.3	0.7	2.1	2.5	1.5	2.5	1.9	2.9
Q3	1.2	2.1	0.8	2.5	2.8	1.9	2.9	2.2	2.9
Q4	0.3	2.0	1.7	2.8	3.1	2.2	3.1	2.2	2.5
2000 Q1	0.6	2.5	2.0	3.4	3.8	2.5	3.5	3.0	2.9
Q2	0.5	2.1	1.5	3.4	3.8	2.7	3.4	3.0	2.9
Q3	1.2	2.3	1.1	3.5	3.9	2.6	3.4	3.1	2.5
Q4	1.7	2.1	0.5	3.4	3.8	2.4	3.2	3.3	2.3
Euro area enlargement									
2001 Q1	2.0	2.2	0.2	3.1	3.6	2.2	3.0	3.0	3.0

Sources: ECB calculations based on Eurostat data (columns 1 to 6 and 18), Eurostat (columns 7 to 10 and 14 to 17) and ECB calculations based on national data (columns 11 to 13 and 19).

1) Data for employment are based on the ESA 95. Due to differences in coverage, quarterly data are not fully consistent with annual data. Data for unemployment follow ILO recommendations.

2) Adult: 25 years and over; youth: below 25 years; expressed as a percentage of the labour force for the relevant age group.

3) Hourly labour costs for the whole economy, excluding the agriculture, public administration, education and health sectors. Owing to differences in coverage, components are not consistent with the total.

6 Saving, investment and financing in the euro area

Table 6.1

Financial investment and financing of non-financial sectors [1]

(EUR billions (ECU billions to end-1998); not seasonally adjusted)

Levels at the end of the period

1. Main financial assets [2]

	Currency and deposits									Memo: deposits of euro area non-banks with banks outside the euro area [3]
	Total	Currency	Deposits of non-financial sectors other than central government with euro area MFIs					Deposits of central government with euro area MFIs	Deposits with non-MFIs [4]	
			Total	Overnight	With agreed maturity	Redeemable at notice	Repurchase agreements			
	1	2	3	4	5	6	7	8	9	10
1997 Q4	4,696.2	320.5	4,083.2	1,159.0	1,469.5	1,329.1	125.5	153.9	138.7	215.8
1998 Q1	4,651.8	311.7	4,060.4	1,134.2	1,459.9	1,348.2	118.2	139.4	140.2	247.2
Q2	4,707.0	315.4	4,108.1	1,205.3	1,455.0	1,346.7	101.1	147.4	136.1	239.7
Q3	4,683.5	311.7	4,080.0	1,184.2	1,452.5	1,345.6	97.7	156.4	135.3	237.6
Q4	4,831.9	323.3	4,216.8	1,282.1	1,466.2	1,389.7	78.9	149.8	141.9	213.0
1999 Q1	4,677.9	317.7	4,077.8	1,239.1	1,466.3	1,306.5	66.0	133.4	148.9	243.9
Q2	4,704.1	323.9	4,116.3	1,321.8	1,420.2	1,315.9	58.4	125.0	138.9	242.7
Q3	4,715.4	327.3	4,115.1	1,324.5	1,418.6	1,313.3	58.7	133.3	139.7	238.6
Q4	4,861.8	349.9	4,217.6	1,370.5	1,460.7	1,323.4	63.0	142.0	152.3	229.7
2000 Q1	4,840.3	334.6	4,225.0	1,379.6	1,465.5	1,303.2	76.8	130.2	150.4	260.6
Q2	4,896.9	341.2	4,259.4	1,409.6	1,488.5	1,282.5	78.9	146.0	150.3	247.2
Q3	4,916.7	338.9	4,268.6	1,396.8	1,526.4	1,263.5	81.9	159.3	149.9	254.1
Q4	.	347.5	4,364.3	1,464.4	1,545.0	1,269.3	85.6	164.6	.	231.6
					Euro area enlargement					
2001 Q1	.	335.4	4,499.7	1,446.0	1,622.3	1,314.4	117.0	150.5	.	.

	Securities other than shares			Shares [5]				Insurance technical reserves		
	Total	Short-term	Long-term	Total	Quoted shares	Mutual fund shares	Money market fund shares	Total	Net equity of households in life insurance reserves and pension fund reserves	Prepayments of insurance premiums and reserves for outstanding claims
	11	12	13	14	15	16	17	18	19	20
1997 Q4	1,582.4	204.6	1,377.8	2,683.1	1,520.7	1,162.5	184.9	2,375.0	2,112.6	262.5
1998 Q1	1,599.0	194.6	1,404.4	3,188.4	1,864.9	1,323.5	186.5	2,454.2	2,182.2	272.0
Q2	1,547.2	170.3	1,377.0	3,403.9	1,974.8	1,429.1	186.7	2,513.1	2,239.0	274.1
Q3	1,542.1	159.3	1,382.9	3,110.0	1,666.5	1,443.5	187.9	2,559.1	2,282.3	276.7
Q4	1,532.0	155.6	1,376.4	3,425.7	1,899.8	1,525.9	172.9	2,623.9	2,347.2	276.7
1999 Q1	1,564.1	144.8	1,419.2	3,616.4	1,975.5	1,641.0	195.0	2,699.0	2,412.6	286.5
Q2	1,502.2	136.5	1,365.8	3,877.9	2,127.7	1,750.2	211.7	2,769.2	2,480.6	288.7
Q3	1,503.1	124.0	1,379.1	3,960.8	2,198.8	1,762.0	209.1	2,835.4	2,543.8	291.6
Q4	1,529.8	152.8	1,377.0	4,515.0	2,662.0	1,853.0	199.4	2,955.9	2,660.7	295.2
2000 Q1	1,532.9	154.3	1,378.7	4,866.5	2,907.5	1,959.0	208.6	3,084.0	2,774.3	309.7
Q2	1,595.1	158.9	1,436.2	4,800.6	2,853.6	1,946.9	197.4	3,133.9	2,820.6	313.3
Q3	1,653.1	178.6	1,474.5	4,881.1	2,913.6	1,967.5	201.8	3,192.4	2,875.6	316.9
Q4	.	.	.	.	.	.	.	.	.	.
					Euro area enlargement					
2001 Q1	.	.	.	.	.	.	.	.	.	.

Source: ECB.

1) *Non-financial sectors comprise general government (S.13), non-financial corporations (S.11), and households (S.14) including non-profit institutions serving households (S.15).*
2) *Most of the financial asset and liability categories defined in the ESA 95 are covered. These are currency and deposits, securities other than shares, loans (except those granted by general government and non-financial corporations), quoted shares, mutual fund shares and insurance technical reserves. Other financial instruments (financial derivatives, unquoted shares, other (than share) equity and other receivables and payables) are not included.*
3) *BIS international banking statistics. The BIS definition of banks is close to that of MFIs in the euro area.*
4) *Covering deposits of non-financial sectors with central government (S.1311) in the euro area, other financial intermediaries (S.123) and insurance corporations and pension funds (S.125).*
5) *Excluding unquoted shares.*

Table 6.1 (cont'd)

Financial investment and financing of non-financial sectors [1]

(EUR billions (ECU billions to end-1998); not seasonally adjusted)

Levels at the end of the period

2. Main liabilities [2]

	Loans taken from euro area MFIs and other financial corporations by											Memo: loans taken from banks outside the euro area by euro area non-banks [3]
	Total		General government			Non-financial corporations			Households [4]			
		taken from euro area MFIs	Total	Short-term	Long-term [5]	Total	Short-term	Long-term	Total	Short-term	Long-term	
	1	2	3	4	5	6	7	8	9	10	11	12
1997 Q4	5,839.7	5,320.1	922.3	54.2	868.1	2,406.4	837.7	1,568.7	2,511.0	225.0	2,286.0	141.6
1998 Q1	5,894.4	5,358.7	905.1	35.5	869.7	2,450.1	853.6	1,596.5	2,539.2	224.0	2,315.2	146.9
Q2	6,004.5	5,453.7	902.6	31.7	870.8	2,502.1	877.0	1,625.1	2,599.8	233.3	2,366.5	151.3
Q3	6,077.8	5,524.3	903.6	33.2	870.5	2,525.7	864.0	1,661.7	2,648.4	233.8	2,414.6	147.4
Q4	6,220.0	5,660.3	911.2	35.9	875.4	2,596.9	901.7	1,695.2	2,711.8	240.3	2,471.6	150.7
1999 Q1	6,249.1	5,673.9	903.3	36.1	867.2	2,584.7	917.7	1,667.0	2,761.0	251.2	2,509.8	156.8
Q2	6,417.6	5,814.2	901.2	38.7	862.5	2,683.2	960.0	1,723.2	2,833.2	255.2	2,578.0	183.3
Q3	6,482.8	5,882.6	886.9	37.7	849.2	2,697.7	939.1	1,758.6	2,898.2	255.0	2,643.2	191.4
Q4	6,664.5	6,040.0	902.0	42.0	860.0	2,795.8	980.0	1,815.8	2,966.7	264.0	2,702.7	201.4
2000 Q1	6,804.9	6,155.5	891.8	41.0	850.8	2,893.6	1,038.3	1,855.3	3,019.4	265.3	2,754.1	221.1
Q2	6,951.6	6,261.4	885.4	41.8	843.6	2,993.8	1,088.8	1,905.1	3,072.3	273.8	2,798.6	219.6
Q3	7,105.3	6,378.0	864.8	39.7	825.1	3,101.1	1,143.4	1,957.7	3,139.4	275.5	2,863.9	251.7
Q4	.	6,500.4	.	.	.	.	.	.	.	.	.	246.6
					Euro area enlargement							
2001 Q1	.	6,667.5	.	.	.	.	.	.	.	.	.	.

	Securities other than shares issued by							Quoted shares issued by non-financial corporations	Deposit liabilities of central government	Pension fund reserves of non-financial corporations
	Total	General government			Non-financial corporations					
		Total	Short-term	Long-term	Total	Short-term	Long-term			
	13	14	15	16	17	18	19	20	21	22
1997 Q4	3,630.6	3,327.7	499.0	2,828.7	302.9	45.8	257.1	1,975.7	135.2	236.2
1998 Q1	3,754.4	3,435.2	492.5	2,942.7	319.2	55.8	263.4	2,434.3	136.3	239.1
Q2	3,818.7	3,497.5	491.7	3,005.8	321.2	54.1	267.1	2,648.6	134.2	242.1
Q3	3,911.9	3,580.4	494.5	3,085.9	331.6	55.7	275.9	2,282.9	133.8	245.1
Q4	3,919.4	3,587.0	466.5	3,120.4	332.4	55.1	277.3	2,606.8	140.3	248.2
1999 Q1	3,968.8	3,622.9	462.3	3,160.6	345.9	66.0	279.8	2,722.1	146.9	251.2
Q2	3,950.7	3,598.0	451.8	3,146.2	352.7	67.0	285.7	2,964.9	136.6	254.3
Q3	3,934.1	3,567.7	444.9	3,122.8	366.4	75.0	291.4	3,037.1	137.6	257.4
Q4	3,896.4	3,519.4	420.0	3,099.5	377.0	78.2	298.9	3,916.9	149.8	260.8
2000 Q1	3,950.6	3,574.8	425.1	3,149.7	375.8	78.8	297.0	4,357.8	147.6	263.6
Q2	3,990.1	3,595.7	425.3	3,170.4	394.5	88.6	305.8	4,118.9	147.6	266.6
Q3	4,044.9	3,624.9	421.8	3,203.1	420.0	95.6	324.4	4,008.5	147.2	269.0
Q4	.	.	.	.	.	.	.	.	.	.
				Euro area enlargement						
2001 Q1	.	.	.	.	.	.	.	.	.	.

Source: ECB.

1) *Non-financial sectors comprise general government (S.13), non-financial corporations (S.11), and households (S.14) including non-profit institutions serving households (S.15).*
2) *Most of the financial asset and liability categories defined in the ESA 95 are covered. These are currency and deposits, securities other than shares, loans (except those granted by general government and non-financial corporations), quoted shares, mutual fund shares and insurance technical reserves. Other financial instruments (financial derivatives, unquoted shares, other (than share) equity and other receivables and payables) are not included.*
3) *BIS international banking statistics. The BIS definition of banks is close to that of MFIs in the euro area.*
4) *Including non-profit institutions serving households.*
5) *Including all loans taken by central government from MFIs in the euro area.*

Transactions

1. Main financial assets [1]

	Currency and deposits									Memo: deposits of euro area non-banks with banks outside the euro area [2]
	Total	Currency	Deposits of non-financial sectors [3] other than central government with euro area MFIs [4]					Deposits of central government with euro area MFIs	Deposits with non-MFIs [5]	
			Total	Overnight	With agreed maturity	Redeemable at notice	Repurchase agreements			
	1	2	3	4	5	6	7	8	9	10
1997 Q4	147.7	9.3	128.9	76.3	14.9	39.1	-1.4	3.2	6.2	-13.3
1998 Q1	-19.9	-8.8	2.0	-19.1	-3.0	20.1	4.0	-14.5	1.3	29.0
Q2	77.6	3.6	70.0	74.4	-0.4	0.3	-4.3	8.0	-4.0	-4.9
Q3	-6.1	-3.7	-11.0	-19.8	5.0	-0.9	4.7	9.0	-0.4	4.0
Q4	162.6	11.6	151.1	103.9	19.5	44.0	-16.3	-6.6	6.5	-23.6
1999 Q1	7.0	-5.2	9.3	5.6	-10.4	11.3	2.9	-4.2	7.0	21.5
Q2	57.7	6.2	70.1	82.4	-17.0	9.5	-4.8	-8.4	-10.2	-4.4
Q3	8.7	3.4	-3.7	-12.0	11.8	-2.0	-1.5	8.3	0.7	-1.9
Q4	144.6	22.3	101.1	56.9	42.3	9.3	-7.4	8.7	12.5	-14.1
2000 Q1	-4.0	-15.3	25.1	25.1	4.8	-19.4	14.6	-11.9	-1.9	25.4
Q2	46.3	6.7	23.9	30.9	18.1	-21.7	-3.4	15.8	-0.1	-13.2
Q3	-1.5	-2.2	-12.1	-21.0	25.5	-18.4	1.8	13.3	-0.5	-2.0
Q4	.	8.6	101.2	64.4	30.4	6.2	0.2	5.3	.	-17.3
					Euro area enlargement					
2001 Q1	.	-19.8	4.2	-34.7	28.0	-5.8	16.7	-15.6	.	.

	Securities other than shares			Shares [6]				Insurance technical reserves		
	Total	Short-term	Long-term	Total	Quoted shares	Mutual fund shares	Money market fund shares	Total	Net equity of households in life insurance reserves and pension fund reserves	Prepayments of insurance premiums and reserves for outstanding claims
	11	12	13	14	15	16	17	18	19	20
1997 Q4	1.1	-7.6	8.7	67.8	51.9	15.9	-12.1	54.8	52.5	2.2
1998 Q1	-26.4	-10.3	-16.1	84.5	-15.6	100.2	7.4	67.3	54.8	12.5
Q2	-71.9	-25.1	-46.8	117.0	23.8	93.2	-0.8	48.5	46.3	2.1
Q3	-5.4	-11.0	5.5	115.7	34.9	80.8	1.5	44.8	42.1	2.7
Q4	-13.2	-1.6	-11.5	80.3	60.7	19.7	-15.8	51.6	49.5	2.1
1999 Q1	29.4	-10.4	39.7	121.1	17.6	103.5	1.6	67.2	54.6	12.6
Q2	-26.9	-11.6	-15.3	142.2	58.2	84.0	15.0	51.4	48.6	2.8
Q3	-4.7	-9.9	5.2	90.6	51.4	39.2	-4.2	53.7	50.4	3.3
Q4	50.2	23.5	26.7	2.4	33.6	-31.2	-15.0	71.3	68.8	2.5
2000 Q1	-15.0	3.0	-18.0	9.3	-34.3	43.6	9.0	80.5	67.4	13.2
Q2	53.9	2.7	51.2	116.1	90.3	25.8	-8.8	52.9	49.8	3.0
Q3	60.2	21.1	39.1	186.0	166.2	19.8	4.8	52.4	48.9	3.6
Q4	.	.	.	.	.	.	.	.	.	.
					Euro area enlargement					
2001 Q1	.	.	.	.	.	.	.	.	.	.

Source: ECB.

1) Most of the financial asset and liability categories defined in the ESA 95 are covered. These are currency and deposits, securities other than shares, loans (except those granted by general government and non-financial corporations), quoted shares, mutual fund shares and insurance technical reserves. Other financial instruments (financial derivatives, unquoted shares, other (than share) equity and other receivables and payables) are not included.

2) BIS international banking statistics. The BIS definition of banks is close to that of MFIs in the euro area.

3) Non-financial sectors comprise general government (S.13), non-financial corporations (S.11), and households (S.14) including non-profit institutions serving households (S.15).

4) Transaction amounts are derived from the corresponding quarterly levels outstanding.

5) Covering deposits of non-financial sectors with central government (S.1311) in the euro area, other financial intermediaries (S.123) and insurance corporations and pension funds (S.125).

6) Excluding unquoted shares.

Table 6.1 (cont'd)

Financial investment and financing of non-financial sectors [1]

(EUR billions (ECU billions to end-1998); not seasonally adjusted)

Transactions

2. Main liabilities [2]

	Loans taken from euro area MFIs [3] and other financial corporations by											Memo: loans taken from banks outside the euro area by euro area non-banks [4]
	Total		General government			Non-financial corporations			Households [5]			
		taken from euro area MFIs	Total	Short-term	Long-term [6]	Total	Short-term	Long-term	Total	Short-term	Long-term	
	1	2	3	4	5	6	7	8	9	10	11	12
1997 Q4	151.4	146.1	19.9	0.8	19.1	62.5	21.8	40.7	69.0	6.9	62.2	-16.4
1998 Q1	96.8	55.7	-15.9	-0.4	-15.5	74.1	50.5	23.6	38.6	3.4	35.2	3.9
Q2	118.8	110.6	-4.6	-1.3	-3.4	61.8	27.4	34.3	61.7	5.6	56.1	6.4
Q3	74.8	89.1	2.8	0.0	2.8	24.4	-3.8	28.2	47.6	4.0	43.6	-0.4
Q4	158.5	151.8	8.8	0.4	8.4	69.9	21.9	48.0	79.8	6.9	72.9	3.7
1999 Q1	115.9	103.7	-6.9	-0.1	-6.8	62.6	30.2	32.5	60.2	5.5	54.7	1.0
Q2	169.6	140.0	-4.3	-0.1	-4.3	94.8	50.0	44.8	79.1	7.3	71.9	23.6
Q3	49.3	61.3	-14.7	-0.3	-14.4	19.9	1.2	18.7	44.1	3.4	40.7	8.5
Q4	168.0	149.6	14.7	0.8	13.9	82.3	41.1	41.2	71.0	6.9	64.1	-6.8
2000 Q1	163.8	127.2	-8.9	-0.2	-8.7	96.6	52.4	44.2	76.1	6.6	69.5	14.8
Q2	191.4	128.5	-6.9	-0.3	-6.6	125.2	79.5	45.7	73.1	6.6	66.5	-1.0
Q3	99.2	88.8	-16.9	-0.7	-16.2	56.3	33.9	22.4	59.8	5.2	54.6	21.9
Q4	.	141.3	.	.	.	.	.	.	.	.	.	3.2
					Euro area enlargement							
2001 Q1	.	101.4	.	.	.	.	.	.	.	.	.	.

	Securities other than shares issued by							Quoted shares issued by non-financial corporations	Deposit liabilities of central government	Pension fund reserves of non-financial corporations
	Total	General government			Non-financial corporations					
		Total	Short-term	Long-term	Total	Short-term	Long-term			
	13	14	15	16	17	18	19	20	21	22
1997 Q4	-9.6	-5.4	-33.5	28.1	-4.2	-7.5	3.3	44.6	6.9	2.3
1998 Q1	70.3	59.8	-4.9	64.6	10.5	9.7	0.8	11.4	1.1	2.4
Q2	53.9	51.0	-0.6	51.6	2.9	-1.8	4.7	36.8	-2.1	2.4
Q3	62.0	54.8	3.1	51.6	7.3	1.4	5.9	10.9	-0.4	2.4
Q4	-10.1	-15.6	-30.4	14.9	5.4	0.8	4.6	41.0	6.4	2.2
1999 Q1	79.3	56.9	0.7	56.2	22.4	18.3	4.1	10.8	6.6	2.5
Q2	41.6	32.8	-8.4	41.2	8.8	0.9	8.0	34.7	-10.3	2.5
Q3	53.2	33.7	-8.6	42.3	19.5	8.1	11.4	31.3	1.0	2.5
Q4	-8.6	-15.5	-28.1	12.5	6.9	3.1	3.7	42.0	12.1	2.6
2000 Q1	61.6	62.4	11.0	51.4	-0.8	0.4	-1.2	23.3	-2.2	2.4
Q2	45.0	23.6	-1.3	24.9	21.4	10.0	11.4	33.4	0.0	2.4
Q3	51.8	26.0	-2.2	28.2	25.8	7.7	18.1	73.0	-0.4	2.4
Q4	.	.	.	.	.	.	.	.	.	.
				Euro area enlargement						
2001 Q1	.	.	.	.	.	.	.	.	.	.

Source: ECB.

1) *Non-financial sectors comprise general government (S.13), non-financial corporations (S.11), and households (S.14) including non-profit institutions serving households (S.15).*
2) *Most of the financial asset and liability categories defined in the ESA 95 are covered. These are currency and deposits, securities other than shares, loans (except those granted by general government and non-financial corporations), quoted shares, mutual fund shares and insurance technical reserves. Other financial instruments (financial derivatives, unquoted shares, other (than share) equity and other receivables and payables) are not included.*
3) *Transaction amounts are derived from the corresponding quarterly levels outstanding.*
4) *BIS international banking statistics. The BIS definition of banks is close to that of MFIs in the euro area.*
5) *Including non-profit institutions serving households.*
6) *Including all loans taken by central government from MFIs in the euro area.*

Table 6.2

Saving, investment and financing

(as a percentage of GDP, unless otherwise indicated)

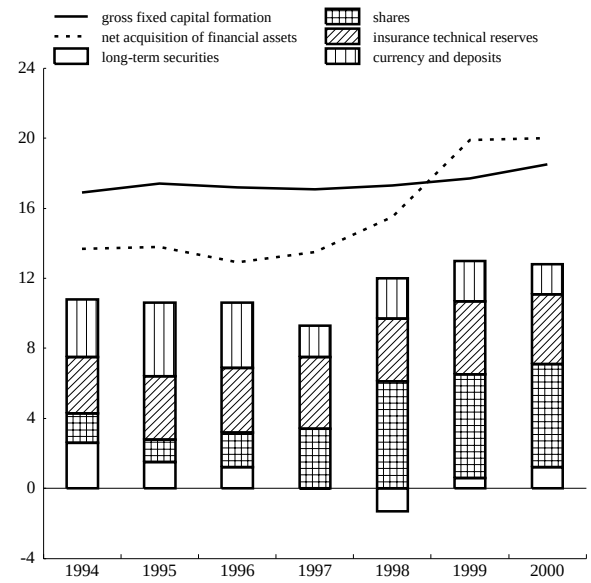
	Euro area saving and investment [1]			Investment of private non-financial sectors [1] [2]							
	Gross saving	Gross fixed capital formation	Net lending to the rest of the world	Gross fixed capital formation	Non-financial corporations	Net acquisition of financial assets	Currency and deposits	Securities other than shares	Long-term securities	Shares	Insurance technical reserves
	1	2	3	4	5	6	7	8	9	10	11
1993	20.2	20.3	0.5	16.8	10.6	13.0	5.5	0.5	0.9	0.7	3.0
1994	20.6	20.1	0.2	16.9	10.3	13.7	3.3	2.4	2.6	1.7	3.2
1995	21.9	20.6	0.5	17.4	10.8	13.8	4.2	1.8	1.5	1.3	3.6
1996	21.6	20.3	0.9	17.2	10.8	12.9	3.7	0.2	1.2	2.0	3.7
1997	22.0	20.1	1.5	17.1	10.7	13.5	1.8	-0.6	0.0	3.4	4.1
1998	22.0	20.3	1.1	17.3	11.0	15.5	2.3	-2.1	-1.3	6.1	3.6
1999	22.0	20.7	0.6	17.7	11.3	19.9	2.3	0.8	0.6	5.9	4.2
2000	21.4	21.2	-0.2	18.5	12.2	20.0	1.7	2.0	1.2	5.9	4.0

	Financing of private non-financial sectors [1] [2]								Net financial investment [3]	Financial investment as a % of gross investment [4]	Net incurrence of liabilities as a % of financing [5]
	Gross saving	Households	Net incurrence of liabilities	Securities other than shares	Long-term securities	Shares	Loans	Long-term loans			
	12	13	14	15	16	17	18	19	20	21	22
1993	20.8	12.8	7.8	1.3	1.4	1.5	3.7	4.5	5.2	43.6	27.3
1994	20.7	11.8	9.6	1.0	1.1	1.7	3.7	3.8	4.1	44.8	31.7
1995	21.7	12.1	7.3	-1.8	-1.7	1.4	4.8	3.6	6.5	44.2	25.2
1996	21.3	11.9	8.8	0.2	0.0	1.7	5.7	4.8	4.1	42.9	29.2
1997	20.5	11.4	9.6	0.1	0.1	1.4	5.9	4.7	3.9	44.1	31.9
1998	19.7	10.5	12.5	0.3	0.2	2.7	7.6	5.9	3.0	47.3	38.8
1999	18.6	9.8	17.4	0.7	0.4	3.2	9.7	7.6	2.5	52.9	48.3
2000	18.3	9.9	20.4	0.9	0.4	3.9	9.9	6.6	-0.4	51.9	52.7

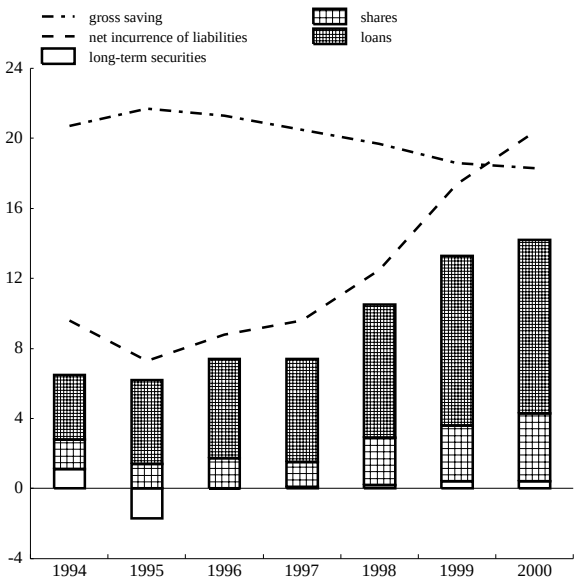
Investment and financing of private non-financial sectors [1] [2]

(as a percentage of GDP)

Investment



Financing



Source: ECB.

1) *Selected items of investment and financing.*
2) *Private non-financial sectors comprise non-financial corporations, households and non-profit institutions serving households.*
3) *Column 6 - column 14.*
4) *Column 6 ÷ (column 4 + column 6).*
5) *Column 14 ÷ (column 12 + column 14).*

7 General government fiscal position in the euro area and in the euro area countries

Table 7.1

Revenue, expenditure and deficit / surplus [1]

(as a percentage of GDP)

1. Euro area – revenue

	Total	Current revenue	Direct taxes			Indirect taxes		Social contributions			Sales	Capital revenue	Capital taxes	Memo: fiscal burden [2]
				Households	Corporations		Received by EU institutions		Employers	Employees				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1991	46.3	46.0	11.8	9.5	2.2	13.0	0.9	16.7	8.5	5.1	2.3	0.3	0.2	41.7
1992	47.4	46.7	11.9	9.8	2.0	13.0	0.9	17.1	8.6	5.2	2.4	0.7	0.6	42.5
1993	48.0	47.5	12.1	10.0	2.1	13.2	0.8	17.4	8.6	5.3	2.5	0.5	0.3	43.0
1994	47.5	47.1	11.6	9.5	2.0	13.5	0.8	17.5	8.5	5.4	2.5	0.4	0.2	42.7
1995	47.2	46.6	11.6	9.5	2.0	13.3	0.9	17.3	8.4	5.4	2.5	0.5	0.3	42.6
1996	48.0	47.5	12.0	9.6	2.3	13.4	0.8	17.6	8.7	5.4	2.5	0.5	0.3	43.3
1997	48.2	47.6	12.2	9.6	2.6	13.6	0.7	17.6	8.7	5.3	2.5	0.7	0.4	43.7
1998	47.7	47.2	12.4	9.9	2.5	14.1	0.7	16.5	8.5	4.8	2.5	0.5	0.3	43.3
1999	48.3	47.7	12.8	10.1	2.7	14.4	0.6	16.4	8.5	4.8	2.4	0.6	0.3	43.9
2000	47.9	47.4	13.0	10.1	2.7	14.2	0.6	16.3	8.5	4.7	2.4	0.5	0.3	43.7

2. Euro area – expenditure

	Total	Current expenditure								Capital expenditure				Memo: primary expenditure [4]
		Total	Compensation of employees	Intermediate consumption	Interest	Current transfers	Subsidies				Investment	Capital transfers		
							Social payments [3]		Paid by EU institutions				Paid by EU institutions	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1991	51.0	46.2	11.2	4.9	5.3	24.8	21.0	2.4	0.6	4.9	3.2	1.6	0.0	45.8
1992	52.2	47.5	11.4	5.0	5.7	25.5	21.9	2.3	0.5	4.7	3.2	1.5	0.0	46.5
1993	53.7	49.1	11.6	5.2	5.9	26.5	22.8	2.4	0.6	4.6	3.1	1.6	0.1	47.8
1994	52.6	48.2	11.3	5.0	5.5	26.5	22.9	2.3	0.5	4.3	2.9	1.5	0.1	47.1
1995	52.2	47.7	11.2	4.8	5.7	26.1	22.8	2.2	0.6	4.5	2.7	1.8	0.1	46.5
1996	52.2	48.3	11.2	4.8	5.7	26.6	23.2	2.2	0.6	4.0	2.6	1.4	0.0	46.6
1997	50.8	47.1	11.0	4.7	5.1	26.2	23.1	2.1	0.5	3.7	2.4	1.3	0.1	45.7
1998	49.8	46.0	10.7	4.6	4.7	25.9	22.6	2.0	0.5	3.9	2.4	1.5	0.1	45.2
1999	49.5	45.4	10.7	4.7	4.2	25.8	22.6	2.0	0.5	4.1	2.5	1.6	0.1	45.3
2000	48.6	44.7	10.5	4.7	4.0	25.5	22.2	1.9	0.5	3.9	2.5	1.4	0.1	43.5

3. Euro area – deficit / surplus, primary deficit / surplus and government consumption

	Deficit (-) / surplus (+)					Primary deficit (-) / surplus (+)	Government consumption [5]							
	Total	Central government	State government	Local government	Social security funds		Total	Compensation of employees	Intermediate consumption	Transfers in kind via market producers	Consumption of fixed capital	Sales (minus)	Government collective consumption	Government individual consumption
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1991	-4.7	-4.6	-0.3	-0.1	0.3	0.6	20.3	11.2	4.9	4.7	1.8	-2.3	.	.
1992	-4.8	-4.2	-0.3	-0.2	0.0	0.8	20.8	11.4	5.0	4.9	1.8	-2.4	8.8	12.0
1993	-5.7	-4.9	-0.5	-0.2	-0.1	0.2	21.2	11.6	5.2	5.0	1.8	-2.5	8.9	12.2
1994	-5.0	-4.3	-0.5	-0.2	0.0	0.5	20.8	11.3	5.0	5.0	1.8	-2.5	8.6	12.1
1995	-5.0	-4.2	-0.5	-0.1	-0.3	0.7	20.5	11.2	4.8	5.1	1.8	-2.5	8.5	12.0
1996	-4.3	-3.6	-0.4	-0.1	-0.2	1.4	20.6	11.2	4.8	5.2	1.8	-2.5	8.5	12.1
1997	-2.6	-2.2	-0.4	0.1	0.0	2.5	20.3	11.0	4.7	5.1	1.8	-2.5	8.4	12.0
1998	-2.1	-2.1	-0.3	0.2	0.1	2.5	20.0	10.7	4.6	5.1	1.7	-2.5	8.1	11.8
1999	-1.2	-1.6	-0.1	0.1	0.4	3.0	20.0	10.7	4.7	5.1	1.7	-2.4	8.1	11.8
2000	-0.7	-1.2	-0.1	0.2	0.5	3.3	19.8	10.5	4.7	5.1	1.7	-2.4	8.0	11.8

4. Euro area countries – deficit (-) / surplus (+)

	BE	DE	GR	ES	FR	IE	IT	LU	NL	AT	PT	FI
	1	2	3	4	5	6	7	8	9	10	11	12
1997	-1.9	-2.7	-4.6	-3.2	-3.0	0.7	-2.7	3.6	-1.1	-1.7	-2.7	-1.5
1998	-0.9	-2.1	-3.2	-2.6	-2.7	2.1	-2.8	3.2	-0.7	-2.3	-2.2	1.3
1999	-0.7	-1.4	-1.8	-1.2	-1.6	2.1	-1.8	4.7	1.0	-2.1	-2.0	1.8
2000	0.0	1.3	-0.9	-0.3	-1.3	4.5	-0.3	5.3	2.0	-1.1	-1.4	6.7

Sources: ECB for euro area aggregated data; European Commission for data relating to countries' deficit / surplus (including proceeds from sales of UMTS licences).

1) *Revenue, expenditure and deficit / surplus based on the ESA 95, but the figures exclude proceeds from sales of UMTS licences in 2000 (the euro area deficit / surplus including those proceeds is equal to 0.4). Data before 1995 are partially estimated. Transactions between countries and EU institutions are included and consolidated. Transactions among governments are not consolidated.*
2) *The fiscal burden comprises taxes and social contributions.*
3) *Comprises social benefits, social transfers in kind via market producers and transfers to non-profit institutions serving households.*
4) *Comprises total expenditure minus interest expenditure.*
5) *Corresponds to final consumption expenditure (P.3) of the general government in the ESA 95.*

Table 7.2

Debt [1]

(as a percentage of GDP)

1. Euro area − government debt by financial instrument and sector of the holder

	Total	Financial instrument				Holder				
		Coins and deposits	Loans	Short-term securities	Long-term securities	Domestic creditors [2]				Other creditors [3]
						Total	MFIs	Other financial corporations	Other sectors	
	1	2	3	4	5	6	7	8	9	10
1991	57.4	2.6	16.0	9.6	29.1	48.1	24.6	7.0	16.4	9.3
1992	60.9	2.6	16.7	10.1	31.5	50.2	26.4	7.3	16.5	10.7
1993	67.2	2.7	17.6	9.9	37.0	52.5	27.6	8.4	16.4	14.7
1994	70.0	2.9	16.7	10.3	40.0	56.1	29.8	9.7	16.6	13.8
1995	74.2	2.9	18.2	9.8	43.1	58.6	30.5	10.9	17.1	15.6
1996	75.4	2.9	17.8	9.9	44.8	59.2	30.3	13.2	15.8	16.2
1997	74.8	2.9	17.0	8.9	46.1	57.1	29.1	14.4	13.7	17.7
1998	73.0	2.8	15.8	7.9	46.6	53.5	27.0	16.2	10.4	19.6
1999	72.0	2.9	14.8	6.8	47.4	50.1	25.3	15.0	9.8	21.9
2000	69.6	2.7	13.7	6.2	46.9	46.6	23.5	13.6	9.5	23.0

2. Euro area − government debt by issuer, maturity and currency denomination

	Total	Issued by [4]				Original maturity			Residual maturity			Currency		
		Central government	State government	Local government	Social security funds	Up to 1 year	Over 1 year	Variable interest rate	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Euro or participating currency [5]	Non-domestic currency	Other currencies
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1991	57.4	46.3	4.5	6.3	0.3	11.8	45.6	4.8	17.6	18.5	21.3	56.2	1.7	1.1
1992	60.9	49.4	4.7	6.3	0.4	12.2	48.7	6.3	17.8	21.1	22.0	59.6	2.1	1.3
1993	67.2	54.9	5.2	6.6	0.6	11.9	55.3	6.7	18.5	24.4	24.3	65.5	2.7	1.7
1994	70.0	57.5	5.4	6.4	0.7	11.2	58.8	7.4	16.6	26.6	26.8	68.0	2.7	2.0
1995	74.2	61.3	5.7	6.3	0.8	10.6	63.5	6.9	17.6	26.2	30.3	72.1	2.7	2.0
1996	75.4	62.6	6.1	6.2	0.5	10.2	65.2	6.3	19.2	25.3	30.9	73.3	2.5	2.0
1997	74.8	62.0	6.3	5.9	0.6	8.8	66.0	6.0	18.6	25.2	31.0	72.7	2.5	2.1
1998	73.0	60.7	6.3	5.7	0.4	7.7	65.4	5.5	16.3	25.9	30.8	71.2	2.8	1.8
1999	72.0	59.8	6.2	5.6	0.3	6.9	65.1	5.0	14.4	26.7	30.8	70.1	-	1.8
2000	69.6	57.8	6.1	5.3	0.3	5.5	64.1	4.5	.	.	.	67.8	-	1.8

3. Euro area countries − government debt

	BE	DE	GR	ES	FR	IE	IT	LU	NL	AT	PT	FI
	1	2	3	4	5	6	7	8	9	10	11	12
1997	125.3	60.9	108.3	66.7	59.3	65.1	120.1	6.0	70.0	64.7	59.1	54.1
1998	119.8	60.7	105.5	64.7	59.7	55.0	116.2	6.4	66.8	63.9	55.3	48.8
1999	116.4	61.1	104.6	63.4	58.7	50.1	114.5	6.0	63.2	64.7	55.0	46.9
2000	110.9	60.2	103.9	60.6	58.0	39.1	110.2	5.3	56.3	62.8	53.8	44.0

Sources: ECB for euro area aggregated data; European Commission for data relating to countries' debt.

1) Data are partially estimated. General government gross consolidated debt at nominal value at the end of the year. Holdings by other governments are not consolidated.

2) Holders resident in the country whose government has issued the debt.

3) Includes residents of euro area countries other than the country whose government has issued the debt.

4) Excludes debt held by general government in the country whose government has issued it.

5) Before 1999, comprises debt in ECU, in domestic currency and in the currencies of other Member States which have adopted the euro.

Table 7.3

Change in debt [1]

(as a percentage of GDP)

1. Euro area – change in government debt by source, financial instrument and sector of the holder

	Total	Source of change				Financial instrument				Holder			
		Borrowing requirement [2]	Valuation effects [3]	Other changes in volume [4]	Aggregation effect [5]	Coins and deposits	Loans	Short-term securities	Long-term securities	Domestic creditors [6]	MFIs	Other financial corporations	Other creditors [7]
	1	2	3	4	5	6	7	8	9	10	11	12	13
1991	5.2	5.1	0.0	0.2	-0.1	0.2	1.2	0.0	3.9	.	.	.	.
1992	6.8	5.6	0.3	0.7	0.1	0.1	1.6	1.0	4.0	4.9	3.1	0.7	1.9
1993	8.0	7.5	0.3	0.1	0.1	0.2	1.3	0.1	6.4	3.7	2.0	1.3	4.4
1994	6.1	5.2	0.2	0.7	0.0	0.4	0.0	0.9	4.8	6.3	3.6	1.7	-0.2
1995	7.7	5.5	0.2	2.2	-0.2	0.2	2.3	0.0	5.2	5.3	2.2	1.7	2.5
1996	3.8	4.2	-0.2	0.1	-0.3	0.1	0.2	0.4	3.2	2.7	0.8	2.6	1.1
1997	2.3	2.4	0.2	-0.2	0.0	0.0	-0.1	-0.6	3.0	0.2	-0.1	1.8	2.1
1998	1.6	1.9	-0.2	0.0	0.0	0.1	-0.4	-0.6	2.6	-1.1	-0.8	2.4	2.7
1999	1.6	1.3	0.3	0.0	0.0	0.2	-0.4	-0.8	2.6	-1.4	-0.6	-0.6	3.0
2000	0.8	0.8	0.1	0.0	0.0	-0.1	-0.4	-0.3	1.6	-1.2	-0.7	-0.7	2.1

2. Euro area – deficit-debt adjustment

	Change in debt	Deficit (-) / surplus (+) [8]	Deficit-debt adjustment [9]								Valuation effects		Other changes in volume	Other [11]
			Total	Transactions in main financial assets held by general government								Exchange rate effects		
				Total	Currency and deposits	Securities [10]	Loans	Shares and other equity	Privatisations	Equity injections				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1991	5.2	-4.7	0.5	1.0	0.3	0.1	0.4	0.2	-0.1	0.2	0.0	0.1	0.2	-0.8
1992	6.8	-4.8	1.9	0.8	0.2	0.1	0.3	0.1	-0.1	0.2	0.3	0.3	0.7	0.1
1993	8.0	-5.7	2.4	1.4	1.0	0.2	0.4	-0.2	-0.3	0.2	0.3	0.3	0.1	0.6
1994	6.1	-5.0	1.1	0.2	0.0	0.1	0.3	-0.1	-0.4	0.2	0.2	0.0	0.7	0.0
1995	7.7	-5.0	2.7	0.6	0.0	-0.1	0.5	0.1	-0.4	0.2	0.2	0.0	2.2	-0.3
1996	3.8	-4.3	-0.4	-0.1	-0.1	0.0	0.0	0.0	-0.3	0.2	-0.2	-0.1	0.1	-0.3
1997	2.3	-2.6	-0.2	-0.5	0.1	-0.1	-0.1	-0.4	-0.8	0.3	0.2	0.2	-0.2	0.2
1998	1.6	-2.1	-0.5	-0.6	0.2	0.0	-0.2	-0.5	-0.9	0.2	-0.2	0.0	0.0	0.3
1999	1.6	-1.2	0.4	0.2	0.5	0.1	0.1	-0.5	-0.8	0.2	0.3	0.2	0.0	-0.1
2000	0.8	0.4	1.2	1.0	0.7	0.2	0.1	-0.1	-0.4	0.2	0.1	0.0	0.0	0.2

Source: ECB.

1) Data are partially estimated. Annual change in gross nominal consolidated debt expressed as a percentage of GDP [debt(t) - debt(t-1)] ÷ GDP(t).
2) The borrowing requirement is by definition equal to transactions in government debt.
3) Includes, in addition to the impact of foreign exchange movements, effects arising from measurement at nominal value (e.g. premia or discounts on securities issued).
4) Comprises, in particular, the impact of the reclassification of units and certain types of debt assumption.
5) The difference between the changes in the aggregated debt, resulting from the aggregation of countries' debt, and the aggregation of countries' change in debt, due to variations in the exchange rates used for aggregation before 1999.
6) Holders resident in the country whose government has issued the debt.
7) Includes residents of euro area countries other than the country whose government has issued the debt.
8) Including proceeds from sales of UMTS licences.
9) The difference between the annual change in gross nominal consolidated debt and the deficit as a percentage of GDP.
10) Excluding financial derivatives.
11) Comprises mainly transactions in other assets and liabilities (trade credit, other receivables/payables and financial derivatives).

8 Balance of payments and international investment position of the euro area (including reserves)

Table 8.1

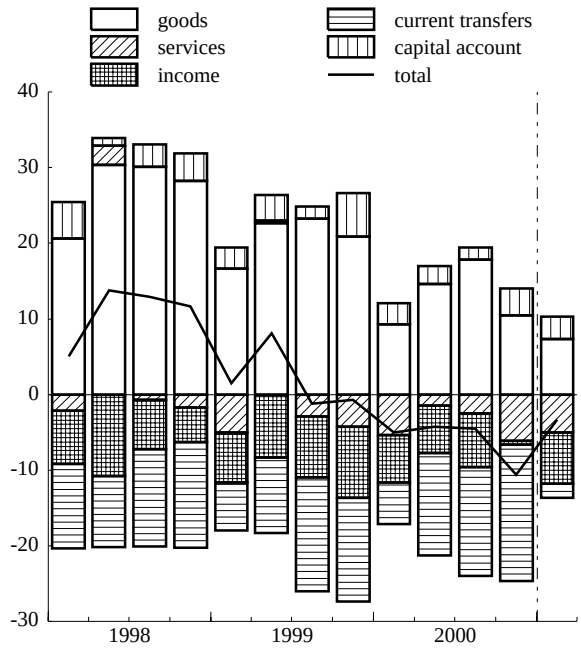
Summary balance of payments [1) 2)]

(EUR billions (ECU billions to end-1998); net flows)

	Current account					Capital account	Financial account						Errors and omissions
	Total	Goods	Services	Income	Current transfers		Total	Direct investment	Portfolio investment	Financial derivatives	Other investment	Reserve assets	
	1	2	3	4	5	6	7	8	9	10	11	12	13
1997	61.5	115.7	3.1	-15.2	-42.2	13.0	.	-44.5	-24.3	.	.	.	.
1998	31.1	109.3	-2.0	-28.8	-47.4	12.4	-61.2	-83.2	-99.7	-7.5	120.9	8.2	17.8
1999	-5.8	83.4	-11.8	-32.4	-45.0	13.5	19.1	-120.6	-41.7	8.1	163.1	10.2	-26.8
2000	-34.7	52.2	-15.3	-20.2	-51.4	10.4	6.8	-22.8	-128.9	-1.1	142.0	17.5	17.5
2000 Q1	-7.9	9.3	-5.3	-6.3	-5.5	2.8	47.8	148.0	-192.6	2.5	91.3	-1.4	-42.7
Q2	-6.6	14.7	-1.4	-6.3	-13.5	2.4	-2.9	-18.2	51.9	4.8	-45.3	3.8	7.2
Q3	-6.1	17.9	-2.5	-7.1	-14.4	1.6	-14.0	-94.3	3.5	0.4	71.9	4.5	18.5
Q4	-14.2	10.4	-6.1	-0.5	-17.9	3.6	-24.0	-58.4	8.4	-8.8	24.1	10.7	34.6
2000 Mar.	1.2	5.6	-1.1	-0.3	-3.0	1.3	30.5	1.1	-34.4	1.4	61.8	0.5	-32.9
Apr.	-5.9	4.3	-1.3	-3.8	-5.1	1.5	2.7	1.1	-5.9	2.1	5.1	0.2	1.6
May	-0.1	4.4	-0.3	-1.0	-3.1	0.6	10.5	-8.7	1.9	0.3	15.7	1.3	-11.0
June	-0.6	5.9	0.2	-1.5	-5.3	0.2	-16.2	-10.6	55.8	2.3	-66.1	2.3	16.5
July	-2.2	8.1	0.0	-4.6	-5.8	0.5	-12.0	-24.6	-12.9	-0.4	26.3	-0.4	13.8
Aug.	-3.9	4.1	-0.6	-1.6	-5.8	0.2	0.6	-41.1	13.6	-0.9	27.8	1.2	3.1
Sep.	0.1	5.7	-1.9	-0.9	-2.9	0.9	-2.5	-28.6	2.8	1.8	17.8	3.7	1.6
Oct.	-3.4	4.6	-1.8	0.2	-6.4	0.3	3.5	-17.6	5.2	-1.7	16.9	0.7	-0.4
Nov.	-3.5	2.9	-1.0	0.2	-5.5	1.6	-10.9	-9.9	-2.4	-3.0	-3.3	7.7	12.8
Dec.	-7.3	2.9	-3.3	-0.9	-6.0	1.8	-16.6	-30.9	5.6	-4.1	10.5	2.3	22.1
Euro area enlargement													
2001 Q1	-6.3	7.4	-5.0	-6.8	-1.9	3.0	12.8	-42.9	-38.2	-2.8	87.2	9.6	-9.5
2001 Jan.	-9.4	-3.2	-2.4	-6.5	2.7	1.3	-2.9	-10.0	-42.2	-4.8	51.9	2.4	11.0
Feb.	2.3	3.6	-1.0	0.3	-0.5	1.5	-3.2	0.2	-2.1	-0.9	-4.9	4.5	-0.6
Mar.	0.9	7.0	-1.6	-0.5	-4.0	0.2	18.9	-33.1	6.2	3.0	40.2	2.7	-19.9
Apr.	-3.3	5.3	0.3	-4.7	-4.2	2.2	11.8	0.1	-20.9	1.1	24.6	7.0	-10.7
May	-0.8	5.3	1.8	-2.6	-5.3	0.5	-4.6	-40.4	24.9	3.4	11.1	-3.6	4.9

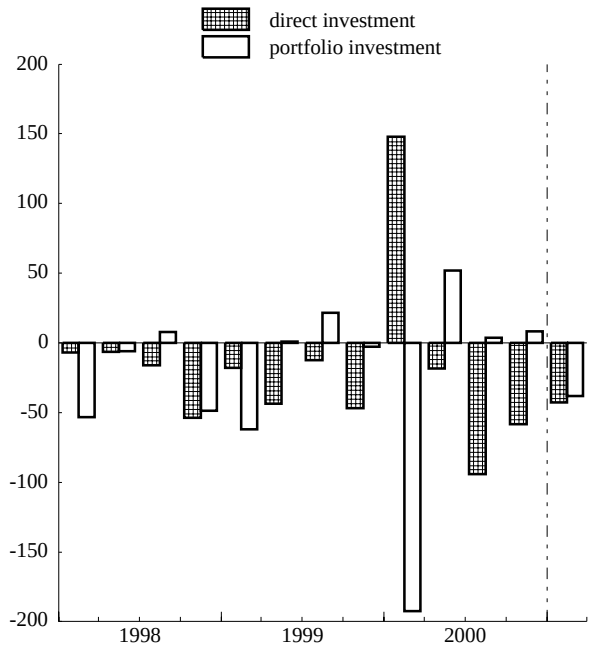
Current and capital accounts

(EUR billions (ECU billions to end-1998); net flows)



Direct and portfolio investment

(EUR billions (ECU billions to end-1998); net flows)



Source: ECB.

1) Inflows (+); outflows (-). Reserve assets: increase (-); decrease (+).

2) For the comparability of recent and some earlier data, see the general notes.

Table 8.2

Balance of payments: current and capital accounts [1)]

(EUR billions (ECU billions to end-1998))

1. Main items

	Current account											Capital account	
	Total			Goods		Services		Income		Current transfers			
	Credit 1	Debit 2	Net 3	Credit 4	Debit 5	Credit 6	Debit 7	Credit 8	Debit 9	Credit 10	Debit 11	Credit 12	Debit 13
1997	1,212.9	1,151.4	61.5	749.1	633.4	214.2	211.0	189.5	204.7	60.1	102.3	18.9	5.9
1998	1,270.2	1,239.2	31.1	779.2	669.9	229.8	231.9	198.5	227.3	62.7	110.0	17.7	5.3
1999	1,335.6	1,341.4	-5.8	814.5	731.1	241.5	253.3	213.2	245.6	66.4	111.5	19.7	6.2
2000	1,578.4	1,613.2	-34.7	979.1	926.9	270.2	285.5	262.3	282.5	66.9	118.3	19.3	8.8
2000 Q1	359.5	367.4	-7.9	221.2	211.9	58.5	63.8	54.7	61.0	25.2	30.7	4.3	1.4
Q2	387.7	394.3	-6.6	239.0	224.3	66.8	68.3	66.9	73.2	14.9	28.4	4.7	2.4
Q3	391.5	397.6	-6.1	244.6	226.7	70.7	73.2	64.2	71.3	11.9	26.4	4.3	2.7
Q4	439.7	453.9	-14.2	274.4	263.9	74.1	80.2	76.5	77.0	14.8	32.7	5.9	2.3
2000 Mar.	131.8	130.6	1.2	83.8	78.2	21.7	22.8	20.9	21.1	5.5	8.5	1.8	0.5
Apr.	116.1	121.9	-5.9	72.2	67.9	20.4	21.7	18.9	22.7	4.5	9.6	2.1	0.5
May	137.7	137.8	-0.1	84.8	80.4	23.0	23.3	23.9	24.9	6.1	9.2	1.7	1.1
June	133.9	134.5	-0.6	82.0	76.1	23.5	23.2	24.2	25.6	4.3	9.6	1.0	0.8
July	131.6	133.8	-2.2	82.4	74.4	24.3	24.3	20.9	25.5	3.9	9.7	1.1	0.6
Aug.	123.8	127.8	-3.9	77.0	73.0	23.8	24.4	19.4	21.0	3.6	9.4	1.5	1.3
Sep.	136.1	136.0	0.1	85.2	79.4	22.6	24.5	23.9	24.8	4.4	7.3	1.7	0.8
Oct.	146.2	149.6	-3.4	93.6	89.0	25.0	26.7	24.1	23.9	3.6	10.0	0.9	0.6
Nov.	145.9	149.4	-3.5	93.7	90.8	23.8	24.8	23.4	23.3	5.0	10.5	2.2	0.6
Dec.	147.6	154.9	-7.3	87.1	84.2	25.4	28.7	28.9	29.8	6.2	12.3	2.9	1.1
						Euro area enlargement							
2001 Q1	423.7	430.0	-6.3	253.2	245.8	68.5	73.5	72.4	79.1	29.6	31.5	4.4	1.5
2001 Jan.	141.1	150.5	-9.4	79.3	82.4	22.4	24.8	23.8	30.4	15.6	12.9	1.8	0.5
Feb.	135.1	132.8	2.3	81.8	78.2	22.4	23.4	23.0	22.7	7.9	8.4	1.9	0.4
Mar.	147.5	146.7	0.9	92.1	85.1	23.7	25.3	25.6	26.1	6.1	10.2	0.7	0.5
Apr.	138.1	141.4	-3.3	84.0	78.7	24.3	24.0	24.2	28.9	5.6	9.8	2.6	0.4
May	146.2	147.0	-0.8	88.9	83.6	26.7	24.9	25.8	28.4	4.8	10.1	1.4	0.9

2. Main items seasonally adjusted

	Current account										
	Total			Goods		Services		Income		Current transfers	
	Credit 1	Debit 2	Net 3	Credit 4	Debit 5	Credit 6	Debit 7	Credit 8	Debit 9	Credit 10	Debit 11
1999 Q1	316.8	313.2	3.6	191.1	167.9	57.4	59.5	52.5	59.8	15.8	25.9
Q2	330.2	328.4	1.8	195.9	174.9	60.5	62.3	56.5	63.8	17.3	27.5
Q3	336.7	341.6	-4.8	208.3	188.2	60.6	64.4	51.4	59.8	16.5	29.2
Q4	350.2	356.1	-5.9	216.6	198.7	62.4	66.8	52.8	62.2	18.3	28.4
2000 Q1	361.6	364.1	-2.5	226.0	208.7	63.2	65.2	55.9	63.1	16.6	27.1
Q2	382.6	393.5	-10.9	237.7	225.1	65.5	69.2	61.9	67.3	17.4	31.9
Q3	402.0	411.0	-8.9	251.2	236.8	67.5	71.2	67.9	75.4	15.4	27.6
Q4	432.1	445.7	-13.6	263.9	256.3	73.8	80.0	76.9	77.3	17.4	32.0
2000 Mar.	123.2	124.5	-1.4	76.7	71.0	21.5	22.2	19.4	21.3	5.7	10.0
Apr.	122.6	128.6	-6.0	77.1	72.7	21.8	23.0	18.2	22.2	5.5	10.7
May	135.2	133.8	1.4	82.8	77.2	22.3	23.0	23.5	23.1	6.7	10.5
June	124.7	131.1	-6.3	77.8	75.1	21.5	23.2	20.2	22.0	5.2	10.7
July	129.1	135.1	-6.0	80.7	77.7	22.3	23.3	21.2	24.0	4.8	10.2
Aug.	134.2	138.7	-4.5	84.3	79.2	22.4	23.5	22.5	26.3	5.0	9.7
Sep.	138.6	137.1	1.5	86.2	79.9	22.8	24.4	24.1	25.1	5.5	7.7
Oct.	141.4	144.5	-3.1	86.5	83.8	24.2	25.7	25.4	24.7	5.2	10.3
Nov.	144.4	148.8	-4.3	88.0	85.7	24.6	26.3	25.8	26.0	6.1	10.8
Dec.	146.3	152.4	-6.1	89.5	86.9	25.0	28.0	25.7	26.6	6.1	10.9
					Euro area enlargement						
2001 Q1	430.8	431.9	-1.1	261.5	245.2	75.9	76.7	74.3	81.3	19.1	28.8
2001 Jan.	143.6	143.1	0.5	86.6	81.0	25.0	25.1	25.4	28.6	6.6	8.4
Feb.	144.7	144.6	0.2	87.9	82.9	25.9	25.9	24.7	26.1	6.2	9.5
Mar.	142.5	144.3	-1.8	87.0	81.3	25.0	25.6	24.2	26.5	6.3	10.9
Apr.	143.6	145.5	-1.9	87.6	81.6	25.6	25.4	23.8	27.7	6.6	10.7
May	143.6	143.8	-0.1	87.1	81.1	25.8	25.2	25.2	26.3	5.6	11.1

Source: ECB.

1) For the comparability of recent and some earlier data, see the general notes.

Table 8.3

Balance of payments: income account

(EUR billions; gross flows)

	Total		Compensation of employees		Investment income							
					Total		Direct investment		Portfolio investment		Other investment	
	Credit 1	Debit 2	Credit 3	Debit 4	Credit 5	Debit 6	Credit 7	Debit 8	Credit 9	Debit 10	Credit 11	Debit 12
1999	213.2	245.6	12.4	5.0	200.8	240.6	44.1	45.4	64.1	105.9	92.6	89.4
2000	262.3	282.5	12.6	5.2	249.7	277.3	67.8	59.4	67.6	103.6	114.3	114.3
2000 Q1	54.7	61.0	3.1	1.1	51.5	59.9	13.3	13.5	13.5	21.7	24.8	24.7
Q2	66.9	73.2	3.0	1.4	64.0	71.9	19.2	13.8	17.2	30.8	27.6	27.3
Q3	64.2	71.3	3.1	1.4	61.1	69.9	15.4	15.1	17.7	26.6	28.1	28.3
Q4	76.5	77.0	3.4	1.3	73.0	75.7	20.0	17.1	19.3	24.6	33.8	34.0
					Euro area enlargement							
2001 Q1	72.4	79.1	3.4	1.1	69.0	78.0	17.1	14.7	18.1	26.6	33.8	36.7

	Income on direct investment				Income on portfolio investment							
	Equity		Debt		Equity		Debt instruments					
							Total		Bonds and notes		Money market instruments	
	Credit 13	Debit 14	Credit 15	Debit 16	Credit 17	Debit 18	Credit 19	Debit 20	Credit 21	Debit 22	Credit 23	Debit 24
1999	37.7	41.5	6.4	3.8	9.6	32.5	54.5	73.4	51.7	71.7	2.9	1.7
2000	57.9	52.1	9.9	7.4	11.5	37.8	56.0	65.8	.	.	.	.
2000 Q1	11.0	12.0	2.3	1.5	1.9	5.8	11.6	15.9	.	.	.	.
Q2	16.9	12.2	2.3	1.6	3.5	17.2	13.7	13.5	.	.	.	.
Q3	13.2	13.1	2.2	2.0	3.1	7.9	14.6	18.7	.	.	.	.
Q4	16.8	14.8	3.2	2.3	3.1	6.9	16.2	17.6	.	.	.	.
					Euro area enlargement							
2001 Q1	14.4	12.3	2.6	2.4	2.4	7.0	15.7	19.6	.	.	.	.

Source: ECB.

Table 8.4

Balance of payments: direct investment account [1)]

(EUR billions (ECU billions to end-1998); net flows)

	Abroad			In the euro area		
	Total	Equity capital and reinvested earnings	Other capital, mostly intercompany loans	Total	Equity capital and reinvested earnings	Other capital, mostly intercompany loans
	1	2	3	4	5	6
1997	-93.1	.	.	48.6	.	.
1998	-175.0	.	.	91.8	.	.
1999	-286.8	-212.2	-74.6	166.2	126.8	39.5
2000	-339.7	-270.1	-69.6	316.9	197.0	120.0
2000 Q1	-63.3	-33.2	-30.1	211.3	191.3	20.0
Q2	-71.9	-44.8	-27.1	53.7	19.3	34.5
Q3	-117.9	-111.7	-6.2	23.7	15.5	8.2
Q4	-86.6	-80.5	-6.1	28.3	-29.0	57.3
2000 Mar.	-36.2	-13.1	-23.1	37.3	24.8	12.6
Apr.	-16.0	-7.4	-8.6	17.1	5.1	12.0
May	-33.8	-15.2	-18.6	25.1	11.4	13.7
June	-22.1	-22.2	0.2	11.5	2.7	8.8
July	-19.8	-27.9	8.1	-4.7	5.4	-10.2
Aug.	-54.0	-56.1	2.1	13.0	3.6	9.3
Sep.	-44.1	-27.7	-16.4	15.4	6.4	9.1
Oct.	-33.7	-32.3	-1.5	16.2	10.6	5.6
Nov.	-30.5	-25.5	-5.0	20.5	8.6	12.0
Dec.	-22.4	-22.7	0.3	-8.4	-48.1	39.7
		Euro area enlargement				
2001 Q1	-59.9	-28.5	-31.4	17.0	27.6	-10.7
2001 Jan.	-17.8	-11.7	-6.2	7.8	5.4	2.4
Feb.	-16.0	-3.3	-12.8	16.3	14.7	1.6
Mar.	-26.0	-13.6	-12.4	-7.1	7.5	-14.6
Apr.	-6.6	-10.3	3.8	6.7	2.5	4.2
May	-48.4	-41.6	-6.7	8.0	7.7	0.3

Source: ECB.

1) Inflows (+); outflows (-).

Table 8.5

Balance of payments: portfolio investment account [1)]

(EUR billions (ECU billions to end-1998); net flows)

1. By instrument [2)]

	Total		Equity		Debt instruments					
					Assets			Liabilities		
	Assets	Liabilities	Assets	Liabilities	Total	Bonds and notes	Money market instruments	Total	Bonds and notes	Money market instruments
	1	2	3	4	5	6	7	8	9	10
1998	-327.6	227.9	-105.5	105.9	-222.1	-203.8	-18.2	122.0	108.3	13.7
1999	-309.6	267.8	-155.4	106.0	-154.1	-153.6	-0.5	161.8	109.0	52.8
2000	-409.6	280.8	-286.8	13.5	-122.9	-114.9	-8.0	267.3	231.0	36.2
2000 Q1	-153.9	-38.8	-116.9	-105.7	-37.0	-38.6	1.6	67.0	46.8	20.2
Q2	-85.2	137.0	-54.3	52.4	-30.9	-24.6	-6.3	84.6	50.7	33.9
Q3	-91.8	95.3	-56.1	29.7	-35.7	-30.8	-4.9	65.6	73.6	-8.1
Q4	-78.8	87.2	-59.5	37.1	-19.3	-20.9	1.6	50.1	59.9	-9.8
2000 Mar.	-43.2	8.7	-26.5	-20.4	-16.7	-14.1	-2.6	29.1	22.2	6.9
Apr.	-28.0	22.2	-17.5	-2.9	-10.5	-9.1	-1.4	25.1	13.0	12.1
May	-28.1	29.9	-18.6	8.4	-9.5	-6.1	-3.4	21.5	18.4	3.1
June	-29.1	84.9	-18.2	47.0	-10.9	-9.4	-1.5	38.0	19.3	18.7
July	-36.9	24.0	-26.2	5.7	-10.7	-8.3	-2.4	18.3	25.3	-7.0
Aug.	-23.9	37.5	-20.4	18.2	-3.5	-1.5	-2.0	19.4	18.0	1.4
Sep.	-30.9	33.7	-9.5	5.8	-21.5	-21.0	-0.4	27.9	30.4	-2.5
Oct.	-18.4	23.6	-9.1	4.1	-9.4	-11.4	2.1	19.5	26.9	-7.4
Nov.	-29.5	27.1	-16.8	6.8	-12.7	-11.6	-1.1	20.3	24.6	-4.3
Dec.	-30.9	36.5	-33.6	26.2	2.7	2.1	0.6	10.3	8.4	1.9
				Euro area enlargement						
2001 Q1	-83.3	45.1	-28.5	20.9	-54.9	-38.1	-16.7	24.2	15.9	8.3
2001 Jan.	-36.7	-5.5	-20.2	0.2	-16.5	-7.0	-9.5	-5.7	-12.0	6.3
Feb.	-28.9	26.8	-12.6	12.4	-16.3	-16.1	-0.2	14.4	12.8	1.6
Mar.	-17.7	23.9	4.3	8.3	-22.0	-15.0	-7.0	15.6	15.1	0.5
Apr.	-8.1	-12.8	-11.3	8.5	3.2	-3.4	6.6	-21.3	-11.3	-10.1
May	-21.8	46.7	-9.7	58.4	-12.1	-13.5	1.4	-11.7	-6.7	-5.0

2. Assets by instrument and sector of holder

	Equity				Debt instruments							
					Bonds and notes				Money market instruments			
	Euro-system	General govern-ment	MFIs (excl. the Euro-system)	Other sectors	Euro-system	General govern-ment	MFIs (excl. the Euro-system)	Other sectors	Euro-system	General govern-ment	MFIs (excl. the Euro-system)	Other sectors
	1	2	3	4	5	6	7	8	9	10	11	12
1999	0.1	-2.1	-1.7	-151.8	0.1	-1.7	-15.2	-136.8	0.9	-0.1	-7.5	6.2
2000	-0.1	-2.4	-4.6	-279.7	-1.9	-1.2	-45.5	-66.2	2.1	-0.3	3.3	-13.1
2000 Q1	0.0	-0.7	1.7	-117.9	-1.2	-0.1	-15.5	-21.7	1.2	0.1	3.2	-2.8
Q2	0.0	-0.7	1.5	-55.1	0.6	-0.7	-7.7	-16.8	0.0	0.0	1.3	-7.5
Q3	-0.1	-0.4	-2.8	-52.8	-2.3	-0.4	-19.4	-8.8	0.5	-1.3	-1.0	-3.1
Q4	0.0	-0.6	-5.0	-53.9	0.9	0.0	-2.9	-18.9	0.6	0.9	-0.2	0.4
					Euro area enlargement							
2001 Q1	-0.1	-0.4	-11.0	-16.9	1.0	-0.6	-18.2	-20.3	-1.6	-0.1	-18.2	3.2

Source: ECB.

1) Inflows (+); outflows (-).

2) For the comparability of recent and some earlier data, see the general notes.

Table 8.6

Balance of payments: other investment account and reserve assets

(EUR billions (ECU billions to end-1998); net flows)

1. Other investment by sector [1) 2)]

	Total		Eurosystem		General government		MFIs (excluding the Eurosystem)						Other sectors	
							Total		Long-term		Short-term			
	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1998	-82.3	203.2	-0.7	3.5	-1.0	-7.6	-22.6	192.5	-37.6	40.5	15.0	152.0	-58.0	14.9
1999	-20.9	184.0	0.0	4.6	2.8	-12.5	18.2	159.6	-46.4	54.4	64.6	105.2	-41.9	32.3
2000	-189.0	331.0	0.0	-1.7	-4.0	2.5	-128.2	273.9	-46.9	47.7	-81.3	226.2	-56.8	56.4
2000 Q1	-78.9	170.2	0.0	-5.1	-6.0	-2.7	-30.0	163.1	-11.2	20.0	-18.8	143.1	-42.8	14.9
Q2	-29.3	-16.0	0.0	3.1	1.0	-0.3	-21.1	-20.7	-4.9	7.6	-16.2	-28.3	-9.3	2.0
Q3	-29.2	101.1	0.0	-1.7	-4.0	1.4	-14.3	72.3	-9.6	8.9	-4.7	63.4	-11.0	29.0
Q4	-51.6	75.7	0.0	2.0	5.0	4.1	-62.9	59.2	-21.3	11.2	-41.6	48.0	6.3	10.4
2000 Mar.	-27.6	89.4	0.0	-3.5	-0.4	-1.4	-10.0	93.3	-2.3	6.1	-7.7	87.2	-17.2	1.0
Apr.	-34.9	40.1	0.0	3.1	0.4	-0.5	-30.8	37.1	-5.4	5.7	-25.5	31.4	-4.5	0.4
May	-14.0	29.7	0.0	-2.4	0.5	0.6	-9.1	27.8	-0.5	-0.8	-8.5	28.7	-5.4	3.6
June	19.6	-85.7	0.0	2.3	0.2	-0.4	18.8	-85.7	1.0	2.6	17.8	-88.3	0.6	-2.0
July	5.4	20.9	0.0	-1.6	3.5	1.2	9.3	16.6	-7.0	7.6	16.3	8.9	-7.4	4.7
Aug.	-26.2	54.0	0.0	-1.8	-1.5	1.0	-19.3	24.8	-0.7	-1.1	-18.6	25.9	-5.3	30.0
Sep.	-8.5	26.2	0.0	1.7	-6.0	-0.7	-4.2	31.0	-1.9	2.4	-2.3	28.6	1.7	-5.7
Oct.	-11.0	27.9	0.0	0.3	8.2	1.6	-18.9	24.8	-3.1	6.4	-15.8	18.5	-0.3	1.1
Nov.	-50.6	47.3	0.0	0.7	-3.2	0.9	-48.8	48.1	-6.5	7.4	-42.4	40.7	1.4	-2.3
Dec.	10.0	0.5	0.0	1.0	0.0	1.5	4.8	-13.8	-11.7	-2.6	16.5	-11.1	5.2	11.6
						Euro area enlargement								
2001 Q1	-140.1	227.2	0.0	-3.1	2.5	-8.6	-133.8	250.0	-9.1	1.6	-124.7	248.3	-8.8	-11.1
2001 Jan.	-46.6	98.5	0.0	0.5	3.6	-6.4	-50.5	104.9	-4.2	-1.8	-46.3	106.7	0.3	-0.6
Feb.	-5.7	0.8	0.0	-1.8	0.1	-4.0	-2.3	7.3	-2.9	4.4	0.5	2.9	-3.5	-0.6
Mar.	-87.7	127.9	0.0	-1.8	-1.2	1.8	-80.9	137.8	-2.0	-1.0	-78.9	138.7	-5.7	-9.9
Apr.	9.1	15.5	-0.3	-1.6	-0.5	-1.0	14.3	17.4	-1.0	4.5	15.4	12.9	-4.5	0.7
May	-8.0	19.1	-0.3	1.6	1.2	1.6	-5.3	10.1	-7.3	4.1	2.0	6.0	-3.6	5.7

2. Other investment by sector and instrument [1)]

2.1. Eurosystem

	Loans/currency and deposits			Other assets/liabilities		
	Assets	Liabilities	Balance	Assets	Liabilities	Balance
	1	2	3	4	5	6
1999	0.0	5.5	5.5	0.0	-0.9	-0.9
2000	0.0	-1.8	-1.8	0.0	0.0	0.0
2000 Q1	0.0	-5.1	-5.1	0.0	0.0	0.0
Q2	0.0	3.0	3.0	0.0	0.0	0.0
Q3	0.0	-1.8	-1.8	0.0	0.0	0.0
Q4	0.0	2.0	2.0	0.0	0.0	0.0
		Euro area enlargement				
2001 Q1	0.0	-3.2	-3.2	0.0	0.0	0.0

Source: ECB.
1) Inflows (+); outflows (-).
2) For the comparability of recent and some earlier data, see the general notes.

2.2. General government

	Trade credits			Loans/currency and deposits			Other assets/liabilities		
	Assets 7	Liabilities 8	Balance 9	Assets 10	Liabilities 11	Balance 12	Assets 13	Liabilities 14	Balance 15
1999	0.0	0.0	0.0	3.9	-12.6	-8.7	-1.2	0.2	-1.0
2000	0.0	0.0	0.1	-3.7	-1.8	-5.5	-0.3	4.3	3.9
2000 Q1	0.0	0.0	0.0	-5.9	-2.3	-8.2	-0.1	-0.4	-0.5
Q2	0.0	0.0	0.0	1.2	-0.5	0.7	-0.2	0.2	0.0
Q3	0.0	0.0	0.0	-4.0	0.6	-3.4	0.0	0.8	0.8
Q4	0.1	0.0	0.1	5.0	0.4	5.4	-0.1	3.7	3.6
				Euro area enlargement					
2001 Q1	0.0	0.0	0.0	3.1	-8.3	-5.3	-0.5	-0.2	-0.7

2.3. MFIs (excluding the Eurosystem)

	Loans/currency and deposits			Other assets/liabilities		
	Assets 16	Liabilities 17	Balance 18	Assets 19	Liabilities 20	Balance 21
1999	17.7	158.9	176.6	0.5	0.7	1.2
2000	-124.3	268.5	144.2	-3.9	5.4	1.5
2000 Q1	-27.7	163.0	135.3	-2.2	0.1	-2.1
Q2	-22.3	-21.5	-43.8	1.2	0.8	2.0
Q3	-12.8	72.2	59.4	-1.4	0.1	-1.3
Q4	-61.5	54.8	-6.7	-1.4	4.4	2.9
			Euro area enlargement			
2001 Q1	-129.3	246.1	116.8	-4.5	3.9	-0.6

2.4. Other sectors

	Trade credits			Loans/currency and deposits			Other assets/liabilities		
	Assets 22	Liabilities 23	Balance 24	Assets 25	Liabilities 26	Balance 27	Assets 28	Liabilities 29	Balance 30
1999	-6.4	3.4	-3.0	-13.2	17.5	4.3	-22.4	11.4	-11.0
2000	-15.3	7.0	-8.3	-36.2	54.6	18.3	-5.2	-5.2	-10.4
2000 Q1	-4.3	2.9	-1.4	-38.1	18.4	-19.8	-0.4	-6.4	-6.8
Q2	-3.9	0.3	-3.6	-5.3	2.8	-2.5	-0.1	-1.0	-1.1
Q3	-2.1	2.1	0.0	-8.0	27.1	19.1	-0.9	-0.2	-1.1
Q4	-5.0	1.7	-3.3	15.2	6.3	21.5	-3.9	2.4	-1.5
				Euro area enlargement					
2001 Q1	-5.1	4.0	-1.1	-1.2	-14.6	-15.8	-2.6	-0.5	-3.0

3. Reserve assets [1)]

	Total	Monetary gold	Special drawing rights	Reserve position in the IMF	Foreign exchange							Other claims
					Total	Currency and deposits		Securities			Financial derivatives	
						With monetary authorities and the BIS	With banks	Equity	Bonds and notes	Money market instruments		
	1	2	3	4	5	6	7	8	9	10	11	12
1999	10.2	0.3	1.0	2.0	7.1	2.3	-1.0	0.2	3.6	2.1	-0.1	0.0
2000	17.5	1.0	0.3	2.9	12.8	4.0	4.3	0.0	-5.7	10.4	-0.2	0.5
2000 Q1	-1.4	0.7	0.2	0.2	-2.8	2.3	-4.5	0.0	2.6	-3.1	0.0	0.2
Q2	3.8	0.0	-0.1	3.3	0.7	-0.9	0.2	0.0	-3.7	5.3	-0.2	-0.1
Q3	4.5	0.3	-0.1	0.0	4.3	1.5	4.8	0.0	-5.4	3.5	-0.1	0.0
Q4	10.7	0.0	0.3	-0.6	10.5	1.1	3.8	0.0	0.8	4.7	0.0	0.5
					Euro area enlargement							
2001 Q1	9.6	0.3	-0.4	0.3	10.7	7.8	-6.9	-1.1	5.2	5.7	0.0	-1.3

Source: ECB.
1) Increase (-); decrease (+).

Table 8.7

International investment position and reserve assets outstanding

1. Net international investment position [1)]

(EUR billions (ECU billions in 1997); assets minus liabilities; end-of-period positions)

	Total	Direct investment			Portfolio investment					Financial derivatives	Other investment				Reserve assets
		Total	Equity (including reinvested earnings)	Other capital	Total	Equity securities	Debt instruments				Total	Trade credits	Loans/ currency and deposits	Other assets/ liabilities	
							Total	Bonds and notes	Money market instruments						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1997	32.7	177.6	148.6	29.1	-724.7	-358.7	-366.0	-339.8	-26.2	-5.9	222.4	79.8	51.3	91.4	363.3
1998	-175.3	136.4	112.7	23.7	-704.6	-476.0	-228.6	-205.4	-23.2	2.2	61.5	99.7	-102.1	63.9	329.2
1999	-131.0	373.4	290.8	82.6	-730.9	-596.8	-134.1	-72.7	-61.4	1.9	-147.8	112.6	-340.4	80.0	372.3

Source: ECB.

1) For the comparability of recent and some earlier data, see the general notes.

2. Reserves and related assets of the Eurosystem and of the European Central Bank [1]

(EUR billions; end-of-period positions, unless otherwise indicated)

	Reserve assets														Memo: related assets
	Total	Monetary gold		Special drawing rights	Reserve position in the IMF	Foreign exchange							Financial derivatives	Other claims	
						Total	Currency and deposits		Securities						
			In fine troy ounces (millions)				With monetary authorities and the BIS	With banks	Total	Equities	Bonds and notes	Money market instruments			Claims on euro area residents denominated in foreign currency
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Eurosystem [2]															
1998 Dec. [3]	329.2	99.6	404.131	5.2	23.2	199.9	12.6	18.3	169.0	0.0	116.6	52.4	0.0	1.3	7.6
1999 Dec.	372.3	116.4	402.762	4.5	24.3	225.1	12.8	21.7	190.5	0.0	134.0	56.5	0.0	2.1	14.4
2000 Jan. [4]	378.0	116.2	401.639	4.3	24.4	230.9	14.4	28.0	188.4	-	-	-	0.2	2.3	14.7
Feb. [4]	383.2	121.1	400.503	4.4	23.9	231.4	12.0	25.8	193.4	-	-	-	0.2	2.4	16.1
Mar.	385.3	116.0	400.503	4.4	24.8	238.8	12.7	25.9	200.1	-	-	-	0.2	1.3	17.0
Apr.	399.7	121.3	400.503	4.3	22.7	249.6	18.2	28.3	202.9	-	-	-	0.2	1.9	18.1
May	388.8	117.2	400.503	4.5	21.1	244.4	16.2	28.8	199.2	-	-	-	0.2	1.6	19.1
June	385.8	120.8	400.503	4.5	20.5	238.3	14.3	24.4	199.4	-	-	-	0.1	1.8	18.3
July [4]	391.3	119.6	399.539	4.5	20.9	244.4	10.5	27.1	206.6	-	-	-	0.2	1.9	17.5
Aug.	402.6	124.3	399.539	4.8	20.9	251.5	10.9	25.2	215.3	-	-	-	0.2	1.2	17.3
Sep.	408.0	124.7	399.539	4.9	21.3	255.9	11.2	24.3	220.1	-	-	-	0.3	1.2	16.6
Oct. [4]	416.2	125.6	399.538	4.7	21.5	263.1	10.3	24.3	228.2	-	-	-	0.3	1.4	16.3
Nov. [4]	400.1	123.8	399.537	4.8	20.8	249.8	9.0	22.6	217.8	-	-	-	0.3	0.9	16.7
Dec.	377.7	117.8	399.537	4.3	20.8	234.1	9.7	19.5	204.4	-	-	-	0.5	0.6	15.8
Euro area enlargement															
2001 1 Jan.	*390.9*	*119.2*	*404.119*	*4.4*	*21.2*	*245.5*	*16.8*	*19.8*	*208.4*	-	-	-	*0.5*	*0.7*	*16.3*
2001 Jan.	386.0	115.0	404.119	4.5	22.3	243.4	11.8	19.9	211.2	-	-	-	0.5	0.8	18.0
Feb.	384.3	116.5	404.119	4.8	21.3	241.0	10.4	21.7	208.4	-	-	-	0.5	0.6	18.3
Mar. [4]	393.4	117.6	403.153	4.9	21.4	247.5	9.8	27.3	210.0	-	-	-	0.5	2.0	18.6
Apr.	386.7	119.5	403.153	4.9	21.1	240.7	11.5	23.7	205.1	-	-	-	0.4	0.6	20.5
May	409.0	127.2	403.153	5.6	22.3	252.0	10.6	25.7	215.5	-	-	-	0.2	1.8	20.0
June [4]	410.2	128.6	403.089	5.7	22.9	249.8	9.8	28.4	211.3	-	-	-	0.2	3.2	19.7
European Central Bank [5]															
1999 Dec.	49.3	7.0	24.030	0.0	0.0	40.9	0.3	6.4	34.3	0.0	28.0	6.3	0.0	1.4	2.6
2000 Jan.	49.9	7.0	24.030	0.0	0.0	41.2	0.4	7.2	33.6	-	-	-	0.0	1.7	3.2
Feb.	48.0	7.3	24.030	0.0	0.0	39.0	0.4	6.1	32.5	-	-	-	0.0	1.7	4.2
Mar.	49.7	7.0	24.030	0.0	0.0	41.9	0.4	7.4	34.1	-	-	-	0.0	0.9	4.3
Apr.	52.7	7.3	24.030	0.0	0.0	44.1	1.1	7.9	35.1	-	-	-	0.0	1.4	4.3
May	50.0	7.0	24.030	0.0	0.0	42.0	1.7	6.0	34.2	-	-	-	0.0	1.0	4.5
June	50.5	7.2	24.030	0.0	0.0	42.1	0.9	6.3	34.9	-	-	-	0.0	1.2	3.7
July	51.0	7.2	24.030	0.0	0.0	42.8	0.5	5.5	36.8	-	-	-	0.0	1.0	4.1
Aug.	55.0	7.5	24.030	0.0	0.0	46.4	0.6	7.5	38.3	-	-	-	0.0	1.2	4.1
Sep.	52.4	7.5	24.030	0.0	0.0	43.7	0.7	6.1	36.9	-	-	-	0.0	1.2	3.7
Oct.	53.8	7.6	24.030	0.0	0.0	44.9	0.7	6.4	37.7	-	-	-	0.0	1.4	4.0
Nov.	47.2	7.4	24.030	0.0	0.0	38.8	0.7	5.0	33.1	-	-	-	0.0	0.9	3.0
Dec.	45.1	7.1	24.030	0.0	0.0	37.3	0.6	6.1	30.6	-	-	-	0.0	0.6	3.8
Euro area enlargement															
2001 Jan.	45.9	7.0	24.656	0.0	0.0	38.2	0.7	2.6	34.9	-	-	-	0.0	0.7	3.5
Feb.	46.7	7.1	24.656	0.0	0.0	38.9	0.6	3.9	34.4	-	-	-	0.0	0.6	3.0
Mar.	46.7	7.2	24.656	0.0	0.0	37.5	0.7	5.2	31.6	-	-	-	0.0	2.0	3.9
Apr.	45.3	7.3	24.656	0.0	0.0	37.5	0.8	5.2	31.5	-	-	-	0.0	0.5	3.6
May	50.1	7.8	24.656	0.0	0.0	40.5	0.8	5.2	34.5	-	-	-	0.0	1.8	2.7
June	50.9	7.9	24.656	0.1	0.0	40.1	0.9	6.8	32.5	-	-	-	0.0	2.8	3.1

Source: ECB.

1) More comprehensive data in accordance with the template on international reserves and foreign currency liquidity can be found on the ECB's website.
2) The figures are not fully comparable with those in Table 1.1 owing to differences in coverage and valuation.
3) Position as at 1 January 1999.
4) Changes in the gold holdings of the Eurosystem are due to transactions in gold within the terms of the Central Bank Gold Agreement of 26 September 1999.
5) Part of the Eurosystem's reserves.

9 External trade in goods of the euro area

Table 9

1. Exports [1]

(EUR billions (ECU billions to end-1998); f.o.b. value)

	Total	Food, drink, tobacco	Raw materials	Energy	Chemicals	Other manu-factured articles	Machinery, transport equipment	Other	Export trade indices [2] 1995 = 100		
									Value [3]	Volume [3]	Unit value
	1	2	3	4	5	6	7	8	9	10	11
1997	762.8	57.0	16.5	14.4	99.6	217.6	343.8	13.8	122.5	115.9	105.7
1998	797.1	56.2	15.8	12.6	104.4	222.1	371.3	14.7	128.1	120.1	106.6
1999	831.8	55.7	16.4	13.6	114.1	225.9	384.9	21.1	133.6	122.6	109.0
2000	1,006.7	61.6	19.5	23.4	136.3	267.4	469.8	28.7	161.7	137.1	118.0
1998 Q1	194.8	13.9	4.2	3.4	26.7	54.9	88.1	3.7	125.2	116.1	107.8
Q2	204.6	14.6	3.9	3.3	26.9	56.6	95.5	3.7	131.5	123.1	106.8
Q3	196.0	13.4	3.9	3.0	25.8	55.4	90.9	3.6	125.9	118.2	106.5
Q4	201.7	14.2	3.8	2.9	25.0	55.2	96.8	3.7	129.6	123.0	105.4
1999 Q1	187.8	12.4	3.8	2.6	25.9	51.5	86.9	4.7	120.7	112.6	107.2
Q2	203.2	13.5	4.0	3.1	27.9	55.1	94.4	5.2	130.6	119.9	108.9
Q3	209.5	14.0	4.1	3.9	29.6	56.9	95.4	5.7	134.6	123.0	109.5
Q4	231.3	15.8	4.5	4.1	30.7	62.4	108.3	5.5	148.6	135.0	110.1
2000 Q1	230.1	13.8	4.8	5.1	32.0	62.2	105.3	6.9	147.9	129.3	114.4
Q2	247.7	15.1	5.0	5.4	33.2	65.0	116.8	7.2	159.2	136.9	116.3
Q3	250.4	15.3	4.7	6.2	34.9	67.0	115.3	7.1	160.9	134.7	119.5
Q4	278.5	17.4	5.0	6.8	36.1	73.1	132.5	7.5	178.9	147.8	121.1
1998 Feb.	63.8	4.6	1.4	1.0	8.6	18.2	28.9	1.2	123.0	114.1	107.8
Mar.	72.2	5.0	1.5	1.2	9.6	20.3	33.1	1.3	139.2	128.8	108.0
Apr.	68.2	4.9	1.3	1.1	9.2	19.0	31.3	1.3	131.4	123.0	106.9
May	65.9	4.8	1.3	1.1	8.7	18.2	30.7	1.2	127.0	118.8	106.9
June	70.5	4.9	1.3	1.1	9.1	19.3	33.5	1.2	136.0	127.4	106.7
July	73.0	4.8	1.3	1.1	9.3	21.2	34.2	1.2	140.8	131.7	106.9
Aug.	56.6	4.2	1.2	1.0	7.7	15.6	25.8	1.1	109.1	103.1	105.9
Sep.	66.3	4.5	1.3	0.9	8.8	18.6	30.9	1.3	127.9	120.0	106.6
Oct.	69.1	4.8	1.3	1.0	8.7	19.6	32.5	1.2	133.2	125.9	105.8
Nov.	67.2	4.8	1.3	1.0	8.1	18.2	32.6	1.3	129.6	123.6	104.8
Dec.	65.4	4.6	1.2	0.9	8.2	17.4	31.7	1.2	126.0	119.5	105.5
1999 Jan.	54.3	3.7	1.1	0.8	7.8	14.8	25.0	1.1	104.8	98.1	106.8
Feb.	60.2	4.0	1.2	0.8	8.3	16.6	27.5	1.7	116.1	108.6	106.9
Mar.	73.2	4.7	1.5	1.0	9.8	20.1	34.4	1.8	141.2	130.9	107.9
Apr.	65.9	4.4	1.3	1.0	9.2	17.8	30.7	1.5	127.0	116.6	108.9
May	63.7	4.5	1.3	1.0	9.0	17.4	29.0	1.7	122.8	113.2	108.5
June	73.6	4.7	1.3	1.1	9.8	19.9	34.7	2.0	141.9	129.8	109.3
July	76.2	4.6	1.4	1.2	10.3	20.9	35.6	2.2	146.8	132.8	110.6
Aug.	61.1	4.3	1.3	1.2	9.2	16.1	27.4	1.7	117.7	107.0	110.0
Sep.	72.3	5.1	1.4	1.5	10.1	19.8	32.4	1.9	139.4	129.0	108.0
Oct.	77.5	5.3	1.5	1.4	10.2	21.0	36.3	1.9	149.5	136.0	109.9
Nov.	77.6	5.4	1.5	1.2	10.7	21.0	36.0	1.7	149.6	137.3	108.9
Dec.	76.2	5.1	1.6	1.5	9.8	20.4	36.0	1.8	146.9	131.8	111.4
2000 Jan.	66.2	4.1	1.4	1.6	9.3	17.6	30.1	2.2	127.5	112.3	113.6
Feb.	75.4	4.5	1.6	1.7	10.6	20.9	33.9	2.2	145.4	126.5	115.0
Mar.	88.5	5.2	1.8	1.8	12.1	23.7	41.3	2.6	170.7	149.0	114.5
Apr.	73.5	4.5	1.6	1.7	10.0	19.5	34.2	2.0	141.6	122.1	116.0
May	89.3	5.5	1.9	1.9	11.8	23.2	42.4	2.5	172.1	147.9	116.4
June	85.0	5.1	1.6	1.8	11.4	22.3	40.2	2.6	163.8	140.4	116.7
July	85.0	4.9	1.5	2.0	11.4	23.3	39.5	2.3	163.8	137.6	119.0
Aug.	78.0	5.0	1.6	2.0	11.3	20.6	35.3	2.4	150.5	126.5	118.9
Sep.	87.4	5.4	1.7	2.2	12.3	23.1	40.5	2.4	168.6	139.8	120.6
Oct.	96.5	6.0	1.8	2.4	13.0	25.7	45.1	2.6	186.0	153.6	121.1
Nov.	95.7	6.1	1.7	2.3	12.5	25.2	45.3	2.5	184.4	152.8	120.7
Dec.	86.3	5.3	1.6	2.1	10.6	22.3	42.0	2.4	166.4	137.0	121.5
				Euro area enlargement							
2001 Q1	257.0	14.4	4.8	5.3	35.6	67.1	122.7	7.1	167.2	136.5	122.5
2001 Jan.	80.5	4.6	1.5	2.0	11.4	20.5	38.2	2.2	157.1	128.8	122.0
Feb.	83.2	4.7	1.5	1.7	11.5	21.9	39.7	2.3	162.5	133.4	121.8
Mar.	93.2	5.1	1.7	1.7	12.7	24.7	44.8	2.5	182.0	147.1	123.7
Apr.	82.6	4.6	1.5	1.9	11.3	20.9	39.9	2.5	161.3	130.6	123.5
May	90.1	.	.	.	.	.	.	.	175.8	142.8	123.1

Source: Eurostat; the commodity breakdown is in accordance with the SITC Rev. 3.

1) Owing to differences in definitions, coverage and time of recording, trade data (as compiled by Eurostat) are not fully comparable with the goods item in the balance of payments statistics compiled by the ECB (Table 8.2).

2) For 2001, unit value indices, which are also used for the estimation of volumes, refer to the euro area excluding Greece.

3) ECB calculations based on Eurostat data.

Table 9

2. Imports [1)]

(EUR billions (ECU billions to end-1998); c.i.f. value)

	Total	Food, drink, tobacco	Raw materials	Energy	Chemicals	Other manufactured articles	Machinery, transport equipment	Other	Import trade indices [2)] 1995 = 100		
									Value [3)]	Volume [3)]	Unit value
	1	2	3	4	5	6	7	8	9	10	11
1997	674.2	55.5	41.5	81.3	62.5	189.3	230.0	14.0	119.8	110.3	108.6
1998	711.4	55.1	41.3	58.5	68.0	202.1	270.2	16.1	126.4	123.1	102.7
1999	780.7	52.5	39.4	77.8	71.4	211.4	307.8	20.4	138.7	130.5	106.3
2000	999.3	55.4	48.1	144.0	85.0	254.3	379.9	32.6	177.6	137.0	129.6
1998 Q1	180.1	13.7	10.9	16.4	17.7	51.7	65.4	4.3	128.0	119.3	107.3
Q2	179.2	13.7	11.1	15.1	17.3	50.4	67.3	4.3	127.4	121.7	104.7
Q3	171.0	13.4	9.7	13.8	16.4	50.7	63.4	3.6	121.6	119.4	101.8
Q4	181.0	14.3	9.6	13.2	16.5	49.3	74.2	3.9	128.7	132.1	97.4
1999 Q1	179.2	12.4	9.3	13.8	17.0	50.4	71.7	4.7	127.4	128.8	98.9
Q2	189.5	12.9	10.2	16.8	17.7	50.8	76.1	5.0	134.7	129.8	103.8
Q3	193.9	12.9	9.5	21.3	17.3	54.3	73.6	5.1	137.9	126.0	109.4
Q4	218.0	14.3	10.5	26.0	19.4	55.8	86.4	5.6	154.9	137.7	112.5
2000 Q1	232.5	12.8	11.3	31.7	20.1	60.9	88.3	7.4	165.2	136.4	121.1
Q2	243.9	14.0	12.4	32.3	21.3	62.4	93.9	7.6	173.4	137.5	126.1
Q3	245.7	13.4	11.8	37.7	21.1	64.6	89.4	7.7	174.7	133.0	131.3
Q4	277.2	15.2	12.6	42.4	22.5	66.4	108.3	9.9	197.1	141.4	139.4
1998 Feb.	57.9	4.3	3.5	5.4	5.6	16.7	20.8	1.6	123.4	114.4	107.9
Mar.	64.3	4.9	3.8	5.3	6.5	18.3	24.2	1.3	137.2	128.7	106.6
Apr.	60.1	4.7	3.7	5.2	5.8	16.8	22.6	1.3	128.2	121.5	105.5
May	56.9	4.4	3.5	5.2	5.6	15.8	21.2	1.2	121.4	115.8	104.9
June	62.2	4.6	3.9	4.7	6.0	17.8	23.4	1.8	132.6	127.9	103.7
July	59.2	4.7	3.6	4.7	6.0	17.8	21.2	1.3	126.3	123.5	102.2
Aug.	50.1	4.1	2.8	4.4	4.7	15.0	18.1	1.0	106.8	105.6	101.1
Sep.	61.8	4.6	3.3	4.7	5.8	17.9	24.1	1.4	131.7	129.3	101.9
Oct.	62.5	4.8	3.3	4.7	5.8	17.4	25.1	1.4	133.3	133.9	99.5
Nov.	59.8	4.6	3.2	4.2	5.4	16.2	24.9	1.3	127.6	132.1	96.6
Dec.	58.7	5.0	3.1	4.3	5.3	15.7	24.2	1.2	125.1	130.4	96.0
1999 Jan.	55.0	3.9	3.0	4.6	5.2	15.5	21.5	1.4	117.4	119.5	98.2
Feb.	56.4	3.9	2.9	4.2	5.4	16.2	22.2	1.6	120.3	122.1	98.5
Mar.	67.8	4.7	3.3	5.0	6.4	18.7	28.0	1.7	144.6	144.7	99.9
Apr.	61.6	4.2	3.3	5.6	5.8	16.0	25.0	1.7	131.4	128.3	102.4
May	62.4	4.3	3.3	5.7	5.8	16.5	25.2	1.6	133.1	127.2	104.6
June	65.5	4.4	3.5	5.4	6.2	18.2	26.0	1.7	139.7	133.5	104.6
July	64.5	4.4	3.4	6.7	5.7	18.4	24.3	1.6	137.4	127.3	108.0
Aug.	58.5	4.1	2.7	7.0	5.2	16.3	21.8	1.6	124.8	113.5	110.0
Sep.	70.9	4.4	3.5	7.6	6.4	19.6	27.6	1.9	151.3	137.3	110.2
Oct.	70.6	4.5	3.4	7.9	6.5	18.9	27.4	2.1	150.5	135.2	111.3
Nov.	74.4	4.8	3.6	8.5	6.8	18.8	30.0	1.9	158.6	143.1	110.8
Dec.	73.0	4.9	3.5	9.6	6.2	18.1	29.1	1.7	155.7	134.9	115.4
2000 Jan.	71.6	4.1	3.5	10.4	5.8	18.6	26.9	2.3	152.8	128.7	118.7
Feb.	75.9	4.1	3.6	10.2	6.8	20.2	28.5	2.4	161.8	133.7	121.0
Mar.	85.0	4.6	4.2	11.0	7.5	22.1	33.0	2.6	181.2	147.0	123.2
Apr.	73.3	4.3	3.7	9.6	6.6	18.4	28.6	2.3	156.4	127.4	122.7
May	88.3	5.1	4.7	11.4	7.5	22.8	34.1	2.7	188.2	148.3	126.9
June	82.3	4.6	4.1	11.3	7.3	21.2	31.2	2.6	175.5	136.7	128.4
July	79.4	4.5	4.0	11.9	6.7	21.0	28.4	2.9	169.3	131.9	128.3
Aug.	78.7	4.4	3.6	12.5	6.8	20.6	28.6	2.3	167.9	128.4	130.7
Sep.	87.6	4.5	4.2	13.3	7.6	23.0	32.4	2.6	186.8	138.7	134.7
Oct.	94.5	5.2	4.3	14.1	7.8	23.3	36.6	3.3	201.6	144.4	139.6
Nov.	95.9	5.1	4.4	14.7	7.9	23.0	37.1	3.6	204.4	146.3	139.7
Dec.	86.8	4.9	3.9	13.6	6.7	20.2	34.6	3.0	185.2	133.4	138.8
				Euro area enlargement							
2001 Q1	261.0	13.5	12.3	33.8	23.3	67.0	100.7	10.4	184.3	139.1	132.5
2001 Jan.	86.7	4.5	4.2	11.8	7.6	22.6	32.4	3.7	183.8	138.9	132.3
Feb.	82.2	4.2	3.9	10.9	7.6	21.5	31.0	3.2	174.2	130.9	133.1
Mar.	92.0	4.8	4.2	11.2	8.1	23.0	37.3	3.5	195.0	147.5	132.2
Apr.	83.3	4.5	4.0	11.2	7.6	20.8	31.8	3.4	176.4	133.2	132.4
May	88.4	.	.	.	.	.	.	.	187.2	139.1	134.6

Source: Eurostat; the commodity breakdown is in accordance with the SITC Rev. 3.

1) Owing to differences in definitions, coverage and time of recording, trade data (as compiled by Eurostat) are not fully comparable with the goods item in the balance of payments statistics compiled by the ECB (Table 8.2). Part of the difference arises from the inclusion of insurance and freight services in the recording of goods imported, which accounted for about 3.8% of the value of imports (c.i.f.) in 1998.

2) For 2001, unit value indices, which are also used for the estimation of volumes, refer to the euro area excluding Greece.

3) ECB calculations based on Eurostat data.

Table 9

3. Trade balance [1)]

(EUR billions (ECU billions to end-1998); exports (f.o.b.) - imports (c.i.f.))

	Total	Food, drink, tobacco	Raw materials	Energy	Chemicals	Other manufactured articles	Machinery, transport equipment	Other
	1	2	3	4	5	6	7	8
1997	88.6	1.5	-25.1	-66.8	37.1	28.3	113.8	-0.1
1998	85.7	1.0	-25.5	-45.9	36.4	20.0	101.1	-1.4
1999	51.1	3.2	-23.0	-64.1	42.7	14.5	77.1	0.7
2000	7.4	6.2	-28.6	-120.6	51.3	13.1	89.9	-3.9
1998 Q1	14.7	0.2	-6.7	-13.0	9.0	3.3	22.7	-0.7
Q2	25.4	0.9	-7.2	-11.7	9.6	6.1	28.3	-0.6
Q3	24.9	0.1	-5.8	-10.8	9.3	4.6	27.5	0.0
Q4	20.7	-0.1	-5.8	-10.3	8.5	5.9	22.6	-0.1
1999 Q1	8.5	0.0	-5.5	-11.2	8.8	1.2	15.2	0.0
Q2	13.7	0.6	-6.2	-13.7	10.2	4.3	18.2	0.2
Q3	15.6	1.1	-5.4	-17.4	12.4	2.5	21.7	0.7
Q4	13.3	1.5	-5.9	-21.9	11.3	6.5	21.9	-0.1
2000 Q1	-2.3	1.0	-6.5	-26.6	11.9	1.3	17.0	-0.5
Q2	3.8	1.1	-7.4	-26.9	11.9	2.6	22.9	-0.5
Q3	4.7	1.9	-7.1	-31.5	13.8	2.4	25.9	-0.6
Q4	1.2	2.2	-7.6	-35.6	13.7	6.7	24.2	-2.4
1998 Feb.	5.9	0.3	-2.2	-4.3	3.1	1.4	8.1	-0.4
Mar.	7.9	0.1	-2.3	-4.1	3.1	2.1	9.0	0.0
Apr.	8.1	0.1	-2.4	-4.0	3.4	2.3	8.7	0.0
May	9.0	0.4	-2.3	-4.1	3.1	2.4	9.5	-0.1
June	8.3	0.3	-2.6	-3.5	3.1	1.5	10.1	-0.5
July	13.8	0.1	-2.2	-3.6	3.3	3.3	13.0	0.0
Aug.	6.5	0.1	-1.6	-3.5	3.0	0.6	7.7	0.1
Sep.	4.6	-0.1	-2.0	-3.8	3.0	0.7	6.8	-0.1
Oct.	6.6	0.0	-2.0	-3.7	2.8	2.2	7.4	-0.2
Nov.	7.4	0.2	-1.9	-3.3	2.7	2.0	7.6	0.0
Dec.	6.7	-0.3	-1.9	-3.3	2.9	1.7	7.6	0.1
1999 Jan.	-0.7	-0.1	-1.9	-3.8	2.6	-0.7	3.5	-0.3
Feb.	3.8	0.1	-1.7	-3.3	2.9	0.5	5.3	0.1
Mar.	5.4	0.0	-1.9	-4.0	3.4	1.4	6.4	0.1
Apr.	4.2	0.2	-2.0	-4.6	3.4	1.8	5.7	-0.2
May	1.3	0.2	-2.1	-4.8	3.2	0.9	3.8	0.1
June	8.1	0.2	-2.2	-4.3	3.6	1.6	8.8	0.3
July	11.7	0.2	-2.0	-5.5	4.6	2.5	11.3	0.5
Aug.	2.5	0.2	-1.4	-5.8	4.0	-0.2	5.6	0.1
Sep.	1.3	0.6	-2.1	-6.1	3.7	0.2	4.9	0.0
Oct.	7.0	0.8	-1.9	-6.5	3.7	2.1	8.9	-0.1
Nov.	3.2	0.6	-2.1	-7.3	4.0	2.1	6.1	-0.2
Dec.	3.2	0.2	-1.9	-8.1	3.6	2.3	7.0	0.2
2000 Jan.	-5.5	0.0	-2.2	-8.9	3.4	-1.0	3.2	-0.2
Feb.	-0.4	0.4	-2.0	-8.5	3.8	0.6	5.4	-0.2
Mar.	3.6	0.6	-2.3	-9.2	4.6	1.7	8.3	-0.1
Apr.	0.1	0.2	-2.1	-7.9	3.5	1.1	5.6	-0.3
May	1.0	0.4	-2.8	-9.4	4.3	0.4	8.3	-0.2
June	2.7	0.5	-2.5	-9.5	4.1	1.1	8.9	0.0
July	5.6	0.5	-2.5	-9.9	4.6	2.3	11.1	-0.6
Aug.	-0.7	0.6	-2.0	-10.6	4.5	0.0	6.7	0.1
Sep.	-0.2	0.8	-2.5	-11.1	4.7	0.1	8.0	-0.2
Oct.	1.9	0.8	-2.5	-11.7	5.1	2.4	8.6	-0.7
Nov.	-0.2	1.0	-2.7	-12.4	4.6	2.2	8.2	-1.1
Dec.	-0.5	0.5	-2.4	-11.5	3.9	2.1	7.4	-0.6
			Euro area enlargement					
2001 Q1	-4.0	0.9	-7.5	-28.5	12.3	0.2	22.0	-3.4
2001 Jan.	-6.3	0.1	-2.7	-9.8	3.8	-2.0	5.8	-1.5
Feb.	1.0	0.4	-2.3	-9.2	3.9	0.5	8.6	-0.9
Mar.	1.2	0.4	-2.5	-9.4	4.5	1.7	7.5	-0.9
Apr.	-0.6	0.1	-2.4	-9.3	3.7	0.1	8.1	-0.9
May	1.7	.	.	.	.	.	.	.

Source: Eurostat; the commodity breakdown is in accordance with the SITC Rev. 3.

1) Owing to differences in definitions, coverage and time of recording, trade data (as compiled by Eurostat) are not fully comparable with the goods item in the balance of payments statistics compiled by the ECB (Table 8.1). Part of the difference arises from the inclusion of insurance and freight services in the recording of goods imported, which accounted for about 3.8% of the value of imports (c.i.f.) in 1998.

10 Exchange rates

Table 10

Exchange rates

(period averages; units of national currency per ECU or euro (bilateral); index 1999 Q1=100 (effective))

	Effective exchange rate of the euro [1]						Bilateral ECU or euro exchange rates [2]			
	Narrow group				Broad group		US dollar	Japanese yen	Swiss franc	Pound sterling
	Nominal	Real CPI	Real PPI	Real ULCM	Nominal	Real CPI				
	1	2	3	4	5	6	7	8	9	10
1996	107.9	108.8	107.4	111.4	95.4	105.9	1.270	138.1	1.568	0.814
1997	99.1	99.4	99.2	100.5	90.4	96.6	1.134	137.1	1.644	0.692
1998	101.5	101.3	101.5	99.5	96.6	99.1	1.121	146.4	1.622	0.676
1999	95.7	95.7	95.7	96.4	96.6	95.8	1.066	121.3	1.600	0.659
2000	85.7	86.5	86.9	87.2	88.2	86.3	0.924	99.5	1.558	0.609
1999 Q1	100.0	100.0	100.0	100.0	100.0	100.0	1.122	130.7	1.599	0.687
Q2	96.1	96.0	96.0	96.9	96.5	96.0	1.057	127.7	1.600	0.658
Q3	94.6	94.7	94.5	95.1	95.5	94.6	1.049	118.7	1.602	0.655
Q4	92.2	92.2	92.2	93.8	94.2	92.6	1.038	108.4	1.600	0.636
2000 Q1	89.0	89.6	89.7	90.2	91.1	89.5	0.986	105.5	1.607	0.614
Q2	86.0	86.6	87.0	87.5	88.4	86.6	0.933	99.6	1.563	0.610
Q3	84.7	85.7	86.2	86.6	87.3	85.3	0.905	97.4	1.544	0.612
Q4	83.0	84.0	84.8	84.6	85.9	83.6	0.868	95.3	1.516	0.600
1999 Jan.	102.0	101.8	101.8	-	101.4	101.4	1.161	131.3	1.605	0.703
Feb.	99.9	99.9	99.8	-	100.0	100.0	1.121	130.8	1.598	0.689
Mar.	98.3	98.3	98.4	-	98.7	98.6	1.088	130.2	1.595	0.671
Apr.	97.1	96.9	97.0	-	97.5	97.2	1.070	128.2	1.602	0.665
May	96.6	96.5	96.4	-	96.9	96.4	1.063	129.7	1.603	0.658
June	94.7	94.7	94.7	-	95.1	94.5	1.038	125.3	1.595	0.650
July	94.8	95.2	94.8	-	95.0	94.5	1.035	123.7	1.604	0.658
Aug.	95.4	95.6	95.4	-	96.3	95.5	1.060	120.1	1.600	0.660
Sep.	93.6	93.4	93.4	-	95.2	93.8	1.050	112.4	1.602	0.647
Oct.	94.4	94.2	94.3	-	96.3	94.7	1.071	113.5	1.594	0.646
Nov.	92.0	92.0	92.1	-	94.0	92.4	1.034	108.2	1.605	0.637
Dec.	90.1	90.4	90.3	-	92.2	90.7	1.011	103.7	1.601	0.627
2000 Jan.	90.2	90.8	90.9	-	92.4	90.8	1.014	106.5	1.610	0.618
Feb.	89.2	89.8	89.9	-	91.2	89.5	0.983	107.6	1.607	0.615
Mar.	87.7	88.3	88.4	-	89.7	88.1	0.964	102.6	1.604	0.611
Apr.	86.1	86.6	87.0	-	88.4	86.7	0.947	99.9	1.574	0.598
May	84.5	85.0	85.7	-	86.9	85.1	0.906	98.1	1.556	0.602
June	87.4	88.1	88.4	-	89.9	88.1	0.949	100.7	1.561	0.629
July	86.9	87.9	88.1	-	89.4	87.5	0.940	101.4	1.551	0.623
Aug.	84.6	85.5	86.0	-	87.0	85.2	0.904	97.8	1.551	0.607
Sep.	82.8	83.6	84.6	-	85.3	83.3	0.872	93.1	1.531	0.608
Oct.	81.6	82.4	83.4	-	84.4	82.2	0.855	92.7	1.513	0.589
Nov.	82.3	83.2	84.1	-	85.1	82.8	0.856	93.3	1.522	0.600
Dec.	85.4	86.4	87.0	-	88.1	85.8	0.897	100.6	1.514	0.613
				Euro area enlargement						
2001 Q1	88.6	90.0	90.4	88.8	91.4	88.9	0.923	109.1	1.533	0.633
Q2	86.0	87.7	87.9	86.3	89.5	86.8	0.873	106.9	1.528	0.614
2001 Jan.	89.2	90.3	90.7	-	91.7	89.1	0.938	109.6	1.529	0.635
Feb.	88.3	89.7	90.1	-	91.0	88.6	0.922	107.1	1.536	0.634
Mar.	88.4	90.0	90.3	-	91.4	89.0	0.910	110.3	1.535	0.629
Apr.	87.6	89.2	89.4	-	91.0	88.4	0.892	110.4	1.529	0.622
May	85.9	87.5	87.6	-	89.3	86.6	0.874	106.5	1.533	0.613
June	84.7	86.3	86.6	-	88.1	85.3	0.853	104.3	1.522	0.609
July	85.4	87.2	87.4	-	89.1	86.1	0.861	107.2	1.514	0.609
% ch. vs. [4] prev. month										
2001 July	0.8	1.0	0.9	-	1.2	1.0	0.9	2.8	-0.6	-0.1
% ch. vs. [4] prev. year										
2001 July	-	-	-	-	-	-	-8.4	5.7	-2.4	-2.3

Source: ECB.

1) More details of the calculation are given in the general notes.

2) To December 1998, rates for the ECU (source BIS); from January 1999, rates for the euro.

3) Indicative rates for these currencies are shown up to September 2000, as the ECB did not provide official reference rates for these currencies before that.

4) The table shows the percentage change in the latest monthly observation vis-à-vis the previous month, and vis-à-vis the same month of the previous year. A positive change denotes an appreciation of the euro. Due to the change in the weighting scheme, effective exchange rate data as from January 2001 are not fully comparable with earlier observations.

Bilateral ECU or euro exchange rates [2]								
Swedish krona	Danish krone	Norwegian krone	Canadian dollar	Australian dollar	Hong Kong dollar [3]	Korean won [3]	Singapore dollar [3]	
11	12	13	14	15	16	17	18	
8.51	7.36	8.20	1.731	1.623	9.68	1,007.9	1.765	1996
8.65	7.48	8.02	1.569	1.528	8.75	1,069.8	1.678	1997
8.92	7.50	8.47	1.665	1.787	8.69	1,568.9	1.876	1998
8.81	7.44	8.31	1.584	1.652	8.27	1,267.3	1.806	1999
8.45	7.45	8.11	1.371	1.589	7.20	1,043.5	1.592	2000
8.98	7.44	8.60	1.696	1.770	8.69	1,342.6	1.911	1999 Q1
8.90	7.43	8.24	1.557	1.618	8.19	1,258.8	1.810	Q2
8.71	7.44	8.22	1.558	1.613	8.14	1,252.8	1.772	Q3
8.65	7.44	8.19	1.528	1.613	8.07	1,217.4	1.737	Q4
8.50	7.45	8.11	1.434	1.564	7.68	1,109.8	1.674	2000 Q1
8.28	7.46	8.20	1.381	1.585	7.27	1,042.0	1.608	Q2
8.40	7.46	8.10	1.341	1.576	7.06	1,009.5	1.569	Q3
8.60	7.45	8.04	1.325	1.632	6.77	1,011.6	1.516	Q4
9.08	7.44	8.65	1.765	1.839	8.99	1,362.4	1.950	1999 Jan.
8.91	7.44	8.65	1.679	1.751	8.68	1,330.2	1.905	Feb.
8.94	7.43	8.51	1.651	1.726	8.43	1,336.2	1.881	Mar.
8.91	7.43	8.32	1.594	1.668	8.30	1,292.2	1.834	Apr.
8.97	7.43	8.23	1.553	1.605	8.24	1,272.1	1.820	May
8.83	7.43	8.17	1.524	1.580	8.05	1,212.6	1.775	June
8.74	7.44	8.18	1.540	1.576	8.03	1,229.4	1.756	July
8.75	7.44	8.26	1.583	1.645	8.23	1,269.1	1.779	Aug.
8.63	7.43	8.23	1.552	1.619	8.15	1,260.1	1.781	Sep.
8.73	7.43	8.29	1.581	1.641	8.32	1,289.9	1.793	Oct.
8.63	7.44	8.19	1.516	1.618	8.04	1,215.9	1.727	Nov.
8.59	7.44	8.10	1.491	1.580	7.86	1,149.6	1.694	Dec.
8.60	7.44	8.12	1.469	1.542	7.89	1,145.9	1.697	2000 Jan.
8.51	7.45	8.10	1.427	1.564	7.65	1,110.8	1.674	Feb.
8.39	7.45	8.11	1.408	1.583	7.51	1,076.1	1.654	Mar.
8.27	7.45	8.15	1.389	1.588	7.38	1,051.4	1.620	Apr.
8.24	7.46	8.20	1.355	1.570	7.06	1,015.3	1.566	May
8.32	7.46	8.25	1.402	1.597	7.40	1,061.1	1.641	June
8.41	7.46	8.18	1.389	1.598	7.33	1,047.9	1.636	July
8.39	7.46	8.10	1.341	1.557	7.05	1,007.6	1.556	Aug.
8.41	7.46	8.03	1.295	1.575	6.80	973.2	1.517	Sep.
8.52	7.45	8.00	1.292	1.618	6.67	965.1	1.498	Oct.
8.63	7.46	8.00	1.320	1.639	6.68	990.6	1.497	Nov.
8.66	7.46	8.13	1.368	1.642	7.00	1,089.6	1.558	Dec.
				Euro area enlargement				
9.00	7.46	8.20	1.410	1.741	7.20	1,174.7	1.616	2001 Q1
9.13	7.46	8.01	1.345	1.701	6.81	1,138.9	1.583	Q2
8.91	7.46	8.24	1.410	1.689	7.32	1,194.9	1.630	2001 Jan.
8.98	7.46	8.21	1.403	1.724	7.19	1,153.8	1.607	Feb.
9.13	7.46	8.16	1.417	1.807	7.09	1,173.4	1.611	Mar.
9.11	7.46	8.11	1.390	1.785	6.96	1,183.5	1.617	Apr.
9.06	7.46	7.99	1.347	1.681	6.82	1,133.7	1.586	May
9.21	7.45	7.94	1.302	1.647	6.65	1,104.1	1.550	June
9.26	7.44	7.97	1.315	1.689	6.71	1,120.3	1.569	July
								% ch. vs. [4] prev. month
0.6	-0.1	0.4	1.1	2.6	0.9	1.5	1.3	2001 July
								% ch. vs. [4] prev. year
10.2	-0.2	-2.5	-5.3	5.7	-8.4	6.9	-4.1	2001 July

11 Economic and financial developments in the other EU Member States

Table 11

Economic and financial developments

(annual percentage changes, unless otherwise indicated)

	HICP	General government deficit (-)/ surplus (+) as a % of GDP	General government gross debt as a % of GDP	Long-term government bond yield [1] as a % per annum	Exchange rate [2] as national currency per ECU or euro	Current and new capital account as a % of GDP	Unit labour costs [3]	Real GDP	Industrial production index [4]	Standardised unemployment rate as a % of labour force (s.a.)	Broad money [5]	3-month interest rate [1] as a % per annum
	1	2	3	4	5	6	7	8	9	10	11	12
						Denmark						
1997	1.9	0.3	61.2	6.25	7.48	0.6	1.9	3.0	5.3	5.6	4.7	3.73
1998	1.3	1.1	55.6	4.94	7.50	-0.9	2.3	2.8	2.2	5.2	4.6	4.27
1999	2.1	3.1	52.0	4.91	7.44	1.8	3.0	2.1	1.8	5.2	4.2	3.44
2000	2.7	2.5	46.5	5.64	7.45	2.1	1.4	3.2	6.2	4.7	1.9	5.00
2000 Q1	2.8	-	-	5.79	7.45	1.3	1.8	2.7	3.1	4.7	2.2	3.95
Q2	2.9	-	-	5.67	7.46	1.7	2.1	3.7	7.7	4.7	1.3	4.73
Q3	2.6	-	-	5.69	7.46	3.8	0.4	3.5	8.0	4.7	2.3	5.84
Q4	2.6	-	-	5.42	7.45	1.4	1.1	2.9	6.1	4.8	1.8	5.48
2001 Q1	2.3	-	-	5.03	7.46	3.6	3.4	1.0	5.2	4.7	.	5.26
Q2	2.5	-	-	5.25	7.46	.	.	.	.	.	.	5.06
2001 Feb.	2.3	-	-	5.06	7.46	-	-	-	4.1	4.7	.	5.27
Mar.	2.2	-	-	4.95	7.46	-	-	-	7.7	4.6	.	5.16
Apr.	2.6	-	-	5.10	7.46	-	-	-	1.4	4.6	.	5.11
May	2.8	-	-	5.31	7.46	-	-	-	-4.2	4.6	.	5.11
June	2.2	-	-	5.33	7.45	-	-	-	.	.	.	4.96
July	.	-	-	5.32	7.44	-	-	-	.	.	.	4.93
						Sweden						
1997	1.8	-1.5	74.5	6.62	8.65	-	0.6	2.1	7.0	9.9	4.2	4.43
1998	1.0	1.9	71.8	4.99	8.92	3.7	0.9	3.6	3.8	8.3	3.5	4.36
1999	0.6	1.8	65.2	4.98	8.81	2.8	-0.4	4.1	2.0	7.2	6.8	3.32
2000	1.3	4.1	55.6	5.37	8.45	3.1	5.6	3.6	8.5	5.9	6.2	4.07
2000 Q1	1.2	-	-	5.79	8.50	3.6	5.7	4.2	5.9	6.4	8.7	3.99
Q2	1.2	-	-	5.30	8.28	1.9	4.5	4.1	10.2	6.1	8.9	4.09
Q3	1.3	-	-	5.30	8.40	2.5	5.3	3.7	9.1	5.7	5.1	4.14
Q4	1.5	-	-	5.09	8.60	4.3	6.7	2.3	8.8	5.4	2.2	4.06
2001 Q1	1.6	-	-	4.83	9.00	3.1	3.5	2.2	6.3	5.2	0.2	4.10
Q2	3.0	-	-	5.20	9.13	.	.	.	.	5.0	.	4.15
2001 Feb.	1.5	-	-	4.86	8.98	-	-	-	5.6	5.2	-1.2	4.10
Mar.	1.7	-	-	4.75	9.13	-	-	-	5.5	5.2	1.4	4.06
Apr.	3.0	-	-	4.93	9.11	-	-	-	-1.4	5.0	-0.3	4.04
May	3.1	-	-	5.27	9.06	-	-	-	.	5.0	-1.4	4.09
June	3.0	-	-	5.39	9.21	-	-	-	.	4.9	.	4.32
July	.	-	-	5.43	9.26	-	-	-	.	.	.	4.44
						United Kingdom						
1997	1.8	-2.0	51.1	7.13	0.692	0.9	2.9	3.5	1.3	7.0	11.2	6.92
1998	1.6	0.4	48.1	5.60	0.676	0.0	3.1	2.6	0.8	6.3	9.7	7.42
1999	1.3	1.3	45.7	5.01	0.659	-1.0	3.4	2.3	0.6	6.1	5.3	5.54
2000	0.8	1.9	42.9	5.33	0.609	-1.5	1.9	3.1	1.6	5.5	6.6	6.19
2000 Q1	0.8	6.3	43.7	5.60	0.614	-1.5	3.0	3.2	1.9	5.8	3.8	6.20
Q2	0.6	-0.5	43.7	5.31	0.610	-1.4	1.4	3.4	2.7	5.6	5.8	6.28
Q3	0.8	2.2	42.3	5.31	0.612	-1.8	1.6	3.0	0.7	5.4	8.4	6.21
Q4	0.9	0.0	42.5	5.09	0.600	-1.4	1.7	2.6	0.9	5.3	8.5	6.07
2001 Q1	0.9	6.2	40.2	4.90	0.633	0.0	2.1	2.7	0.7	5.1	9.1	5.72
Q2	1.5	-2.8	39.5	5.18	0.614	.	.	.	.	.	.	5.30
2001 Feb.	0.8	5.0	40.4	4.95	0.634	-	-	-	0.7	5.1	9.2	5.76
Mar.	1.0	-1.1	40.2	4.82	0.629	-	-	-	-0.4	5.0	8.3	5.55
Apr.	1.1	0.3	39.8	5.03	0.622	-	-	-	-1.2	5.0	7.8	5.40
May	1.7	-4.4	39.8	5.21	0.613	-	-	-	-3.2	.	7.3	5.25
June	1.7	-4.2	40.2	5.30	0.609	-	-	-	.	.	.	5.26
July	.	.	.	5.30	0.609	-	-	-	.	.	.	5.25

Sources: Eurostat (columns 1, 8, 9 and 10); European Commission (Economic and Financial Affairs DG and Eurostat) (columns 2 (annual) and 3 (annual)); Reuters (column 12); national data (columns 2 (quarterly and monthly), 3 (quarterly and monthly), 4, 5, 7 (except Sweden) and 11); ECB calculations (columns 6 and 7 (Sweden)).

1) Average-of-period values.
2) For more information, see Table 10.
3) Whole economy; data for the United Kingdom exclude employers' contributions to social security.
4) Total excluding construction; adjusted for working days.
5) Average of end-month values; M3; M4 for the United Kingdom.

12 Economic and financial developments outside the EU

Table 12.1

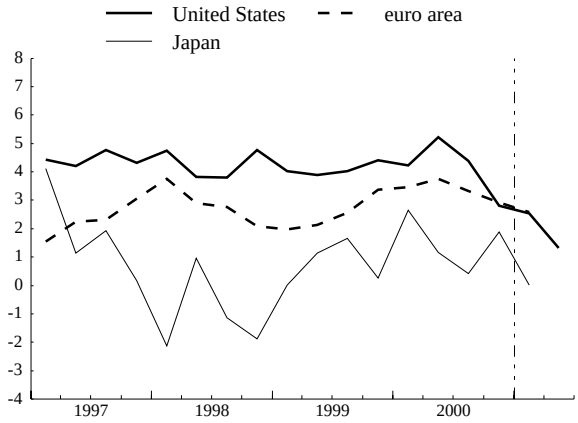
Economic and financial developments

(annual percentage changes, unless otherwise indicated)

	Consumer price index	Unit labour costs [1]	Real GDP	Industrial production index [1]	Unemployment rate as a % of labour force (s.a.)	M2 [2]	3-month interbank deposit rate [3] as a % per annum	10-year government bond yield [3] as a % per annum	Exchange rate [4] as national currency per ECU or euro	Fiscal deficit (-)/ surplus (+) [5] as a % of GDP	Gross public debt [6] as a % of GDP
	1	2	3	4	5	6	7	8	9	10	11
					United States						
1997	2.3	0.0	4.4	7.6	5.0	4.9	5.76	6.45	1.134	-0.9	56.4
1998	1.6	0.7	4.3	5.5	4.5	7.3	5.57	5.33	1.121	0.3	53.4
1999	2.2	-1.7	4.1	4.8	4.2	7.6	5.42	5.64	1.066	1.0	50.3
2000	3.4	-3.8	4.1	6.0	4.0	6.1	6.53	6.03	0.924	2.2	44.5
2000 Q1	3.2	-3.7	4.2	6.3	4.0	6.1	6.11	6.48	0.986	2.0	49.3
Q2	3.3	-4.4	5.2	7.0	4.0	6.2	6.63	6.18	0.933	2.1	46.5
Q3	3.5	-5.4	4.4	6.4	4.0	6.1	6.70	5.89	0.905	2.3	45.2
Q4	3.4	-1.5	2.8	4.3	4.0	6.2	6.69	5.56	0.868	2.4	44.5
2001 Q1	3.4	1.8	2.5	0.4	4.2	7.5	5.35	5.04	0.923	2.3	44.6
Q2	3.4	.	1.3	-3.0	4.5	8.5	4.19	5.25	0.873	.	.
2001 Feb.	3.5	-	-	0.5	4.2	7.5	5.35	5.10	0.922	-	-
Mar.	2.9	-	-	-0.9	4.3	8.1	4.96	4.89	0.910	-	-
Apr.	3.3	-	-	-1.9	4.5	8.1	4.63	5.13	0.892	-	-
May	3.6	-	-	-2.9	4.4	8.4	4.11	5.37	0.874	-	-
June	3.2	-	-	-4.2	4.5	8.9	3.83	5.26	0.853	-	-
July	.	-	-	.	.	.	3.75	5.23	0.861	-	-
					Japan						
1997	1.7	-2.2	1.8	3.6	3.4	3.1	0.62	2.15	137.1	-2.7	.
1998	0.6	6.3	-1.1	-7.1	4.1	4.4	0.66	1.30	146.4	-10.3	.
1999	-0.3	-2.5	0.8	0.8	4.7	3.7	0.22	1.75	121.3	-10.4	.
2000	-0.6	-6.5	1.5	5.9	4.7	2.1	0.28	1.76	99.5	.	.
2000 Q1	-0.7	-7.0	2.6	6.3	4.8	2.2	0.14	1.79	105.5	.	.
Q2	-0.7	-7.3	1.2	7.1	4.7	2.3	0.12	1.72	99.6	.	.
Q3	-0.7	-6.1	0.4	5.5	4.6	1.9	0.32	1.79	97.4	.	.
Q4	-0.5	-5.3	1.9	4.9	4.8	2.1	0.56	1.73	95.3	.	.
2001 Q1	-0.1	-0.2	0.0	-1.1	4.8	2.6	0.37	1.38	109.1	.	.
Q2	-0.5	.	.	-5.7	4.9	2.9	0.08	1.28	106.9	.	.
2001 Feb.	-0.1	1.2	-	-2.0	4.7	2.7	0.41	1.43	107.1	-	-
Mar.	-0.4	1.5	-	-2.9	4.7	2.6	0.19	1.19	110.3	-	-
Apr.	-0.4	.	-	-4.2	4.8	2.5	0.10	1.36	110.4	-	-
May	-0.5	.	-	-3.9	4.9	2.9	0.07	1.28	106.5	-	-
June	-0.5	.	-	-8.7	4.9	3.2	0.07	1.19	104.3	-	-
July	.	.	-	.	.	.	0.08	1.33	107.2	-	-

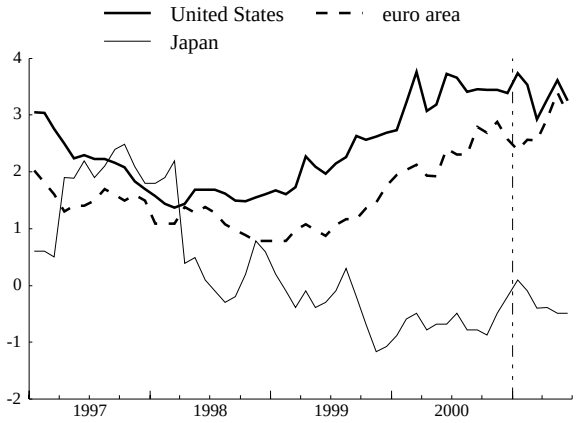
Real gross domestic product

(annual percentage changes; quarterly)



Consumer price indices

(annual percentage changes; monthly)



Sources: National data (columns 1, 2 (United States), 3, 4, 5, 6, 8 (to December 1998), 9 and 10); OECD (column 2 (Japan)); Eurostat (euro area chart data); Reuters (column 7 and 8 (from January 1999)); ECB calculation (column 11).

1) Manufacturing.
2) Average-of-period values; M2 and CDs for Japan.
3) For more information, see Tables 3.1 and 3.2.
4) For more information, see Table 10.
5) Japan: the 1998 deficit includes a large debt assumption; financial accounts sources for 1999.
6) Gross consolidated debt for the general government (end of period).

Table 12.2

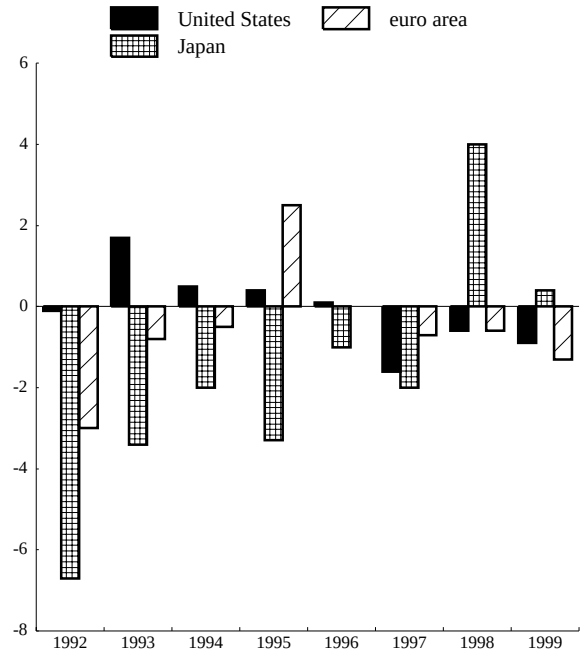
Saving, investment and financing

(as a percentage of GDP)

	National saving and investment			Investment and financing of non-financial corporations						Investment and financing of households [1]			
	Gross saving	Gross capital formation	Net lending to the rest of the world	Gross capital formation	Gross fixed capital formation	Net acquisition of financial assets	Gross saving	Net incurrence of liabilities	Securities and shares	Capital expenditure	Net acquisition of financial assets	Gross saving	Net incurrence of liabilities
	1	2	3	4	5	6	7	8	9	10	11	12	13
						United States							
1997	18.1	19.9	-1.5	9.4	8.6	1.8	8.7	3.4	1.8	11.8	4.5	12.1	4.6
1998	18.8	20.8	-2.3	9.7	8.8	6.5	8.5	7.1	1.4	12.3	6.6	12.3	5.7
1999	18.5	21.1	-3.4	10.1	9.6	6.9	8.7	7.8	3.3	12.6	5.7	11.0	6.6
2000	18.3	21.8	-4.3	10.6	10.1	6.1	8.9	7.4	2.7	12.5	2.9	9.4	5.8
1999 Q2	18.4	20.8	-3.2	10.0	9.9	6.4	8.7	7.4	0.0	12.7	5.6	11.2	6.6
Q3	18.4	21.1	-3.6	10.1	9.7	7.3	8.6	8.5	3.5	12.6	4.8	10.8	6.3
Q4	18.3	21.4	-3.9	10.4	9.6	5.9	8.7	7.0	3.8	12.6	7.1	10.5	7.1
2000 Q1	18.2	21.4	-4.0	10.3	10.0	8.7	8.8	9.8	5.6	12.8	4.2	9.8	7.6
Q2	18.5	22.0	-4.1	10.7	10.0	6.9	9.0	8.0	3.4	12.5	4.2	9.7	5.9
Q3	18.5	21.9	-4.5	10.9	10.3	5.7	9.1	7.3	1.9	12.5	2.5	9.3	5.7
Q4	18.0	21.7	-4.5	10.6	10.1	3.5	8.8	4.7	0.1	12.3	0.6	8.8	4.2
2001 Q1	17.5	20.9	-3.9	9.9	10.1	2.9	8.6	3.7	1.9	12.5	2.9	8.9	4.0
						Japan							
1997	30.2	28.7	2.2	16.6	16.1	3.2	13.8	1.2	0.1	6.0	6.9	11.3	0.7
1998	29.1	26.9	2.6	15.6	15.6	-6.4	13.3	-9.1	-1.4	5.3	5.4	11.7	-0.5
1999	27.8	26.0	2.2	14.5	14.7	2.5	13.7	-2.8	1.2	5.3	6.6	11.3	-0.5
2000	.	26.0	.	.	.	1.4	.	-1.2	0.0	.	4.7	.	0.8
1999 Q2	.	24.2	.	.	.	-16.9	.	-17.1	1.7	.	14.6	.	-7.2
Q3	.	26.4	.	.	.	9.7	.	-1.3	1.3	.	4.4	.	1.3
Q4	.	26.9	.	.	.	15.3	.	19.9	3.9	.	11.6	.	-2.2
2000 Q1	.	26.3	.	.	.	7.7	.	-3.4	-3.4	.	3.9	.	9.7
Q2	.	24.8	.	.	.	-26.9	.	-19.6	0.4	.	5.2	.	-9.2
Q3	.	27.1	.	.	.	18.6	.	5.0	-0.6	.	-0.7	.	2.3
Q4	.	27.1	.	.	.	5.0	.	11.5	1.2	.	10.1	.	0.5
2001 Q1	.	27.5	.	.	.	9.6	.	2.4	-0.3	.	-2.6	.	5.1

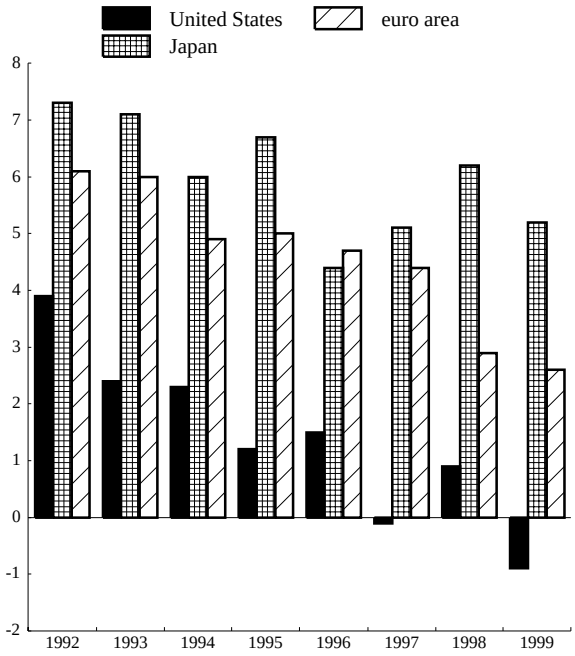
Net lending of non-financial corporations

(as a percentage of GDP)



Net lending of households [1]

(as a percentage of GDP)



Sources: ECB, Federal Reserve Board, Bank of Japan and Economic and Social Research Institute.

1) Households including non-profit institutions serving households.

Past data for selected economic indicators for the euro area plus Greece

A. Main monetary and financial markets statistics

A.1 Monetary aggregates and counterparts

(EUR billions (not seasonally adjusted; end of period) and annual percentage changes [1])

	M1		M2		M3 [2]		Credit [3]		MFI loans to residents of the euro area plus Greece excluding MFIs and general government	
	Amount 1	% change 2	Amount 3	% change 4	Amount 5	% change 6	Amount 7	% change 8	Amount 9	% change 10
1999 Jan.	1,818.0	.	4,046.4	.	4,608.2	.	7,856.9	.	5,169.0	.
Feb.	1,787.3	.	4,005.1	.	4,592.7	.	7,877.0	.	5,171.3	.
Mar.	1,809.4	.	4,023.7	.	4,610.8	.	7,952.1	.	5,219.0	.
Apr.	1,823.9	.	4,044.2	.	4,649.5	.	7,985.0	.	5,240.7	.
May	1,856.1	.	4,073.0	.	4,685.9	.	8,062.1	.	5,278.0	.
June	1,900.1	.	4,100.3	.	4,710.7	.	8,141.4	.	5,371.5	.
July	1,901.0	.	4,117.7	.	4,719.9	.	8,161.5	.	5,407.9	.
Aug.	1,865.8	.	4,084.5	.	4,701.3	.	8,164.4	.	5,402.9	.
Sep.	1,892.0	.	4,093.8	.	4,728.1	.	8,215.6	.	5,442.7	.
Oct.	1,897.4	.	4,110.5	.	4,747.8	.	8,286.6	.	5,490.4	.
Nov.	1,933.6	.	4,140.5	.	4,801.3	.	8,387.8	.	5,556.3	.
Dec.	1,988.5	.	4,239.6	.	4,893.2	.	8,410.2	.	5,589.0	.
2000 Jan.	1,997.1	9.4	4,233.6	4.2	4,900.2	5.3	8,467.4	8.1	5,633.8	8.8
Feb.	1,986.7	10.8	4,226.9	5.2	4,920.9	6.2	8,529.0	8.5	5,670.0	9.5
Mar.	1,998.1	10.1	4,236.7	4.9	4,961.3	6.5	8,627.2	8.4	5,741.4	9.9
Apr.	2,039.8	11.4	4,280.5	5.4	5,016.0	6.7	8,693.1	8.7	5,803.8	10.5
May	2,021.0	8.7	4,271.8	4.6	5,011.3	6.0	8,728.6	8.2	5,834.5	10.3
June	2,038.0	7.1	4,282.0	4.2	5,004.2	5.4	8,745.2	7.3	5,902.4	9.5
July	2,037.8	6.9	4,281.0	3.6	5,010.9	5.2	8,760.1	7.1	5,931.9	9.1
Aug.	2,002.5	7.0	4,269.5	4.1	5,011.4	5.6	8,763.2	7.1	5,951.9	9.6
Sep.	2,014.5	6.1	4,275.4	4.0	5,011.0	5.1	8,852.2	7.3	6,038.9	10.1
Oct.	2,013.7	5.7	4,282.7	3.7	5,031.1	5.1	8,892.8	6.7	6,082.9	9.9
Nov.	2,032.4	4.9	4,304.9	3.7	5,062.6	4.8	8,934.3	6.0	6,119.0	9.4
Dec.	2,098.8	5.5	4,397.4	3.7	5,138.8	5.0	8,961.9	6.5	6,154.2	9.6

A.2 Financial market interest rates and statistics on securities other than shares

(percentages per annum and EUR billions)

	Money market rates		Government bond yields		Euro-denominated securities issued by residents of the euro area plus Greece					
					Gross issues					
	3-month deposits 11	12-month deposits 12	2 years 13	10 years 14	Total 15	By MFIs [4] 16	By general government [4] 17	By non-financial and non-monetary financial corporations [4] 18	Net issues 19	Amounts outstanding 20
1999 Jan.	3.33	3.24	3.11	3.87	348.3	47.1	39.4	13.5	64.1	5,787.1
Feb.	3.27	3.19	3.17	4.02	292.1	49.1	35.6	15.3	49.5	5,835.8
Mar.	3.21	3.19	3.19	4.22	297.2	47.8	35.4	16.8	43.7	5,880.0
Apr.	2.87	2.91	2.93	4.09	333.8	48.8	34.4	16.9	42.3	5,922.1
May	2.75	2.83	2.89	4.24	290.9	46.4	37.7	15.9	51.0	5,974.2
June	2.80	2.98	3.16	4.56	279.3	48.6	28.7	22.7	38.2	6,012.6
July	2.84	3.17	3.38	4.89	328.1	44.5	36.4	19.1	42.1	6,053.2
Aug.	2.86	3.37	3.65	5.10	239.1	50.2	32.3	17.5	35.4	6,089.1
Sep.	2.89	3.43	3.75	5.27	311.6	51.7	31.2	17.1	59.8	6,147.4
Oct.	3.53	3.81	4.16	5.51	305.0	51.6	30.2	18.2	52.5	6,201.2
Nov.	3.64	3.82	4.07	5.22	285.1	57.1	26.2	16.7	42.5	6,244.9
Dec.	3.58	3.94	4.24	5.32	236.0	66.7	20.1	13.2	-32.7	6,217.1
2000 Jan.	3.47	4.04	4.43	5.72	347.8	56.6	30.5	12.9	1.8	6,213.1
Feb.	3.65	4.18	4.59	5.68	355.0	57.7	26.4	15.9	61.5	6,273.3
Mar.	3.86	4.33	4.62	5.51	378.7	58.7	26.4	14.9	53.7	6,328.9
Apr.	4.03	4.42	4.61	5.43	345.7	54.1	26.3	19.6	38.2	6,365.2
May	4.44	4.88	5.04	5.53	384.1	59.9	22.7	17.4	52.1	6,426.0
June	4.59	5.01	5.05	5.36	335.4	57.8	21.7	20.5	32.2	6,460.0
July	4.66	5.14	5.21	5.47	377.7	56.3	21.7	22.0	38.4	6,498.7
Aug.	4.85	5.28	5.30	5.41	346.3	59.6	21.5	18.9	34.5	6,534.8
Sep.	4.91	5.24	5.24	5.48	386.9	61.4	21.3	17.3	20.1	6,555.9
Oct.	5.08	5.23	5.19	5.42	442.7	63.5	19.3	17.2	34.3	6,590.8
Nov.	5.12	5.20	5.14	5.34	378.0	59.1	20.9	20.1	21.4	6,611.4
Dec.	4.94	4.87	4.80	5.07	318.3	63.1	14.6	22.3	-40.9	6,574.1

Sources: ECB, Reuters for columns 11 and 12.

1) *Calculated from monthly differences in levels adjusted for reclassifications, other revaluations, exchange rate variations and any other changes which do not arise from transactions. For the calculation of growth rates, see the technical notes.*
2) *Excluding holdings of money market fund shares/units by non-residents of the euro area.*
3) *Credit comprises loans granted to non-MFIs resident in the euro area plus Greece and holdings of securities issued by non-MFIs resident in the euro area plus Greece.*
4) *As a percentage of the total.*

B. Price, real economy and fiscal developments

B.1 Price developments

(annual percentage changes)

	HICP						Industrial producer prices (excluding construction)	Deflators of GDP			
	Total	Goods				Services		GDP			
		Total	Food	Non-energy industrial goods	Energy				Private consumption	Government consumption	Gross fixed capital formation
	1	2	3	4	5	6	7	8	9	10	11
1996	2.3	2.0	2.3	1.6	3.1	2.9	0.4	2.1	2.5	2.2	1.0
1997	1.7	1.2	1.5	0.6	2.6	2.5	1.1	1.6	2.0	1.8	1.1
1998	1.2	0.7	1.7	1.0	-2.6	2.0	-0.7	1.7	1.5	1.7	1.0
1999	1.1	0.9	0.6	0.7	2.3	1.6	-0.4	1.3	1.1	2.2	1.0
2000	2.4	2.7	1.4	0.7	13.4	1.7	5.4	1.3	2.2	1.9	2.4
1999 Q4	1.5	1.5	0.5	0.5	8.0	1.5	2.2	1.1	1.5	2.4	1.5
2000 Q1	2.1	2.3	0.5	0.5	13.7	1.6	4.4	1.2	2.1	2.0	2.1
Q2	2.1	2.3	0.9	0.6	12.3	1.7	5.2	1.2	2.0	1.7	2.4
Q3	2.5	2.9	1.9	0.6	13.7	1.8	5.8	1.4	2.4	1.9	2.5
Q4	2.7	3.2	2.2	1.1	13.8	1.8	6.1	1.5	2.5	1.9	2.7
1999 Dec.	1.7	1.8	0.6	0.5	10.2	1.6	2.9	-	-	-	-
2000 Jan.	1.9	2.0	0.4	0.5	12.2	1.7	3.8	-	-	-	-
Feb.	2.1	2.3	0.6	0.5	13.6	1.6	4.4	-	-	-	-
Mar.	2.2	2.5	0.4	0.6	15.4	1.6	4.9	-	-	-	-
Apr.	1.9	1.9	0.7	0.6	10.3	1.8	4.7	-	-	-	-
May	1.9	2.2	0.8	0.6	12.0	1.6	5.3	-	-	-	-
June	2.4	2.7	1.2	0.7	14.6	1.7	5.6	-	-	-	-
July	2.4	2.7	1.7	0.5	13.5	1.7	5.6	-	-	-	-
Aug.	2.4	2.7	2.0	0.6	12.0	1.8	5.6	-	-	-	-
Sep.	2.8	3.4	2.1	0.9	15.6	1.8	6.3	-	-	-	-
Oct.	2.7	3.3	2.0	1.0	14.7	1.9	6.6	-	-	-	-
Nov.	2.9	3.5	2.2	1.1	15.3	1.9	6.4	-	-	-	-
Dec.	2.6	3.0	2.3	1.1	11.3	1.8	5.4	-	-	-	-

B.2 Real economy and fiscal developments

(annual percentage changes, unless otherwise indicated)

	Real GDP				Industrial production (excluding construction)	Retail sales (constant prices)	Employment (whole economy)	Unemployment (% of labour force)	Trade balance (EUR billions; (ECU billions to end-1998))	Government deficit (-) / surplus (+) (% of GDP)	Government debt (% of GDP)
		Private consumption	Government consumption	Gross fixed capital formation							
	12	13	14	15	16	17	18	19	20	21	22
1996	1.4	1.6	1.7	1.3	0.4	0.5	0.5	11.5	62.4	-4.3	76.0
1997	2.3	1.6	0.9	2.5	4.2	1.2	0.9	11.5	74.5	-2.6	75.4
1998	2.9	3.1	1.0	5.1	4.4	3.0	1.8	10.8	68.7	-2.1	73.6
1999	2.5	3.0	1.5	5.2	2.0	2.6	2.1	10.0	33.8	-1.2	72.6
2000	3.4	2.6	1.9	4.5	5.6	2.4	2.4	8.9	-14.7	-0.7	70.1
1999 Q4	3.4	2.9	1.7	5.5	4.5	3.0	2.2	9.6	8.5	-	-
2000 Q1	3.5	2.6	2.0	5.6	4.9	2.3	2.3	9.3	-6.8	-	-
Q2	3.8	3.2	2.2	5.0	6.1	3.4	2.5	9.0	-2.6	-	-
Q3	3.3	2.5	1.7	4.1	5.7	2.2	2.3	8.8	-0.5	-	-
Q4	2.9	2.1	1.9	3.5	5.5	1.6	2.3	8.6	-4.8	-	-
1999 Dec.	-	-	-	-	5.3	2.8	-	9.5	1.5	-	-
2000 Jan.	-	-	-	-	2.8	2.4	-	9.4	-6.6	-	-
Feb.	-	-	-	-	6.0	3.6	-	9.3	-1.8	-	-
Mar.	-	-	-	-	5.9	0.9	-	9.2	1.5	-	-
Apr.	-	-	-	-	6.0	3.9	-	9.1	-1.3	-	-
May	-	-	-	-	7.8	4.8	-	9.0	-1.0	-	-
June	-	-	-	-	4.6	1.4	-	8.9	-0.4	-	-
July	-	-	-	-	5.6	1.7	-	8.9	3.8	-	-
Aug.	-	-	-	-	6.8	1.7	-	8.8	-2.2	-	-
Sep.	-	-	-	-	5.1	3.1	-	8.7	-2.1	-	-
Oct.	-	-	-	-	3.9	1.7	-	8.6	0.0	-	-
Nov.	-	-	-	-	4.5	1.3	-	8.6	-2.2	-	-
Dec.	-	-	-	-	8.2	1.8	-	8.5	-2.5	-	-

Sources: European Commission (Eurostat) and ECB calculations.

C. Summary balance of payments [1)]

(EUR billions; net flows)

	Current account					Capital account	Direct investment	Portfolio investment	Financial derivatives	Other investment
	Total	Goods	Services	Income	Current transfers					
	1	2	3	4	5	6	7	8	9	10
1997	54.6	99.9	9.4	-16.8	-38.0	15.0	.	.	.	.
1998	23.5	92.8	4.4	-30.1	-43.6	14.8	.	.	.	.
1999	-13.8	64.1	-3.5	-33.0	-41.4	15.6	-120.6	-36.4	8.5	164.5
2000	-45.0	28.3	-4.4	-21.1	-47.8	12.6	-25.2	-120.1	-0.8	143.0
2000 Q1	-11.5	3.1	-3.9	-6.5	-4.2	3.9	147.6	-190.4	2.7	91.6
Q2	-9.1	8.8	1.3	-6.5	-12.7	3.2	-17.9	52.9	4.8	-45.4
Q3	-6.5	12.3	2.1	-7.3	-13.5	1.6	-95.9	7.6	0.5	69.7
Q4	-17.8	4.1	-3.9	-0.7	-17.4	3.9	-58.9	9.7	-8.8	27.2
2000 Jan.	-10.4	-2.4	-1.8	-5.2	-1.1	1.5	0.8	-4.2	-0.8	28.5
Feb.	-1.1	2.2	-1.8	-1.0	-0.4	0.9	145.8	-151.7	1.9	1.4
Mar.	0.0	3.3	-0.3	-0.3	-2.7	1.5	1.0	-34.4	1.6	61.6
Apr.	-6.9	2.5	-0.7	-3.9	-4.8	2.3	1.1	-5.6	2.1	6.1
May	-1.0	2.3	0.7	-1.1	-2.9	0.6	-8.5	1.1	0.4	16.8
June	-1.3	4.0	1.3	-1.5	-5.1	0.3	-10.5	57.4	2.3	-68.4
July	-2.5	6.3	1.5	-4.7	-5.5	0.5	-24.6	-13.1	-0.4	27.7
Aug.	-3.5	2.4	1.1	-1.7	-5.3	0.2	-42.8	17.1	-0.9	25.4
Sep.	-0.4	3.6	-0.4	-0.9	-2.7	0.9	-28.5	3.7	1.8	16.6
Oct.	-4.3	2.6	-0.8	0.1	-6.3	0.4	-17.6	5.7	-1.7	18.2
Nov.	-5.0	0.5	-0.3	0.1	-5.3	1.6	-9.8	-1.3	-2.9	-4.5
Dec.	-8.5	1.0	-2.7	-0.9	-5.9	1.9	-31.5	5.3	-4.1	13.5

D. Effective exchange rates

(period averages; index 1999 Q1=100)

	Narrow group				Broad group	
	Nominal	Real CPI	Real PPI	Real ULCM	Nominal	Real CPI
	1	2	3	4	5	6
1996	108.1	108.7	107.4	111.4	95.4	105.8
1997	99.1	99.4	99.1	100.5	90.3	96.5
1998	101.5	101.3	101.5	99.5	96.5	99.1
1999	95.6	95.7	95.7	96.4	96.5	95.8
2000	85.4	86.3	86.8	87.1	88.0	86.1
1999 Q4	92.0	92.1	92.1	93.7	94.1	92.5
2000 Q1	88.8	89.5	89.6	90.1	90.9	89.4
Q2	85.7	86.4	86.8	87.3	88.2	86.5
Q3	84.5	85.4	86.0	86.4	87.1	85.1
Q4	82.7	83.8	84.6	84.4	85.7	83.4
1999 Dec.	89.9	90.3	90.2	-	92.1	90.7
2000 Jan.	90.1	90.7	90.7	-	92.3	90.7
Feb.	89.0	89.7	89.8	-	91.0	89.4
Mar.	87.4	88.1	88.3	-	89.5	88.0
Apr.	85.8	86.4	86.8	-	88.2	86.6
May	84.2	84.8	85.5	-	86.7	84.9
June	87.1	87.9	88.2	-	89.8	88.0
July	86.7	87.6	87.9	-	89.2	87.3
Aug.	84.3	85.3	85.8	-	86.8	85.0
Sep.	82.5	83.3	84.3	-	85.1	83.1
Oct.	81.3	82.1	83.1	-	84.2	82.0
Nov.	82.0	83.0	83.8	-	84.9	82.6
Dec.	85.1	86.2	86.8	-	87.9	85.7

Source: ECB.

1) Inflows (+); outflows (-).

Technical notes[1]

Relating to Table 2.4

Seasonal adjustment of the euro area monetary aggregates

The approach used relies on multiplicative decomposition through X-12-ARIMA (version 0.2.2).[2] Seasonal adjustment for monetary aggregates includes a day-of-the-week adjustment for some components of M2. The seasonal adjustment of M3 is carried out indirectly by aggregating the seasonally adjusted series of M1, M2 less M1, and M3 less M2 to fulfil the additivity constraint.

Seasonal factors are estimated for the index of adjusted stocks. They are then applied to the levels expressed in EUR billions and to the adjustments due to reclassifications, other revaluations, etc., yielding seasonally adjusted values for the levels, the adjustments and thus for the flows. Seasonal factors are revised at annual intervals or as and when required.

Calculation of growth rates

Growth rates may be calculated from (a) flows or (b) the index of adjusted stocks.

If F_t represents the flow in month t, L_t the level outstanding at the end of the month t, X_t the rate of change in month t defined as $X_t = (F_t / L_{t-1} + 1)$, and I_t the index of the adjusted stocks in month t, the annual percentage change a_t – i.e. the change in the latest 12 months – may be calculated as follows:

(a) $a_t = ((X_t * X_{t-1} * X_{t-2} * X_{t-3} * X_{t-4} * X_{t-5} * X_{t-6} * X_{t-7} * X_{t-8} * X_{t-9} * X_{t-10} * X_{t-11}) - 1) * 100$

(b) $a_t = (I_t / I_{t-12} - 1) * 100$

Roundings may give rise to differences from the annual percentage changes shown in Table 2.4. The index of adjusted stocks is available with a higher level of precision on the ECB's website (www.ecb.int) on "Euro area statistics – download" page (in csv file format), from which the exact percentage changes in Table 2.4 may be calculated.

Similarly, the monthly change, as shown, for example, in Table 2.4, may be calculated as $(I_t/I_{t-1} - 1) * 100$. Finally, the three-month moving average for M3 is obtained as $(a_t + a_{t-1} + a_{t-2})/3$.

Relating to Tables 2.5 to 2.8

As far as possible, the data are harmonised and comparable. Nevertheless, as a result of the implementation of a new reporting scheme in January 1999, data for Tables 2.5 to 2.8 prior to the first quarter of 1999 are not directly comparable with those referring to later periods. In addition, quarterly flows cannot be calculated for any of the periods as, for the time being, reclassification and revaluation adjustments are not compiled. Tables 2.5 to 2.8 can be used for a structural analysis, while it is not advisable to perform a detailed analysis of the growth rates.

Finally, since the values reported for Tables 2.5 to 2.8 are revised on a quarterly basis (in the March, June, September and December issues), minor discrepancies may occur between these tables and those reporting monthly data.

Relating to Table 4.1

Seasonal adjustment of the HICP

The approach used relies on multiplicative decomposition through X-12-ARIMA (version 0.2.2)[2]. The seasonal adjustment of the total HICP for the euro area is carried out indirectly by aggregating the seasonally adjusted euro area series of processed food, unprocessed food, industrial goods excluding energy and services. Energy is added as a raw component since there is no statistical evidence of seasonality. Seasonal factors are revised at annual intervals or as and when required.

1 *For details see "Seasonal adjustment of monetary aggregates and HICP for the euro area", ECB (August 2000).*

2 *For details see Findley, D., Monsell, B., Bell, W., Otto, M., and Chen, B. C. (1998), "New Capabilities and Methods of the X-12-Arima Seasonal Adjustment Program", Journal of Business and Economic Statistics, 16, 2, 127-152, or "X-12-ARIMA Reference Manual Version 0.2.2.", December 1998, Time Series Staff, Bureau of the Census, Washington, D.C.*
For internal purposes, multiplicative models of TRAMO-SEATS also are used. For details on TRAMO-SEATS, see Gomez, V. and Maravall, A. (1996), "Programs TRAMO and SEATS: Instructions for the User", Bank of Spain, Working Paper No. 9628, Madrid.

Relating to Table 8.2

Seasonal adjustment of the balance of payments current account

The approach relies on multiplicative decomposition through X-12-ARIMA (version 0.2.2)[2] . The seasonal adjustment for goods and services includes a working day adjustment. The seasonal adjustment of the total current account is carried out by aggregating the seasonally adjusted euro area series for goods, services, income and current transfers. Seasonal factors are revised at annual intervals or as and when required.

General notes

The basis for the statistics compiled by the European Central Bank (ECB) is presented in the document entitled "Statistical information collected and compiled by the ESCB", dated May 2000. This document is an update of the report entitled "Statistical requirements for Stage Three of Monetary Union (Implementation Package)" of July 1996, and describes the provision of statistics as it stands today. The document covers money and banking and related statistics, balance of payments statistics, international investment position statistics and financial accounts statistics. The requirements of the ECB for statistics on prices and costs, national accounts, the labour market, government receipts and expenditure, short-term indicators of output and demand, and the European Commission Business and Consumer Surveys are set out in the document entitled "Requirements in the field of general economic statistics" of August 2000.[1]

The focus of these statistics is the euro area as a whole. More detailed and longer runs of data, with further explanatory notes, are available in a downloadable format (csv files) on the ECB's website (www.ecb.int) and new or expanded data will appear in the ECB Monthly Bulletin as they become available.

Owing to the fact that the composition of the ECU does not coincide with the currencies of the Member States which have adopted the single currency, pre-1999 amounts converted from the participating currencies into ECU at current ECU exchange rates are affected by movements in the currencies of Member States which have not adopted the euro. To avoid this effect in the monetary statistics, the pre-1999 data in Tables 2.1 to 2.8 are expressed in units converted from national currencies at the irrevocable euro exchange rates established on 31 December 1998. Unless indicated otherwise, price and cost statistics before 1999 are based on the data expressed in national currency terms.

Methods of aggregation and/or consolidation (including cross-country consolidation) have been used as appropriate.

As a general rule, the cut-off date for the statistics included in the ECB Monthly Bulletin is the day preceding the first meeting in the month of the Governing Council of the ECB. For this issue, it was 2 August 2001.

Recent data are often provisional and may be revised. Discrepancies between totals and their components may arise from rounding.

Overview

Key developments in the euro area are summarised in an overview table.

Monetary policy and financial statistics

Tables 1.1 to 1.5 show the consolidated financial statement of the Eurosystem, data on Eurosystem operations, statistics relating to minimum reserves, and the banking system's liquidity position. Tables 1.2 and 1.3 reflect the switch to variable rate tenders in June 2000. Monetary data relating to Monetary Financial Institutions (MFIs), including the Eurosystem, are shown in Tables 2.1 to 2.3. Table 2.3 is consolidated; inter-MFI positions within the euro area are not shown, but any difference between the sum total of such claims and liabilities as recorded is shown in column 13. Table 2.4 sets out monetary aggregates drawn from the consolidated MFI balance sheet; they also include some (monetary) liabilities of central government. The M3 data shown in Table 2.4 exclude holdings by non-residents of the euro area of shares/units issued by money market funds located in the euro area. Accordingly, these holdings are included in the item external liabilities shown in Table 2.3, and as a result

1 *Money and banking statistics are the responsibility of the ECB at the European level; responsibility for balance of payments, international investment position and financial accounts statistics is shared with the European Commission (Eurostat); price and cost and other economic statistics are the responsibility of the European Commission (Eurostat).*

have an impact on the item net external assets shown in Table 2.4. Table 2.5 shows a quarterly sectoral and maturity analysis of loans by MFIs to euro area residents. Table 2.6 shows a quarterly analysis of deposits held by euro area residents with MFIs. Table 2.7 provides a quarterly analysis of MFI claims on and liabilities to non-residents of the euro area. Table 2.8 shows a quarterly currency analysis of certain MFI balance sheet items. A complete list of MFIs is published on the ECB's website. Details of the sector definitions are set out in the "Money and Banking Statistics Sector Manual: Guidance for the statistical classification of customers" (ECB, November 1999). The "Money and Banking Statistics Compilation Guide" (EMI, April 1998) explains recommended practices to be followed by the NCBs. From 1 January 1999 the statistical information is collected and compiled on the basis of the ECB Regulation concerning the consolidated balance sheet of the Monetary Financial Institutions sector (ECB/1998/16).

Statistics on money market interest rates, long-term government bond yields and stock market indices (Tables 3.1 to 3.3) are produced by the ECB using data from wire services. For details concerning the statistics on retail bank interest rates (Table 3.4), see the footnote at the bottom of the relevant page.

Statistics on securities issues are presented in Tables 3.5 and 3.6. They are broken down into short-term and long-term securities. "Short-term" means securities with an original maturity of one year or less (in accordance with the ESA 95, in exceptional cases two years or less). Securities with a longer maturity, or with optional maturity dates, the latest of which is more than one year away, or with indefinite maturity dates, are classified as long-term. The statistics on securities issues are estimated to cover approximately 95% of total issues by euro area residents. Table 3.5 shows securities issued, redemptions and amounts outstanding, broken down into short-term securities and long-term securities. Net issues differ from the change in amounts outstanding owing to valuation changes, reclassifications and other adjustments. Table 3.6 contains a sectoral breakdown of issuers of euro-denominated securities, whether resident in the euro area or elsewhere. For euro area residents, the sectoral breakdown is in line with the European System of Accounts 1995 (ESA 95).[2] For non-euro area residents, the term "banks (including central banks)" is used to indicate institutions of a similar type to MFIs (including the Eurosystem) resident outside the euro area. The term "international organisations" includes the European Investment Bank. (The ECB is included in the Eurosystem.)

The totals (columns 1, 7 and 14) in Table 3.6 are identical to the data on amounts outstanding (columns 8, 16 and 20), gross issues (columns 5, 13 and 17) and net issues (columns 7, 15 and 19) of euro-denominated securities in Table 3.5. The amounts outstanding of securities issued by MFIs (column 2) in Table 3.6 are broadly comparable with money market paper and debt securities issued as shown on the liabilities side of the aggregated MFI balance sheet in Table 2.8.3 (columns 2 and 10), although the coverage of securities issues statistics is at present somewhat narrower.

Prices and real economy indicators

The data presented in the ECB Monthly Bulletin are, with a few exceptions, produced by the European Commission (mainly Eurostat) and national statistical authorities. Euro area results are obtained by aggregating data for individual countries. As far as possible, the data are harmonised and comparable. However, the availability of comparable data is, as a general rule, better for the more recent periods than for earlier periods.

2 *The code numbers in the ESA 95 for the sectors shown in tables in the Monthly Bulletin are: MFIs (including Eurosystem) comprises the ECB and the national central banks of Member States in the euro area (S.121) and other monetary financial institutions (S.122); non-monetary financial corporations comprises other financial intermediaries (S.123), financial auxiliaries (S.124) and insurance corporations and pension funds (S.125); non-financial corporations (S.11); central government (S.1311); other general government comprises state government (S.1312), local government (S.1313) and social security funds (S.1314).*

The Harmonised Index of Consumer Prices (HICP) for the euro area (Table 4.1) is available from 1995 onwards. The index is based on national HICPs that follow the same methodology in all euro area countries. The breakdown by goods and services components is derived from the Classification of individual consumption by purpose (Coicop) used for the HICP. Data from January 2000 include the cost of health and educational services; data from January 2001 also cover hospital services and social services provided to people living at home, in retirement homes and in residences for the disabled; earlier data on the extended basis are, in general, not available. The HICP from January 2000 also covers spending by non-residents which had previously been excluded from the HICP in certain Member States. The table includes seasonally adjusted HICP data which are compiled by the ECB.

With regard to statistics on national accounts (Tables 4.2 and 5.1), the implementation of the ESA 95 during 1999 and thereafter has begun to pave the way for fully comparable data, including quarterly summary accounts, across the euro area. Before 1999 the deflators of GDP in Table 4.2.2 are derived from national data in domestic currency. National accounts in this issue are based on the ESA 95.

Table 5.2 shows selected other real economy indicators. The implementation of Council Regulation (EC) No. 1165/98 of 19 May 1998 concerning short-term statistics will enlarge the range of available euro area data. The breakdown by end-use of the products applied in Tables 4.2.1 and 5.2.1 represent the harmonised sub-division of the industry excluding construction (NACE sections C to E) into Main Industrial Groupings as defined in the Commission Regulation (EC) No. 586/2001 of 26 March 2001.

Opinion survey data (Table/Chart 5.3) draw on the Business and Consumer Surveys of the European Commission.

Employment data (Table 5.4) are based on the ESA 95. Whenever coverage of the euro area is incomplete, some data will be estimated by the ECB on the basis of the information available. Unemployment rates conform to International Labour Organization (ILO) guidelines.

Financial accounts statistics

Table 6.1 shows quarterly data on financial accounts for non-financial sectors in the euro area, comprising general government (S.13), non-financial corporations (S.11), and households (S.14) including non-profit institutions serving households (S.15). The data (not seasonally adjusted) cover levels outstanding and financial transactions classified according to the ESA 95 and show the main financial investment and financing activities of the non-financial sectors. On the financing side (liabilities), the data are presented by ESA 95 sector and original maturity. Whenever possible the financing taken from MFIs is separately presented. The information on financial investment (assets) is currently less detailed than that on financing, especially since a breakdown by sector is not possible. While both levels and transactions may throw light on economic developments, the latter are more likely to be the focus of attention.

The quarterly data are based on euro area MFI and securities issues statistics, government finance statistics, quarterly national financial accounts, and BIS international banking statistics. While all euro area countries contribute to the euro area statistics, Ireland and Luxembourg, as yet, do not provide quarterly national financial accounts data.

Table 6.2 shows annual data on saving, (financial and non-financial) investment and financing in the euro area. These data cannot yet be reconciled with the quarterly data presented in Table 6.1.

General government fiscal position

Tables 7.1 to 7.3 show the general government fiscal position in the euro area. The data are mainly consolidated and are based on the ESA 95 methodology. The euro area aggregates are compiled by the ECB from harmonised data provided by the NCBs, which are regularly updated. Data on deficit and debt for the euro area countries may therefore differ from those used by the European Commission in the context of the excessive deficit procedure.

Table 7.1 shows general government revenue and expenditure on the basis of definitions laid down in Commission Regulation No. 1500/2000 of 10 July 2000 amending the ESA 95. Table 7.2 shows details of general government gross consolidated debt at nominal value in accordance with the Treaty provisions on the excessive deficit procedure. Tables 7.1 and 7.2 include summary data for individual euro area countries owing to their importance in the framework of the Stability and Growth Pact. Table 7.3 analyses changes in general government debt. The difference between the change in government debt and government deficit, the deficit-debt adjustment, is mainly explained by government transactions in financial assets and by foreign exchange valuation effects.

Balance of payments and international investment position of the euro area (including reserves), trade in goods and exchange rates

The concepts and definitions used in balance of payments statistics (Tables 8.1 to 8.6) and international investment position (i.i.p.) statistics generally conform to the 5th edition of the IMF Balance of Payments Manual (October 1993), to the ECB Guideline of May 2000 (ECB/2000/04) on the statistical reporting requirements of the ECB, and to Eurostat's documentation.

The euro area balance of payments is compiled by the ECB. Data up to December 1998 are expressed in ECU. The recent monthly figures for balance of payments statistics should be regarded as provisional. Data are revised with the publication of the detailed quarterly balance of payments data. Earlier data are revised periodically.

Some earlier data have been partially estimated and may not be fully comparable with more recent observations. That is the case for the b.o.p. financial account before end-1998, the services account before end-1997, the monthly pattern of income for the years 1997 to 1999 and the i.i.p. at end-1997. Table 8.5.2 provides a sectoral breakdown of euro area purchasers of securities issued by non-residents of the euro area. It is not possible to show a sectoral breakdown of euro area issuers of securities acquired by non-residents.

The euro area i.i.p. (Table 8.7.1) is compiled on a net basis by aggregating national data. The i.i.p. is valued at current market prices with the exception of direct investment stocks, where book values are used to a large extent.

The outstanding amounts of the Euroystem's international reserves and related assets are shown in Table 8.7.2 with the corresponding reserves and related assets held by the ECB. The data in Table 8.7.2 are in line with the recommendations for the IMF/BIS template on international reserves and foreign currency liquidity. Earlier data are revised on an ongoing basis. Reserve assets data before end-1999 are not fully comparable with later observations. A publication on the statistical treatment of the Eurosystem's international reserves is available on the ECB's website.

Table 9 gives data on euro area external trade in goods, and indices – value, volume and unit value – for total exports and imports. The value index is calculated by the ECB. The volume index is derived from the unit value index provided by Eurostat and the value index. Owing to differences in definitions, classification, coverage and time of recording, external trade data, in particular imports, are

not fully comparable with the goods item in the balance of payments statistics (Tables 8.1 and 8.2).

Table 10 shows ECB calculations of nominal and real effective exchange rate indices for the euro based on weighted averages of bilateral euro exchange rates. Weights are based on 1995-97 manufactured goods trade with the trading partners and capture third-market effects. Up to December 2000, the narrow group is composed of the countries whose currencies are shown in the table plus the Greek drachma. On adopting the euro in January 2001, Greece ceased to be a partner country in the effective exchange rate of the euro and the weighting scheme has been adjusted accordingly. In addition, the broad group includes the following countries: Algeria, Argentina, Brazil, China, Croatia, Cyprus, the Czech Republic, Estonia, Hungary, India, Indonesia, Israel, Malaysia, Mexico, Morocco, New Zealand, the Philippines, Poland, Romania, Russia, Slovakia, Slovenia, South Africa, Taiwan, Thailand and Turkey. Real rates are calculated using consumer prices (CPI), producer prices in manufacturing (PPI) and unit labour costs in manufacturing (ULCM). Where deflators are not yet available, estimates are used. The bilateral rates shown are those against the 12 currencies used in the ECB's calculation of the "narrow" effective exchange rate of the euro. The ECB publishes daily reference rates for these and some other currencies.

Other statistics

Statistics on other EU Member States (Table 11) follow the same principles as those for data relating to the euro area. Data for the United States and Japan contained in Tables/Charts 12.1 and 12.2 are obtained from national sources. Saving, investment and financing data for the United States and Japan (Table/Chart 12.2) are structured in the same way as the capital and financial flows data shown for the euro area in Table/Chart 6.

Past data for selected economic indicators for the euro area plus Greece

Data for the euro area plus Greece up to end-2000 are shown in an additional table at the end of the "Euro area statistics" section. This table provides past data for the euro area plus Greece for a selected number of indicators. Detailed information on the different parts of the table is provided below.

Table A.1 presents monetary aggregates and the main counterparts of M3, as drawn from the consolidated MFI balance sheet. For the consolidation of the data referring to the "Euro 11 plus Greece", balance sheet positions of MFIs in the first 11 countries participating in the euro area vis-à-vis those resident in Greece have been taken into account. Business denominated in Greek drachmas has also been identified and treated as if it had been in euro.

Table A.2 shows financial market interest rates and securities other than shares statistics. Before January 1999 synthetic euro area money market rates were calculated on the basis of national rates weighted by GDP. From January 1999 to December 2000 euro interbank offered rates (EURIBOR) and ATHIBOR are weighted by GDP. Up to August 2000, euro area yields are calculated on the basis of harmonised national government bond yields weighted by GDP. Thereafter, the weights are the nominal outstanding amounts of government bonds in each maturity band.

For securities issues statistics (also shown in Table A.2), the fact that residents of Greece will become residents of the euro area has given rise to two structural modifications. The first change involves the inclusion of all securities issued by Greek residents in euro and Greek drachmas. The second effect is caused by the inclusion of all securities issued by euro area residents – in addition to those in Greece – and denominated in Greek drachmas. Securities issues statistics including Greece are compiled for both stocks and flows.

Aggregated data for the euro area plus Greece on price and real economy developments (Table B) are provided by the European Commission (Eurostat). Data on fiscal developments have been aggregated by the ECB.

Table C presents selected balance of payments past data for the euro area plus Greece. The methodology applied is generally the same as that used in Section 8. All available information for the past data is shown on the ECB's web site (in the "Statistics, Latest monetary, financial and balance of payments statistics – release schedules" section).

Table D shows past nominal and real effective exchange rate indices for the euro plus the Greek drachma. The methodology applied for the calculation is the same as that described in the article in the April 2000 issue of the ECB Monthly Bulletin entitled "The nominal and real effective exchange rates of the euro". New weights for the euro area partner countries have been calculated, excluding Greece from the partners but including it in the euro area (for the countries included in the calculations, see footnote 1 to Table 10 on "Exchange rates" in the "Euro area statistics" section of this issue). A "theoretical" euro exchange rate, in which account is taken of Greek drachma-related developments as well as deflators for the euro area plus Greece, has been constructed prior to January 2001. The full set of data, starting from 1990 (1993 for the broad group), can be downloaded in csv format from the ECB's website.

Chronology of monetary policy measures of the Eurosystem[1]

4 January 2000

The ECB announces that on 5 January 2000 the Eurosystem will conduct a liquidity-absorbing fine-tuning operation with same-day settlement. This measure aims at restoring normal liquidity conditions in the money market after the successful transition to the year 2000.

5 January 2000

The Governing Council of the ECB decides that the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility will remain unchanged at 3.0%, 4.0% and 2.0% respectively.

15 January 2000

At the request of the Greek authorities, the ministers of the euro area Member States, the ECB and the ministers and central bank governors of Denmark and Greece decide, following a common procedure, to revalue the central rate of the Greek drachma in the exchange rate mechanism (ERM II) by 3½%, with effect from 17 January 2000.

20 January 2000

The Governing Council of the ECB decides that the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility will remain unchanged at 3.0%, 4.0% and 2.0% respectively.

It also announces that the Eurosystem intends to allot an amount of €20 billion for each of the longer-term refinancing operations to be conducted in the first half of 2000. This amount takes into consideration the expected liquidity needs of the banking system of the euro area in the first half of 2000 and the desire of the Eurosystem to continue to provide the bulk of its refinancing of the financial sector through its main refinancing operations.

3 February 2000

The Governing Council of the ECB decides to raise the interest rate on the main refinancing operations of the Eurosystem by 0.25 percentage point to 3.25%, starting from the operation to be settled on 9 February 2000. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 4.25% and 2.25% respectively, both with effect from 4 February 2000.

17 February, 2 March 2000

The Governing Council of the ECB decides that the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility will remain unchanged at 3.25%, 4.25% and 2.25% respectively.

16 March 2000

The Governing Council of the ECB decides to raise the interest rate on the main refinancing operations of the Eurosystem by 0.25 percentage point to 3.5%, starting from the operation to be settled on 22 March 2000. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 4.5% and 2.5% respectively, with effect from 17 March 2000.

30 March, 13 April 2000

The Governing Council of the ECB decides that the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility will remain unchanged at 3.5%, 4.5% and 2.5% respectively.

1 *The chronology of monetary policy measures of the Eurosystem taken in 1999 can be found on pages 176 to 179 of the ECB Annual Report 1999.*

27 April 2000

The Governing Council of the ECB decides to raise the interest rate on the main refinancing operations of the Eurosystem by 0.25 percentage point to 3.75%, starting from the operation to be settled on 4 May 2000. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 4.75% and 2.75% respectively, both with effect from 28 April 2000.

11 May 2000

The Governing Council of the ECB decides that the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility will remain unchanged at 3.75%, 4.75% and 2.75% respectively.

25 May 2000

The Governing Council of the ECB decides that the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility will remain unchanged at 3.75%, 4.75% and 2.75% respectively.

8 June 2000

The Governing Council of the ECB decides to raise the interest rate on the main refinancing operations of the Eurosystem by 0.50 percentage point to 4.25% and to apply this in the two operations (which will be conducted as fixed rate tenders) to be settled on 15 and 21 June 2000. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 0.50 percentage point, to 5.25% and 3.25% respectively, both with effect from 9 June 2000.

It also announces that, starting from the operation to be settled on 28 June 2000, the main refinancing operations of the Eurosystem will be conducted as variable rate tenders, applying the multiple rate auction procedure. The Governing Council decides to set a minimum bid rate for these operations equal to 4.25%. The switch to variable rate tenders in the main refinancing operations is not intended as a further change in the monetary policy stance of the Eurosystem, but as a response to the severe overbidding which has developed in the context of the current fixed rate tender procedure.

19 June 2000

In accordance with Article 122 (2) of the Treaty establishing the European Community, the ECOFIN Council decides that Greece fulfils the necessary conditions on the basis of the criteria set out in Article 121 (1) and abrogates the derogation of Greece with effect from 1 January 2001. The ECOFIN Council took its decision, taking account of the reports of the European Commission and the ECB on the progress made in the fulfilment by Sweden and Greece of their obligations regarding the achievement of Economic and Monetary Union, after consulting the European Parliament, and after a discussion in the EU Council meeting in the composition of Heads of State or Government.

The ECOFIN Council, acting with the unanimity of the Member States of the European Community without a derogation and the Member State concerned, upon a proposal from the European Commission and after consultation of the ECB, also adopts the irrevocable conversion rate between the Greek drachma and the euro, with effect from 1 January 2001. Following the determination of the euro conversion rate of the Greek drachma (which is equal to its prevailing central rate against the euro in the exchange rate mechanism, ERM II), the ECB and the Bank of Greece announce that they will monitor the convergence of the market exchange rate of the Greek drachma against the euro towards its euro conversion rate, which should be completed at the latest by 29 December 2000.

21 June 2000

The Governing Council of the ECB decides that the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 5.25% and 3.25% respectively. It reiterates that, as announced on 8 June 2000, the forthcoming main refinancing operations of the Eurosystem will be conducted as variable rate tenders, applying the multiple rate auction procedure, with a minimum bid rate of 4.25%.

The Governing Council also announces that, for the longer-term refinancing operations to be conducted in the second half of 2000, the Eurosystem intends to allot an amount of €15 billion per operation. This amount takes into consideration the expected liquidity needs of the banking system of the euro area in the second half of 2000 and the desire of the Eurosystem to continue to provide the bulk of its refinancing of the financial sector through its main refinancing operations.

6 July, 20 July, 3 August 2000

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.25%, 5.25% and 3.25% respectively.

31 August 2000

The Governing Council of the ECB decides to raise the minimum bid rate on the main refinancing operations of the Eurosystem by 0.25 percentage point to 4.50%, with effect from the operation to be settled on 6 September 2000. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 5.50% and 3.50% respectively, both with effect from 1 September.

14 September 2000

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.50%, 5.50% and 3.50% respectively.

5 October 2000

The Governing Council of the ECB decides to raise the minimum bid rate on the main refinancing operations of the Eurosystem by 0.25 percentage point to 4.75%, with effect from the operation to be settled on 11 October 2000. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 5.75% and 3.75% respectively, both with effect from 6 October.

19 October, 2 November, 16 November, 30 November 2000

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.75%, 5.75% and 3.75% respectively.

14 December 2000

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.75%, 5.75% and 3.75% respectively.

In addition, it decides to reconfirm the existing reference value for monetary growth, namely an annual growth rate of 4½% for the broad aggregate M3. This decision is taken on the grounds that the available evidence continues to support the assumptions underlying the initial derivation of the reference value in December

1998 (and its confirmation in December 1999), namely that, over the medium term, M3 income velocity declines at a trend rate in the range from ½% to 1% per annum and potential output grows at a trend rate between 2% and 2½% per annum. The Governing Council will undertake the next review of the reference value in December 2001.

2 January 2001

On 1 January 2001 the euro was introduced in Greece. Greece thus became the twelfth EU Member State to adopt the single currency and the first to do so since the start of Stage Three of Economic and Monetary Union (EMU) on 1 January 1999. As a result, the Bank of Greece is now a full member of the Eurosystem, with the same rights and obligations as the 11 national central banks of the EU Member States which previously adopted the euro. In accordance with Article 49 of the Statute of the European System of Central Banks and of the European Central Bank, the Bank of Greece pays up the remainder of its contribution to the capital of the ECB, as well as its share of the ECB's reserves, and also transfers to the ECB its contribution to the foreign reserve assets of the ECB.

Further to the announcement on 29 December 2000, the first main refinancing operation of 2001, in which the Greek counterparties of the Eurosystem participate for the first time, is successfully conducted. The allotment volume of €101 billion takes into account the additional liquidity needs of the euro area banking system resulting from the integration of the Greek Monetary Financial Institutions.

4 January 2001

The Governing Council of the ECB decides that the minimum bid rate for the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.75%, 5.75% and 3.75% respectively.

In addition, it decides on an allotment amount of €20 billion per operation for the longer-term refinancing operations to be conducted in 2001. This amount takes into consideration the expected liquidity needs of the euro area banking system in 2001 and the desire of the Eurosystem to continue to provide the bulk of refinancing of the financial sector through its main refinancing operations. The Governing Council may adjust the allotment amount in the course of the year in the event of unexpected developments in liquidity needs.

18 January, 1 February, 15 February, 1 March, 15 March, 29 March, 11 April, 26 April 2001

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.75%, 5.75% and 3.75% respectively.

10 May 2001

The Governing Council of the ECB decides to lower the minimum bid rate on the main refinancing operation by 0.25 percentage point to 4.50%, with effect from the operation to be settled on 15 May 2001. In addition, it decides to lower the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 5.50% and 3.50% respectively, both with effect from 11 May 2001.

23 May, 7 June, 21 June, 5 July, 19 July, 2 August 2001

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.50%, 5.50% and 3.50% respectively.

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"Annual Report 1998", April 1999.

"Annual Report 1999", April 2000.

"Annual Report 2000", May 2001.

Convergence Report

"Convergence Report 2000", May 2000.

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"Euro area monetary aggregates and their role in the Eurosystem's monetary policy strategy", February 1999.

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