



EUROPEAN CENTRAL BANK

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## MONTHLY BULLETIN OCTOBER 2005

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**Address**

Kaiserstrasse 29  
60311 Frankfurt am Main  
Germany

**Postal address**

Postfach 16 03 19  
60066 Frankfurt am Main  
Germany

**Telephone**

+49 69 1344 0

**Website**

<http://www.ecb.int>

**Fax**

+49 69 1344 6000

**Telex**

411 144 ecb d

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## ABBREVIATIONS

### COUNTRIES

BE	Belgium	HU	Hungary
CZ	Czech Republic	MT	Malta
DK	Denmark	NL	Netherlands
DE	Germany	AT	Austria
EE	Estonia	PL	Poland
GR	Greece	PT	Portugal
ES	Spain	SI	Slovenia
FR	France	SK	Slovakia
IE	Ireland	FI	Finland
IT	Italy	SE	Sweden
CY	Cyprus	UK	United Kingdom
LV	Latvia	JP	Japan
LT	Lithuania	US	United States
LU	Luxembourg		

### OTHERS

BIS	Bank for International Settlements
b.o.p.	balance of payments
BPM5	IMF Balance of Payments Manual (5th edition)
CD	certificate of deposit
c.i.f.	cost, insurance and freight at the importer's border
CPI	Consumer Price Index
ECB	European Central Bank
EER	effective exchange rate
EMI	European Monetary Institute
EMU	Economic and Monetary Union
ESA 95	European System of Accounts 1995
ESCB	European System of Central Banks
EU	European Union
EUR	euro
f.o.b.	free on board at the exporter's border
GDP	gross domestic product
HICP	Harmonised Index of Consumer Prices
HWWA	Hamburg Institute of International Economics
ILO	International Labour Organization
IMF	International Monetary Fund
MFI	monetary financial institution
NACE Rev. 1	Statistical classification of economic activities in the European Community
NCB	national central bank
PPI	Producer Price Index
SITC Rev. 3	Standard International Trade Classification (revision 3)
ULCM	unit labour costs in manufacturing
ULCT	unit labour costs in the total economy

**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 meeting on 6 October 2005, the Governing Council of the ECB decided to leave the minimum bid rate on the main refinancing operations of the Eurosystem unchanged at 2.0%. The interest rates on the marginal lending facility and the deposit facility were also left unchanged at 3.0% and 1.0% respectively.

On the basis of its regular economic and monetary analyses, and despite renewed upward pressure on prices stemming mainly from oil market developments, the Governing Council concluded that the monetary policy stance still remains appropriate. At the same time, strong vigilance with regard to upside risks to price stability is warranted. It is essential that the increase in the current inflation rate does not translate into higher underlying inflationary pressures in the euro area. Strong vigilance is also called for in the light of ample liquidity in the euro area. Across the maturity spectrum, interest rates in the euro area remain very low in both nominal and real terms, and thus lend ongoing support to economic activity. For this support to continue, it is of the essence that inflation expectations remain firmly anchored at levels consistent with price stability.

Starting with the economic analysis underlying the Governing Council's assessment, real GDP grew at quarter-on-quarter rates of 0.4% and 0.3% in the first and second quarters of 2005, dampened in particular by higher oil prices. In line with the September ECB staff projections, recent survey indicators, on balance, support the view that economic growth could gradually pick up from the second half of this year. On the external side, ongoing growth in global demand should support euro area exports. On the domestic side, investment should benefit both from continuously favourable financing conditions and from the robust growth of corporate earnings. Consumption should gradually recover, broadly in line with expected developments in real disposable income.

This outlook for economic activity remains subject to downward risks, relating mainly to

oil prices, concerns about global imbalances and weak consumer confidence. Temporarily, further uncertainty arose as to the economic effects of the recent hurricanes in the United States, which, in the meantime, have generally been assessed to be limited and short-term.

Turning to price developments, recent increases mainly in oil prices have pushed headline inflation rates to levels significantly in excess of 2%. According to Eurostat's flash estimate, annual HICP inflation was 2.5% in September, compared with 2.2% in the previous two months, and it is likely that HICP inflation will remain elevated in the short term. In interpreting this jump in the annual inflation rate, it is key to make a clear distinction between temporary, short-term factors on the one hand, and those of a more lasting nature on the other.

While no detailed information on developments in the components of HICP in September is available as yet, it appears that oil price increases have again played an important role, this time exacerbated by a much stronger increase in petrol prices owing to exceptional capacity constraints at refineries following the two hurricanes in the United States. If a gradual normalisation in this market segment is confirmed, an unwinding of the sharp increases in spreads between oil prices and refined products could materialise. Hence, these increases may be only temporary.

However, there is currently no indication that oil prices will moderate significantly in the foreseeable future. Rather, markets expect oil prices to remain at high levels, driven mainly by buoyant global demand and, to some extent, by fragilities on the supply side. Accordingly, this scenario underlies the Governing Council's forward-looking assessment of price developments.

Crucially, what matters is how these developments affect the outlook for price stability over the medium term. For the time being, there continues to be no clear evidence of domestic inflationary pressures building up in

the euro area. In particular, wage increases have remained contained over recent quarters and, with labour markets weak, this should continue for the time being. The main scenario, therefore, remains one of elevated inflation rates over the short term, and with a gradual decline thereafter.

Upside risks to this scenario have, however, increased. These relate to ongoing uncertainties surrounding oil market developments, to a potentially stronger pass-through than has so far been observed, on account of higher oil prices being passed on to consumers via the domestic production chain, and to potential second-round effects in wage and price-setting behaviour, all of which play an important role in the Governing Council's assessment for price stability over the medium term. In addition, possible further increases in administered prices and indirect taxes have to be taken into account. Accordingly, strong vigilance is required in order to ensure that longer-term inflation expectations for the euro area remain well-anchored.

The monetary analysis provides further insight into inflation prospects over medium to longer horizons. Money and credit have continued to grow robustly in the euro area over the past few months, with the annual rate of M3 growth now exceeding 8%. The strength of monetary growth has been increasingly driven primarily by the prevailing low level of interest rates. In recent months, the short-term dynamics of M3 have gained further momentum and the growth of borrowing, in particular mortgage loans, remains very strong. In this context, price dynamics in a number of housing markets need to be monitored closely. Strong monetary and credit growth, in the context of an already ample liquidity situation in the euro area, points to risks to price stability over medium to longer horizons.

To sum up, the economic analysis indicates that oil and petrol price increases, in particular, imply upward revisions to the outlook for short-term price developments. Domestic

inflationary pressures over the medium term still remain contained in the euro area, but significant upside risks have to be taken into account. Moreover, the monetary analysis identifies upside risks to price stability over the medium to longer term.

Overall, cross-checking the information from the two pillars confirms the need for strong vigilance in order to maintain inflation expectations in line with price stability. By keeping medium-term inflation expectations firmly anchored at levels consistent with price stability, monetary policy continues to make a significant contribution towards a recovery in economic growth.

As regards fiscal policies in the euro area, most recent information again provides a very mixed picture. Some countries still report significant imbalances, while others maintain sound fiscal positions. Preparations for 2006 budgets are in their final stages in most euro area countries. It is essential that forthcoming budgets reflect a thrust for fiscal consolidation that both progresses at the appropriate pace and is embedded in a well-designed and comprehensive reform strategy. This would help to support confidence within the euro area by strengthening expectations of sustainable and growth-friendly public finances and by enhancing the credibility of the reformed Stability and Growth Pact. As for the impact of high oil prices on public finances, consolidation of budgets must be continued. In addition, as affirmed in the latest G7 statement, subsidies and artificial price caps that constrain the price of oil and oil products have an adverse effect on the global market and should be avoided. Such measures are also not in the longer-run interests of the economies concerned since all economies will eventually need to adjust to the higher level of the oil price.

Unit labour cost (ULC) developments within the euro area play an important role in determining inflation and competitiveness patterns across the euro area countries. Since the euro was introduced, several euro area

countries have experienced significantly larger cumulative increases in their ULCs than the euro area average. At the same time, some countries have exhibited cumulative ULC developments significantly below the euro area average.

It must be understood that some differences in ULC growth rates are a natural feature of a well-functioning monetary union, as these may reflect catching-up processes or necessary adjustments to past shocks. In this respect, the flexibility within the euro area may well have been underestimated in the early phases of its existence.

At the same time, there is no room for complacency. In some euro area countries, wage developments have substantially and persistently exceeded labour productivity growth, leading to relatively strong ULC developments over a prolonged period of time, higher inflationary pressures and losses in competitiveness. This may be, at least partially, due to wage rigidities, such as an explicit or de facto indexation of nominal wages to prices or high reservation wages determined by the level of unemployment benefits, to low labour productivity growth and to a lack of competition in some sectors.

In the context of external shocks, such as sharp increases in oil prices, there is an even greater need for increasing the resilience of euro area economies by speeding-up structural reforms. Together with the completion of the EU internal market, such reforms would support ULC developments that are conducive to price stability and would further smooth the functioning of adjustment mechanisms in the euro area, thereby strengthening the foundations for sustained growth in output and employment.

This issue of the Monthly Bulletin contains two articles. The first article assesses the impact of economic and financial uncertainty on the euro area's money demand, emphasising in particular the influence of that uncertainty on portfolio

decisions. The second article addresses the performance of financial systems within industrialised countries, using a comprehensive conceptual framework and presenting an illustrative selection of relevant indicators.





# ECONOMIC AND MONETARY DEVELOPMENTS

## I THE EXTERNAL ENVIRONMENT OF THE EURO AREA

Overall, the global economy continues to expand at a fairly robust pace, with the recent hurricanes in the Gulf of Mexico resulting in some weakening in activity in the United States. As the effects of the hurricanes are expected to be temporary and relatively localised, the outlook for the global economy continues to be relatively favourable. Inflationary pressures generally remain fairly well contained, although the hurricane-related disruptions to the supply of oil and refined products may result in some increase in inflation rates.

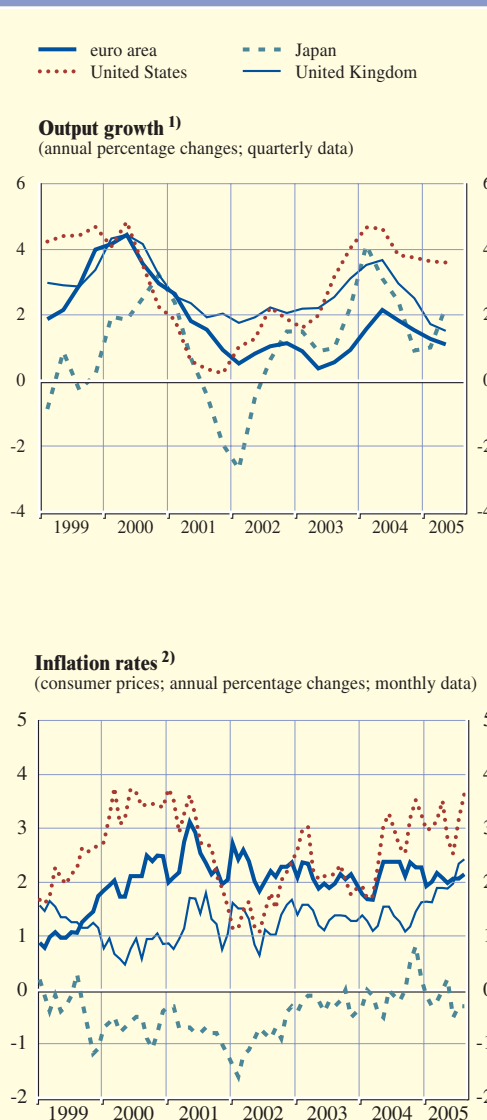
### I.1 DEVELOPMENTS IN THE WORLD ECONOMY

The global economy continues to expand at a fairly robust pace. Available indicators suggest that hurricanes Katrina and Rita have resulted in a temporary weakening in US activity, employment and consumer sentiment. At the same time, the Chinese economy continues to expand at a more or less unabated rate and the recovery process in Japan remains on track. Survey evidence suggests that although the manufacturing sector has regained some momentum, global activity appears to be supported by the services sector. Global inflationary pressures generally remain fairly well contained. Although headline consumer price inflation has recently picked up in many countries as a result of the increase in oil prices, annual consumer price increases excluding food and energy have been more moderate, standing at an average of 1.9% in July for the OECD countries.

#### UNITED STATES

In the United States, the recent destructive hurricanes in the Gulf of Mexico are expected to depress activity and increase consumer prices in the autumn. In addition to regional production losses, the hurricanes are affecting macroeconomic developments through their impact on the functioning of ports and through increases in energy prices resulting from disruptions to the oil production and refining infrastructure. However, the macroeconomic effects of the hurricanes will probably be relatively limited and confined to the near term. The underlying strength of the economic expansion is unlikely to be greatly affected by the hurricanes and reconstruction spending should help to offset at least some of the negative growth effects.

Chart I Main developments in major industrialised economies



Sources: National data, BIS, Eurostat and ECB calculations.  
1) Eurostat data are used for the euro area and the United Kingdom; for the United States and Japan, national data are used. GDP figures have been seasonally adjusted.  
2) HICP for the euro area and the United Kingdom; CPI for the United States and Japan.

The momentum in the economy appears to have been relatively robust before the hurricanes. In the second quarter of 2005 real GDP grew by 3.3% in quarterly annualised terms, according to “final” estimates. Growth moderated somewhat compared with the previous quarter, mostly owing to a sharp decrease in inventory investment. The growth of final domestic demand remained robust and export growth increased. Import growth decreased, probably affected by the weakness of inventory investment.

Growth in manufacturing production picked up in the months before the hurricanes after some weakness in the spring. At the same time, indicators of household consumption, residential investment and business fixed investment were fairly strong. Furthermore, the gradual improvement in the employment situation continued. Overall, as regards the background factors of output and demand, it appears that the negative effects of higher oil prices and increases in short-term interest rates were counterbalanced by low long-term interest rates and increases in house prices.

Looking ahead, the destruction brought about by the hurricanes will be felt in economic developments in the autumn. For the period thereafter, however, the outlook for overall economic activity remains relatively benign, given the apparent underlying strength of the expansion. In the first half of next year GDP growth is expected to receive additional support from investment spending related to the rebuilding efforts following the hurricanes. The main risks to growth beyond the very near term include the effects of increased energy prices in the context of an exceptionally low household saving rate and historically high household indebtedness.

Increases in consumer prices other than energy prices have remained relatively contained, despite the rise in oil prices and unit labour costs. In August annual consumer price inflation increased to 3.6%, but excluding food and energy it remained at 2.1%. As regards monetary policy, at its meeting on 20 September the US Federal Open Market Committee decided to raise its target for the federal funds rate by 25 basis points for the 11th consecutive time, bringing the policy rate to 3.75%. The Committee reiterated its statement that “policy accommodation can be removed at a pace that is likely to be measured”.

## **JAPAN**

In Japan, economic activity has gained momentum since the start of the year. According to a second estimate, real GDP rose by 0.8% on a quarterly basis in the second quarter of 2005, equivalent to an annualised rate of growth of 3.3%. This represents a significant upward revision of the initial estimate (from 0.3% on a quarterly basis and 1.1% on an annualised basis), mainly reflecting revisions to the contributions from private business investment and inventories. The revised data confirm that the current recovery in the Japanese economy is being driven mainly by strong growth in private domestic demand. Despite some weakening in production indicators in July and August, the overall outlook for the Japanese economy remains favourable. The Bank of Japan’s Tankan corporate survey shows a further moderate improvement in corporate sentiment for the third quarter of 2005, with particularly strong gains in the retail and real estate sectors.

With regard to price developments, both the headline CPI and the CPI excluding fresh food continued to decline on an annual basis in August. The annual rate of change of the CPI stood at -0.3%, while that of the CPI excluding fresh food was -0.1%. By contrast, producer prices – as measured by the domestic corporate goods price index – rose by 1.7% on an annual basis in August, reflecting the rise in the prices of energy products.

At its meeting on 8 September the Bank of Japan decided to keep its target for the outstanding balance of current accounts unchanged at around JPY 30-35 trillion. At the same time, it reiterated in its accompanying press release that when demand for liquidity is exceptionally weak owing to technical factors, the balance may be allowed to fall below the lower bound of the target.

### UNITED KINGDOM

In the United Kingdom, quarter-on-quarter growth increased to 0.5% in the second quarter of 2005. A slight improvement notwithstanding, private spending remained fairly weak. In particular, household consumption was probably affected by the lagged effects of past interest rate increases, moderation in the housing market and some easing in the labour market. Overall, real GDP growth is expected to be significantly weaker this year than in 2004, when it reached 3.2%.

HICP inflation continued to increase in August, reaching 2.4% year on year. Transport prices, largely driven by energy prices, continue to be mainly responsible for the upward pressure on inflation, while considerable further upward pressure came from food and non-alcoholic beverages. Residential property prices remained relatively subdued in the second quarter of 2005, and growth in average earnings moderated somewhat compared with the previous quarter.

### OTHER EUROPEAN COUNTRIES

Output growth remained relatively robust in many of the other non-euro area EU countries in the second quarter of this year, and the prospects for economic growth in the third quarter are favourable. HICP inflation increased in August in most non-euro area EU countries, mainly as a result of higher energy prices.

In Sweden, quarterly real GDP growth increased to 0.6% in the second quarter of this year, mainly supported by domestic demand. In Denmark, output growth is expected to recover from the relatively subdued activity observed in the first quarter. For 2005 as a whole, economic activity is expected to remain relatively robust in both countries. Annual HICP inflation continued to rise in Denmark in August (reaching 2.3% year on year), owing to high energy and food prices. In Sweden, inflation also rose in August, but remained moderate (at 1.0%).

Real GDP growth developments varied across the three largest new EU Member States in the second quarter of this year. In the Czech Republic and Hungary, annual output growth increased in the second quarter, to 5.1% and 4.0% respectively, largely supported by exports and, in the case of Hungary, also by investment. In Poland, however, GDP growth declined to 1.0% in the second quarter. Looking ahead, output growth is expected to remain relatively robust in 2005 in the Czech Republic and Hungary, but is forecast to be somewhat weaker in Poland. Against the background of significant inflows of foreign direct investment to the new EU Member States and their potential impact on these countries' growth performance, the box entitled "Recent developments in FDI in the new EU Member States in central Europe" takes a closer look at these flows and their geographical and sectoral decomposition.

Despite upward pressure from higher energy prices, inflation remained relatively stable in August in the three countries, largely supported by favourable developments in food prices and recent currency appreciations. Annual HICP inflation remained virtually unchanged in August in the Czech Republic (1.4%) and Hungary (3.5%), and increased slightly in Poland (1.8%). Against the background of a further improvement in the inflation outlook, Magyar Nemzeti Bank reduced its policy rate by 0.25 percentage point on 19 September, to 6%.

## RECENT DEVELOPMENTS IN FDI IN THE NEW EU MEMBER STATES IN CENTRAL EUROPE

The new EU Member States in central Europe (the Czech Republic, Estonia, Latvia, Lithuania, Hungary, Poland, Slovenia and Slovakia; together known as the EU8) are currently experiencing a period of relatively strong growth, above the level of the euro area. Foreign direct investment (FDI) is commonly considered to be an important driver of economic growth, as the internationalisation of production helps enterprises and countries to make better use of their advantages, improves competitiveness in markets and stimulates technology transfers and innovative activity. Furthermore, FDI can complement domestic financial sources, which may sometimes be scarce in catching-up countries. Against this background, this box provides some more details on recent developments in FDI in the EU8 countries.

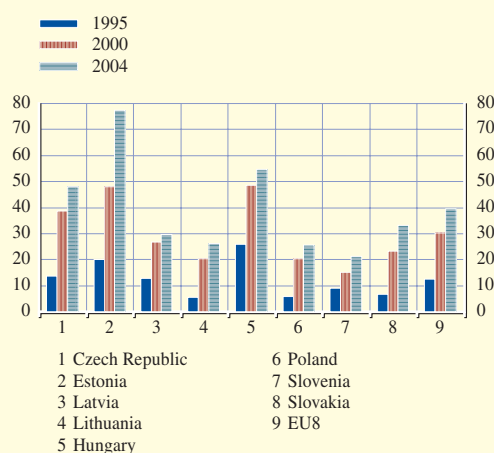
The EU8 countries have accumulated substantial FDI inflows since the early stages of their transition. Annual FDI inflows have ranged on average between 2% and 6% of GDP since 1995, though the pattern has varied strongly from country to country.<sup>1</sup> Overall, FDI inflows in the EU8 picked up significantly between 1995 and 2000, to 6.2% of GDP, but decelerated somewhat at the beginning of the new decade. In 2004 FDI inflows in the EU8 amounted to 3.3% of GDP (€15 billion). In line with the strong FDI inflows, FDI stocks have been growing fast in most EU8 countries, reaching an average of 40% of GDP in 2004 (see Chart A). Estonia has experienced the highest accumulation of FDI relative to its GDP (close to 80%), followed by Hungary and the Czech Republic. In Latvia, Lithuania, Poland, Slovenia and Slovakia, FDI inflows have been more moderate and FDI stocks remain below the EU8 average.

Various factors have shaped FDI accumulation in the EU8, EU accession prospects and privatisation being among the main drivers. Particularly during the 1990s privatisation was a major factor. Indeed, differences in the timing of privatisation and the degree of openness to foreign investment help to explain country-specific differences in FDI positions.<sup>2</sup> More recently, other determinants of FDI, such as cost factors, the size of the market and the location, overall political and macroeconomic stability, and FDI policies, have gained in importance.

The services sector has received the majority of FDI inflows in the EU8. Services sectors, in particular financial intermediation, trade, real estate and transport, comprise around 55% of the total FDI inward stock, while manufacturing comprises around 40%. FDI in the services sector is

### Chart A Inward FDI stock

(as a percentage of GDP)



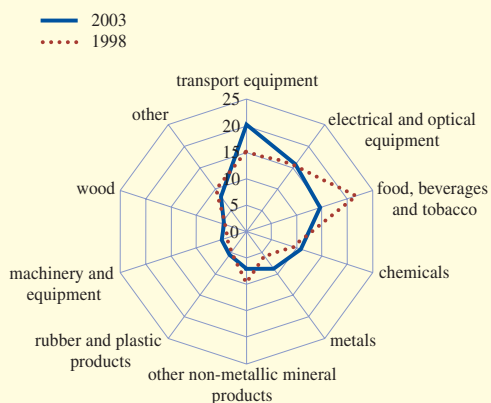
Sources: WIIW and ECB.

1 The FDI data used are from the database of the Wiener Institut für Internationale Wirtschaftsvergleiche (WIIW); data on FDI stocks for all EU8 countries are currently available for 1994-2004, flows for 1995-2004 and a breakdown of FDI stocks by sector, industry and investing country for 1998-2003.

2 For FDI restrictions, see OECD (2003), World Economic Outlook, Paris. See also Golub, S., *Measures of restrictions on inward foreign direct investment for OECD countries*, OECD Economic Studies No. 36, 2003.

Chart B Inward FDI stock in the EU8 by manufacturing sector

(as a percentage of total)



Source: WIIW.

Chart C Inward FDI stock in the EU8 by country of origin

(percentages)



Source: WIIW.

Note: Data relate to December 2004, with the exception of the Czech Republic, Hungary, Poland and Slovenia, for which data relate to December 2003.

usually motivated by market seeking, although outsourcing and FDI in export-oriented services also seem to have become important factors recently.

In the manufacturing sector, available data suggest that foreign investors' activity has been concentrated in a few industries, notably in transport equipment, electrical and optical equipment, and food, which have received around one-half of the FDI in manufacturing (see Chart B). Transport equipment has gained in importance in recent years (together with the metal industry), which may indicate the creation of "manufacturing export platforms" in these industries. In contrast, FDI in the food industry has become relatively less important, as this has mostly related to privatisation and the buying of existing firms and less to relocation. Other major industries have broadly retained their shares in FDI.

The EU8 countries have on average received the majority of their inward FDI from the euro area, with the euro area's share in inward FDI stock in the EU8 gradually increasing from 64% in 1998 to 71% in 2004. The most active countries have been Germany and the Netherlands, together accounting for more than 40% of total FDI inward stock, followed by Austria and France with shares of 8-9% each. The varying shares of individual countries highlight the importance of geographical factors, although some countries may act as channels for other countries' investment, owing, for example, to favourable financial and tax environments.<sup>3</sup>

Looking ahead, privatisation has largely ceased to be one of the main drivers of FDI in the EU8 countries, which is also reflected in the deceleration of FDI inflows to most EU8 countries over the last few years. Against that background, the institutional and business environment, as well as economic features that attract non-privatisation-related FDI, will become increasingly important for the EU8 countries in order to maintain high levels of FDI inflows. In particular, a stable macroeconomic environment, a favourable cost structure, the availability of skilled labour and a sufficiently developed infrastructure are needed to secure future FDI inflows.

<sup>3</sup> The FDI outflows from Luxembourg and the Netherlands partly reflect their role as a channel for investment originating from outside the euro area, since a number of multinationals channel FDI through special purpose entities (SPEs) in these two countries (ECB Occasional Paper No. 30, June 2005, p. 58).

## **NON-JAPAN ASIA**

Economic growth in non-Japan Asia continued at a robust pace in July and August, mainly supported by a continuous improvement in domestic demand and some pick-up in export growth. At the same time, inflationary pressures generally remain moderate.

In China, the economy continued to expand strongly in July and August. Both rising exports and robust domestic demand contributed to this growth performance. In August, year-on-year export growth increased to 31.9%, while import growth rose considerably, to 23.2%. At the same time, domestic demand continued to boost economic activity. Year-on-year growth in industrial production and retail sales, despite falling slightly from the levels observed in July, remained high at 16.0% and 12.5% respectively in August. The policy tightening adopted one and a half years ago appears to have been relaxed somewhat, as year-on-year growth in the money supply and bank lending picked up in July and August. As regards price developments, inflationary pressures continued to abate, with annual CPI inflation declining from 1.8% in July to 1.3% in August owing to a moderation in food prices.

Economic prospects for non-Japan Asia remain fairly favourable, bolstered by the ongoing improvement in domestic demand and some pick-up in export growth. The expected deceleration in the Chinese economy could be milder than previously anticipated, owing to a higher net trade contribution (mainly as a result of a slowdown in import growth) and a reversal of some of the earlier policy tightening.

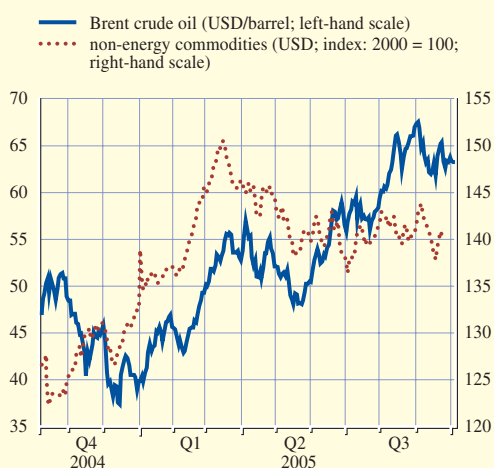
## **LATIN AMERICA**

In Latin America, the most recent data indicate that the region's economies are continuing to expand, albeit at a slower pace than in recent months. Following strong second quarter real GDP figures in Mexico and Brazil, industrial production fell by 1.1% year on year in July in the former and rose by only 0.5% year on year in the latter. At the same time, Argentina's industrial activity has continued to grow at a relatively fast pace (7.6% year on year in August). The recent deceleration in some Latin American countries is widely believed to be temporary, as domestic demand is expected to strengthen during the rest of the year.

## **1.2 COMMODITY MARKETS**

Oil prices have risen to new all-time highs in recent months, amid considerable volatility, as oil market fundamentals have tightened. On 5 October the price of Brent crude oil stood at USD 61.5, 52% higher than at the start of this year. The erosion of the global spare capacity cushion all along the oil supply chain, combined with the ensuing high level of sensitivity to unanticipated changes in the supply-demand balance, has made oil prices both high and volatile. Although oil demand growth has eased by comparison with last year, it has remained relatively robust in historical terms in spite of record high prices. Meanwhile, non-OPEC supply growth has been disappointing by comparison with earlier expectations, increasing the need for OPEC to fill the gap between world demand and non-OPEC supply. OPEC, however, has only limited spare capacity. Both spare production capacity and global spare refining capacity have shrunk as a result of unexpectedly strong growth in demand over the last few years and underinvestment in refining capacity.

The effects of the recent hurricanes have further aggravated constraints in an already stretched oil supply chain. The area of the Gulf of Mexico that has been affected by those hurricanes is an

**Chart 2 Main developments in commodity markets**

Sources: Bloomberg and HWWA.

important region for the US oil infrastructure and the loss in terms of production and refining capacity has been substantial. While crude oil prices have subsequently fallen back to the levels preceding the hurricanes, the impact was more prolonged for prices of refined oil products, in particular the price of petrol. The box entitled “Recent oil and petrol price developments” in the “Prices and costs” section provides additional information on recent movements in oil and petrol prices and their impact on euro area consumer prices. According to futures markets, oil prices are expected to remain around current levels over the coming years.

After retreating from their March 2005 peak, non-energy commodity prices have broadly remained stable over the last five months, with an increase in the prices of industrial raw

materials offset by declining food prices. Nonetheless, expressed in US dollar terms, non-energy commodity prices were approximately 13.5% higher in September than one year earlier.

### 1.3 OUTLOOK FOR THE EXTERNAL ENVIRONMENT

The outlook for the external environment and for euro area external demand remains fairly favourable. The recent hurricanes in the Gulf of Mexico can be expected to result in some weakening in activity in the United States. However, this weakening is likely to be relatively localised and temporary, with reconstruction spending eventually supporting growth. The direct spillover effects to other countries should be relatively limited, provided that prices of refined oil products revert relatively soon to pre-hurricane levels. Indirect effects through higher energy prices are, however, likely to be felt more widely, but should also be relatively temporary. The underlying momentum of the global economy appears to be relatively robust, supported by favourable financing and profit conditions. Although not yet including the impact of the recent hurricanes, the six-month rate of change in the OECD Composite Leading Indicator increased further in July, suggesting a continuing improvement in the outlook from the temporary weakening observed earlier this year. Recent developments in the price of oil and refined products, most notably petrol, highlight the tightness of energy market fundamentals and oil prices therefore remain the most significant risk to what is, overall, a relatively benign outlook for the global economy.



## 2 MONETARY AND FINANCIAL DEVELOPMENTS

### 2.1 MONEY AND MFI CREDIT

Annual M3 growth strengthened further in August 2005, continuing the trend observed since mid-2004. The stimulative effect of the prevailing low level of interest rates remains the dominant factor driving monetary and credit dynamics. In particular, MFI loans for house purchase continue to be the major driver of growth in credit to the private sector. Strong monetary and credit growth in the context of ample liquidity point to upside risks to price stability at medium- to longer-term horizons. Moreover, these risks imply a need to monitor asset price dynamics closely, given the potential for price misalignments to emerge.

#### THE BROAD MONETARY AGGREGATE M3

The annual growth rate of the broad monetary aggregate M3 increased to 8.1% in August 2005, from 7.9% in July. The three-month average of the annual M3 growth rates rose to 7.9% in the period between June and August 2005, from 7.6% in the period between May and July. The data for recent months confirm the strengthening of M3 growth which has been observed since the second half of 2004 and which was only briefly interrupted by a moderation earlier this year. The strength of M3 growth is particularly visible in the shorter-term dynamics, as illustrated by the further rise of the annualised six-month growth rate of M3 to 9.2% in August, from 8.6% in the previous month (see Chart 3).

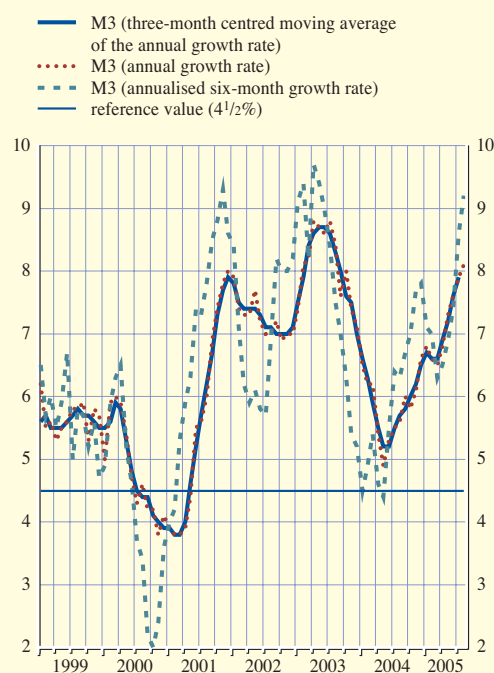
The August data support the view that the stimulative impact of the prevailing low level of interest rates has been the dominant factor driving monetary dynamics. On the components side, the most liquid assets within M3 contained in the narrow aggregate M1 contributed most to the current high level of M3 growth, as well as to its strengthening over recent months. On the counterparts side, the prevailing low level of interest rates has contributed to a further increase in the annual growth rate of MFI credit to the private sector.

At the same time, the normalisation of the portfolio allocation behaviour of the euro area money-holding sector, which had dampened M3 growth in late 2003 and early 2004, has lost some momentum. This reflects inter alia the reluctance to purchase riskier and longer-term foreign assets, which is impeding a substantial unwinding of past portfolio shifts.

Given the robust annual rate of growth in M3 over the most recent quarters, liquidity in the euro area remains ample. This implies risks to price stability over the medium to longer term, especially if a significant part of the ample liquidity were to be transformed into

Chart 3 M3 growth and the reference value

(percentage changes; adjusted for seasonal and calendar effects)



Source: ECB.

transaction balances at a time when confidence and real economic activity are strengthening. In addition, strong credit growth in the context of ample liquidity implies a need to monitor asset price dynamics closely, given the potential for price misalignments to emerge.

### MAIN COMPONENTS OF M3

Developments in M1 continued to make the largest contribution to the level of annual M3 growth in August, as well as to its strengthening over recent months. Among the components of M1, currency in circulation continued to grow at a robust pace, while the annual growth rate of overnight deposits increased further. The annual rate of growth of short-term deposits other than overnight deposits remained unchanged in August compared with July (see Table 1). The current strength of demand for short-term deposits is likely to reflect the low opportunity cost of holding these assets in an environment of low interest rates.

The annual growth rate of short-term deposits and repurchase agreements held by the private sector with MFIs (excluding the Eurosystem) increased further in August. This asset class constitutes the broadest aggregation of M3 components for which information by holding sector is available, and accounted for around 80% of M3 in August 2005. Since the middle of 2004, the observed accumulation of these assets has been broad-based across sectors. However, particularly strong contributions to the increase in the annual growth rate have come from the non-monetary financial intermediaries sector, despite its relatively modest share in overall short-term deposit holdings.

The annual growth rate of marketable instruments included in M3 was 5.5% in August, broadly unchanged from July. This conceals opposing developments in the underlying components. On the one hand, there was a decline in the annual growth rate of money market fund shares/units – instruments that are often used in times of heightened uncertainty as a vehicle to “park” money when alternative assets are deemed too risky by investors. The relatively subdued growth in these

**Table 1 Summary table of monetary variables**

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

	Outstanding amount as a percentage of M3 <sup>1)</sup>	Annual growth rates					
		2004 Q3	2004 Q4	2005 Q1	2005 Q2	2005 July	2005 Aug.
<b>M1</b>	<b>48.1</b>	<b>9.6</b>	<b>9.3</b>	<b>9.6</b>	<b>9.8</b>	<b>11.1</b>	<b>11.5</b>
Currency in circulation	7.3	20.3	19.1	18.0	17.3	16.0	15.6
Overnight deposits	40.9	7.9	7.7	8.2	8.5	10.2	10.8
M2 - M1 (= other short-term deposits)	37.4	2.0	3.5	4.5	5.0	5.3	5.3
Deposits with an agreed maturity of up to two years	15.2	-5.8	-2.4	0.5	2.6	4.0	4.2
Deposits redeemable at notice of up to three months	22.2	7.6	7.4	7.1	6.6	6.0	5.9
<b>M2</b>	<b>85.5</b>	<b>5.8</b>	<b>6.4</b>	<b>7.1</b>	<b>7.5</b>	<b>8.3</b>	<b>8.5</b>
M3 - M2 (= marketable instruments)	14.5	4.1	3.9	4.0	4.4	5.6	5.5
<b>M3</b>	<b>100.0</b>	<b>5.6</b>	<b>6.1</b>	<b>6.7</b>	<b>7.1</b>	<b>7.9</b>	<b>8.1</b>
<b>Credit to euro area residents</b>		<b>6.2</b>	<b>6.0</b>	<b>6.5</b>	<b>6.5</b>	<b>6.7</b>	<b>6.9</b>
Credit to general government		6.3	3.7	3.4	2.1	1.1	1.0
Loans to general government		2.2	0.6	-0.4	-0.9	-1.8	-1.1
Credit to the private sector		6.2	6.7	7.3	7.8	8.3	8.5
Loans to the private sector		6.2	6.9	7.3	7.5	8.3	8.4
<b>Longer-term financial liabilities (excluding capital and reserves)</b>		<b>8.5</b>	<b>8.9</b>	<b>9.5</b>	<b>9.6</b>	<b>9.9</b>	<b>9.8</b>

Source: ECB.

1) As at the end of the last month available. Figures may not add up due to rounding.

instruments over the past few months, following the double-digit annual growth rates observed between mid-2001 and late 2003, points to a normalisation of the portfolio allocation behaviour of euro area residents. On the other hand, debt securities with a maturity of up to two years grew strongly at an annual rate, probably linked in part to the emergence of new structured products, which combine these securities with derivative instruments offering some exposure to equity and bond market developments.

### MAIN COUNTERPARTS OF M3

On the counterparts side, the annual growth rate of MFI loans to the private sector edged up further, to 8.4% in August, from 8.3% in July. The continued robust growth of MFI loans was broadly based across sectors, reflecting the stimulative impact of the low level of interest rates and an improvement in credit supply conditions over the past year.

MFI loans to households continued to be driven mainly by the dynamism of loans for house purchase, which grew at an annual rate of 10.7% in August, after 10.6% in July (see Table 2). The strong borrowing for house purchase reflects the environment of low mortgage lending rates and the strength of housing market developments in some regions of the euro area. Demand for MFI loans by non-financial corporations, which has strengthened since early 2004, remained broadly stable in August. While the annual growth rate of loans with a maturity of up to five years moderated, that of longer-term loans strengthened further. In contrast to the further pick-up in private sector demand for MFI credit, there was a decline in the annual rate of growth in MFI credit granted to general government, mainly reflecting lower growth in holdings of government securities by the MFI sector.

Among the other counterparts of M3, the annual growth rate of MFI longer-term financial liabilities (excluding capital and reserves) stood at 9.8% in August, broadly unchanged from the previous month and only slightly below the peak reached in June (see Table 1). This strong growth was mainly driven by developments in debt securities issued with a maturity of over two years and provides evidence of an ongoing inclination in the euro area money-holding sector to invest in

**Table 2 MFI loans to the private sector**

(quarterly figures are averages; not adjusted for seasonal and calendar effects)

	Outstanding amount as a percentage of the total <sup>1)</sup>	Annual growth rates					
		2004 Q3	2004 Q4	2005 Q1	2005 Q2	2005 July	2005 Aug.
<b>Non-financial corporations</b>	<b>41.3</b>	<b>4.3</b>	<b>5.1</b>	<b>5.7</b>	<b>6.1</b>	<b>6.8</b>	<b>6.7</b>
Up to one year	30.4	-1.4	1.6	3.3	4.5	4.9	4.4
Over one and up to five years	17.4	6.1	5.8	6.7	6.5	7.3	6.3
Over five years	52.3	7.3	7.0	6.9	7.0	7.8	8.2
<b>Households <sup>2)</sup></b>	<b>50.7</b>	<b>7.4</b>	<b>7.9</b>	<b>8.1</b>	<b>8.2</b>	<b>8.5</b>	<b>8.6</b>
Consumer credit <sup>3)</sup>	13.3	6.0	6.2	6.4	6.8	6.8	7.0
Lending for house purchase <sup>3)</sup>	69.0	9.3	9.9	10.1	10.1	10.6	10.7
Other lending	17.6	2.2	1.9	2.2	2.1	2.2	2.3
<b>Insurance corporations and pension funds</b>	<b>0.8</b>	<b>18.3</b>	<b>14.4</b>	<b>23.0</b>	<b>14.3</b>	<b>11.5</b>	<b>18.6</b>
<b>Other non-monetary financial intermediaries</b>	<b>7.2</b>	<b>8.6</b>	<b>10.2</b>	<b>10.4</b>	<b>11.0</b>	<b>14.9</b>	<b>16.5</b>

Source: ECB.

Notes: MFI sector including the Eurosystem; sectoral classification based on the ESA 95. For further details, see the relevant technical notes.

1) As at the end of the last month available. Sector loans as a percentage of total MFI loans to the private sector; maturity breakdown and breakdown by purpose as a percentage of MFI loans to the respective sector. Figures may not add up due to rounding.

2) As defined in the ESA 95.

3) The definitions of consumer credit and lending for house purchase are not fully consistent across the euro area.

longer-term and riskier euro area financial instruments.

Although the annual flow of euro area MFIs' net external assets declined to €127 billion in August from €162 billion in the previous month, it nevertheless continued to contribute positively to annual M3 growth. This points to a continuing reluctance of the euro area money-holding sector to invest in foreign assets, at least relative to non-euro area residents' demand for euro area assets. This reluctance to invest outside the euro area is hindering a substantial unwinding of the portfolio shifts accumulated during the period of heightened economic and financial uncertainty between 2001 and mid-2003.

Summing up the information from the counterparts, the increasing dynamism of MFI loans to the private sector continued to support strong M3 growth. The ongoing robust expansion of MFI longer-term financial liabilities provides evidence of an ongoing inclination in the euro area money-holding sector to invest in longer-term, riskier euro area financial instruments. By contrast, the reluctance of this sector to invest in foreign assets has hindered a significant unwinding of past portfolio shifts, as indicated by the continued positive annual flow in MFI net external assets. In the context of ample liquidity, strong monetary and credit growth point to upside risks to price stability at medium- to longer-term horizons. Furthermore, these risks imply a need to monitor asset price dynamics closely.

## 2.2 SECURITIES ISSUANCE

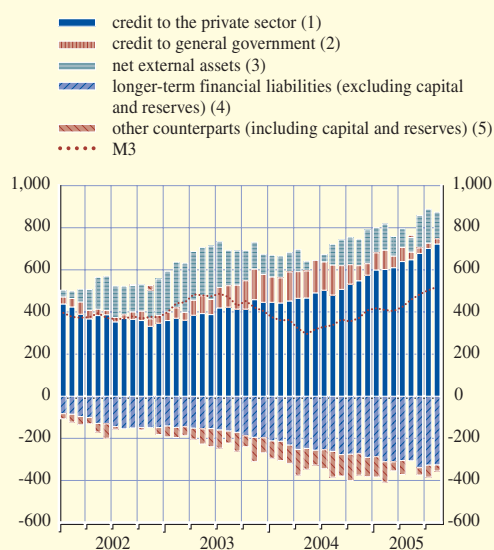
*In July 2005 the annual growth rate of debt securities issued by euro area residents remained strong, but declined slightly to 7.3%, from a peak of 7.7% in June 2005. The annual growth rate of quoted shares issued by euro area residents continued to be subdued at 1.3% in July, a level broadly unchanged from the previous month. It is likely that the differences in the development of these two external sources of market financing are mainly attributable to the lower relative cost of debt financing.*

### DEBT SECURITIES

The annual growth rate of debt securities issued by euro area residents declined slightly to 7.3% in July, from 7.7% in June. This decline in July was largely driven by the slight fall in the annual growth rate of long-term debt securities (to 8.1%, from 8.6% in June), while the annual growth rate of short-term debt securities issued by euro area residents remained broadly unchanged at

Chart 4 Counterparts of M3

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



Source: ECB.  
Note: M3 is shown for reference only ( $M3 = 1+2+3-4+5$ ). Longer-term financial liabilities (excluding capital and reserves) are shown with an inverted sign, since they are liabilities of the MFI sector.

**Table 3 Securities issued by euro area residents**

Issuing sector	Amount outstanding (EUR billions) 2005 July	Annual growth rates <sup>1)</sup>					
		2004 Q3	2004 Q4	2005 Q1	2005 Q2	2005 June	2005 July
<b>Debt securities:</b>	<b>10,053</b>	<b>7.2</b>	<b>6.8</b>	<b>7.2</b>	<b>7.3</b>	<b>7.7</b>	<b>7.3</b>
MFIs	4,016	8.6	8.8	9.1	8.9	9.6	9.3
Non-monetary financial corporations	830	11.4	9.9	11.6	17.2	20.0	18.8
Non-financial corporations	614	3.6	3.0	2.8	4.5	2.7	1.5
General government	4,593	5.9	5.3	5.5	4.9	4.9	4.7
<i>of which:</i>							
Central government	4,325	5.4	4.8	5.1	4.5	4.6	4.3
Other general government	268	16.4	14.5	13.7	12.0	11.1	12.7
<b>Quoted shares:</b>	<b>4,632</b>	<b>0.9</b>	<b>1.1</b>	<b>1.1</b>	<b>1.0</b>	<b>1.2</b>	<b>1.3</b>
MFIs	728	1.7	2.0	2.6	2.1	2.3	2.0
Non-monetary financial corporations	456	1.7	1.5	1.0	1.0	1.7	1.2
Non-financial corporations	3,448	0.7	0.8	0.8	0.8	0.8	1.2

Source: ECB.

1) For details, see the technical notes for Tables 4.3 and 4.4 of the "Euro area statistics" section.

0.4% in July. Long-term debt securities issuance growth was supported mainly by developments in the annual growth rate of securities at variable rates, which remained high at 20.7% in July.

As regards sector issuance activity, the annual growth rate of debt securities issued by non-financial corporations continued to decline, to 1.5% in July, from 2.7% in June (see Table 3 above). Seasonally adjusted data indicate that the decline in issuance by non-financial corporations was even more significant. In fact, the six-month annualised rate of growth was 2.3% in July, compared with 4.2% in June.

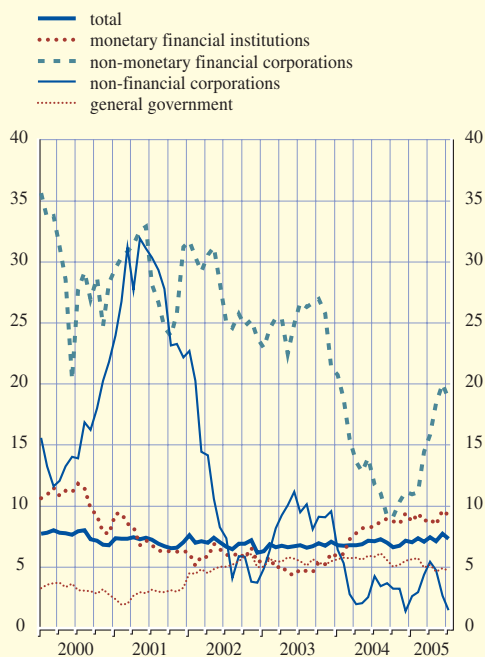
In July, the annual growth rate of debt securities issued by MFIs declined slightly by comparison with the previous month, but remained high at 9.3%. In particular, the growth of financing via long-term debt securities at variable rates remained particularly strong, at 20.6%, with the result that the latter accounted for a share of 37% of the outstanding amount of long-term debt securities issued by euro area MFIs. The strong growth in MFI issuance was related to the financing needs of MFIs, owing to the rapid growth of MFI loans to the private sector.

Non-financial corporations and MFIs in part also use non-monetary financial corporations to raise external funds indirectly. The annual growth rate of debt securities issued by non-monetary financial corporations remained robust, but declined slightly to 18.8% in July (from 20% in June). The main driving force behind the strong issuance by this sector has been the fairly rapid development of securitisation and structured finance in several euro area countries in recent years.

The annual growth rate of debt securities issued by the general government remained broadly unchanged at 4.7% in July.

**Chart 5 Sectoral breakdown of debt securities issued by euro area residents**

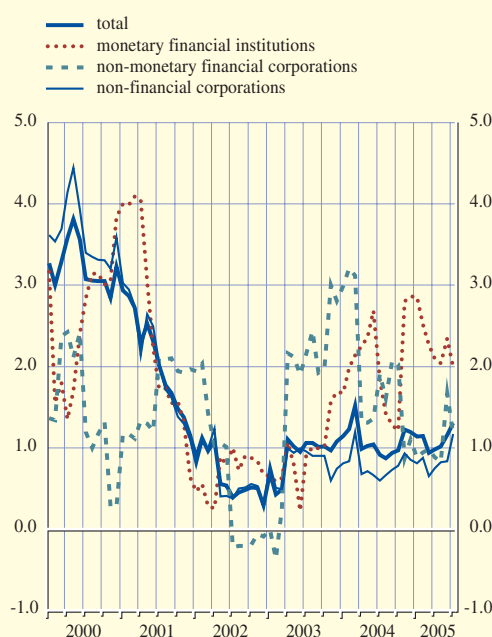
(annual growth rates)



Source: ECB.  
Note: Growth rates are calculated on the basis of financial transactions.

**Chart 6 Sectoral breakdown of quoted shares issued by euro area residents**

(annual growth rates)



Source: ECB.  
Note: Growth rates are calculated on the basis of financial transactions.

## QUOTED SHARES

In July the annual growth rate of quoted shares issued by euro area residents remained subdued and stood unchanged at 1.3%. In particular, over the same period, the annual growth rate of quoted shares issued by non-financial corporations, accounting for nearly three-quarters of the amount outstanding of quoted shares issued by euro area residents, remained at 1.2%. It is likely that the subdued level of equity issuance was partly related to the relatively high cost of issuing equity as compared with the low cost of debt financing during the recent past. The demand for equity was also affected by the relatively low level of investment growth. The robust profitability of non-financial corporations and the associated availability of ample internal funds also played a role in conjunction with relatively low levels of investment. Quoted shares issued by non-financial corporations accounted for around 40% of their total amount outstanding of external financing in the second quarter of 2005. Firms not quoted on the stock market have also been able to obtain funds through the private equity market. In the past decade the European private equity market has grown considerably and has become a significant source of finance for many European companies (see the box entitled “The development of private equity and venture capital in Europe”).

**THE DEVELOPMENT OF PRIVATE EQUITY AND VENTURE CAPITAL IN EUROPE**

In the past decade, the European private equity market has grown substantially and has become a significant source of finance and expertise for many European companies. This box provides a brief explanation of the economic role of private equity and venture capital and presents recent developments in the private equity market.

The private equity market provides equity capital to firms not quoted on a stock market. Its two major components are the venture capital and buy-out (e.g. management and leveraged buy-out (MBO/LBO)) segments.<sup>1</sup>

Venture capital refers to professionally managed equity or equity-linked investments in privately held high-growth companies that require financing and entrepreneurial expertise to pursue their growth objectives. Venture capital investors tend to focus on early-stage firms in technology-intensive industries which have difficulties in raising funds from the banking sector or the primary financial markets. Typically these are firms facing a high degree of uncertainty with regard to their ultimate profitability as well as high information gaps between entrepreneurs and investors. By taking a long-term equity position in respect of the companies they invest in, and by usually monitoring and adding value to these companies, venture capitalists can help to better align the incentives of investors with those of the management of the company.<sup>2</sup> From a macroeconomic perspective, by offering high-growth firms access to financing and industry expertise, an efficient venture capital market could have a significant impact on growth, employment creation and long-term competitiveness.<sup>3</sup>

By contrast with the venture capital segment, the buy-out industry normally focuses on more mature industries which might require additional equity funding for further growth or to undertake major internal governance or balance-sheet restructuring without being subject to the shorter-term pressures of the public equity markets. In some cases, however, buy-out strategies may have caused economic disruptions to the activities of the acquired companies, often as a result of being based on excessive debt financing.

In Europe, the single currency created more integrated pan-European debt and equity markets and a more competitive corporate environment, which also helped to foster, for the first time, a significant private equity market. The growth of this market was initially driven by the boom in high-technology industries in the late 1990s and 2000, thereby financing and nurturing a significant number of European companies at an early stage of their development. Following the decline in stock prices in 2000 and 2001, activity in the European market for private equity declined significantly, although it remained relatively high from a historical perspective (see Chart A). Hence, funds raised by private equity firms stabilised at a fairly high level of around €27 billion per year between 2002 and 2004.

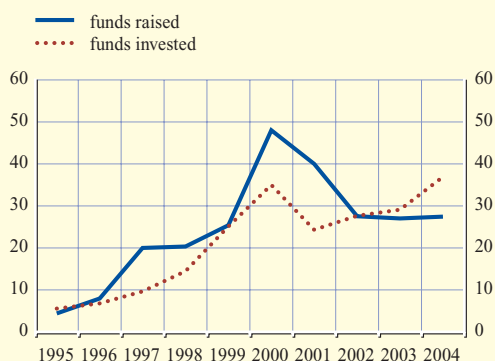
1 Although their relative importance is much more limited, private capital also includes other segments, such as capital replacement or mezzanine finance.

2 See Gompers, P. and J. Lerner, 2002, "The Venture Capital Cycle", MIT press.

3 In the European Union, the development of an efficient venture capital market has been encouraged by the European Commission. See, for instance, European Commission, 2003, "Communication on the implementation of the risk capital action plan", COMM (2003) 654, Brussels.

Chart A Activity in the European private equity market

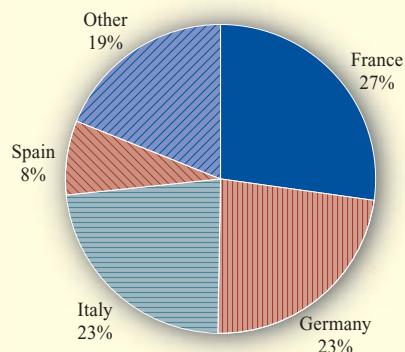
(EUR billions)



Source: EVCA/Thomson Venture Economics/Pricewaterhouse Coopers.  
Note: Includes all western European countries.

Chart B Amount invested by country in the euro area in 2003

(percentages)



Source: European Venture Capital Association.

At the same time, the private equity “overhang” (i.e. of money raised but not yet invested) created in the late 1990s and 2000-01 was reduced further in 2004 as investments continued to surpass funds raised. Since the readjustment of stock market prices, there has been a move towards less risky investments. In fact, buy-outs in mature industries have been dominant in recent years. The importance of buy-out deals may have been driven by the restructuring efforts made by European companies in recent years, which in many cases have led to the sale of non-core businesses. With respect to the geographical breakdown of private equity invested in the euro area, according to the European Venture Capital Association France accounted for slightly more than a quarter of all funds (27%) in 2003, with Germany and Italy both achieving shares of around 23% (see Chart B).

Despite having increased significantly over the past few years, recourse to venture capital in Europe is still relatively modest as compared with other markets. Although statistical comparisons are not straightforward, as definitions of what constitutes private equity and venture capital tend to differ between the United States and Europe, according to the OECD and the National Venture Capital Association venture capital investment in the high-technology sector as a percentage of GDP was around four times smaller in the European Union than in the United States in 2002.

All in all, the European private equity market can perform a useful macroeconomic function which complements that of the banking sector and primary capital markets. In particular, venture capital financing could be particularly useful for young firms facing higher uncertainty and lower investment liquidity. Private equity could also be used to carry out significant restructuring in more mature industries. During the last decade venture capital has become a significant source of financing and support for a considerable number of euro area companies in the earlier stages of their development. While the European venture capital market currently attracts a significant amount of funding, as outlined in the Lisbon Agenda, a further deepening and development of this market would support the full exploitation of the economic growth potential in Europe.



## 2.3 MONEY MARKET INTEREST RATES

*In September 2005 money market interest rates with a maturity of one month remained broadly stable, while those with a maturity of between three months and one year increased. As a result, the slope of the yield curve steepened over the month. In addition, the rates implied by futures prices on three-month EURIBOR futures contracts maturing between December 2005 and June 2006 increased markedly.*

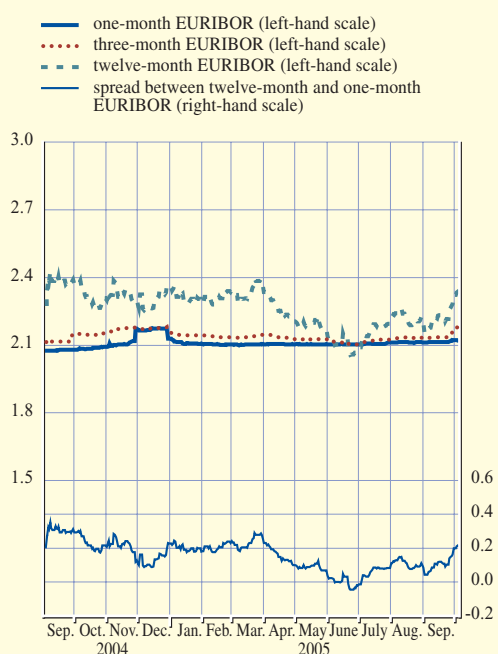
In September 2005 money market interest rates with a maturity of one month remained broadly stable. By contrast, the three-, six- and twelve-month EURIBOR increased by between 5 and 11 basis points over the period from the end of August to 5 October. On the latter date, those three rates stood at 2.18%, 2.22% and 2.33% respectively. Consequently, the slope of the money market yield curve steepened over the month. The difference between the twelve-month and the one-month EURIBOR increased from 9 basis points at the end of August to 21 basis points on 5 October.

In a similar vein, between the end of August and 5 October, the rates implied by futures prices on three-month EURIBOR futures contracts maturing in December 2005 and in March and June 2006 increased by between 9 and 20 basis points. On 5 October, these rates stood at 2.22%, 2.31% and 2.43% respectively.

Interest rates at the shortest end of the money market yield curve rose slightly in September 2005. The marginal rate in the Eurosystem's main refinancing operations rose from 2.05% in the first

**Chart 7 Short-term money market interest rates**

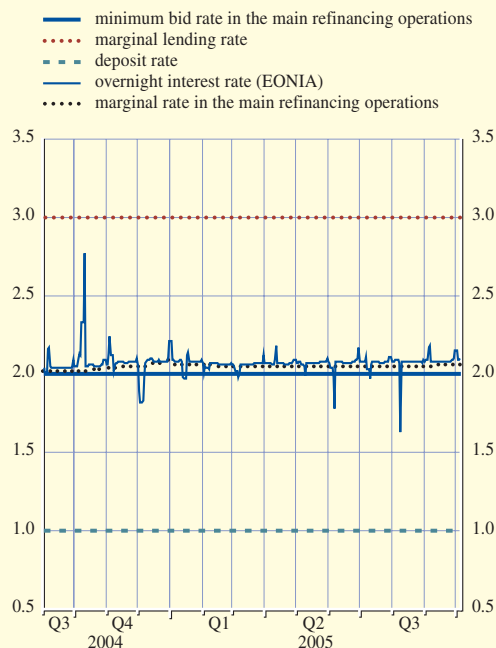
(percentages per annum; percentage points; daily data)



Source: Reuters.

**Chart 8 ECB interest rates and the overnight interest rate**

(percentages per annum; daily data)



Sources: ECB and Reuters.

operation of the reserve maintenance period ending on 11 October to 2.06% in the second. In the penultimate operation of the same period, the weighted average rate rose from 2.06% to 2.07%, due to the end-of-quarter effect, and remained at this level also in the last operation of the period. Nonetheless, the EONIA remained stable at 2.08% for most of the month. Two exceptions were the last five days of the maintenance period ending on 6 September and the end of the quarter. On 2 September the EONIA rose on account of perceptions of tight liquidity conditions. On the last day of the maintenance period, a liquidity-providing fine-tuning operation was conducted to restore neutral liquidity conditions. A total bid amount of €51.1 billion was received, which was well above the estimated liquidity shortage of €9.5 billion. Despite the restoration of neutral liquidity conditions by this operation, the maintenance period ended with the EONIA rising to 2.18% on the last day. On 30 September the EONIA stood at 2.15%, reflecting the usual end-of-quarter effect. In the following days, however, the EONIA declined to 2.09-2.10%, thereby remaining slightly higher than the level observed in most of September (see Chart 8).

In the two longer-term refinancing operations of the Eurosystem settled on 1 and 29 September, the marginal interest rates were 2.08% and 2.09% respectively, i.e. 1 and 2 basis points higher than in the tender on 28 July 2005. Compared with the three-month EURIBOR prevailing on 1 and 29 September, tender rates were 5 basis points lower on both dates.

Box 3 addresses issues relating to excess reserves and illustrates how the ECB takes them into account in its implementation of monetary policy, also when forecasting liquidity conditions at the end of reserve maintenance periods.

### Box 3

#### EXCESS RESERVES AND THE ECB'S IMPLEMENTATION OF MONETARY POLICY

When deciding on the allotment amount in the weekly main refinancing operations and in the potential fine-tuning operation on the last day of the reserve maintenance period, the ECB takes into account three sources of liquidity needs:<sup>1</sup> autonomous liquidity factors, such as liquidity injections or withdrawals normally not caused by the use of monetary policy instruments; reserve requirements; and excess reserves, which are defined as current account holdings in excess of reserve requirements.<sup>2</sup> While the first two sources of liquidity needs are by far the greatest, at present accounting for around 99.8% (€380 billion) of the total, the remaining 0.2% (€0.7 billion), which consists of excess reserves, is also significant at the margin. This box recalls some of the reasons why excess reserves arise and provides some information on their recent trends and on the forecasts made by the ECB.

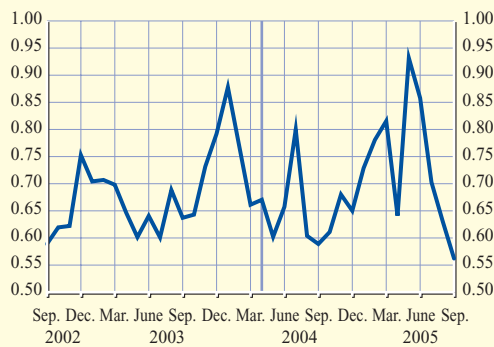
Excess reserves are not remunerated by the Eurosystem and therefore constitute a cost for credit institutions, which could, in principle, have transferred them to the remunerated deposit facility. However, this cost is counterbalanced by some benefits. For instance, the operating costs associated with “staying late in the office” in order to be able to transfer any amount of excess liquidity to the deposit facility are avoided. Such excess liquidity can be the result of unexpected payments and operational errors and, on the last day of the reserve maintenance

1 See also Box 1 entitled “Publication of the benchmark allotment in the main refinancing operations” in the April 2004 issue of the Monthly Bulletin.

2 According to this definition, excess reserves also include current account holdings of credit institutions that either have a zero reserve requirement, are not subject to minimum reserve requirements or fulfil their requirement through an intermediate credit institution.

**Chart A Daily average excess reserves per maintenance period**

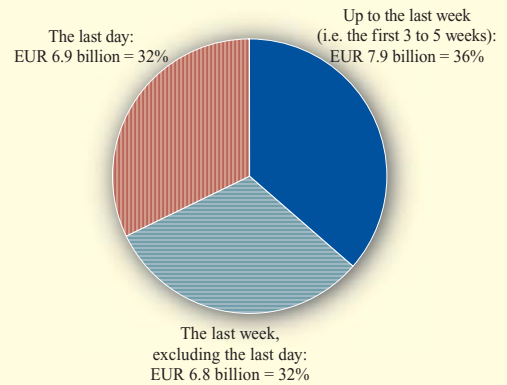
(EUR billions; x-axis refers to the last day of the relevant reserve maintenance period)



Source: ECB.  
Note: The vertical line refers to the end of the first reserve maintenance period in the amended operational framework for monetary policy.

**Chart B Average distribution of excess reserve holdings over a reserve maintenance period**

(September 2002 to September 2005)



Source: ECB.

period, it can also stem from a “buffer” amount held to reduce the risk of non-compliance with reserve requirements. Moreover, in some relatively rare situations, credit institutions hold excess reserves to facilitate night-time processing within some securities settlement systems. Excess reserves are therefore mainly generated through credit institutions’ idiosyncratic behaviour and random liquidity shocks. Still, when looking at excess reserves over the course of a reserve maintenance period, several regularities can be observed, allowing the ECB to forecast the daily average level.

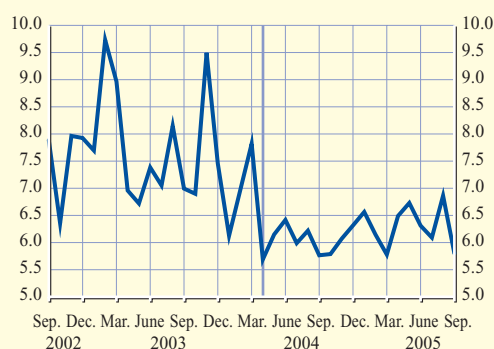
First, daily average excess reserves have, after all, been relatively stable over the last three years, fluctuating between €560 million and €930 million around a median of €660 million (see Chart A). While these maximum and minimum values have only been reached recently, in May and September 2005 respectively, there is no concrete evidence of increased volatility in daily average excess reserves.

Second, an intrinsic feature of excess reserves is that they accumulate primarily during the last few days of the reserve maintenance period (see Chart B). This is because, by this time, an increasing number of credit institutions have already fulfilled their reserve requirements. When credit institutions fulfil their reserve requirements before the end of the reserve maintenance period, they are more likely to hold excess reserves as they are no longer able to offset excess liquidity via reserve averaging (i.e. replacing higher reserve holdings on one day with lower holdings on another day). Moreover, the above-mentioned use of excess reserves as a buffer against non-compliance with reserve requirements implies that the share of total excess reserves held on the last day of the reserve maintenance period is particularly high. Consequently, at the beginning of the reserve maintenance period, when only a small amount of excess reserves has accumulated, the ECB has to base its forecast of the daily average level on information from previous reserve maintenance periods and on various seasonal factors, such as holiday effects and/or the length of the reserve maintenance period. It is only later on in the reserve maintenance period, particularly on the last day, that the ECB can refine its forecast by also taking into account the excess reserves accumulated earlier in the period.

Finally, since the introduction of the changes to the operational framework for monetary policy in March 2004, there has been a significant stabilisation of the amount of excess reserves held on the last day of the reserve maintenance period (see Chart C). This is due, among other factors, to the fact that reserve maintenance periods now always end on the same weekday (Tuesday) and that credit institutions now know exactly what their reserve requirements are at the beginning of the reserve maintenance period. Owing to this stabilisation and the fact that the ECB knows the precise amount of excess reserves that has accumulated up to the second-to-last day (i.e. about two-thirds of the total, as can be seen in Chart B), the forecasts for daily average excess reserves are relatively accurate on the last day of the reserve maintenance period. In the eight reserve maintenance periods from February to September 2005, the error in this average forecast only exceeded €10 million on three occasions and was nevertheless still below €30 million. In accumulated terms, these figures correspond, ceteris paribus, to liquidity imbalances of around €300 million and €900 million respectively at the end of the reserve maintenance period. Hence, when deciding on the need for (and, if so, the amount of) a fine-tuning operation on the last day of the reserve maintenance period, the ECB has faced only limited uncertainty about excess reserves.

**Chart C Excess reserves held on the last day of the maintenance period**

(EUR billions; x-axis refers to the last day of the relevant reserve maintenance period)



Source: ECB.

Note: The vertical line refers to the end of the first reserve maintenance period in the amended operational framework for monetary policy.

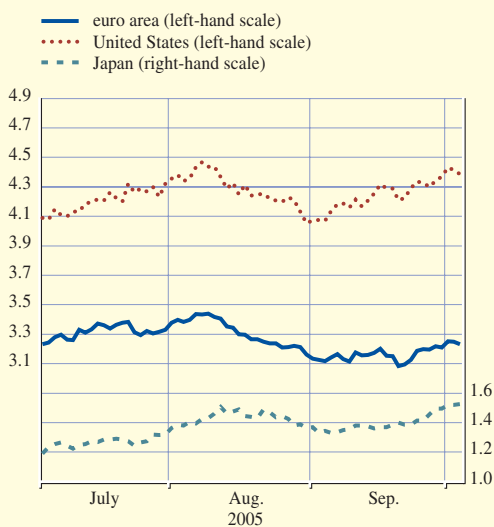
## 2.4 BOND MARKETS

*Overall, long-term government bond yields in the euro area were stable over the course of September. At the same time, bond yields increased in the United States and Japan on account of slightly improved growth prospects for these economies, as perceived by market participants. Overall, break-even inflation rates increased in the euro area and the United States, but the increase was more pronounced over short horizons, reflecting the impact of higher oil prices on market participants' short-term inflation expectations.*

Long-term interest rates rebounded over the latter part of September in major bond markets, following the decline observed between the second week of August and early September. Ten-year government bond yields in the euro area were unchanged overall between end-August and 5 October, standing at 3.2% on the latter date (see Chart 9). In the United States ten-year bond yields rose by around 35 basis points over the same period, to stand at 4.4% on 5 October. As a result, the differential between US and euro area ten-year government bond yields widened to around 115 basis points on 5 October. Ten-year government bond yields in Japan ended the review period at 1.5%, about 15 basis points higher than their end-August levels.

**Chart 9 Long-term government bond yields**

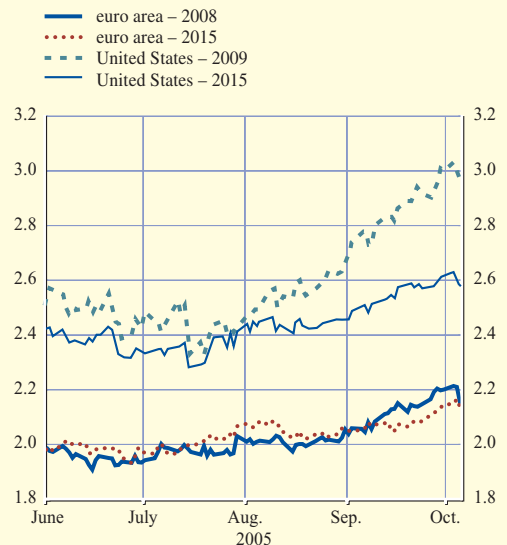
(percentages per annum; daily data)



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

**Chart 10 Break-even inflation rates**

(in percentages)



Sources: Reuters and ECB calculations.

Uncertainty about near-term bond market developments, as indicated by implied bond market volatility, remained broadly unchanged in the euro area and the United States, while it declined slightly in Japan. Implied bond market volatility in major markets remains at a low level by historical standards.

The overall increase in long-term government bond yields in the United States was the result of a significant rebound following the lows reached at the beginning of September, when market participants seemed worried about the economic impact of the damage caused by hurricane Katrina. Both nominal and real yields declined significantly in the early part of the review period on account of concerns related to the damage caused to the productive capacity of the United States as well as to fears that the ongoing upward pressures in the prices of oil and oil-related products would cause a slowdown in economic growth (see also Box 4 on “Recent developments in oil and petrol prices”). Over the following weeks, however, US bond yields increased across the entire maturity spectrum, as market participants appeared to believe that the economic impact of the natural disaster would be short-lived and contained, and that monetary policy would continue to follow a tightening path, as foreseen before the impact of hurricane Katrina. The same concerns were also reflected in movements in real yields and in break-even inflation rates. Index-linked bond yields increased somewhat in September. The rise was more evident for medium and long-term maturities – thereby offsetting part of the declines which took place in August –, suggesting that market participants believe that short-term prospects for economic growth may possibly be hampered by the impact of high oil prices on consumer spending and the temporary decline in productive capacity. In line with this view, market participants’ inflation expectations in the United States – as measured by break-even inflation rates – rose, and the increase was more significant over shorter horizons (see Chart 10).

In Japan, ten-year government bond yields rose, a development which was supported by relatively positive recent news about economic activity and thus expectations that the zero interest rate policy may end earlier than previously anticipated.

In the euro area, long-term government bond yields were stable overall in September. This stability reflected the fact that market participants' views with regard to future economic growth remained unchanged over the review period on account of mixed signals from economic data releases. As regards inflation expectations, the ten-year break-even inflation rate, derived from the difference between the yields on French nominal and index-linked government bonds maturing in 2015, rose slightly in September and stood close to 2.1% on 5 October. Shorter-term inflation expectations, as captured by the 2008-maturity break-even inflation rate, increased more significantly over the last few weeks of the review period, presumably on account of a surge in oil prices, reflecting a perception among market participants that inflation pressures in the euro area will increase over short horizons.

Overnight implied forward interest rates at the end of September were lower than a month earlier for long horizons, possibly reflecting a slight worsening of markets participants' expectations with regard to long-term growth prospects (see Chart 11).

## 2.5 INTEREST RATES ON LOANS AND DEPOSITS

*In July 2005 the majority of both short-term and long-term MFI lending rates on new business declined slightly or remained unchanged. During the same period, MFI deposit rates followed more heterogenous developments.*

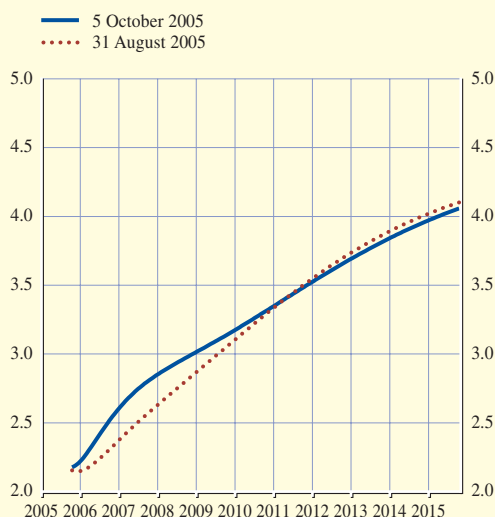
In July 2005 short-term MFI lending rates to both households and non-financial corporations declined slightly or remained broadly unchanged from the previous month (see Table 4). This was in line with the development of comparable short-term money market rates.

Short-term MFI deposit rates followed a very similar pattern and remained unchanged in July 2005, with the exception of the rates on deposits from households redeemable at notice of up to three months, which declined by 21 basis points as compared with the previous month.

Looking back over the last twelve months, most short-term deposit rates have remained broadly unchanged, in line with the stable development of money market rates observed during the same

**Chart 11 Implied forward euro area overnight interest rates**

(percentages per annum; daily data)



Source: ECB estimate.

Note: 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 calculate these implied forward yield curves was outlined in the January 1999 issue of the Monthly Bulletin. The data used in the estimate are derived from swap contracts.

**Table 4 MFI interest rates on new business**

(percentages per annum; basis points; weight-adjusted<sup>1), 2)</sup>)

							Change in basis points up to July 2005		
	2004 Q2	2004 Q3	2004 Q4	2005 Q1	2005 June	2005 July	2004 July	2005 April	2005 June
<b>MFI interest rates on deposits</b>									
Deposits from households									
with an agreed maturity of up to one year	1.88	1.90	1.95	1.92	1.94	1.93	2	-7	-2
with an agreed maturity of over two years	2.45	2.48	2.31	2.38	2.21	2.22	-32	-7	1
redeemable at notice of up to three months	1.97	2.00	2.01	1.96	2.17	1.96	2	2	-21
redeemable at notice of over three months	2.54	2.52	2.52	2.47	2.38	2.34	-21	-11	-4
Overnight deposits from non-financial corporations									
	0.88	0.89	0.91	0.94	0.92	0.94	8	0	3
Deposits from non-financial corporations									
with an agreed maturity of up to one year	1.99	2.00	2.08	2.00	2.01	2.01	2	0	0
with an agreed maturity of over two years	3.56	3.52	3.46	3.34	3.63	2.94	-67	-28	-70
<b>MFI interest rates on loans</b>									
Loans to households for consumption									
with a floating rate and an initial rate fixation of up to one year	6.51	6.89	6.74	6.62	6.61	6.56	-3	2	-5
Loans to households for house purchase									
with a floating rate and an initial rate fixation of up to one year	3.45	3.50	3.44	3.42	3.35	3.31	-15	-9	-4
with an initial rate fixation of over five and up to ten years	4.82	4.82	4.50	4.35	4.15	4.07	-73	-29	-7
Bank overdrafts to non-financial corporations									
	5.39	5.38	5.27	5.26	5.14	5.13	-31	-12	-1
Loans to non-financial corporations of up to €1 million									
with a floating rate and an initial rate fixation of up to one year	3.97	3.99	3.98	3.91	3.88	3.86	-17	-6	-2
with an initial rate fixation of over five years	4.72	4.70	4.44	4.33	4.20	4.14	-54	-22	-7
Loans to non-financial corporations of over €1 million									
with a floating rate and an initial rate fixation of up to one year	3.01	3.00	3.04	3.01	2.94	2.96	-7	-3	2
with an initial rate fixation of over five years	4.17	4.31	4.06	4.04	3.89	3.86	-45	-3	-2
<b>Memo items</b>									
Three-month money market interest rate	2.11	2.12	2.17	2.14	2.11	2.12	0	-2	1
Two-year government bond yield	2.74	2.60	2.36	2.49	2.07	2.19	-51	-15	12
Five-year government bond yield	3.60	3.35	2.93	3.08	2.58	2.66	-83	-23	8

Source: ECB.

1) The weight-adjusted MFI interest rates are calculated using country weights constructed from a 12-month moving average of new business volumes. For further information, see the box entitled "Analysing MFI interest rates at the euro area level" in the August 2004 issue of the Monthly Bulletin.

2) Quarterly data refer to the end of the quarter.

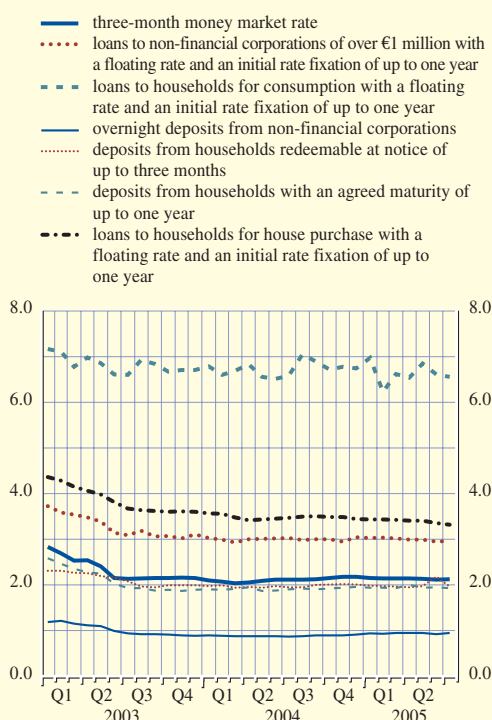
period (see Chart 12). At the same time, most short-term lending rates have declined by around 10-30 basis points over the same period.

In July 2005 most long-term deposit and lending rates continued to decline slightly. The main exception was the interest rate on deposits from non-financial corporations with an agreed maturity of over two years, which declined significantly, by 70 basis points. Rates in this category of deposits are, however, very volatile. By contrast with the declines in MFI lending rates, the benchmark five-year government bond yield increased by around 10 basis points in July, probably reflecting the normal delay in the pass-through from long-term government bond yields to MFI lending rates (see Chart 13).

Looking back over a longer period, long-term rates on loans have declined by between 45 and 75 basis points since July 2004, with the largest decline being observed in the case of long-term housing loans;

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

(percentages per annum; rates on new business; weight-adjusted<sup>1)</sup>)

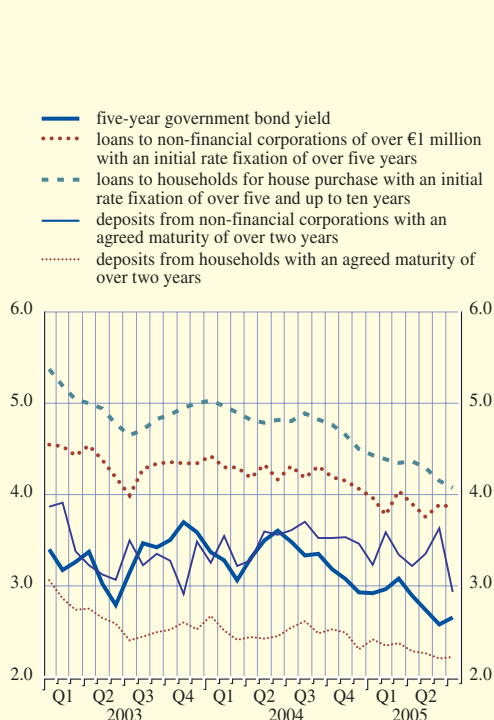


Source: ECB.

1) For the period from December 2003 onwards, the weight-adjusted MFI interest rates are calculated using country weights constructed from a 12-month moving average of new business volumes. For the preceding period, from January to November 2003, the weight-adjusted MFI interest rates are calculated using country weights constructed from the average of new business volumes in 2003. For further information, see the box entitled "Analysing MFI interest rates at the euro area level" in the August 2004 issue of the Monthly Bulletin.

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

(percentages per annum; rates on new business; weight-adjusted<sup>1)</sup>)



Source: ECB.

1) For the period from December 2003 onwards, the weight-adjusted MFI interest rates are calculated using country weights constructed from a 12-month moving average of new business volumes. For the preceding period, from January to November 2003, the weight-adjusted MFI interest rates are calculated using country weights constructed from the average of new business volumes in 2003. For further information, see the box entitled "Analysing MFI interest rates at the euro area level" in the August 2004 issue of the Monthly Bulletin.

in the case of deposits there has been a decline of between 20 and 65 basis points over the same period (see Table 4), while five-year government bond yields have decreased by 85 basis points.

## 2.6 EQUITY MARKETS

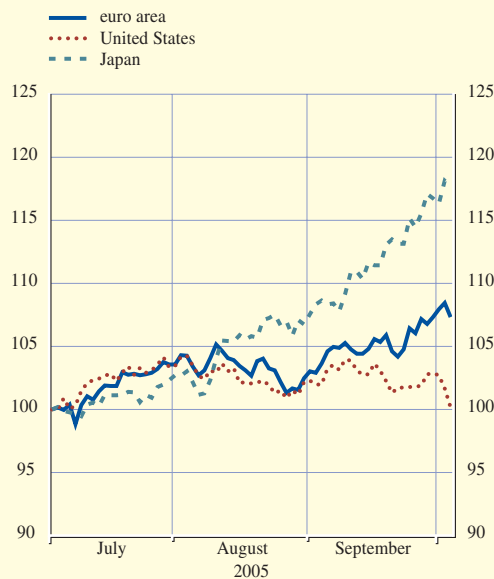
*Stock prices continued to increase in September in the euro area and in Japan against the background of strong corporate earnings, which, as in previous months, seem to have offset investors' concerns about the high level of oil prices. Stock prices in the United States slightly declined on account of downward pressures arising in the aftermath of the damage caused by hurricane Katrina.*

In September, equity prices in the euro area and in Japan continued to increase (see Chart 14). Stock prices in the euro area, as measured by the Dow Jones EURO STOXX index, rose by around 5% between the end of August and 5 October, while Japanese stock prices, as measured by the



Chart 14 Stock price indices

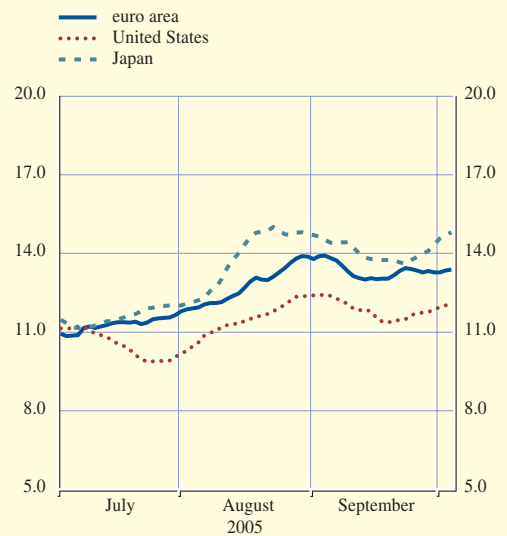
(index: 1 July 2005 = 100; daily data)



Sources: Reuters and Thomson Financial Datastream.  
Note: The indices used are the Dow Jones EURO STOXX broad index for the euro area, the Standard & Poor's 500 index for the United States and the Nikkei 225 index for Japan.

Chart 15 Implied stock market volatility

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



Source: Bloomberg.  
Note: The implied volatility series reflects the expected standard deviation of percentage stock price changes over a period of up to three months, as implied in the prices of options on stock price indices. The equity indices to which the implied volatilities refer are the Dow Jones EURO STOXX 50 for the euro area, the Standard & Poor's 500 for the United States and the Nikkei 225 for Japan.

Nikkei 225 index, rose by 10%. US stock prices, as measured by the Standard & Poor's 500 index, declined slightly – by almost 2% – from their level at end-August.

At the same time, stock market uncertainty in global markets, as measured by the implied volatility extracted from stock options, was broadly stable between the end of August and 5 October and remained at relatively low levels by historical standards (see Chart 15).

In the United States stock prices continued to be supported by the release of positive data on corporate profits. However, downward pressures on stock prices arising from the possible economic impact of the damage caused by the natural disasters contributed to the negative overall performance of stock prices. Looking at sectoral developments, only stock prices of companies belonging to the utilities sector did not decline over the period under review. These developments reflect market participants' expectations that profits in this energy-related sector will remain strong.

In September, euro area stock prices continued the relatively strong performance of the preceding months, proving fairly resilient to the relatively subdued economic growth in the euro area. Strong actual and expected earnings growth of euro area corporations continued to support stock prices and more than offset the impact of the increases in oil prices. At the same time, the slight depreciation of the euro vis-à-vis the US dollar may also have favoured euro area exporters. Despite the strong performance of the broad index, stock prices in the retail sector remained relatively flat over the course of September, reflecting market participants' continued concerns with regard to subdued consumer demand in the euro area.

## 3 PRICES AND COSTS

Short-term developments in euro area HICP inflation were dominated by increasing and volatile oil prices. An upsurge in energy prices, particularly petrol, triggered the significant rise in September inflation to 2.5% reported by Eurostat's flash estimate. However, domestic price pressures remained more subdued, as labour costs have grown moderately and no clear sign of pass-through of higher energy prices to non-energy producer prices has emerged so far. Looking ahead, although there is significant uncertainty, particularly in terms of oil prices, HICP inflation could remain around current elevated levels for the rest of 2005. Over longer horizons, upside risks to price stability have increased and require strong vigilance.

### 3.1 CONSUMER PRICES

#### FLASH ESTIMATE FOR SEPTEMBER 2005

According to Eurostat's flash estimate, euro area HICP inflation increased in September 2005 to 2.5% (see Table 5). Although the detailed HICP components are not yet available, provisional information suggests that this rise was largely driven by energy prices. As discussed in the box entitled "Recent oil and petrol price developments", petrol prices rose substantially during September, which had an immediate impact on the energy component of the HICP.

#### Box 4

#### RECENT OIL AND PETROL PRICE DEVELOPMENTS

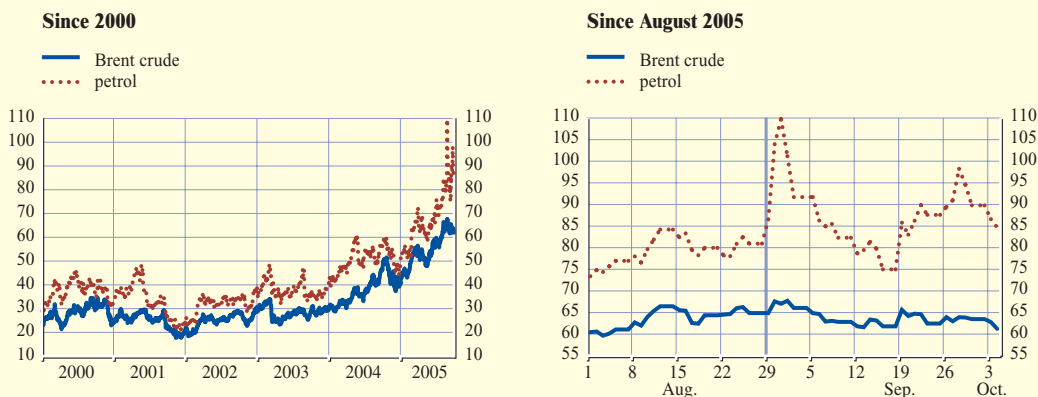
This box briefly presents recent developments in oil and petrol prices, focusing particularly on petrol price movements in the aftermath of hurricane Katrina and their impact on consumer prices.

#### Global developments in oil and petrol prices

After fluctuating between USD 20 and USD 35 in the period 2000-03, crude oil prices have soared, with the price of Brent crude oil more than doubling from around USD 30 at the

#### Chart A Oil prices

(USD/barrel; one-month forward; daily data)

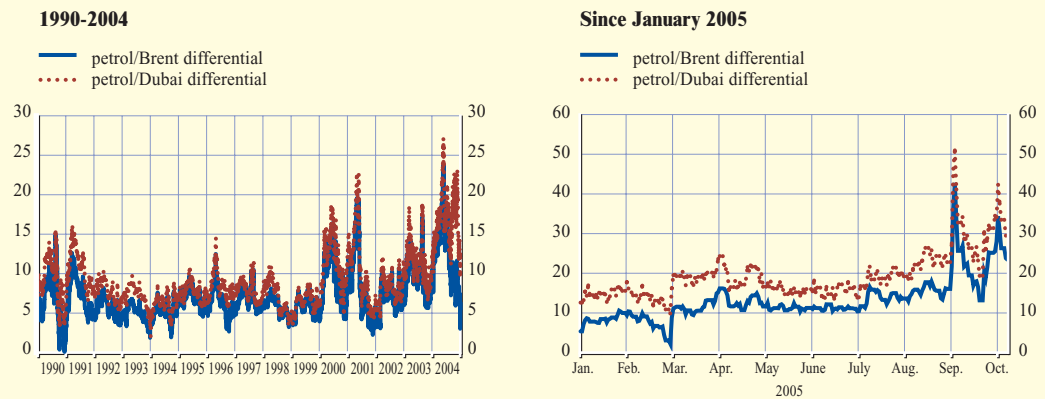


Source: Bloomberg.

Note: The figures show the price of Brent crude oil traded at the International Petroleum Exchange and unleaded petrol traded at the New York Mercantile Exchange, delivered free on board in New York Harbor. The latest value refers to 4 October 2005.

## Chart B Price differentials between petrol and crude oil

(USD/barrel; daily data)



Source: Bloomberg.

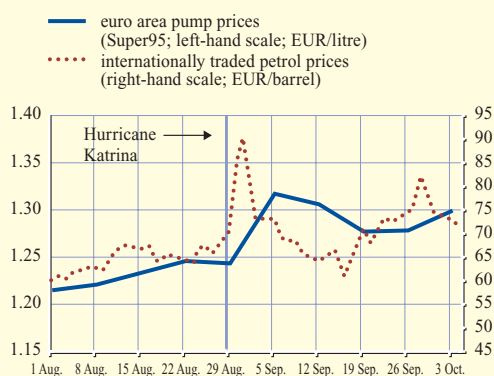
Note: The figures show the price of Brent crude oil traded at the International Petroleum Exchange and unleaded petrol traded at the New York Mercantile Exchange, delivered free on board in New York Harbor. The latest value refers to 4 October 2005.

beginning of 2004 to a new all-time high of USD 67.5 on 2 September 2005. Petrol prices followed a very similar pattern until the week before hurricane Katrina struck the US Gulf Coast on 29 August. From the start of 2005 to August, crude oil prices increased by almost 60%, while petrol prices increased by around 70% (see Chart A, left panel). Subsequently, price decoupling was observed, with considerably stronger rises in the price of petrol in the aftermath of the hurricane (see Chart A, right panel).

Under normal circumstances, there is generally a strong link between crude oil and petrol prices, as they are coupled by relatively stable refining costs. During the 1990s, petrol prices stood, on average, around USD 6 per barrel above the price of light sweet crudes, such as Brent, and around USD 8 above the price of heavier and sour crudes, such as Dubai. From the beginning of 2004 until September 2005, the average price differential has more than doubled compared with the levels of the 1990s, to around USD 12 for Brent and USD 18 for Dubai (see Chart B). This widening differential reflects the longer-term erosion of global spare refining capacity following strong global demand for oil and insufficient investment to adequately expand refining capacity. In principle, widening price differentials should act as a signal to invest in additional refining capacity. However, even though margins have already risen considerably in recent years, after a period of low margins in the 1990s, this has not led to sufficient investment to expand refining capacity. One reason for this is that long-term investments require a sustained high margin to be profitable. In the 1970s, lower demand following the oil price shocks led to capacity overhang which depressed refining margins. Therefore, uncertainty regarding future demand may be a reason why the industry's reaction to the price signals of the last two years has been limited.

The damage to the energy infrastructure in the US Gulf of Mexico following hurricane Katrina placed further pressure on the oil supply chain. Crude oil prices rose to a new all-time high in its immediate aftermath, but returned to pre-hurricane levels the following week, partly in response to the release of strategic oil reserves by the US government and those coordinated by the International Energy Agency. By contrast, the hurricane's effects were considerably more

**Chart C Internationally traded and euro area petrol prices in August and September 2005**



Sources: Bloomberg, European Commission and DG-Energy (Weekly Oil Bulletin).

Note: Daily data for internationally traded petrol prices (i.e. unleaded petrol traded at the NYMEX); weekly data for euro area pump prices.

the second half of September, as hurricane Rita, although generally less devastating than initially feared, led to a further temporary reduction in US refining capacity.

### The impact on pump prices in the euro area

As internationally traded petrol prices soared in the days following hurricane Katrina, petrol prices paid at the pump by euro area consumers also increased dramatically and receded with some delay (see Chart C).

A delay in the adjustment of pump prices is not unusual. A simple correlation analysis shows that an increase (decrease) in the price of internationally traded petrol is generally followed by an increase (decrease) in euro area pump prices within one to two weeks. This is a result of the transmission mechanism between the international price of petrol and the pump price, which is determined by euro area distributors on the basis of various factors, including transportation and the degree of competition in the euro area market.

All in all, the increase in petrol prices in the aftermath of hurricane Katrina has had significant implications for the September euro area HICP inflation. Indeed, around 46% of the HICP energy component (i.e. 4% of the total HICP basket) is accounted for by car fuel prices. The rise in pump prices has thus impacted strongly on the energy component and largely explains the increase in the September HICP inflation to 2.5% according to the flash estimate published by Eurostat. In this regard, the subsequent rise in internationally traded petrol prices in the second half of September, associated with hurricane Rita, is expected to exert additional upward pressure on consumer prices.

Soaring petrol prices in the aftermath of the hurricanes in the United States have exacerbated the uncertainty about the global oil market which has seen the erosion of global spare refining capacity. The associated oil and petrol price developments have also caused a substantial increase in euro area headline HICP inflation. As regards economic activity, uncertainties relating to oil price developments persist, even though the specific effect of the hurricanes is likely to be limited and temporary.

pronounced on the prices of refined oil products, and in particular petrol prices. Petrol futures prices traded in New York (one-month forward prices) increased by 30% between the week preceding hurricane Katrina and its immediate aftermath. Even though the damage was local, the hurricane had global repercussions and pushed up petrol prices around the world. For example, it gave rise to higher “netback margins” (spreads between refined and crude oil, minus processing costs) in the United States which opened up arbitrage opportunities and attracted cargoes of petrol from other regions of the world, pushing up prices there. Subsequently, petrol prices also retreated from their hurricane-induced peaks to the level preceding it, although not as fast as crude oil prices. Petrol prices surged again in

**Table 5 Price developments**

(annual percentage changes, unless otherwise indicated)

	2003	2004	2005 Apr.	2005 May	2005 June	2005 July	2005 Aug.	2005 Sep.
<b>HICP and its components</b>								
Overall index <sup>1)</sup>	2.1	2.1	2.1	2.0	2.1	2.2	2.2	2.5
Energy	3.0	4.5	10.2	6.9	9.4	11.8	11.6	.
Unprocessed food	2.1	0.6	0.8	1.0	0.6	0.3	1.1	.
Processed food	3.3	3.4	1.7	1.5	1.5	1.6	1.7	.
Non-energy industrial goods	0.8	0.8	0.3	0.4	0.3	0.0	0.0	.
Services	2.5	2.6	2.2	2.5	2.2	2.3	2.3	.
<b>Other price indicators</b>								
Industrial producer prices	1.4	2.3	4.3	3.5	4.0	4.1	4.0	.
Oil prices (EUR per barrel)	25.1	30.5	41.4	39.4	45.7	48.3	52.0	52.2
Non-energy commodity prices	-4.5	10.8	-1.9	1.2	7.6	9.6	11.9	13.2

Sources: Eurostat, Thomson Financial Datastream and HWWA.

1) HICP inflation in September 2005 refers to Eurostat's flash estimate.

### HICP INFLATION UP TO AUGUST 2005

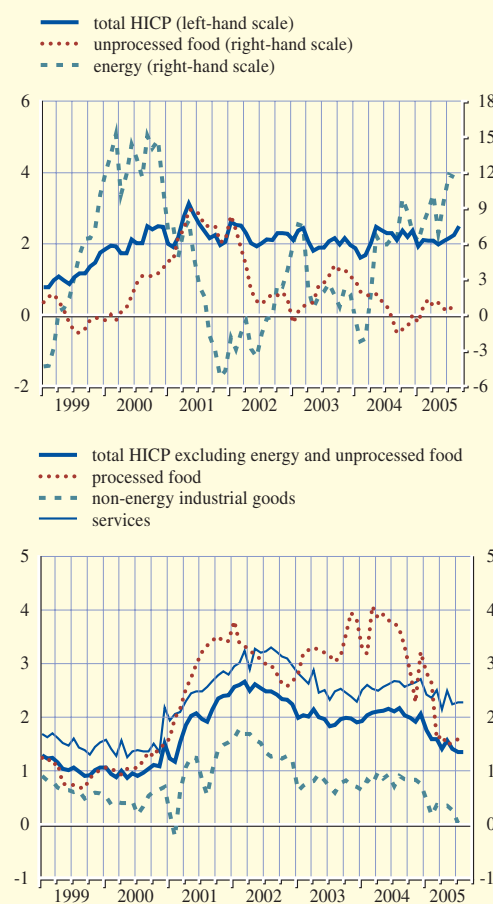
Euro area HICP inflation remained unchanged in August 2005 at 2.2% (see Chart 16). A substantial rise in the annual growth rate of unprocessed food prices offset a slight fall in energy price pressures. The price changes for the other components were broadly stable, so that the annual growth rate of the HICP excluding energy and unprocessed food remained unchanged at 1.4%, for the third month in a row.

The annual growth rate of energy prices eased slightly in August (see Table 5), due in part to a base effect. In addition, the month-on-month growth rate of energy prices eased between July and August (from 2.8% to 1.4%), following an upsurge in July. The downward effect of energy on inflation for August was counterbalanced by an increase in unprocessed food prices, the annual growth rate of which rose from 0.3% in July to 1.1% in August. However, overall developments in the prices of fruit and vegetables were still subdued in comparison with historical standards.

As yet, there is little evidence of indirect effects on the non-energy components of the HICP arising from previous increases in energy prices. The annual growth rates of both non-energy industrial goods and services prices remained unchanged between July and August.

**Chart 16 Breakdown of HICP inflation: main sub-components**

(annual percentage changes; monthly data)



Source: Eurostat.

The very moderate price pressures in non-energy industrial goods prices is shared by a wide variety of products, but is notably related to developments in clothing and footwear prices which reflect the downward impact of strong international competition. As discussed in the box entitled “Trade liberalisation and its impact on the euro area textile and clothing sectors”, this downward impact on prices is significant, although difficult to gauge precisely, given that the relevant items represent 25% of the non-energy industrial goods component and 7% of the overall HICP. Finally, the annual growth in processed food prices rose slightly for the second consecutive month.

**Box 5****TRADE LIBERALISATION AND ITS IMPACT ON THE EURO AREA TEXTILE AND CLOTHING SECTORS**

In January 2005 all remaining quota restrictions on global trade in textiles and clothing were eliminated. This was supposed to mark the end of 50 years of quantity restrictions.<sup>1</sup> However, following a surge in textile imports from China at the beginning of 2005, the EU and China started negotiations to limit the growth of textile imports from China. An agreement was reached on 10 June. By the beginning of August, the new limit had already been reached for some items, and stocks began piling up in storage at various entry points into the EU. A new agreement was concluded on 5 September which allowed these stocks to be released whilst maintaining limits on the future rate of growth of textile imports from China. This box assesses the impact of trade liberalisation on the textile and clothing sectors, with regard to trade, output and pricing.

While the share of textiles in total euro area imports and exports has been following a downward trend since the mid-1990s, the euro area has registered an increasing trade deficit in this sector, which reached €26 billion in 2004. This was mainly the result of imports from low-cost countries which increased their share of the euro area market. Since January 2005, textile imports from China have surged largely at the expense of other textile exporting countries outside the euro area while the total value of textile imports into the euro area has not increased (see Chart A).

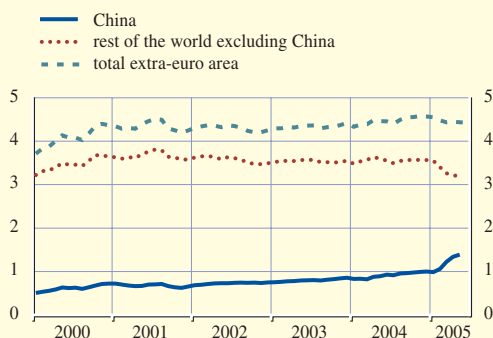
As regards output and employment within the euro area, recent patterns reveal a continuation of the downward trend observed in the textile sector for over a decade (see Chart B). The dots in the chart indicate stages in the progressive phasing-out of import quotas (January 1995, January 1998, January 2002 and January 2005). It appears that the impact of the implementation of each new stage of trade liberalisation has been gradual rather than sharp and short-lived. Thus, for a number of years, the textile sector in the euro area has been exposed to increasing external competition, reflecting the elimination of trade barriers. Not surprisingly, the decline in euro area textile production was accompanied by a decline in employment in this sector.

As regards consumer price developments, textile prices, or more specifically clothing and footwear prices, are an important component of the HICP. They account for over 7% of the overall index and almost 25% of the HICP non-energy industrial goods component.

<sup>1</sup> For additional information see the box entitled “Possible impact of the removal of trade quotas for textiles and clothing” in the December 2004 issue of the Monthly Bulletin.

**Chart A Value of euro area textile imports**

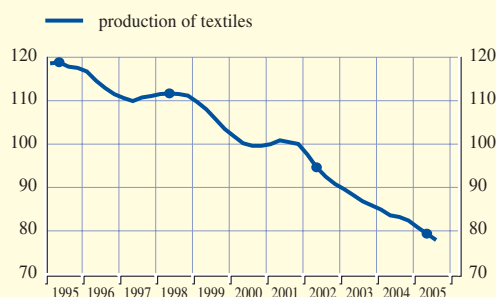
(EUR billions; three-month moving average; seasonally adjusted)



Source: ECB calculations based on Eurostat data.  
Note: The latest figures refer to May 2005.

**Chart B Euro area production of textile products**

(index: Q4 2000 = 100; four quarter moving average; working-day adjusted)



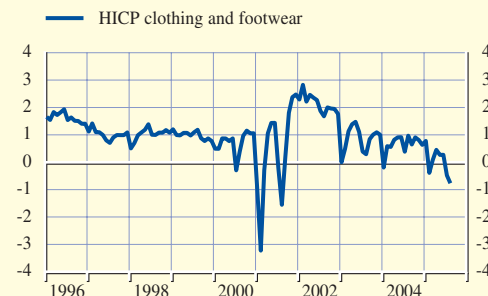
Source: Eurostat.  
Note: The dots in the chart represent stages in the phasing-out of import quotas under the Agreement on Textiles and Clothing.

Unfortunately, interpreting recent developments in clothing and footwear consumer prices is difficult because of their highly volatile seasonal pattern. This is undoubtedly partly due to statistical factors (some countries have only included sales discount prices in the HICP since 2000 or 2001) and legal developments (e.g. the regulations governing discounting have been changed in some countries to provide more flexibility for retailers). However, economic factors, such as efforts to stimulate weak consumer demand by more aggressive discounting, may also be at work. In any case, leaving aside this seasonal volatility and the statistical effects, which explain the sharp drops in 2001, Chart C shows that the annual rate of growth in clothing and footwear prices has been declining since 2002 and is currently negative.

The liberalisation of the textile sector has therefore contributed to lowering overall HICP inflation this year, which has benefited consumers. At the same time, while the liberalisation thus far has only led to a change in the geographical composition of textile exporters to the euro area, it is to be assumed that, in the future, continued strong external competition will pose a challenge for the euro area textile sector, to which it will need to adjust.

**Chart C Clothing and footwear prices**

(annual percentage changes)



Source: Eurostat.  
Note: The sharp declines in the annual rate of change in 2001 are due to the introduction of sales discount prices into the HICP in some countries in that year.

### 3.2 PRODUCER PRICES

In August price pressures from the domestic manufacturing sector remained significant, but this was largely due to energy prices. The industrial producer price index (excluding construction) rose by 4.0% on an annual basis in August, slightly down from 4.1% in July (see Chart 17).

The annual growth rate of producer prices excluding energy and construction remained unchanged at 1.3%. A slight rise in the annual growth rate of consumer goods prices offset a minor fall in the annual growth rate of intermediate goods prices, while the annual growth rate of capital goods prices was stable. Developments in consumer goods prices provide little evidence of significant indirect effects from higher oil prices. In August the annual growth rate of consumer goods prices stood well below its December 2004 level (1.5%) and its previous historical peaks (for instance 3.6% in April 2001 or 3.9% in January 1992).

Survey data point towards a strengthening of input price pressures in the manufacturing sector, whereas prices charged apparently remain more contained. The Eurozone Manufacturing Input Price Index from the Purchasing Managers' Surveys rose from 56.3 in August to 59.1 in September, whereas the index for prices charged has remained unchanged at 50.5 (see Chart 18).

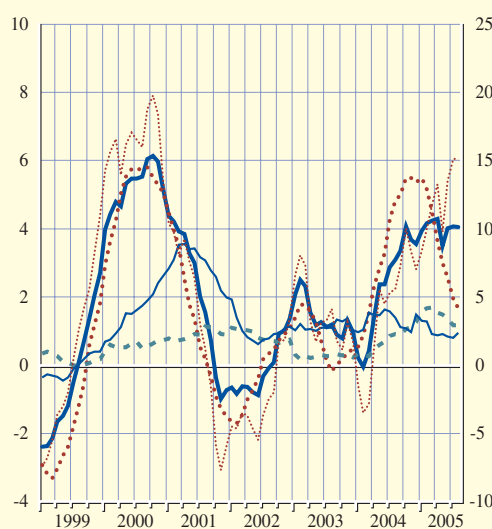
### 3.3 LABOUR COST INDICATORS

Available indicators show that, during the second quarter of 2005, labour cost growth in the euro area corrected the upsurge of the previous quarter, which was mainly the result of statistical factors (see Table 6). The annual growth rate of negotiated wages eased slightly between the first

Chart 17 Breakdown of industrial producer prices

(annual percentage changes; monthly data)

- total industry excluding construction (left-hand scale)
- ... intermediate goods (left-hand scale)
- - capital goods (left-hand scale)
- consumer goods (left-hand scale)
- ... energy (right-hand scale)



Sources: Eurostat and ECB calculations.

Table 6 Labour cost indicators

(annual percentage changes, unless otherwise indicated)

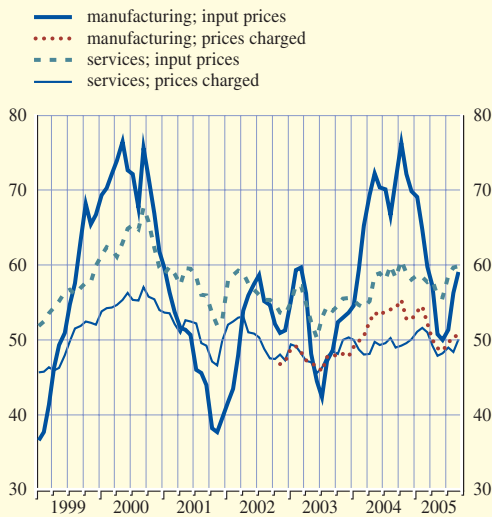
	2003	2004	2004 Q2	2004 Q3	2004 Q4	2005 Q1	2005 Q2
Negotiated wages	2.4	2.1	2.2	2.0	2.1	2.2	2.1
Total hourly labour costs	3.1	2.5	2.5	2.4	2.3	3.0	2.3
Compensation per employee	2.3	2.1	2.4	1.7	1.8	2.3	.
<i>Memo items:</i>							
Labour productivity	0.5	1.2	1.6	1.2	0.7	0.6	0.4
Unit labour costs	1.8	0.9	0.7	0.5	1.1	1.7	.

Sources: Eurostat, national data and ECB calculations.



**Chart 18 Producer input and output price surveys**

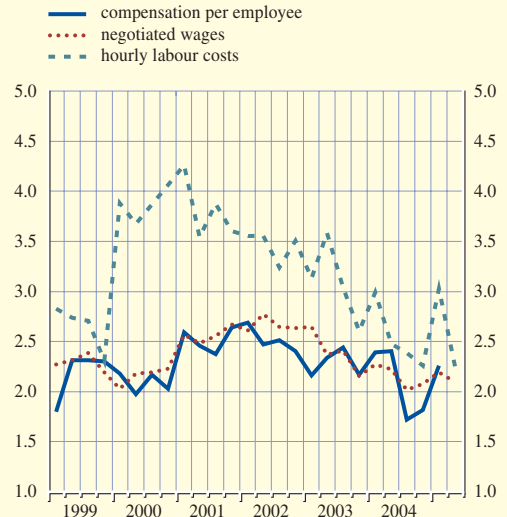
(diffusion indices; monthly data)



Source: NTC Research.  
Note: An index value above 50 indicates an increase in prices, whereas a value below 50 indicates a decrease.

**Chart 19 Selected labour cost indicators**

(annual percentage changes)



Sources: Eurostat, national data and ECB calculations.

and second quarters of 2005. In addition, the annual growth rate of total hourly labour costs slowed down, from 3.0% year on year in the first quarter of 2005 to 2.3% in the second quarter. This decline stems from both wage and non-wage costs (e.g. social security contributions). However, this index may be subject to particular volatility due to the phasing-in of new regulations.

On the basis of the labour costs indicators available so far, compensation per employee growth is likely to have remained moderate during the second quarter of 2005. Although productivity gains declined slightly during this quarter, growth in unit labour costs may have stayed moderate as well.

From a longer-term perspective, labour costs appear to have levelled off at a moderate rate in 2004 and early 2005 (see Chart 19). While wage trends differ across countries, wage pressure is still subdued in the euro area as a whole. Looking ahead, the prospects for moderate real GDP growth, combined with a still subdued euro area labour market, should help to contain inflationary pressures from wage developments.

### 3.4 THE OUTLOOK FOR INFLATION

Given the recent oil price developments, the short-term outlook for inflation has significantly deteriorated and the annual growth rate of the HICP could remain at its current elevated levels for the rest of 2005. Looking further ahead, there is so far no significant evidence of underlying inflationary pressures building up in the euro area economy. While this may imply that annual inflation rates will decline again in the absence of further unexpected upward shocks to prices,

there are several risks involved in this scenario. These include ongoing uncertainties about oil market developments, as well as possible further increases in administered prices and indirect taxes. There are also risks of second-round effects on wages, although wage increases could remain contained in the context of external competition, continued slack in the labour market and only a gradual increase in economic activity. Accordingly, strong vigilance is required in order to ensure that longer-term inflation expectations for the euro area remain well-anchored.

## 4 OUTPUT, DEMAND AND THE LABOUR MARKET

Real GDP continued to grow at a moderate pace in the first half of this year. In line with the ECB staff projections and against the background of favourable fundamentals, most recent survey indicators have, on balance, supported the view that economic growth could gradually pick up from the second half of this year onwards. However, there are some downside risks to this outlook, relating mainly to oil prices.

### 4.1 OUTPUT AND DEMAND DEVELOPMENTS

#### REAL GDP AND EXPENDITURE COMPONENTS

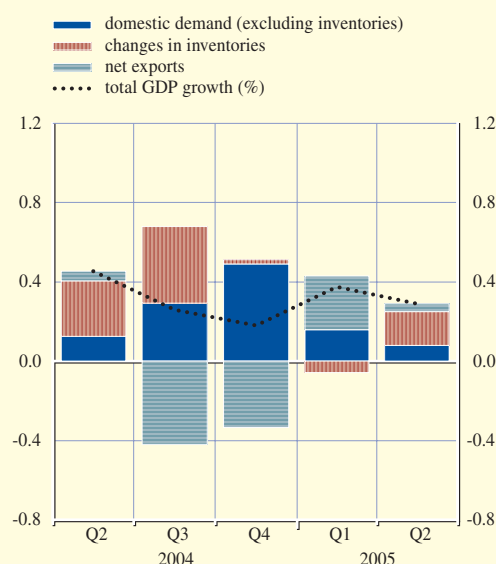
The first release of national accounts data for the second quarter, reported in the Monthly Bulletin last month, confirmed the flash estimate, showing that economic activity continued to grow moderately in the euro area in the first half of 2005. Real GDP increased at a quarter-on-quarter rate of 0.3% in the second quarter of 2005, compared with 0.4% in the first quarter (see Chart 20). All in all, the pace of economic growth has remained broadly stable over the past four quarters.

Economic activity in the second quarter of 2005 was driven primarily by changes in inventories, which contributed 0.2 percentage point to quarter-on-quarter real GDP growth. The contribution of the other components of domestic demand to real growth was weak, or even absent. In particular, the contribution of private consumption to real growth was zero, which may partly reflect the negative impact of rising oil prices on real income. Investment growth increased from -0.2% in the first quarter of 2005 to 0.2% in the second quarter. However, this partly reflected a rebound of the weather-related decline in construction in the previous quarter. Gross capital formation made a contribution of 0.1 percentage point to GDP growth in the second quarter. Meanwhile, the contribution of real net exports declined to almost zero in the second quarter.

In a longer-term perspective, real GDP growth has been somewhat different across euro area countries. The box entitled “Output growth differentials within the euro area: Are they cyclical or trend-driven?” addresses the question as to the causes of the dispersion and concludes that the current degree of growth differentials largely reflects differences in trend growth rates across countries, rather than cyclical differences.

Chart 20 Real GDP growth and contributions

(quarter-on-quarter growth rate and quarterly percentage point contributions; seasonally adjusted)



Sources: Eurostat and ECB calculations.

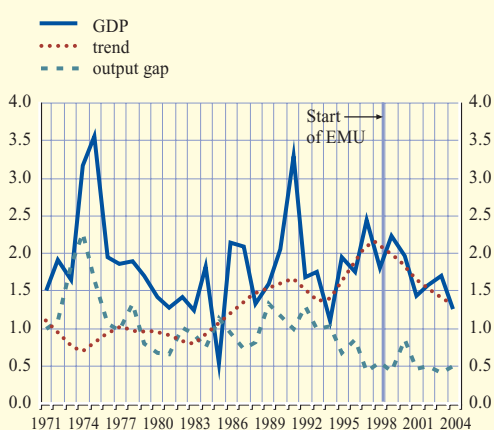
Box 6

**OUTPUT GROWTH DIFFERENTIALS WITHIN THE EURO AREA: ARE THEY CYCLICAL OR TREND-DRIVEN?**

Dispersion of real GDP growth rates in annual average terms, as measured by the unweighted standard deviation, has remained relatively stable across the euro area countries during the period 1970-2004 as a whole.<sup>1</sup> This box considers to what extent this dispersion pattern reflects differences in the evolution of dispersion in the cyclical and trend components of GDP across the euro area countries.

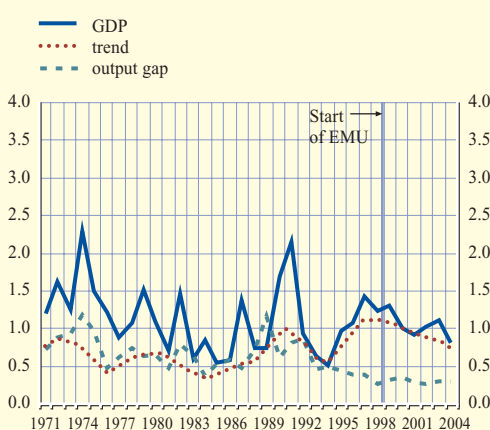
Real GDP of a particular country may deviate temporarily from its long-term trend. Such deviations, capturing cyclical developments, are often presented as a share of the trend, and are referred to as the output gap. Without entering into a detailed discussion, it is important to stress three key caveats related to the decomposition of GDP into its cyclical and trend components.<sup>2</sup> First, since both the trend and the cyclical components of GDP are unobservable, there is no single undisputed method to extract trends and cycles. Second, for any statistical or economics-based method, the results are conditional on the parameters used for the computations. Third, all methods are, to some extent, affected by “end-point problems”, i.e. the fact that the estimates at the end of the sample either are unreliable or need to be based on an extension of the historical data set with forecast values. The methodology used in this box is based on a band-pass filtering<sup>3</sup> technique.

**Chart A** Dispersion in real GDP growth rates, trend growth rates and output gaps across the euro area countries – unweighted standard deviation



Sources: European Commission and ECB calculations.

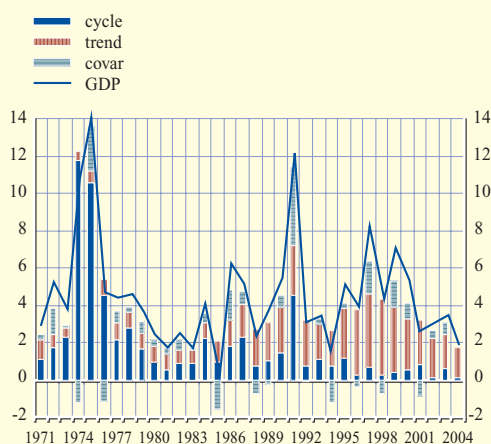
**Chart B** Dispersion in real GDP growth rates, trend growth rates and output gaps across the euro area countries – weighted standard deviation



Sources: European Commission and ECB calculations.

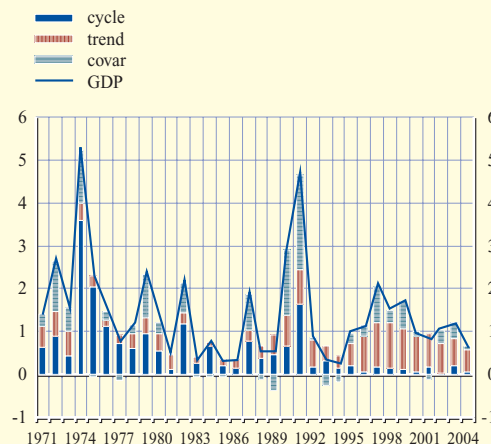
1 See the box entitled “Recent Developments in output growth divergences across euro area countries” in the May 2005 issue of the Monthly Bulletin for further details.  
 2 For a short review see the article entitled “Characteristics of the euro area business cycle in the 1990s” in the July 2002 issue of the Monthly Bulletin.  
 3 The filter used relies on the “approximate” band-pass filter suggested in M. Baxter and R. King (1995), Measuring Business Cycles: approximate band-pass filters for economic time series, NBER working paper 5022, February. For a review of potential output estimates for the euro area, see Box 5 in the February 2005 issue of the Monthly Bulletin. A band-pass filter is a particular type of moving average which transforms macroeconomic data to obtain the business-cycle component. The standard parameters of the Baxter and King filter have been used, namely a lower limit of 6 quarters for cyclical movements, an upper limit of 32 quarters and a lag length of 12 quarters.

**Chart C Contributions to the variance of real GDP growth across the euro area countries – unweighted**



Sources: European Commission and ECB calculations.

**Chart D Contributions to the variance of real GDP growth across the euro area countries – weighted**



Sources: European Commission and ECB calculations.

Charts A and B show the dispersion of real GDP growth rates since the 1970s, as well as the dispersion of output gaps (the cyclical component) and of trend growth rates across the euro area countries, in unweighted and weighted terms. As can be seen, there are some striking differences in the way in which the dispersion of output gaps and trend growth rates has developed. As far as the output gap is concerned, it seems that its dispersion decreased significantly in the course of the 1990s, and has remained broadly stable at a low level in the last five years. Regarding trend growth rates, dispersion increased in the course of the 1980s and for most of the 1990s, but has fallen somewhat since the late 1990s.

In order to better understand the relative importance of trends and cycles in explaining growth differences between countries, contributions by these two components to the total variance<sup>4</sup> can be computed. As can be seen in Charts C and D, the breakdown of the variance of real GDP growth rates across the euro area countries indicates a large decrease in the contribution of the cyclical component to dispersion and, simultaneously, a large increase in the contribution stemming from trend growth differences, mainly since the beginning of the 1990s. Thus, the contribution of the cyclical component to dispersion seems to have been relatively limited in the last ten years, with most of the dispersion being attributable to differences in trend output growth.<sup>5</sup>

There may be several reasons for such differences in trend growth. They may be related, among other things, to catching-up processes, as well as to diverse trends in demographics, in labour utilisation or in productivity patterns. In turn, some of these factors may be related to differences in the speed of structural reforms undertaken in the past. The challenge is for those countries which lag behind in terms of potential growth to determinedly address their structural problems.

4 The standard deviation, as used above, cannot be easily decomposed. The square of the standard deviation, the variance, can be decomposed in the following way: when the trend and cycles are expressed as contributions to real GDP growth,  $\text{var}(\text{GDP}) = \text{var}(\text{trend}) + \text{var}(\text{cycle}) + 2\text{covar}(\text{cycle}, \text{trend})$ .

5 It should be noted that a necessary component of this decomposition is the covariance between trend growth and the cycle. However, as shown in Charts C and D above, this part is relatively small and does not affect the overall conclusions.

## SECTORAL OUTPUT AND INDUSTRIAL PRODUCTION

In terms of the sectoral composition of growth, the data for real value added in the second quarter of 2005 (which have already been reported in the September issue of the Monthly Bulletin) showed that both the industrial sector and the services sector contributed positively to growth. Value added in the industrial sector increased at a significantly higher pace than in the services sector, although services account for the bulk of real value added in the euro area.

Available data up to July show that industrial activity (excluding construction) strengthened somewhat in the euro area at the start of the third quarter, indicating that the recovery may be continuing, albeit without accelerating significantly. Euro area industrial production increased month on month by 0.2% in July, following a rise of 0.4% in June (revised upwards by 0.1 percentage point). On a three-month moving average basis, the latest results show a rate of expansion in the industrial sector of 0.4% in June, which is unchanged from May (see Chart 21). The data for industrial production (excluding construction and energy) for the past three months therefore point to a relatively positive development. This is notably the case in the more cyclically sensitive capital goods sector (increase of 0.9% on a three-month moving average basis) and in the consumer goods sector (increase of 0.5% on a three-month moving average basis).

New orders in manufacturing decreased month on month by 1.2% in July, following a relatively strong increase of 3.1% in the previous month and growth of 2.2% quarter on quarter in the second quarter. The level of new orders in July remained only slightly above the average level of the second quarter, which may suggest a slower expansion of new orders in the third quarter. All in all, data up to July provide a positive signal for developments over the summer months.

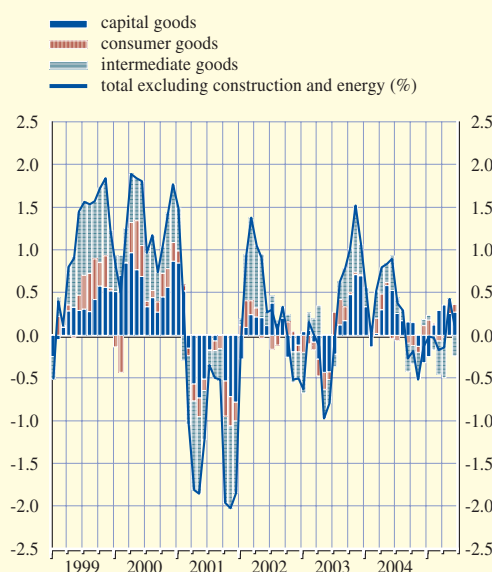
## SURVEY DATA FOR THE MANUFACTURING AND SERVICES SECTORS

Both the European Commission's industrial confidence indicator and the euro area Purchasing Managers' Index (PMI) improved in September, having remained broadly unchanged in August. Between July and September, both indicators stood above the levels recorded in the second quarter of 2005 as a whole and are now close to the levels reported at the beginning of the year. The strengthening of industrial confidence in September reflected mainly an improvement in new order books. However, in a longer-term perspective, the level of industrial confidence is still relatively low, indicating only a measured pace of underlying industrial activity in the third quarter of 2005 (see Chart 22).

In September the European Commission's services confidence indicator returned almost to its level recorded in July 2005. The indicator now stands slightly above its average for the second

Chart 21 Industrial production growth and contributions

(growth rate and percentage point contributions; seasonally adjusted)

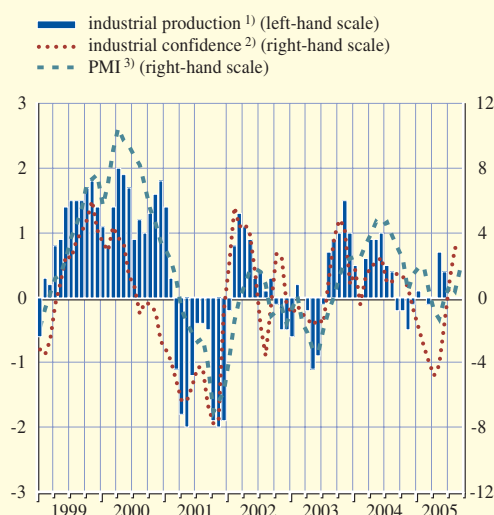


Sources: Eurostat and ECB calculations.

Note: Data shown are calculated as three-month centred moving averages against the corresponding average three months earlier.

**Chart 22 Industrial production, industrial confidence and the PMI**

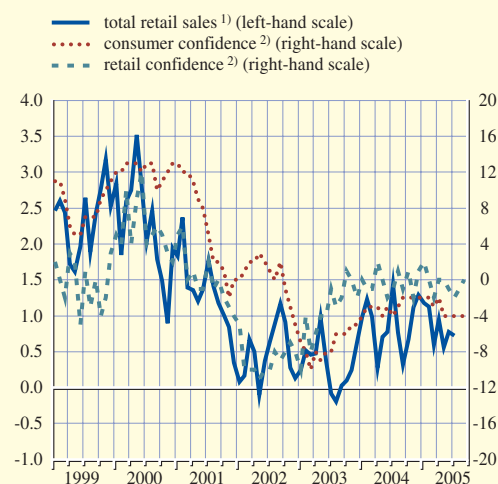
(monthly data; seasonally adjusted)



Sources: Eurostat, European Commission Business and Consumer Surveys, NTC Research and ECB calculations.  
 1) Manufacturing; three-month on three-month percentage changes.  
 2) Percentage balances; changes compared with three months earlier.  
 3) Purchasing Managers' Index; deviations from an index value of 50.

**Chart 23 Retail sales and confidence in the retail trade and household sectors**

(monthly data)



Sources: European Commission Business and Consumer Surveys and Eurostat.  
 1) Annual percentage changes; three-month centred moving averages; working-day adjusted.  
 2) Percentage balances; seasonally and mean-adjusted. For consumer confidence, euro area results from January 2004 onwards are not fully comparable with previous figures due to changes in the questionnaire used for the French survey.

quarter of 2005. From a longer-term perspective, the Commission's indicator continued to be close to its average value since June 2003. The PMI for business activity in the services sector increased more strongly in September, thereby reaching its highest value for a year. Overall, the survey information also provides a slight positive signal for growth in the services sector during the third quarter.

#### INDICATORS OF HOUSEHOLD SPENDING

Private consumption growth was weak in the second quarter. Looking ahead, available indicators of household spending point, on average, to moderate private consumption growth entering the third quarter.

Retail sales volumes fell in July by 0.5% month on month, but increased by 0.9% month on month in August, thereby returning approximately to the levels of May and June. While the decline in the consumption of food products in July was offset by an equal rise in August, retail sales volumes in non-food products rose between June and August. Despite the unfavourable development in June, the three-month moving average growth rates were at 0.4% quarter on quarter in both July and August. As regards other indicators of household spending, new passenger car registrations decreased in both July and August, following an unusually strong rise in June. As a result, car registrations decreased significantly in the first two months of the third quarter, compared with an increase of 1.7% in the second quarter as a whole (see Chart 23). Overall, recent developments in retail trade and new car registration provide a slight positive signal for consumption dynamics in the third quarter.

Finally, according to the European Commission's indicator, consumer confidence was unchanged in September for the fourth consecutive month. Overall, consumer confidence has remained broadly stable since mid-2004, albeit at relatively low levels.

## 4.2 LABOUR MARKET

The latest indicators suggest a continuation of the very gradual improvement in labour market conditions that started in the first half of 2005. Employment expectations for both the industry and services sectors improved for the third quarter of 2005 as a whole and support the picture of an ongoing, albeit mild, improvement in the underlying labour market conditions in the second half of the year.

### UNEMPLOYMENT

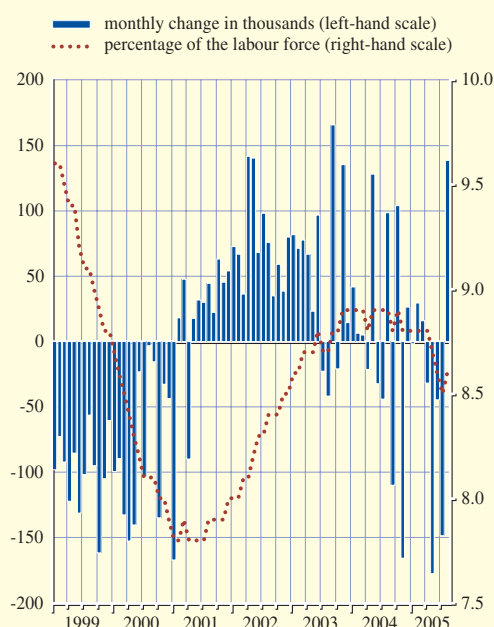
The euro area standardised unemployment rate increased to 8.6% in August 2005, from 8.5% in the previous month, having declined during the previous three months (see Chart 24). Underlying this increase was a rise of about 140,000 in the number of unemployed persons, following an average monthly decline of around 120,000 in the previous three months. However, euro area unemployment data should currently be interpreted with caution. The developments in August were largely driven by a rise in the unemployment rate in Germany, for which the latest data may not fully reflect underlying developments in the labour market following methodological and institutional changes in the collection of the data. In fact, the data for the euro area excluding Germany show an ongoing gradual decrease in unemployment in August too.

### EMPLOYMENT

Employment increased by 0.2% quarter on quarter in the second quarter of 2005, following a rate of increase of 0.1% in the first quarter (see Table 7). The increase in employment in the second quarter compared with the first quarter was mainly attributable to the expansion of employment in the industry sector (including construction). The employment growth rate in this sector was 0.1% quarter on quarter, having declined at a rate of 0.6% in the previous quarter and at an annual rate of 0.9% in 2004. Employment growth in the services sector showed a quarter-on-quarter growth rate of 0.3% in the second quarter of 2005, broadly in line with the pace of expansion recorded in most of the previous quarters. Therefore, developments over the past few quarters point to an ongoing, albeit gradual, improvement in labour market conditions. However, when interpreting the data, the recent effects of labour market policy measures, such as the increase in employment by an expansion of part-time work and self-employment, must also be borne in mind.

Chart 24 Unemployment

(monthly data; seasonally adjusted)



Source: Eurostat.



**Table 7 Employment growth**

(percentage changes compared with the previous period; seasonally adjusted)

	Annual rates		Quarterly rates				
	2003	2004	2004 Q2	2004 Q3	2004 Q4	2005 Q1	2005 Q2
Whole economy	0.3	0.6	0.2	0.2	0.2	0.1	0.2
<i>of which:</i>							
Agriculture and fishing	-1.9	-0.7	-0.2	0.1	-0.4	-1.2	0.1
Industry	-1.0	-0.9	0.2	-0.1	0.0	-0.6	0.1
Excluding construction	-1.5	-1.7	0.1	-0.5	0.2	-0.9	-0.1
Construction	0.1	1.1	0.6	1.1	-0.4	0.1	0.6
Services	0.9	1.2	0.3	0.3	0.3	0.4	0.3
Trade and transport	0.3	0.9	0.3	0.4	0.1	0.1	0.1
Finance and business	1.3	2.5	0.4	0.6	0.5	0.8	0.2
Public administration	1.2	0.8	0.1	0.2	0.3	0.5	0.5

Sources: Eurostat and ECB calculations.

The modest employment growth, combined with a slightly slower pace of economic activity in the second quarter of 2005 than in the first quarter, led to a slight decline in both annual and quarterly labour productivity growth. However, overall developments in labour productivity growth conceal divergent trends across sectors. More specifically, in the second quarter of 2005, the positive labour productivity growth in the industry sector (0.8% quarter on quarter) was partly offset by a decline in labour productivity in the services sector (0.1% quarter on quarter). Beyond the short-term fluctuations, annual labour productivity growth for the whole economy has declined for four consecutive quarters and is clearly below its average since the start of the 1990s. The box entitled “Developments in euro area labour quality and their implications for labour productivity growth” describes long-term developments in productivity, focusing, in particular, on the issue as to what extent changes in labour quality have contributed to productivity trends.

Employment expectations from both the European Commission’s surveys and the PMI improved in September and in the third quarter of 2005 as a whole. They are now higher than the average of the second quarter and thereby point to a small improvement in employment conditions in both the manufacturing and the services sectors.

**Box 7****DEVELOPMENTS IN EURO AREA LABOUR QUALITY AND THEIR IMPLICATIONS FOR LABOUR PRODUCTIVITY GROWTH**

The composition of the euro area workforce evolves over time and in response to changing labour market conditions. This leads to changes in the available stock of human capital. However, standard measures of labour input, such as total hours worked, ignore the effects of changes in the quality of labour, resulting, for example, from changes in the share of workers with a higher level of education and more labour market experience. This results in an underestimation of the contribution of labour input to economic growth. In principle, productivity measurement should take into account changes in labour quality by using a

quality-adjusted number of hours actually worked as a measure of labour input. The term labour quality growth is commonly used to describe the difference between labour quality adjusted and unadjusted hours worked.

This box presents evidence of changes in human capital in the euro area and its impact on productivity growth based on an estimate of euro area labour quality since the early 1980s. A number of different data sources have been used to establish this estimate, but these are still incomplete, hence the estimate should be interpreted with some caution. In order to improve such analysis in the future, a regular compilation of euro area national accounts, including breakdowns of wages and employment by educational level, age group and gender (and by industry) would be needed.

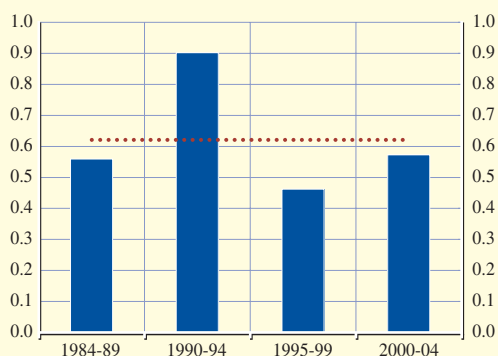
### Estimates of labour quality in the euro area

Measuring labour quality requires disaggregated information on proxies of human capital and productivity. Human capital is determined by several individual characteristics, such as education and work experience. Intuitively, labour quality increases when the share of total hours worked by workers with higher human capital and productivity, such as those with a higher level of education and those with more work experience, increases.<sup>1</sup>

The results suggest that euro area labour quality has increased continuously since the early 1980s (see Chart A), the average growth rate being approximately 0.6% year on year in the period 1984-2004. Over time, changes in labour quality growth may reflect developments in both trend and business-cycle frequencies. The trend increase in labour quality growth is driven mainly by a rise in the share of total hours worked by those with a higher level of education. In terms of the business-cycle frequency, it is possible that the share of lower-skilled workers will increase during periods of stronger growth, as firms scale back their skill requirements in order to expand production, thus encouraging a larger number of lower-skilled workers to enter the labour market due to the greater likelihood that they will find a job and possibly to the prospect of higher wages. The significant increase in labour quality growth in the first half of the 1990s and subsequent decline in the rest of the decade – a period of particularly strong employment growth – is consistent with this interpretation. In the last few years, growth in labour quality appears to have risen.

Chart A Euro area labour quality growth

(averages of annual growth rates)



Source: ECB calculations.

Note: The dotted line represents the average for the period 1984-2004.

<sup>1</sup> The index of labour quality in the euro area is constructed in two steps. First, weights are estimated for 30 different worker groups (cross-classified by education, age, and sex) in 12 euro area countries using earnings equations and microdata on individuals from the European Community Household Panel (ECHP). Second, these weights are combined with data on total hours worked for worker groups cross-classified by country and worker characteristics from the European Labour Force Survey (LFS). For a detailed discussion on different methods of estimating labour quality, see D. Aaronson and D. Sullivan. (2001) "Growth in Worker Quality", Economic Perspectives, Federal Reserve Bank of Chicago.

## Chart B Decomposition of labour productivity growth

(contributions)



Source: ECB calculations. Except for the estimate of labour quality growth, the data are from the Groningen Growth and Development Centre.

labour quality growth accounted for only 15 percent of productivity growth, this share increased to more than 30 percent at the beginning of this decade. These estimates suggest that while TFP growth (excluding the impact of labour quality growth) was slower in the 1990s than in the 1980s, it showed a further slowdown during the recent period of sluggish growth in the euro area. However, given the imprecision that is inherent in all estimates of TFP, these results should be interpreted with some caution.

### Some policy considerations

While the main drivers of changes in labour quality are a higher level of education and labour market experience, it is important to recognise that other (non-measured) factors, such as the quality and type of education are also likely to have an impact. The decomposition of labour productivity growth suggests that policies in the area of human capital should be geared towards enhancing educational attainment and providing more on-the-job training. Furthermore, the slowdown in TFP growth suggested by this decomposition highlights the need for economic policies that stimulate innovation and promote the use of productivity-enhancing technologies.

<sup>2</sup> Developments in labour productivity growth and its decomposition, which do not include an estimate of labour quality growth, are shown in the box entitled "Developments in Euro Area Labour Productivity" in the March 2005 issue of the Monthly Bulletin.

### Implications for productivity

Using a quality-adjusted measure of labour input in a standard growth accounting framework provides further insight into recent developments in euro area labour productivity growth. Within this framework, growth in labour productivity, which is defined as real output per hour worked, can be decomposed into three components: capital deepening (i.e. growth in capital services per hours worked), growth in labour quality and total factor productivity (TFP) growth.<sup>2</sup> The decomposition of labour productivity shows that changes in labour quality are playing an ever greater relative role in the explanation of labour productivity growth (see Chart B).

While in the early 1980s the contribution of

## 4.3 THE OUTLOOK FOR ECONOMIC ACTIVITY

Looking ahead, the latest available data are broadly in line with the assessment that economic growth could strengthen in the second half of 2005. They are also broadly consistent with the September ECB staff projections and recent forecasts from international and private sector organisations. Beyond the short term, conditions for an increase in the rate of economic expansion remain in place. On the external side, ongoing growth in global demand should support euro area

exports. The recent hurricanes are not likely to have a persistent economic impact on the world economy. On the domestic side, the very favourable financing conditions and the robust growth of corporate earnings should be conducive to investment growth. Consumption should expand gradually in line with the expected moderate growth of real disposable income. Overall, there is scope for more positive fundamental factors to shape economic developments. However, the outlook for economic activity remains subject to downward risks, relating mainly to oil prices, concerns about global imbalances and weak consumer confidence.

## 5 EXCHANGE RATE AND BALANCE OF PAYMENTS DEVELOPMENTS

### 5.1 EXCHANGE RATES

The effective exchange rate of the euro experienced a moderate depreciation in September and early October, amid some fluctuations. The fluctuations were largely related to market reactions to the natural disasters in the United States and the outcome of the elections in Germany, and their likely impact on economic development in the two regions.

#### US DOLLAR/EURO

At the beginning of September the euro increased by about 3 cent vis-à-vis the US dollar, reaching USD 1.25 for a brief period. Foreign exchange markets initially considered that the economic impact of hurricane Katrina could slow the pace of monetary policy tightening in the United States, thereby weighing on the US dollar. In the course of the month, however, the euro experienced a period of weakness, which continued following the outcome of the German elections. This weakening vis-à-vis the US currency was also apparently supported by data on buoyant US portfolio investment inflows in July as well as by a persistent and widening interest rate differential between the United States and the euro area. Against this background, the euro stood at USD 1.19 on 5 October 2005, 2.1% below its level at the end of August and 3.9% below its 2004 average.

#### JAPANESE YEN/EURO

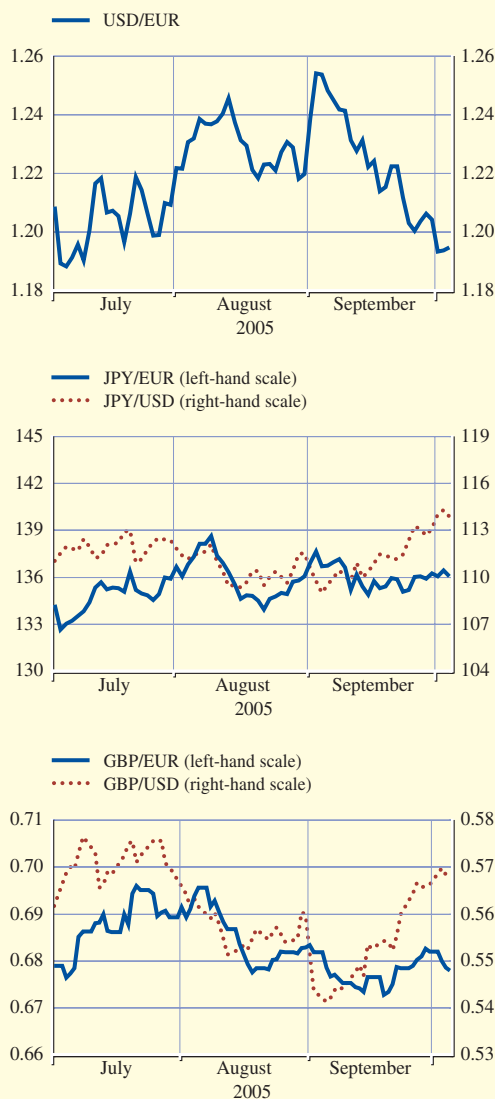
After exhibiting some fluctuations in previous months, the euro remained rather stable vis-à-vis the Japanese yen in September. The yen strengthened initially against the US dollar in the immediate aftermath of hurricane Katrina, but these gains were later more than reversed as market sentiment turned more favourable with respect to the US dollar. On 5 October the euro was quoted at JPY 136, i.e. close to its end-August level and 1.2% above its 2004 average.

#### EU MEMBER STATES' CURRENCIES

In ERM II, all currencies have remained almost unchanged in September. With regard to the currencies of the other EU Member States, the euro continued to depreciate moderately in the first half of September vis-à-vis the pound sterling, picking up later in the month. On 5 October the euro traded at a level of GBP 0.68, or 0.7% below its end-August level and close to its 2004 average. The euro depreciated against the Polish zloty (by 2.9%),

Chart 25 Patterns in exchange rates

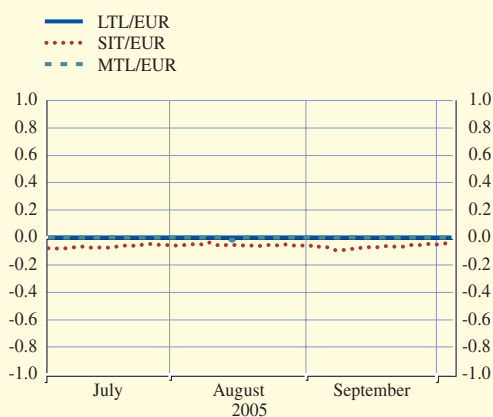
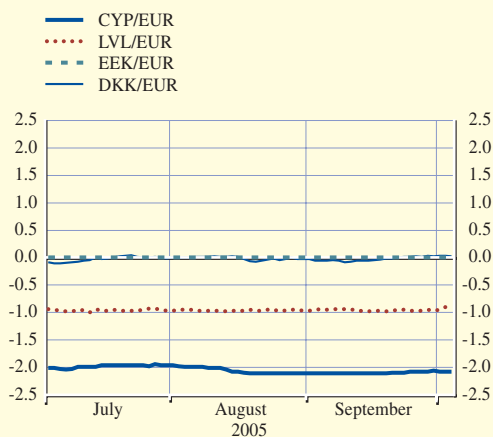
(daily data)



Source: ECB.

**Chart 26 Patterns in exchange rates within ERM II**

(daily data; deviation from central parity in percentage points)

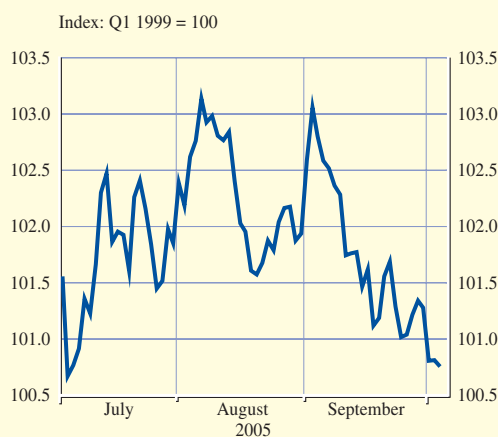


Source: ECB.

Note: A positive/negative deviation from the central parity against the euro implies that the currency is at the weak/strong side of the band. For the Danish krone the fluctuation band is  $\pm 2.25\%$ ; for all other currencies the standard fluctuation band of  $\pm 15\%$  applies.

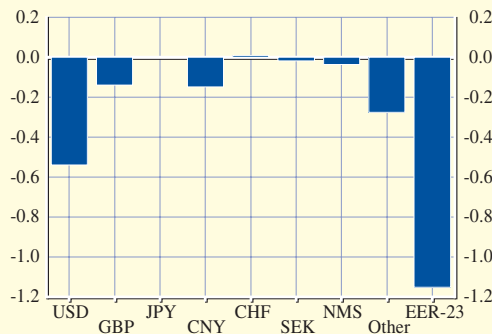
**Chart 27 Euro effective exchange rate and its decomposition<sup>1)</sup>**

(daily data)



**Contributions to EER changes<sup>2)</sup>**

From 31 August to 5 October 2005  
(in percentage points)



Source: ECB.

1) An upward movement of the index represents an appreciation of the euro against the currencies of the most important trading partners of the euro area and all non-euro area EU Member States.

2) Contributions to EER-23 changes are displayed individually for the currencies of the six main trading partners of the euro area. The category "NMS" refers to the aggregate contribution of the currencies of the ten new Member States which joined the EU on 1 May 2004. The category "Other" refers to the aggregate contribution of the remaining seven trading partners of the euro area in the EER-23 index. Changes are calculated using the corresponding overall trade weights in the EER-23 index.

appreciated vis-à-vis the Hungarian forint (by 2%) and remained almost unchanged vis-à-vis the Czech and Slovak korunas.

## OTHER CURRENCIES

Regarding other non-EU currencies, since the end of August the euro has remained broadly unchanged vis-à-vis the Swiss franc, while it depreciated by more than 3.5% against the Canadian and Australian dollars. On 23 September the People's Bank of China widened the renminbi's trading band against currencies other than the US dollar from  $\pm 1.5\%$  to  $\pm 3\%$  per day. This appears

to be mainly a technical decision in order to allow for potentially larger daily cross movements between the US dollar and other currencies.

### EFFECTIVE EXCHANGE RATE OF THE EURO

On 5 October the nominal effective exchange rate of the euro – as measured against the currencies of 23 of the euro area’s important trading partners – was 1.2% lower than its end-August level and 3% weaker than its average in 2004 (see Chart 27). Almost half of the decline of the euro in effective terms in September and early October was attributable to its depreciation against the US dollar.

### 5.2 BALANCE OF PAYMENTS

*Balance of payments data up to July 2005 confirm that euro area exports continued their upward trend. At the same time, there was even stronger growth in the value of imports, which largely reflected higher oil prices. As a consequence, and taking a longer-term perspective, the 12-month cumulated surplus of the euro area current account fell to €8.7 billion in July 2005, compared with €48.6 billion a year earlier. In the financial account, the euro area recorded net inflows of €114.2 billion in combined direct and portfolio investment in the 12-month period up to July, compared with net outflows of €80.9 billion a year earlier.*

### TRADE AND THE CURRENT ACCOUNT

The latest balance of payments data for July confirm that euro area exports continued their upward trend. The three-month moving average of the value of exports of goods and services rose by 3.5% compared with the figure for April. This was mainly the result of a strong rise in the value of goods exports – by 4.5% – while exports of services rose only marginally (see Table 8). Meanwhile,

**Table 8 Main items of the euro area balance of payments**

(EUR billions; seasonally adjusted, unless otherwise indicated)

			Three-month moving average figures ending				12-month cumulated figures ending	
	2005 June	2005 July	2004 Oct.	2005 Jan.	2005 April	2005 July	2004 July	2005 July
<b>Current account balance</b>	-1.0	-5.9	1.7	1.3	1.5	-1.7	48.6	8.7
Goods balance	6.5	2.2	5.3	6.4	7.1	5.4	120.8	72.7
Exports	99.9	102.6	94.3	95.3	96.8	101.2	1,086.2	1,162.7
Imports	93.4	100.4	88.9	88.9	89.7	95.8	965.4	1,090.0
Services balance	1.4	1.9	3.0	2.0	2.3	1.5	23.8	26.5
Exports	30.1	31.7	30.4	29.9	30.1	30.2	342.1	361.8
Imports	28.7	29.9	27.4	27.9	27.8	28.7	318.2	335.3
Income balance	-4.5	-6.1	-1.9	-1.2	-3.2	-4.4	-39.5	-32.2
Current transfers balance	-4.4	-3.8	-4.7	-5.8	-4.7	-4.2	-56.6	-58.3
<b>Financial account balance<sup>1)</sup></b>	16.5	-2.9	-3.2	9.8	-2.6	16.6	-10.1	61.8
Combined direct and portfolio investment	92.7	-6.5	13.8	-9.0	-4.1	37.4	-80.9	114.2
Direct investment	-9.9	-80.1	-1.7	-13.3	-6.6	-28.9	-66.8	-151.5
Portfolio investment	102.6	73.7	15.5	4.3	2.5	66.3	-14.1	265.7
Equities	61.7	90.1	10.5	14.2	-15.5	57.8	-4.5	201.2
Debt instruments	40.9	-16.5	5.0	-9.9	17.9	8.5	-9.6	64.5

Source: ECB.

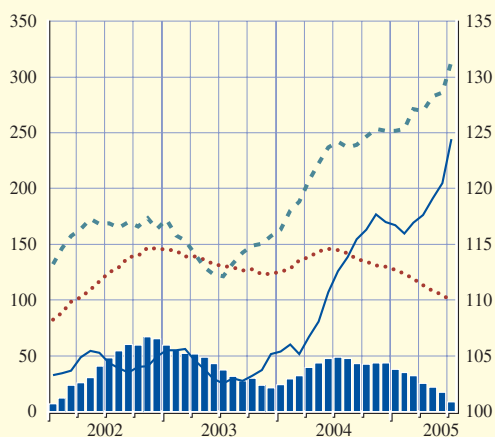
Notes: Figures may not add up due to rounding.

1) Figures refer to balances (net flows). A positive (negative) sign indicates a net inflow (outflow). Not seasonally adjusted.

**Chart 28 The euro area current account and trade balance**

(EUR billions; monthly data; seasonally adjusted)

- current account balance (12-month cumulated data; left-hand scale)
- trade balance of goods and services (12-month cumulated data; left-hand scale)
- exports of goods and services (3-month moving average; right-hand scale)
- imports of goods and services (3-month moving average; right-hand scale)

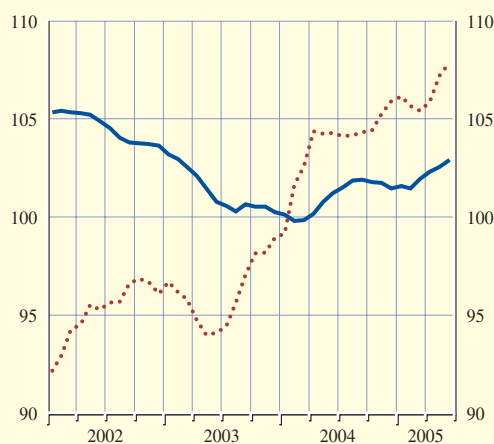


Source: ECB.

**Chart 29 Extra-euro area export prices and volumes**

(indices: January 2004 = 100; seasonally adjusted; three-month moving averages)

- extra-euro area export prices
- extra-euro area export volumes



Sources: Eurostat and ECB calculations.  
Note: The latest observations are for June 2005.

imports of goods and services grew by 6.0% over the same period, reflecting a 6.8% rise in goods and a 3.2% increase in services (see Chart 28).

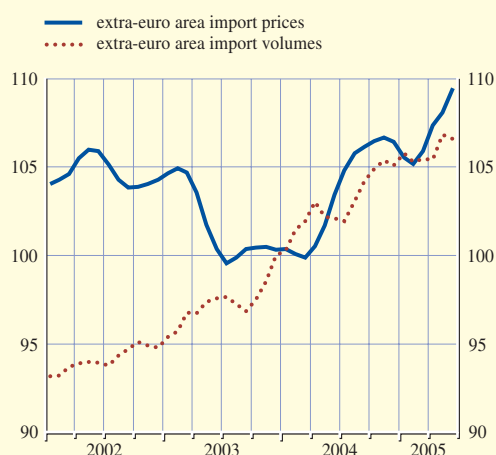
Data provided by Eurostat regarding the breakdown of extra-euro area exports into volumes and prices up to June 2005 indicate that the ongoing robust growth in the value of exports of goods seems to largely reflect strong export volumes, which grew by 2.4% in the second quarter, contrasting with a 0.5% fall in the first quarter of the year (see Chart 28). In particular, a rebound in export volumes to the United States and to the new EU Member States in the second quarter contributed to the strength of exports over this period. Meanwhile, euro area export prices increased marginally in the second quarter, continuing the gradual rise which began in the first half of 2004. Previously, exporters had been reducing prices (in euro) by cutting profit margins in order to partly offset the losses in price competitiveness resulting from the appreciation of the euro that began in early 2002.

Turning to imports, the strong growth in the value of goods imports that occurred in the second quarter of 2005 was largely related to rising import prices (see Chart 30). Furthermore, higher import prices partly reflected rising oil prices, which also increased somewhat as a result of the depreciation of the euro against the US dollar in the second quarter. Owing to the high import content of euro area exports, import volumes increased again, supported by the pick-up in exports. Meanwhile, preliminary data suggest that this rebound was mainly the result of strong import volumes from Asia and the new EU Member States and highlight the ongoing switch towards imports from these countries and away from more traditional suppliers.



**Chart 30 Extra-euro area import prices and volumes**

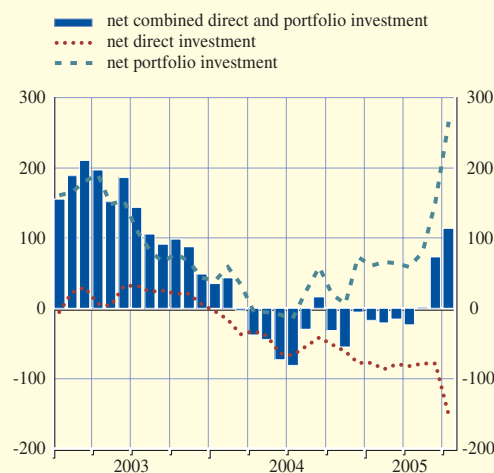
(indices: January 2004 = 100; seasonally adjusted; three-month moving averages)



Sources: Eurostat and ECB calculations.  
Note: The latest observations are for June 2005.

**Chart 31 Net direct and portfolio investment flows**

(EUR billions; 12-month cumulated data)



Source: ECB.  
Note: A positive (negative) number indicates a net inflow (outflow) into (out of) the euro area.

From a longer-term perspective, in July 2005 the 12-month cumulated surplus in goods was around €48 billion lower than a year earlier, as import values grew more strongly than exports. A reduction in the deficit for the income account (of €7.3 billion) and a moderate increase in the services surplus (of €2.7 billion) partly offset the strong reduction in the goods surplus, while the deficit for current transfers rose slightly by €1.7 billion. These developments resulted in a fall of approximately €40 billion in the 12-month cumulated current account surplus, which stood at €8.7 billion in July.

### FINANCIAL ACCOUNT

Following the sizeable net inflows in the second quarter of 2005, the euro area recorded small net outflows of €6.5 billion in combined direct and portfolio investment in July (see Table 8). The underlying relatively large net outflows in euro area direct investment and net purchases of euro area equity securities reflect, to a large extent, one exceptional operation. Nevertheless, net purchases of euro area debt instruments by non-residents fell to their lowest level since the beginning of the year, possibly reflecting subdued issuance of bonds in the euro area in July.

Looking at developments over the 12-month period up to July 2005, the euro area recorded net inflows of €114.2 billion in combined direct and portfolio investment, compared with net outflows of €80.9 billion a year earlier. This switch in the direction of capital flows stems largely from a strong increase in net purchases of euro area equity securities and, to a lesser extent, debt instruments by non-residents over this period. As regards equity, these large net inflows are likely to have been supported by the strong corporate profitability and low level of interest rates in the euro area, favouring equity investment. Meanwhile, the euro area continued to record steady net outflows in direct investment, largely on account of equity capital investment abroad by euro area residents. This may reflect efforts by euro area companies to broaden access to emerging markets and, at the same time, to achieve cost-efficient production chains.

## ARTICLES

# MONEY DEMAND AND UNCERTAINTY



*The period between 2000 and 2003 was characterised by heightened geopolitical, economic and financial uncertainty, triggered by a number of shocks to the global economy. This uncertainty has had a profound impact on many dimensions of the euro area's economic performance. In particular, it has influenced the portfolio decisions of firms and households, leading to considerably higher money holdings in the euro area than would have been anticipated on the basis of developments in the conventional determinants of money demand, such as income, prices and interest rates. Portfolio shifts – in particular between money, on the one hand, and holdings of securities, especially foreign securities, on the other hand – have played a key role in this regard. Indeed, in the context of increased globalisation, the spillover of global shocks between economies is likely to continue playing a significant role in domestic money demand developments.*

### I INTRODUCTION

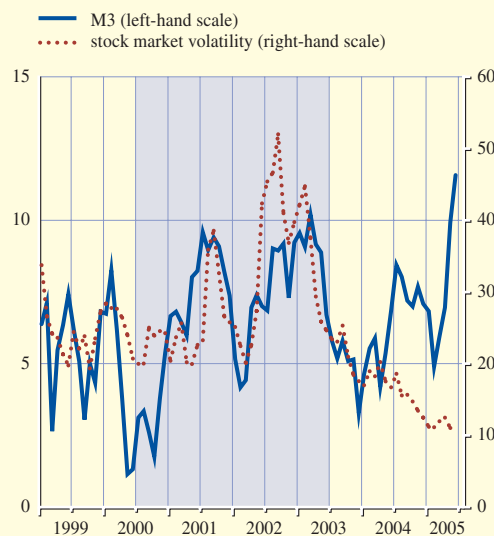
The period between 2000 and 2003 was characterised by heightened geopolitical, economic and, especially, financial uncertainty, triggered by a series of large and mainly unprecedented shocks to the world economy. The key events include the bust marking the end of the IT-driven boom, the terrorist attacks in the United States on 11 September 2001, a spate of accounting scandals on both sides of the Atlantic in the aftermath of the equity market correction, and the wars in Afghanistan in late 2001 and in Iraq in early 2003. All these events contributed in one way or another to a significant and protracted fall and heightened volatility in global stock prices from mid-2000 onwards.

These global shocks have had a profound impact on the behaviour of economic agents, on the dynamics of monetary aggregates, on developments in financial, commodity, goods and factor markets, and, thus, on the evolution of the euro area economy. The uncertainty arising from such shocks has important implications for the design and conduct of monetary policy.<sup>1</sup>

This article investigates in some detail how these shocks have influenced euro area money demand through their impact on economic and financial uncertainty. For example, the growth rate of euro area M3 – particularly in the second half of 2001 and between end-2002 and early 2003 – appears to have been related to greater than normal uncertainty about future stock price developments (at least as expressed in

**Chart 1 Short-term growth of M3 and implied stock market volatility**

(annualised three-month growth rate in percentages; percentages per annum)



Sources: ECB and Bloomberg.

Note: The implied volatility series consists of the implied volatility on the near-contract generic future reported by Bloomberg. The equity index that the implied volatility refers to is the Dow Jones Euro Stoxx 50 index.

terms of the implied volatility of stock indices derived from option prices), as shown in the shaded area of Chart 1.

Moreover, the article recognises that the impact of such global shocks on euro area M3 has been further amplified by the increased globalisation of financial markets, resulting in international capital flows exerting a more

<sup>1</sup> See the article entitled "Monetary policy-making under uncertainty" in the January 2001 issue of the ECB's Monthly Bulletin.

significant influence on developments in domestic money holdings.

## 2 MONEY AND UNCERTAINTY

Textbook presentations of monetary economics typically portray money as serving three main functions: a unit of account, a medium of exchange, and a store of value. Each of these functions alleviates, at least to some extent, problems arising from conditions of uncertainty.<sup>2</sup>

Since the demand for money arises, at least in part, from a need to insure against uncertainties, developments in the demand for money are influenced by the prevailing level and character of uncertainty in the economy. Monetary indicators thus have the potential to provide information about risks and uncertainty that may be hard to observe directly. A number of implications result from this.

First, monetary indicators may be a signal of (often unobserved) changes in a large set of asset prices. Asset prices are typically influenced by the nature and magnitude of uncertainty in the economy. For example, corporate bond prices will reflect the credit risk of the issuer and, therefore, uncertainties related to companies' future profits and cash flow. It may be impossible to observe such uncertainties directly. Since monetary indicators are also likely to be influenced by these uncertainties, they may constitute good proxy measures of corporate bond spreads.<sup>3</sup>

Second, in this setting, it is inevitable that – despite considerable efforts having been made in the economic literature – the modelling of money demand, especially at shorter-term horizons, will remain imperfect. In other words, some part of the evolution of the demand for money, reflecting the development of unobservable and, therefore, from the central bank's perspective, uncertain variables, will always remain difficult to explain or check in the context of formal econometric models.

Yet the inevitable imperfection of any single approach to modelling money demand does not disqualify such quantitative analysis. Rather it implies that various – not necessarily mutually exclusive – specifications of money demand can exist. Specifications range from simple money demand models to more complex dynamic stochastic general equilibrium (DSGE) models. Furthermore, the analysis of money demand needs to be complemented by other “off-model” information that is analysed on a judgemental basis. Such a judgemental approach fulfils an important role in the short to medium-term analysis of monetary developments. More specifically, by helping to explain the “unexplained” component of money dynamics, the judgemental analysis constitutes a framework for deepening the real time monitoring and assessment of monetary developments and, over time, improving the performance of the underlying models.<sup>4</sup> One example of the incorporation of such off-model information into the monetary analysis is the construction of an M3 series adjusted for the estimated impact of so-called portfolio shifts into and out of monetary assets which have taken place during the past few years as a consequence of heightened uncertainty (see Box 1). The ECB has published this adjusted series in its Monthly Bulletin on a regular basis since December 2004.

Against this background, the remainder of this article presents some elements of the conceptual framework used to undertake a quantitative assessment of the impact of specific types of uncertainty on money demand without, however, attempting to provide an exhaustive or fully integrated overview of the concept of uncertainty and its effect on monetary dynamics. Within this framework, the article presents a number of simple,

2 Goodhart, C.A.E. (1989, p. 29) stresses that “in a world of certainty, there is no need for the physical existence of markets or for money”. See Goodhart, C.A.E. (1989), *Money, Information and Uncertainty*, second edition, MacMillan Ltd.

3 See Nelson, E. (2002), “The future of monetary aggregates in monetary policy analysis”, CEPR Discussion Paper No 3897.

4 See the article entitled “Monetary analysis in real time” in the October 2004 issue of the ECB's Monthly Bulletin.

## Box I

## THE IMPACT ON M3 OF PORTFOLIO SHIFTS ARISING FROM HEIGHTENED UNCERTAINTY

The period of heightened economic and financial uncertainty between 2000 and 2003 led to a strong preference by euro area residents for safe and liquid assets. As a consequence, extraordinary portfolio shifts into monetary assets took place. These shifts strongly influenced M3 growth in a way that could not be easily explained by the conventional determinants of money demand, such as prices, income and interest rates. Against this background, in order to assess the implications of monetary developments for future price stability, it was crucial to develop a view of how M3 should be corrected for the estimated impact of portfolio shifts.

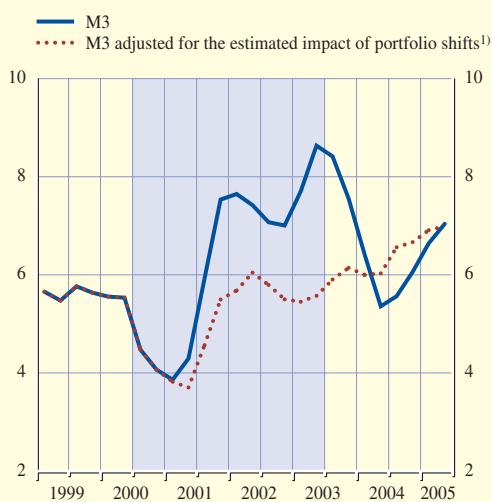
A number of methods for estimating the magnitude of these portfolio shifts into and out of M3 have been discussed in previous issues of the Monthly Bulletin.<sup>1</sup> In particular, regression variables (dummies and trends) designed on the basis of a comprehensive analysis of the available data (e.g. on the components and counterparts of M3, from the monetary presentation of the balance of payments, and from the financial accounts) were introduced into a univariate time series model for the level of M3 in order to produce quantitative estimates of the required adjustments for portfolio shifts.

The results of this exercise led to the construction of an M3 series adjusted for the estimated impact of portfolio shifts (see Chart). Of course, the estimation methods underlying the derivation of this series embody, to some extent, elements of judgement. They therefore have to be interpreted with caution. Nonetheless, it is apparent from the Chart that the magnitude of the adjustments made has been significant.

The difference between the official and adjusted M3 series peaked in late 2001 and early 2003 – the two periods most associated with heightened global uncertainty. These adjustments provide an initial quantification of the impact of uncertainty on money demand, and this is developed further in the remainder of the article.

## M3 and M3 adjusted for the estimated impact of portfolio shifts

(annual growth rates in percentages; adjusted for seasonal and calendar effects)



Source: ECB.

1) Estimates of the magnitude of portfolio shifts into and out of M3 are constructed using the approach discussed in section 4 of the article entitled "Monetary analysis in real time" in the October 2004 issue of the ECB's Monthly Bulletin.

1 For details, see the box entitled "Approaches to identifying and estimating portfolio shifts into and out of M3" in the January 2005 issue of the ECB's Monthly Bulletin, the article entitled "Monetary analysis in real time" in the October 2004 issue of the ECB's Monthly Bulletin and the box entitled "Estimating the size of portfolio shifts from equity to money" in the May 2003 issue of the ECB's Monthly Bulletin.

illustrative examples of how uncertainty has affected money demand as reflected in the recent euro area monetary data.

### 3 CONCEPTUAL FRAMEWORK

Quantifying the demand for money by the private sector is a key, albeit challenging, element of monetary analysis. Households and firms hold money for a variety of purposes. In the economic literature, three main motives for holding money have traditionally been distinguished: the need to hold money to finance regular expenditures (i.e. the *transactions demand* for money), the need to hold money to finance unexpected expenditures and to bridge the period between unsynchronised payment inflows and outflows (i.e. the *precautionary demand* for money), and the willingness to hold money as an asset or savings vehicle (i.e. the *speculative demand* for money).

As regards the speculative demand for money, traditional approaches focused solely on the portfolio choice between holding money and bonds, emphasising that money would be held so as to avoid capital losses on bonds if interest rates were expected to increase. However, more modern approaches regard money as a part of a broader portfolio choice, where wealth holdings are distributed across a range of assets (such as bonds or equities or even residential investment) according to their risk and return characteristics.

The different motives for holding money are reflected in conventional empirical specifications of money demand. Money demand equations explain money holdings on the basis of a small number of macroeconomic variables. The transactions demand for money is captured by the inclusion of measures of expenditure (often proxied by national income or GDP). Generally, these expenditure measures are also viewed as capturing the precautionary demand for money, since the money holdings required to manage uncertain cash flow developments are likely also to be

related to the volume of ongoing transactions. Finally, the speculative demand for money is captured by the inclusion of opportunity cost variables – typically interest rates – which reflect the relative financial returns on money and alternative financial assets. However, conventional money demand specifications do not embody an explicit measure of risk or uncertainty in the economy and thus do not directly address the issues raised in the remainder of this article.

Obviously, making a precise quantification of the impact of uncertainty on money demand would require reliable operational measures of uncertainty and a clear sense of how uncertainty affects the different motives for holding money. However, by its very nature, uncertainty is not directly observable and can take many shapes and forms over time. Consequently, its measurement and the quantification of its impact is an issue of ongoing economic debate. Indeed, various types of uncertainty exist. In the economic literature, a distinction is drawn between risk – a form of uncertainty where probabilities can be assigned to various possible outcomes – and Knightian uncertainty, where the assignment of such probabilities is deemed impossible.<sup>5</sup> Moreover, uncertainty surrounds all economic variables; in the context of money demand, uncertainties about future inflation, future interest rates and future returns on risky financial assets are particularly important. Furthermore, the way uncertainty may influence the demand for money depends on the range of financial instruments available to money holders and on the impact of the uncertainty on the economic counterparts (banks, foreign investors) with whom the money holders transact.

In this context, it is important to bear in mind that shifts of financial assets within the money-holding sector cancel each other out and, thus, have no overall impact on aggregate money

<sup>5</sup> See Knight, F. H. (1921), *Risk, Uncertainty, and Profit*, Boston, MA: Hart, Schaffner & Marx, Houghton Mifflin Company.

demand. For instance, the sale of equity from one household to another would simply shift bank deposits used for the corresponding payment from the bank account of one household to that of the other, with no overall impact on M3. Consequently, portfolio shifts in response to heightened uncertainty which have an effect on the behaviour of M3 must reflect transactions between the money-holding sector (largely euro area firms and households) and the non-money-holding sector (in essence non-residents and euro area MFIs). Against this background, when analysing the impact of uncertainty on money demand, it is particularly important to assess the differential impact of shocks on the money-holding sector and the non-money-holding sector, since it is largely the flows between these sectors that will determine and reflect the evolution of money demand.

Taking account of all these considerations, it is likely that the relationship between various kinds of uncertainties and money demand will be complex, varying over time and across situations. Indeed, one would expect that the response of money demand to uncertainty will depend on the nature of the uncertainty.

At the conceptual level, the *transactions* motive reflects the necessity of holding cash so as to bridge the gap between regular income receipts and regular payments. The key point is that cash inflows and cash outflows are not perfectly synchronised even if they are known with complete certainty. This creates a demand for money to bridge the gap between receipt of income and payment of bills. To the extent that this motive can be separated from the precautionary motive, the impact of a rise in economic uncertainty on the transactions demand for money should be negligible.

By contrast, an increased level of economic uncertainty can be expected to lead to an increase in the level of *precautionary* cash holdings, as money holders prepare for the possibility of higher unexpected expenditures or a potentially lower level of income resulting

from the higher uncertainty. Some empirical studies have tried to proxy the precautionary motive by introducing the unemployment rate.<sup>6</sup> This variable is intended to capture the tendency for money to be hoarded when labour market prospects are weak, income flows are surrounded by increased uncertainty and workers may hold more liquid savings in the form of money as a reserve to cover their expenses should they be laid off.

The accumulation of liquidity as a response to rising uncertainty is, at the microeconomic level, captured more explicitly by the so-called “buffer stock” theory of money demand. In essence, this theory suggests that economic agents react to unexpected changes in their cash flows by increasing money holdings, which can then act as a buffer to smooth out the irregular and the certain pattern of receipts and payments. Because money holders usually require some time and additional information to be reassured that their income and payment flows have normalised in the aftermath of the shock, their reversion to normal patterns of behaviour is, generally, gradual. Furthermore, as the adjustment of portfolios typically implies transaction costs, agents can be expected to delay this adjustment until confidence has increased substantially. By implication, money demand will tend to jump in response to shocks while the reversion towards more normal levels will take place more slowly.

As already mentioned, the *speculative* demand for money, or more broadly the portfolio approach to money demand, is mostly concerned with the choice between holding money and holding alternative assets. This choice is governed by an assessment of the consequences for the liquidity, return and risk characteristics of the portfolio as a whole. As a consequence, for a given pattern of expected returns on a set of assets, increased uncertainty surrounding the return on one asset is likely to

6 See, for instance, Fase, M.M.G. (1998), *On money and credit in Europe: The selected essays of Martin M.G. Fase*, Edward Elgar, Cheltenham, UK/Northampton, MA, USA.

trigger substitution of wealth holdings from that asset into alternatives. To the extent that money is one of this set of alternative instruments, changes in the uncertainty surrounding asset returns will affect money demand. Such considerations are likely to be particularly important for broader measures of money – such as euro area M3 – which include instruments such as short-term savings deposits, money market fund shares/units and short-term MFI debt securities that are typically used as savings vehicles rather than to conduct transactions.

Using relatively plausible assumptions, the economic literature has demonstrated that an increase in uncertainty affects the portfolio distribution between risky and safe assets, and thus also the demand for money within the overall portfolio (i.e. a “flight to safety” or an increase in the preference for liquidity).<sup>7</sup> At the same time, informational frictions and (switching) cost considerations have to be taken into account. For instance, information asymmetries among various market participants make it difficult to assess whether the risk/return profile of an asset adequately reflects changes in fundamentals or whether the changes are of a more transitory nature.

The empirical modelling of the speculative demand for money requires the inclusion of a broader set of returns and risk measures in money demand equations. As the array of available financial instruments has broadened over time, portfolios are allocated across a very wide variety of assets (such as bonds, equities or even residential investment). As a consequence, a number of studies have attempted to introduce not only short-term and long-term interest rates, but also stock price-earnings ratios or some measure of changes in the stock market price index (i.e. variables intended to reflect the expected return on equity).<sup>8</sup> Other studies have addressed the issue of changes in risk aversion by referring to conditional correlations between returns on long-term bonds and stock market indices.<sup>9</sup> In the context of the increasing globalisation of

financial markets, information about the return and risk of foreign assets also needs to be taken into account when investigating the speculative or portfolio demand for money. Therefore, other specifications contain foreign interest rates or exchange rates as additional determinants of money demand behaviour. However, due to the sometimes quite considerable degree of co-movement of various rates of return in the financial markets, it is not always easy to identify their individual effects on money demand.

These considerations have led to the development of more elaborated money demand functions, which attempt to reflect the complex interdependencies underlying the portfolio behaviour of the private sector. Among the possible modelling approaches, DSGE models have achieved some prominence. While they entertain the possibility of capturing more complex portfolio choice considerations, they also suffer from a number of caveats, such as data and estimation problems (see Box 2).

<sup>7</sup> More particularly, risk-averse behaviour has to be assumed. See, for instance, Tobin, J. (1958), “Liquidity preference as behaviour towards risk”, *Review of Economic Studies*, Vol. 25, pp. 65-86 and Friedman, M. (1959), “The demand for money: Some theoretical and empirical results”, *Journal of Political Economy*, Vol. 67, pp. 327-351. It is worth noting, however, that there is, in general, no automatic link between the flight to safety and developments in monetary assets, as the flight to safety might as well be simply a substitution between equity and bonds.

<sup>8</sup> For a more detailed overview of the ECB’s monetary analysis, see Issing, O. (2001), “The importance of monetary analysis”, in: ECB (ed.), *Monetary Analysis – Tools and Applications*, p. 6.

<sup>9</sup> See, for instance, the box entitled “Risk aversion and developments in monetary aggregates” in the December 2004 issue of the ECB’s *Monthly Bulletin*.

## Box 2

**THE USE OF DYNAMIC STOCHASTIC GENERAL EQUILIBRIUM MODELS TO UNDERSTAND THE RESPONSE OF MONEY TO ECONOMIC SHOCKS**

As described in the main text, the better remunerated and longer-maturity assets included within a broad monetary aggregate such as euro area M3 are typically held by households as a savings vehicle. Developments in these holdings are, naturally, understood in the context of household portfolio decisions, through which household wealth is allocated across a variety of competing assets according to their risk/return profile. Against this background, one may ask whether the analysis of monetary developments requires a richer modelling structure than a standard money demand equation, where the determinants of such complex portfolio decisions are only taken into account in a simplified, summary form.

Dynamic stochastic general equilibrium (DSGE) models represent one potentially richer modelling framework within which to consider such issues. These models have become increasingly popular in the economic literature and are now starting to be used for monetary policy analysis. Their defining features are twofold. First, they are derived from micro-foundations. This means that the economic behaviour captured in the model can be traced back to the solutions to constrained optimisation problems intended to represent, albeit in a stylised manner, the way in which households and firms determine their consumption, production and investment choices over time in the face of inevitable uncertainties surrounding the future. Second, DSGE models exhaustively capture all the interactions between households, firms and other agents that participate in the economic system defined by the model. This means that all feedback effects of one economic decision on other decisions within the model framework – which would be ignored if each decision were treated in isolation – are fully captured. This latter feature is particularly important whenever portfolio decisions are being considered. For example, if the household sector were to switch from equities into money, some other sector would, by necessity, have to be prepared to switch in the opposite direction such that all assets are ultimately held in the final overall equilibrium.

DSGE models have a number of important advantages over alternative modelling strategies. First, in principle the outcome of the model can be explained in terms of economic behaviour, at least insofar as it is captured by the definition of the constrained optimisation problems facing firms and households. This facilitates the use of the model to explain why the data has developed in a certain way, which is an attractive feature of a model used in a policy context. Second, DSGE models permit the identification of the underlying economic shocks – those events determined outside the model which are deemed not to be governed by the choices of firms and households – that influence consumption, production and investment decisions. In principle, in a rich enough model this latter feature would allow the recent behaviour of euro area M3 to be decomposed into developments associated with a variety of underlying shocks. More specifically, in a model that allowed a shock to the overall uncertainty faced by money holders and/or to their level of risk aversion to be identified, an assessment could be made of the proportion of the strong growth of M3 between 2000 and 2003 that was caused by the channels relating money demand and uncertainty discussed in the main text, at least insofar as they are appropriately taken into account by the model.

Of course, these advantages are not costless. The DSGE approach also has its drawbacks. First, the rich theoretical structure of the models imposes a large number of restrictions on the data,



which may not all be empirically valid. This suggests that caution is required when relying on DSGE models for making quantitative assessments in a policy context. Second, the interpretation of shocks that these models suggest is strongly dependent on their structure and the assumptions made a priori on the nature of the shocks. Third, for reasons of tractability, DSGE models have thus far remained relatively simple. The complexity of the microeconomic structure underlying DSGE models makes it more difficult than in alternative frameworks to develop more extensive models, for example with a detailed sectoral breakdown. For this reason, most existing DSGE models in the economic literature still neglect the role of money and financial flows in the transmission mechanism of monetary policy. The absence of money from the model naturally precludes the analysis of M3 developments proposed in the preceding paragraph.

One exception in this respect is the DSGE model of Christiano, Motto and Rostagno (2003).<sup>1</sup> This model incorporates a relatively well-developed monetary and financial sector into a fairly standard DSGE model of the real economy. In this model, money serves mainly two roles. First, money facilitates transactions in the model, which generates a demand for cash balances. Second, households make portfolio decisions that involve allocating wealth across instruments of different maturities (inside and outside M3). In this context, adverse shocks to financial markets – such as those that might follow an increase in the uncertainty surrounding future investment returns – can induce portfolio shifts by households from risky assets into safer and more liquid monetary assets. In other words, the model attempts to capture in a stylised manner the intuition underlying the relationship between money demand and uncertainty outlined in the main text.

To sum up, at the current stage DSGE models with monetary and financial mechanisms constitute a promising and potentially powerful tool to support monetary analysis. However, their practical use in addressing policy-relevant questions remains in its infancy. Moreover, given the shortcomings identified above, DSGE models are, for the foreseeable future, likely to remain a complement to other tools of monetary analysis – such as the more conventional money demand equations described in Box 3 of this article – rather than a replacement for them. Nonetheless, the development of DSGE models embodying monetary and financial mechanisms should continue. This agenda is being pursued further by economists at the ECB.

<sup>1</sup> For details, see Christiano, L., Motto, R. and Rostagno, M. (2003), “The Great Depression and the Friedman-Schwartz hypothesis,” *Journal of Money, Credit and Banking*, Vol. 35, No 6, pp. 1119-1197. The DSGE model is used to analyse the financial dynamics surrounding the Great Depression in the United States in the 1930s. For a number of other examples of DSGE models that assign a role for money, see Andrés, J., López-Salido, J. D. and Nelson, E. (2004), “Money and the Natural Rate of Interest: Structural Estimates for the UK, the US and the Euro Area”, CEPR Discussion Paper No 4337.

Drawing together the preceding discussion, the complexity of the relationships between portfolio allocation behaviour, asset price developments, asset price uncertainty and money holdings can be illustrated using the response of money holdings to developments in the stock market. While, in general, many further indirect channels linking interest rates, liquidity and asset prices exist, here the focus is placed on the direct links between stock prices and money holdings, of which five distinct channels can be identified.<sup>10</sup> The overall impact

of stock price developments, price uncertainty and risk aversion depends on the empirical weight of these channels in specific situations.<sup>11</sup>

<sup>10</sup> Of course, another reason could be that both variables react in the same direction to monetary policy or cyclical shocks in the economy. This could be described as an indirect channel.

<sup>11</sup> For a detailed description of these channels, see, for instance, Friedman, M. (1988), “Money and the stock market”, *The Journal of Political Economy*, Vol. 96, No 2, pp. 221-245, but also Baks, K. and Kramer, C. (1999), “Global liquidity and asset prices: measurements, implications and spillovers”, IMF Working Paper No 99/168, Washington.

First, an increase in stock prices leads to higher nominal wealth, which – for a given share of money in the overall wealth portfolio – implies higher money holdings relative to income. Second, rising stock prices reflect an increase in the expected return from risky assets relative to safe assets. Assuming unchanged risk aversion, the overall portfolio of assets excluding equity might therefore be rebalanced towards highly liquid and safe assets in order to keep the risk/return profile unchanged (for example by substituting monetary assets for bond holdings). Third, rising stock prices may imply an increased need for balances to undertake financial transactions, increasing the desired level of money holdings. Fourth, an increase in stock prices may have balance sheet effects, raising the value of collateral available to borrowers and thus leading to more rapid credit expansion and, ultimately, faster broad money growth.

While the four channels described above suggest a positive relationship between developments in stock prices and money holdings, the substitution effect – i.e. the desire to switch wealth holdings from monetary assets towards equity at times of rising real stock prices, and in the opposite direction at times of decreasing stock prices or high stock price uncertainty – points to a negative relation between developments in stock prices and money holdings. The size and direction of the overall impact of asset price developments and asset price uncertainty on money demand depends on the relative magnitude of the first four channels versus the fifth and, thus, remains an empirical question.

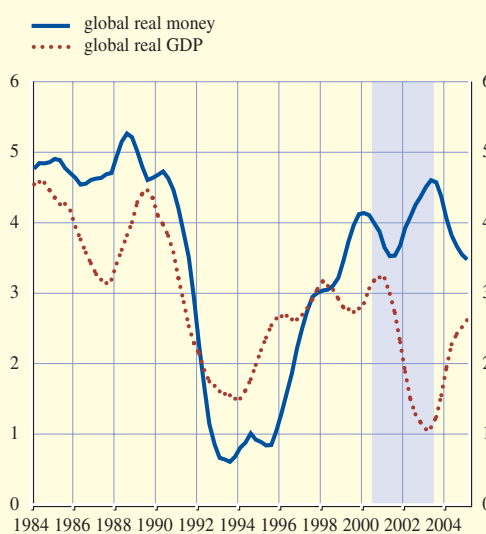
#### 4 SOME INDICATORS OF THE IMPACT OF UNCERTAINTY ON MONEY DEMAND

This section presents evidence corroborating the view that the increase in money demand observed in the euro area between 2000 and 2003 was largely due to the response of money holders to the uncertainty associated with several global shocks.

Over the medium to longer term, the transaction demand for money should dominate the overall demand for money. Such dominance would lead to a link between developments in output and real money holdings. This relationship is apparent at the global level, where global money growth and global output growth have, in general, moved together (see Chart 2). However, between 2000 and 2003, a period characterised by heightened uncertainty triggered by global economic shocks, the usual relationship was reversed, as the relationship between global output growth and global broad money growth became negative (see the shaded area in Chart 2). Given the global nature of the shocks observed between 2000 and 2003, one would expect their impact on money demand to have been worldwide. Chart 2 suggests this was indeed the case.

**Chart 2 Global real money growth and global real GDP growth**

(two-year moving average of annual percentage changes; quarterly data)

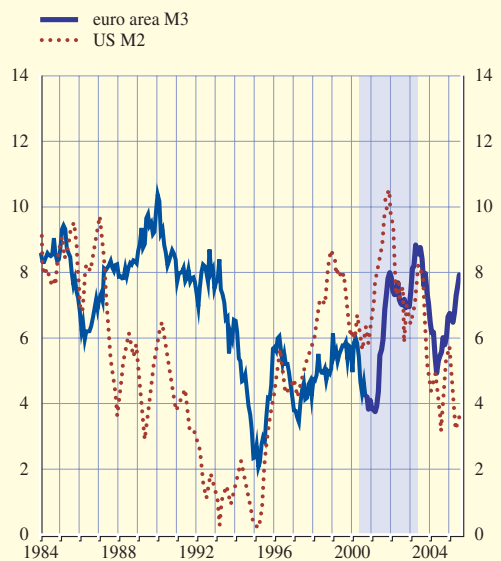


Sources: ECB, BIS, EUROSTAT, OECD.

Note: Global real GDP growth is the weighted average of real GDP growth rates in the euro area, the United States, the United Kingdom, Japan and Canada constructed using GDP weights. Global real money is nominal global money, which is calculated as the sum of euro-denominated broad money aggregates of the countries used to construct global real GDP growth converted into euro using purchasing power parity exchange rates, deflated by the euro area GDP deflator.

**Chart 3 Growth in broad monetary aggregates in the euro area and the United States**

(annual growth rates in percentages)



Sources: BIS and ECB.

This evidence supports the argument that, at the global level, precautionary and speculative motives significantly influenced the overall demand for money during that period. The fact that common global shocks might have influenced the demand for money in several regions can be further illustrated by the close co-movement of the broad monetary aggregates in the euro area and the United States during the aforementioned period (see Chart 3). Nonetheless, it should be kept in mind that region-specific factors (for instance, asymmetric shocks) also contribute to monetary developments; the evidence presented in the charts is, therefore, inevitably rather simple.

Turning more specifically to the euro area, the wish to hedge against global uncertainties and their consequences led to increased precautionary money holdings over and above the level suggested by conventional money demand models. In support of this view, one can demonstrate that measures which contain information on uncertainty (for example, consumer confidence indicators or changes in

the unemployment rate, both of which may reflect uncertainties concerning future income) are related to the residuals of conventional money demand equations (i.e. that component of observed monetary holdings that is not explained by the money demand model). Uncertainty thus appears to help explain why observed money holdings deviated from the level that would have been anticipated on the basis of the conventional determinants of money demand.

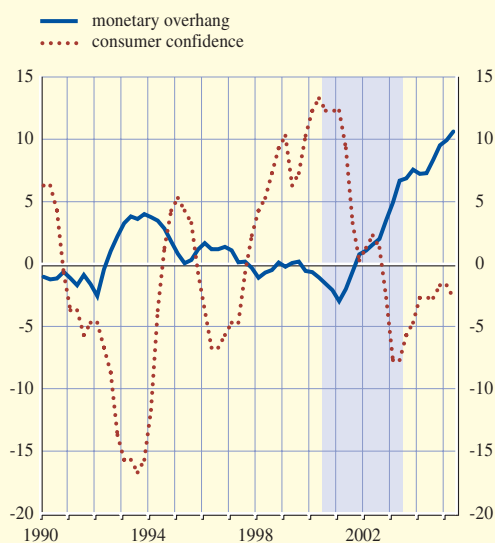
One measure of deviations of money holdings from long-run equilibrium money demand is the monetary overhang, which is defined as the difference between the actual level of real M3 and the “equilibrium” or “desired” level of real M3 given by the long-run relation from a money demand model.<sup>12</sup> Chart 4 demonstrates the negative relationship between consumer confidence and the monetary overhang derived from the Calza, Gerdesmeier and Levy (2001) money demand model,<sup>13</sup> which is particularly apparent in the period between mid-2000 and mid-2003 (the shaded area in the chart). The chart thus supports the view that economic uncertainty plays a considerable role in money demand. The chart also shows that the effect on money seems to be especially pronounced when uncertainty has been increasing strongly and for a protracted period.

A similar picture can be gained when comparing changes in the unemployment rate with smoothed residuals from an M1 demand model (see Chart 5).<sup>14</sup> The choice of M1 is particularly appropriate for this purpose, as it best reflects the transaction demand for money and thus, *prima facie*, should be a measure that is relatively resistant to the impact of uncertainty. The positive link between M1

12 See Masuch, K., Pill, H. and Willeke, C. (2001), “Framework and tools for monetary analysis” in: ECB (ed.), *Monetary Analysis – Tools and Applications*, pp. 117-144.

13 For a detailed description of the methodology used, see Calza, A., Gerdesmeier, D. and Levy, J. (2001), “Euro area money demand: Measuring the opportunity costs appropriately”, IMF Working Paper No 01/179.

14 See Stracca, L. (2001), “The functional form of the demand for euro area M1”, ECB Working Paper No 51.

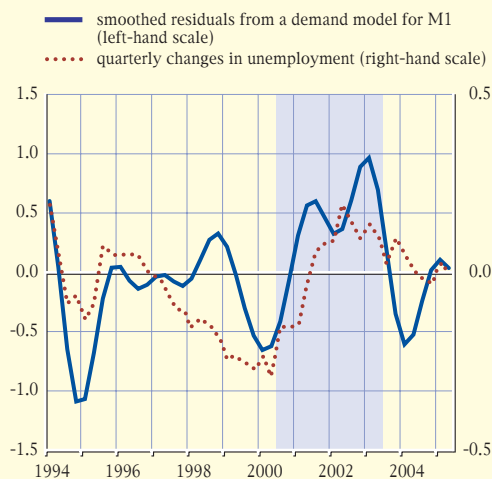
**Chart 4 Monetary overhang and consumer confidence**(deviations from long-run equilibrium in percentages;  
mean-corrected percentage balances)

Sources: Eurostat and ECB calculations.

Note: The monetary overhang is constructed using the approach discussed in Box 3 of the article entitled “Monetary analysis in real time” in the October 2004 issue of the ECB’s Monthly Bulletin. The model used to derive the monetary overhang is Calza, A., Gerdesmeier, D. and Levy, J. (2001), “Euro area money demand: measuring the opportunity costs appropriately”, IMF Working Paper No 01/179.

**Chart 5 Smoothed residuals from a demand model for M1 and changes in unemployment**

(in percentage points)



Sources: Eurostat and ECB calculations.

Note: For the money demand model, see Stracca, L. (2001), “The functional form of the demand for euro area M1”, ECB Working Paper No 51. The chosen smoother is a band-pass filter that excludes all cycles with a higher frequency than 1.5 years, as described in Christiano, L. J. and Fitzgerald, T. J. (2003), “The Band Pass Filter”, *International Economic Review*, 44 (2), pp. 435-465. The model used to derive the monetary overhang is Calza, A., Gerdesmeier, D. and Levy, J. (2001), “Euro area money demand: measuring the opportunity costs appropriately”, IMF Working Paper No 01/179.

residuals and the unemployment rate suggests that in periods of high uncertainty, as for example between mid-2000 and mid-2003, precautionary money demand also affects a more transactions-oriented measure of money. Indeed, significant upward shocks observed in the M1 demand model coincide with economic uncertainty, as captured by large positive changes in the unemployment rate.

Shifting to the evidence most closely related to the speculative demand for money, a significant element in the detailed assessment of the relationship between uncertainty and monetary developments is the analysis of the counterparts and components of M3. Such analysis often provides further details that help to explain aggregate M3 growth and facilitate the detection of the underlying driving factors. Specifically, in times of increased global uncertainty, the analysis of the net external asset position of MFIs and the strength of

demand for the money market fund shares/units component of M3 is of particular interest. In such periods, one may expect portfolio flows into monetary assets to constitute a significant source of increased money demand, by contrast with money creation via credit expansion which would be the main source of monetary growth in more normal circumstances.

As a reaction to rising global uncertainty, one may expect an increase in the “home bias” of investment decisions. In that respect, changes in the net external asset position of euro area MFIs – which represent the net capital flow of the euro area money-holding sectors with non-residents channelled via euro area MFIs – should be particularly strong. As investors search for safer and more liquid assets at times of heightened uncertainty, they may repatriate funds previously invested abroad by selling the underlying holdings of foreign securities to non-residents. To the extent that non-residents

purchase these securities using deposits at euro area MFIs, MFI external liabilities will fall and thus MFI net external assets will rise, fuelling M3 growth. This is the counterpart to the accumulation of deposits by euro area residents as they receive payment for the sale of foreign securities.

Chart 6 demonstrates the link between changes in the net external asset position of euro area MFIs and M3 between mid-2000 and mid-2003 and confirms the existence of substantial portfolio shifts into money, driven to a significant extent by a portfolio inflow of capital from abroad. However, it should be recognised that, at least to some extent, these flows were linked to the previous strong outflows of funds from the euro area money-holding sector which were driven by the strong wave of international mergers and acquisition activities associated with the “New Economy” boom in the United States at the turn of the century. Nonetheless, overall, portfolio considerations – especially the repatriation of capital previously invested

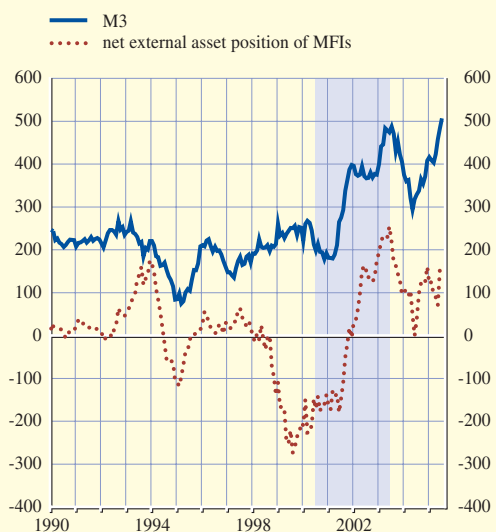
abroad – have had a considerable effect on monetary developments in past periods of high global uncertainty.

A similar form of analysis can be applied to the components of M3. There are two reasons why the analysis of money market fund shares/units may reflect the speculative demand for money. First, at times of high uncertainty investors may park money in money market fund shares/units, in part because the attractiveness of these funds at such times is likely to be high due to their limited asset class structure that is largely restricted to highly liquid short-term debt instruments. Second, a large proportion of households’ holdings of shares in their wealth portfolio is held via equity funds. Relatively limited switching costs between equity funds and money market funds, remuneration close to market interest rates and the high liquidity of money market funds allow the move out of equity funds into money market funds at times of uncertainty and permit a relatively fast reversion into equity funds at times of increasing confidence. Overall, it is, therefore, not surprising that, during the period of heightened uncertainty driven by the global shocks between 2000 and 2003, the contribution of the growth in money market fund shares/units to overall M3 growth was sizeable (see Chart 7). It then decreased during the subsequent periods, when global and financial market uncertainty normalised to a large extent.

One way of deriving empirical measures of the uncertainties that affect the portfolio decisions of the euro area money-holding sector is to construct volatility measures, i.e. measures associated with variations in second-order moments of prices (i.e. the variances and covariances). One such measure is the implied volatility of stock price indices derived from options prices on the index. A high value of such measures would indicate a reduced ability to predict future asset price developments, possibly leading to actions by investors to reduce their exposure to these risks and, thus, a switch into lower-yielding but capital-certain

**Chart 6 M3 and net external assets of MFIs**

(annual flows; EUR billions)

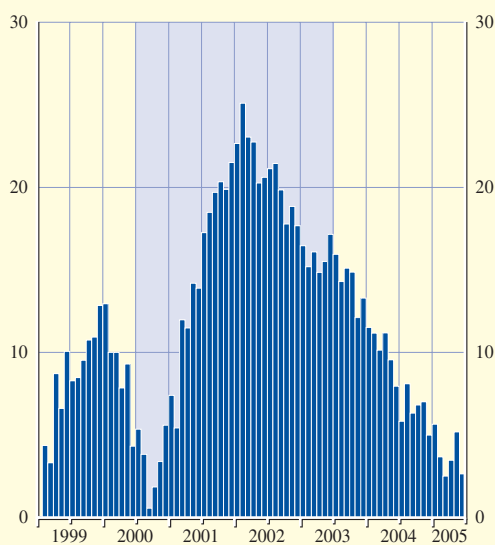


Source: ECB.

Note: Before September 1997, flows in the net external asset position of MFIs were derived as differences in outstanding amounts.

**Chart 7 Contribution of money market fund shares/units to annual M3 growth**

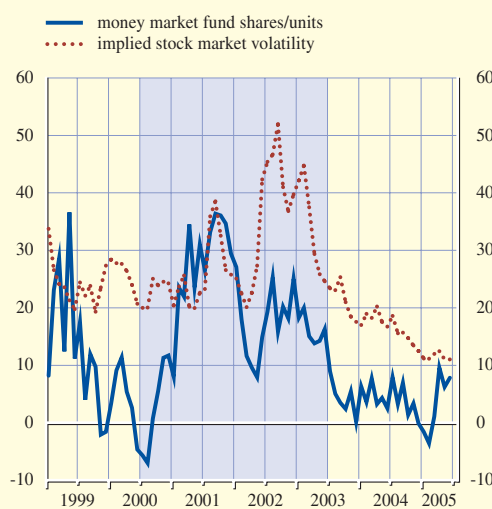
(in percentages)



Source: ECB.

**Chart 8 Short-term growth of money market fund shares/units and implied stock market volatility**

(annualised three-month growth rate in percentages; percentages per annum)



Sources: Bloomberg and ECB.

Note: The implied volatility series consists of the implied volatility on the near-contract generic future reported by Bloomberg. The equity index that the implied volatility refers to is the Dow Jones Euro Stoxx 50 index.

and more liquid monetary assets. As shown in Chart 8, it appears that rises in the implied volatility of the Dow Jones Euro Stoxx 50 index – especially in late 2001 and late 2002 – led to increased inflows into money market mutual fund shares/units, as investors sought a safe haven from the prevailing financial uncertainty.

However, money demand does not seem to react immediately when implied volatility measures decline. Such asymmetric behaviour is in line with theory. As implied by the buffer stock theory of money demand, in the presence of adjustment costs it may not be optimal for economic agents to bring their monetary holdings back to the desired levels immediately after a shock. The reactions to shocks can therefore be assumed to be asymmetric, i.e. an immediate reaction to increased uncertainty, but a relatively slow process of correction. Risk measures designed to capture the impact of uncertainty on money demand should therefore take into account the impact of a

time-varying risk aversion on the part of investors that is likely to increase after the profound losses incurred during the period between mid-2000 and mid-2003 (for a study of the impact of equity return and risk measures, see Box 3).

One possible measure of risk aversion that takes these empirical regularities into account is the conditional correlation between stock and long-term government bond returns.<sup>15</sup> This should constitute a reasonable proxy for risk aversion because government bond markets are less sensitive than equity markets to shifts in investors' attitudes towards risk. In periods of heightened risk aversion, the prices of the two asset classes should move in opposite directions, i.e. they should display a negative correlation or investors should leave the equity market and buy bonds. In normal periods, by contrast, standard asset allocation would

<sup>15</sup> For details, see the box entitled "Risk aversion and developments in monetary aggregates" in the December 2004 issue of the ECB's Monthly Bulletin.

suggest a positive correlation between stock and bond returns as low interest rates support equity prices.

Chart 9 demonstrates the negative correlation between flows in M3 and the index of risk aversion for the period under review. In order to check for the robustness of these results, alternative indicators of risk appetite have been constructed, which show similar results. One of these alternative indicators is shown in Chart 10, which illustrates the “earnings yield premium” in the euro area – the difference between the earnings yields for equity and the real long-term interest rate. Such an indicator reflects investors’ perception of a risk premium. This indicator has remained at relatively high levels even after the recovery in stock market indices and the reduction in equity price volatility since mid-2003.

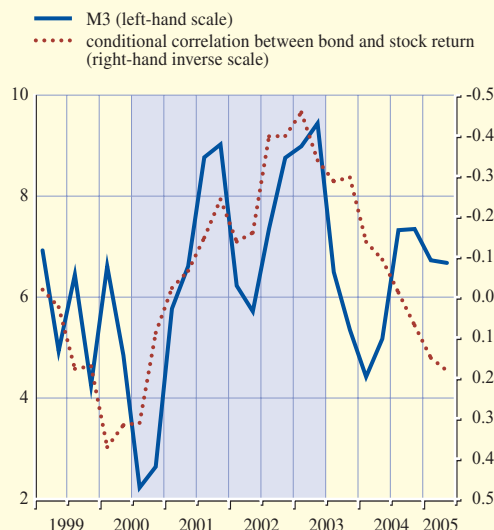
This measure therefore seems particularly appropriate for capturing the asymmetric reactions to shocks, i.e. a rapid reaction to higher uncertainty associated with a flight to safety, but a relatively slow reversal due to increased risk aversion. Indeed, as shown in Chart 10, this indicator seems relatively closely related to the real money gap of M3.<sup>16</sup>

When analysing the inertia in the risk aversion of money holders, one should not neglect the international dimension. In fact, the relatively positive expectations for euro exchange rates in recent years are likely to have dissuaded euro area money holders from investing more strongly in foreign assets. At the same time, a

16 For a more thorough analysis of the earnings yield premium index, see the ECB Financial Stability Review June 2005, pp. 66-68.

**Chart 9 M3 growth and a measure of risk aversion**

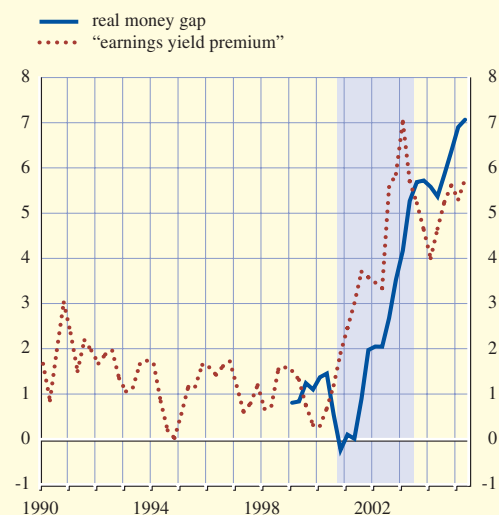
(annualised quarter-on-quarter growth rate in percentages; conditional correlation)



Sources: Global Financial Database, ECB and ECB calculations. Note: The conditional correlation between bond and stock market returns has been estimated using a multivariate GARCH model. See Engle, R. F. and Kroner, K. K. (1995), “Multivariate Simultaneous Generalized ARCH”, *Econometric Theory*, Volume 11, Issue 1, pp. 122-150.

**Chart 10 Estimate of the real money gap<sup>1)</sup> of M3 and the “earnings yield premium”**

(as a percentage of the stock of real M3; adjusted for seasonal and calendar effects; December 1998 = 0; percentage points)



Sources: Thomson Financial Datastream and ECB calculations. Note: The “earnings yield premium” is the difference between the earnings yield for equity and the real long-term interest rate (nominal long-term interest rate minus actual HICP inflation).

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

possibly lower risk aversion on the part of international investors and the exchange rate expectations mentioned above may partly explain the capital inflows into the euro area in recent quarters, as recorded in the net external asset position of euro area MFIs.

### Box 3

#### AN ILLUSTRATION OF HOW TO CAPTURE THE POSSIBLE IMPACT OF STOCK MARKETS ON MONEY DEMAND

As discussed in Section 3 of the main text, the sign of the relationship between stock market developments and money holdings is ambiguous on purely conceptual grounds and thus remains essentially an empirical question.

This box uses a simplified extension of a traditional money demand model<sup>1</sup> to demonstrate how variables capturing the return and the risk on alternative assets can affect money demand. More specifically, following the work of Carstensen (2004),<sup>2</sup> a smoothed version of the return on equity (combined with the ten-year government bond yield to give a broad measure of the returns available on non-monetary assets) and a smoothed version of a stock market volatility measure have been introduced into the long-run money demand equation.<sup>3</sup> The smoothing of the additional explanatory variables is meant to capture time-varying risk aversion, which appears characteristic of recent behaviour. Shocks to the stock market in preceding periods are likely to influence portfolio choices in current periods. Moreover, the short-term dynamics of the traditional money demand model have been extended by the introduction of a further risk measure related to the stock market, namely the first difference of the earnings-yield premium (as presented in section 4 of the main text).<sup>4</sup>

It should be noted that a number of interesting phenomena, such as potential asymmetric effects of stock market booms and busts on money demand, the possible inclusion of variables capturing the relative interest of foreign investors in euro area equity as compared with euro area investors, and the likely non-linear effects of the price-earnings ratio of equities on money demand, have been ignored in this specification and probably will have to be taken into account in future work.

Despite its admittedly simple structure, the estimated long-run relationship between real money balances, output, opportunity costs and equity risk measures is relatively stable up to the end of

1 For a detailed description of the methodology used, see Calza A., Gerdesmeier, D. and Levy, J. (2001), "Euro area money demand: Measuring the opportunity costs appropriately", IMF Working Paper No 01/179. A number of changes relative to the original model have been introduced: changes in the inflation rate were added to the short-run dynamics in order to relax the condition of short-run homogeneity, and the log of opportunity costs was taken in order to better capture possible non-linear effects in the interest rate elasticity. Furthermore, the model parameters were frozen from the estimation period ending in the second quarter of 2001, to take account of signs of instability that occurred in relation to the extraordinary portfolio shifts into money between 2001 and mid-2003.

2 See Carstensen, K. (2004), "Stock market downswing and the stability of EMU money", Kiel Institute of World Economics. Another approach leading to similar results is presented in Greiber, C. and Lemke, W. (2005) "Money demand and macroeconomic uncertainty", Deutsche Bundesbank Discussion Paper Series 1: Economic Studies No 26/2005.

3 The annualised three-year log differences of the quarterly Dow Jones Euro Stoxx index have been used as an equity return variable. A two-year average of conditional variances from a GARCH(1,1) model derived from the yields of the daily Dow Jones Euro Stoxx index has been used as a stock market volatility measure.

4 In addition, the lagged changes in the yield spread between the ten-year government bond yield and the three-month money market rate and the lagged changes of oil prices have been removed from the short-run equation.



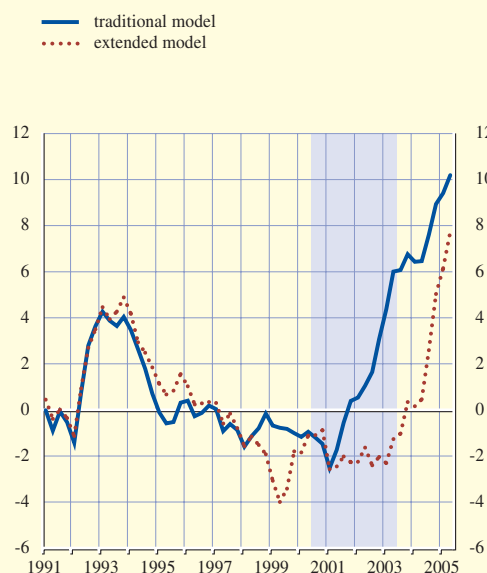
the sample period (the second quarter of 2005) and provides an appropriate framework to derive some stylised facts on the impact of stock market developments on money demand.

Chart A illustrates these stylised facts by comparing model-based measures of the monetary overhang stemming from the traditional money demand model with those of the model extended with stock market variables. In this respect, the two measures of the monetary overhang display significant differences during the period from 2001 to mid-2004. Whereas the traditional model indicates a positive and steadily increasing overhang in the period from 2001 to mid-2005, the overhang of the extended model including stock market effects remains negative over the whole period of heightened uncertainty between 2001 and 2003, as the higher money holdings resulting from a flight to safety are explained in terms of the high risk in equity holdings. Yet from the second half of 2004, the overhang measure of the extended model becomes positive and then increases strongly.

This simplified measure of excess liquidity corrected for the impact of heightened uncertainty in financial markets thus leads to similar conclusions to those derived from money gap measures constructed from the M3 series corrected for the estimated impact of portfolio shifts, as regularly presented in the Monthly Bulletin (see Chart B).

**Chart A Monetary overhang from the traditional and extended money demand models**

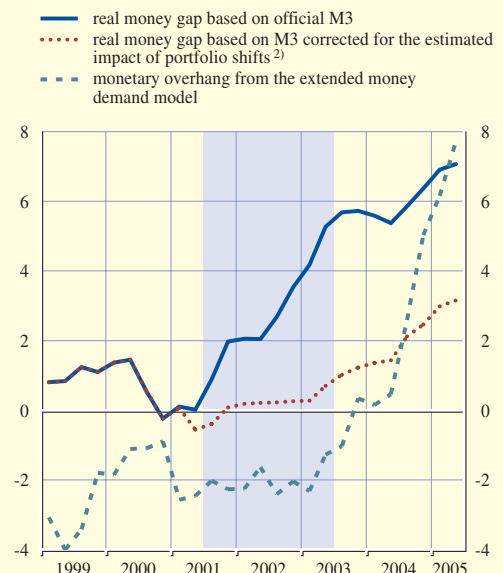
(percentage deviations from equilibrium)



Sources: ECB and ECB calculations.

**Chart B Estimates of the real money gap<sup>1)</sup> and the monetary overhang**

(as a percentage of the stock of real M3; adjusted for seasonal and calendar effects; December 1998 = 0; percentage deviations from equilibrium)



Sources: ECB and ECB calculations.

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

2) Estimates of the magnitude of portfolio shifts into M3 are constructed using the approach discussed in section 4 of the article entitled "Monetary analysis in real time" in the October 2004 issue of the ECB's Monthly Bulletin.

## 5 CONCLUSION

Understanding the impact of macroeconomic uncertainty on money demand is crucial when assessing risks to future price stability stemming from monetary developments.

In the environment faced over the past few years, it has been a challenging task to recover the information in monetary developments which is relevant for monetary policy decisions. In this respect, monetary analysis plays an important role in the ECB's monetary policy framework as it is used to check from a medium to longer-term perspective the assessment of short to medium-term risks to price stability obtained from economic analysis. It thereby helps to ensure that the Governing Council, in forming its overall judgement of the risks to price stability, does not overlook important information concerning future price trends.

A sequence of large shocks increased global uncertainty, especially during the period from 2000 to 2003. This appears to have triggered considerable flows into safe haven investments, especially monetary assets. Money demand therefore increased significantly. Due to the increasing globalisation of financial markets, shocks that increase global uncertainty are likely to have a considerably stronger effect on euro area monetary holdings than in previous decades. Efforts to incorporate these effects into econometric money demand models are ongoing.

This article has outlined the main elements of the conceptual framework within which the impact of uncertainty on M3 dynamics has been analysed. It has also illustrated some of the indicators and tools used by the ECB to foster a deeper understanding of the potential implications of monetary developments for future price stability.



# ASSESSING THE PERFORMANCE OF FINANCIAL SYSTEMS

## ARTICLES

Assessing the performance of financial systems

*This article examines the performance of financial systems using a functional approach. The better financial systems perform their main functions, the more they overcome frictions in the process of allocating capital. While the expanding theoretical and empirical economic literature suggests that a better functioning financial system is conducive to economic growth, it has focused mostly on developing economies. This article concentrates on industrialised economies. It first develops a comprehensive conceptual framework for analysing financial system performance. A selection of economic indicators is then used to illustrate how performance may be assessed. Financial systems in euro area countries and the euro area aggregate are compared with those of other major industrialised countries, both inside and outside Europe. The indicators used suggest that the performance of a financial system can vary considerably across different dimensions. Similarly, there is a fair amount of heterogeneity across euro area countries. Some financial systems that score highly in a particular dimension may not necessarily do so in another. For a comprehensive assessment of performance, it is therefore necessary to look at many indicators together. Nevertheless, the differences in performance identified seem to suggest that there is further scope for structural reforms in financial sectors in the euro area. The efficiency gains that can be expected from such reforms would also benefit the ECB as they would support the smooth implementation and transmission of monetary policy.*

## I INTRODUCTION

The functioning of financial systems has received special attention in European public policy in recent years. A well-functioning financial system permits an economy to fully exploit its growth potential as it ensures that investment opportunities receive the necessary funding at minimum cost. Accordingly, the European Union has made structural financial sector reforms a priority in the Lisbon agenda. For example, the European Commission's Financial Services Action Plan (1999-2004), which has as an important objective greater European financial integration to complete the single market for financial services, is currently being implemented by Member States. The European Commission has recently also issued a Green Paper on Financial Services Policy for 2005-2010.<sup>1</sup> Furthermore, the financial sector plays an important role in the implementation and transmission of the ECB's monetary policy. This is a major reason why the ECB has a special interest in the functioning of the euro area financial system.<sup>2</sup> Finally, the functioning of financial systems is relevant for financial stability.

The article presents a broad framework for the analysis of financial system performance. It

starts from the well-established functions of a financial system and covers all of its dimensions that are likely to affect growth. For each dimension, a group of economic indicators can be derived that describe how well a given financial system performs its functions. The article presents a selection of indicators to illustrate how the framework can be applied. For a fully comprehensive assessment of performance, one may however have to look at a greater number of indicators. In contrast to most of the existing literature, the focus is on industrialised countries, covering euro area countries as well as the euro area aggregate and comparing them with major countries inside and outside Europe.

1 In August 2005 the Eurosystem contributed to the public consultation by the Commission on the Green Paper. The Commission plans to publish the final policy programme as a White Paper in November 2005. The ECB recently published indicators of financial integration (see "Indicators of financial integration in the euro area", September 2005). The Commission publishes a complementary set of indicators in its "Financial Integration Monitor" (see [http://europa.eu.int/comm/internal\\_market/finances/cross-sector/index\\_en.htm](http://europa.eu.int/comm/internal_market/finances/cross-sector/index_en.htm)).

2 The interest of the ECB in financial sector issues has been illustrated particularly in the Monthly Bulletin article "Recent developments in financial structures of the euro area" (October 2003), the proceedings of the Second ECB Central Banking Conference (see V. Gaspar, P. Hartmann and O. Sleijpen (eds., 2002), *The Transformation of the European Financial System*) and the first ECB Financial Stability Review (December 2004).

The next section presents the main functions of a financial system and reviews the economic theory about how market imperfections and frictions can reduce its contribution to growth. The third section provides a comprehensive framework for assessing performance, structured along various dimensions of a financial system. It also displays a selection of indicators, covering in particular the size of capital markets, the completeness of markets and financial innovation, the ability of financial systems to process information, the effectiveness of corporate governance and the efficiency of legal systems. The last section draws some conclusions.

## 2 FUNCTIONS OF A FINANCIAL SYSTEM AND MARKET IMPERFECTIONS

It has long been noted that finance affects growth.<sup>3</sup> A financial system influences the allocation of scarce resources across space and time. In order to exploit the growth potential of an economy, resources need to be allocated towards the most valuable investment opportunities. The allocation is affected by the costs of acquiring information, enforcing contracts and making transactions. This applies both to firms and households. Firms may find it very costly to raise external financing if outside investors know little about how their money is being invested. Households can neither optimise their consumption over their lifecycle nor optimally invest in their human capital if they cannot borrow against future income or if a financial system does not allow them to tap into their illiquid wealth such as housing.<sup>4</sup>

When frictions hinder the flow of resources to the best possible uses, economic growth suffers. A financial system aims to overcome frictions, since it:<sup>5</sup>

- produces information about potential investments and the possibilities for allocating capital;

- monitors investments and ensures that investors and savers are paid back according to the contracts they hold;
- allows the trading, diversification and management of risk;
- mobilises and pools savings; and
- facilitates the exchange of goods and services.

### 2.1 PERFECT MARKET BENCHMARK

The benchmark case of a perfect market illustrates how: (i) frictions lead to the establishment of a financial system; (ii) a financial system functions in such a way as to overcome these frictions; and (iii) a financial system thus affects growth.

Economic theory states that a perfect market is characterised by a frictionless flow of capital ensuring that all valuable investment opportunities are exploited optimally. Even though agents transfer their capital, and thus give up control, to others who may have different information or different interests when investing, it is possible to specify at no cost contracts that cover all possible future contingencies. Similarly, households can achieve optimal consumption smoothing and risk sharing over their lifecycle. In a perfect market where capital flows without frictions, the organisation of economic activity, i.e. firms, institutions and the location of economic agents, is irrelevant. It does not matter whether savers and investors are the

<sup>3</sup> In *The Theory of Economic Development* (1912), Joseph Schumpeter explains that a well-functioning banking sector spurs technological progress by identifying new investment opportunities and channelling scarce resources towards them. In *A Theory of Economic History* (1969), John Hicks argues that the financial system played a crucial role in British industrialisation by mobilising the necessary capital.

<sup>4</sup> See F. Allen and D. Gale (1997), “Financial markets, intermediaries and intertemporal smoothing”, *Journal of Political Economy*, 105, pp. 523-546, for an analysis of how the existence of long-lived intermediaries in a financial system allows households to insure against wealth shocks.

<sup>5</sup> See R. Levine (2004), “Finance and growth” in P. Aghion and S. Durlauf (eds.), *Handbook of Economic Growth* (Amsterdam: North-Holland, forthcoming).

same person or not. A perfect market achieves the same allocation of capital and level of investment as if each owner of an investment opportunity, e.g. a firm or a household, was already endowed with sufficient resources to invest up to the optimal point (where the marginal benefit equals the opportunity cost).

It is clear that in reality markets are not perfect and frictionless. This article considers how real world frictions lead to a departure from the perfect market benchmark and how they impede the flow of capital and thus distort investment decisions. It then analyses how a financial system overcomes these frictions using the five functions mentioned previously to structure the analysis.

## 2.2 FRICTIONS IMPEDING THE FLOW OF CAPITAL

First, economic agents neither share nor have access to the same information. Investors, for example, provide the investment capital but delegate the investment decision to a manager, since he often has better information about the use of capital. When an investor no longer has control over his funds, he demands a premium that increases the cost of capital, since he needs to be compensated for not knowing exactly how his funds are being used by the manager. The increase in the cost of capital makes investing more expensive and leads to underinvestment relative to the perfect market benchmark. Bank financing and specialised venture capital financing are responses of a financial system to this kind of information friction. In both cases, uninformed investors hand over their resources to more knowledgeable intermediaries, who have learnt from financing similar projects. In addition, the intermediaries pool the resources of many investors and can therefore reach a sufficient scale to cover the fixed costs of acquiring information that arise for example from setting up a credit screening mechanism. Intermediaries also address the “public goods” problem, i.e. the difficulty of preventing others from free riding on one’s costly information. Stock markets support the acquisition and

dissemination of information about firms mainly through the price mechanism. Trading in a large and liquid market means that prices reflect the information of many traders who have an incentive to acquire valuable information.

Second, a financial investor – who owns the funds – and his manager – who de facto controls them – may not share the same investment objectives. While investors are usually interested in value maximisation, as in the perfect market benchmark, managers may be driven by career concerns or perks, or, in extreme cases, they may even extract resources for themselves. In the same vein, the interests of a household may not be identical to those of the bank it borrows from, since a bank is mainly interested in the repayment of its loans. When investment decisions are no longer governed by value maximisation, they will be distorted relative to a perfect market and growth will be hampered since scarce capital is not used efficiently.

Several arrangements in a financial system address the control problem. Banks for example serve as “delegated monitors”, i.e. a bank acts on behalf of many depositors, thus avoiding a wasteful duplication of monitoring expenses. Stock markets allow investors to exert pressure by selling their shares. The buying or selling of shares influences a company’s stock price with possible consequences for management, e.g. its dismissal after a poor stock price performance. More directly, stock markets exercise control through voting at shareholder meetings or, in extreme cases, through takeovers.

Third, capital is dispersed among many different people who have different time and risk preferences. The perfect market benchmark assumes that capital is fully liquid, meaning that financial assets can be traded and converted into real assets without frictions. In reality, physical assets used in production and human capital are illiquid, e.g. it is neither easy to buy or sell production plants, nor to borrow against future expected income.

To finance production, capital must be committed in many cases for a long period of time, but a saver does not typically like relinquishing control over his assets for long periods. A saver's investment horizon is often shorter than the investment horizon of a production process. Households are subject to liquidity shocks, i.e. they may need quick access to their capital in order to cover unforeseen contingencies. Banks and stock markets mitigate the adverse effects of such liquidity shocks. A bank transforms short-term liquid deposits into long-term illiquid loans. A bank therefore makes it possible for households to react to liquidity shocks and to withdraw deposits without interrupting production processes. Stock markets similarly reduce liquidity risks by allowing stock holders to trade their shares, while firms still have access to long-term capital.

Fourth, in the perfect market benchmark, the location of capital and economic activity does not matter since financial contracts can be written to cover all possible future contingencies. But in reality economic capital is dispersed across many investors. Without access to multiple investors, many production processes would be constrained to sub-optimal scales. A key function of a financial system is therefore the pooling and mobilisation of scarce and dispersed capital. Having standardised financial contracts, such as bonds or shares, lowers the transaction costs of trading in public markets. Without such standard contracts, firms would have to enter into a large number of bilateral agreements, specifying a large number of contingencies, instead of being able to tap into a large pool of readily available capital. A pooling of resources also occurs through financial intermediaries, where a large number of depositors entrust their funds to a "middleman" who is then able to invest on a large scale on their behalf.

Finally, and closely related to the previous point about the location of economic activity, a financial system facilitates the exchange of

goods and services. In order to exploit the full growth potential of an economy, specialised investments need to be made and households need to be able to finance the consumption of goods. Greater specialisation allows higher returns to be earned, because it enables a better use of the information and skills that are specific to a production process. But greater specialisation also requires more coordination and transactions than an autarkic environment. At the same time, the financing of consumption over time also requires financial arrangements. Households for example need to be able to save or to borrow against their future stream of income.

In the perfect market benchmark, goods and services flow without frictions across production processes and to consumers. Information asymmetries and transaction costs, however, cause frictions to build up in this exchange. A financial system overcomes these barriers by providing suitable specialised instruments such as derivatives, which can fix prices in advance (e.g. forward contracts). Credit cards, consumer credit and mortgage refinancing are channels through which a financial system facilitates the consumption of goods and services by the household sector.

To sum up, a financial system performs several functions to ease the flow of resources from owners of capital, e.g. households which possess savings, to the most valuable investment opportunities in an economy in the presence of a number of market imperfections.<sup>6</sup>

### **3 DIMENSIONS OF FINANCIAL SYSTEM PERFORMANCE AND SELECTED INDICATORS**

Having reviewed the main elements of economic theory explaining how a financial system helps to overcome the frictions that can

<sup>6</sup> It should be noted that the "theory of the second best" shows that overcoming one of those frictions alone does not mean that the market will approach the perfect market benchmark. Reducing one friction in isolation may actually worsen other frictions.

hinder the efficient flow of savings into investment, one can go ahead and identify groups of characteristics/dimensions that lend themselves to an assessment of a financial system's performance of its functions. In this section, this is done by deriving a comprehensive framework of dimensions to be covered. These dimensions are treated in the following eight sub-sections. Moreover, a number of economic indicators are selected to illustrate how the theory and framework can be applied. These two steps are undertaken drawing extensively on the existing empirical evidence on the link between finance and growth<sup>7</sup> and paying attention to dimensions and indicators particularly relevant for industrialised countries. Where possible, the analysis shows the evolution of an indicator over time, distinguishing euro area countries and the euro area aggregate from non-euro area European countries and other major countries.

A caveat is that data availability constrains the choice of indicators here. The presentation furthermore focuses only on a selection of indicators that can be linked to the finance and growth literature. It would be useful to have several indicators for each dimension, since a single measure cannot usually give a complete and balanced picture. The conclusions drawn here are therefore tentative.

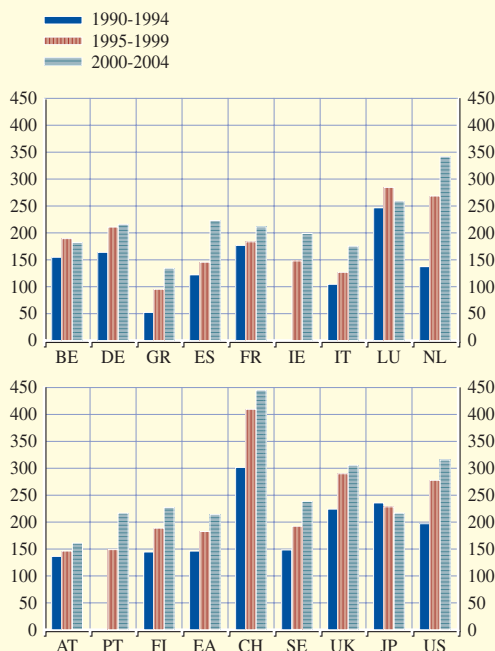
### 3.1 SIZE OF CAPITAL MARKETS AND FINANCIAL STRUCTURE

Financial structure is traditionally measured in terms of the relative size of different capital markets, e.g. loan versus securities markets. When measuring the size of a market, it is intended to capture its importance: a larger financial market means that more capital is channelled through it. For example, a larger market for bank loans indicates that more intermediation and thus more monitoring of loans and pooling of resources take place in a financial system.

There has also been an extensive debate on whether bank-based or market-based financial

Chart 1 Size of capital markets

(percentages of GDP)



Sources: BIS, Eurostat, IMF International Financial Statistics, World Federation of Exchanges and ECB calculations.

Notes: Sum of the ratios of stock market capitalisation, bank credit to the private sector and domestic debt securities issued by the private sector to GDP. For the Netherlands and Portugal the data are up to 2001, while for Luxembourg data exclude debt securities. Euro area bank credit, stock market capitalisation, domestic debt securities and GDP are the sum of euro area countries' figures.

systems perform better. On the one hand, banks can exploit scale economies in acquiring information, exercise control through monitoring, and form long-run relationships with firms that reduce information asymmetries. On the other hand, banks may exploit their dominant position vis-à-vis a borrower, they may have a bias towards prudence and they do not necessarily act in the interest of firm owners. More recently, the debate has however shifted away from pitting markets against banks. Rather, it is recognised that both perform valuable functions in a

<sup>7</sup> See A. Demirgüç-Kunt and R. Levine (eds., 2001), *Financial Structure and Economic Growth* (MIT Press) and R. Levine (2004), *op. cit.*



financial system. Some functions may even require complementarities between bank- and market-based financing.<sup>8</sup>

Chart 1 displays the sum of stock market capitalisation, the amount of bank credit to the private sector and the amount outstanding of domestic debt securities issued by the private sector as a share of GDP.

According to this indicator, the relative size of financial markets has increased since the 1990s for all countries except Belgium and Japan. Austria, Greece and Italy have the smallest markets, while the financial centres of Luxembourg, Switzerland and the United Kingdom have the largest ones. The Netherlands, Greece and to some extent Spain have seen the size of their markets more than double over the last fourteen years. Overall, the average size of financial markets in the euro area is smaller than in the United Kingdom and the United States.

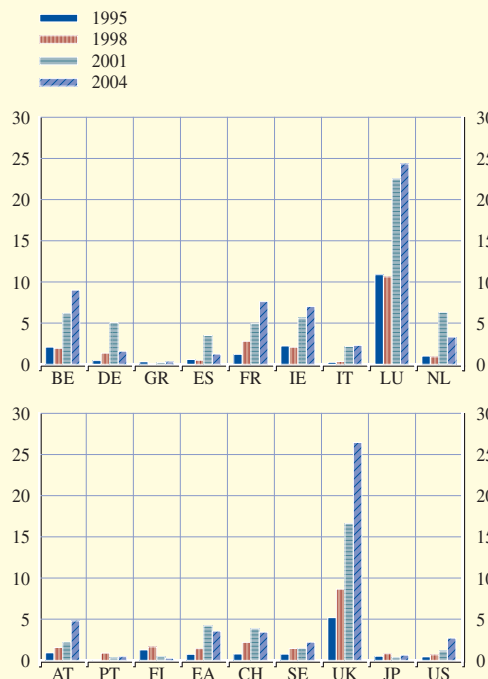
The next sub-sections go beyond the traditional size measures of financial markets and consider indicators that relate more directly to the different functions of a financial system. These help paint a more nuanced picture of a financial system's performance.

### 3.2 FINANCIAL INNOVATION AND MARKET COMPLETENESS

Financial innovation opens up new possibilities for economic agents to allocate capital across space, time and risk. This makes markets more complete. For example, new financial instruments allow firms to manage risks by shifting them to economic agents better able to bear them. Financial innovation allows households to refinance their mortgages and banks to resell risks using mortgage-backed securities. Furthermore, prices of new financial instruments contain additional information. Thus, financial innovation facilitates the supply of capital and reduces information asymmetries.

**Chart 2 Turnover of interest rate derivatives**

(percentages of GDP)



Sources: BIS, IMF and ECB calculations.  
Note: Daily average turnover in the month of April of OTC single currency interest rate derivatives (net of local inter-dealer double-counting).

Chart 2 shows the turnover of interest rate derivatives. More active trading of interest rate derivatives allocates capital across time, space and risk because investors can lock in future interest rates using forwards and futures, hedge using options and exchange fixed and flexible interest rate agreements using swaps.

The most active markets for interest rate derivatives are the financial centres of Luxembourg and the United Kingdom. The market is much less active in most other countries, although Austria, Belgium, France and Ireland have seen strong growth over the last decade. The market has recently shrunk

<sup>8</sup> See R. Levine (2002), "Bank-based or market-based financial systems: Which is better?", *Journal of Financial Intermediation*, 11, pp. 398-428.

in Germany, Spain and the Netherlands.<sup>9</sup> On average, interest rate derivatives are more actively traded in the euro area than in the United States.

### 3.3 TRANSPARENCY AND INFORMATION

Transparency and information refer to measures that capture the degree to which a financial system produces and spreads information about investment opportunities, market conditions and the behaviour of economic agents. For example, the quality of accounting standards captures the degree of asymmetric information between investors and managers. Better information on and more transparent reporting of company performance alleviate the control problem between outside investors and firm insiders, e.g. through more accurate stock prices, allowing outsiders to exert pressure by selling their shares, or through an improved market for corporate control.

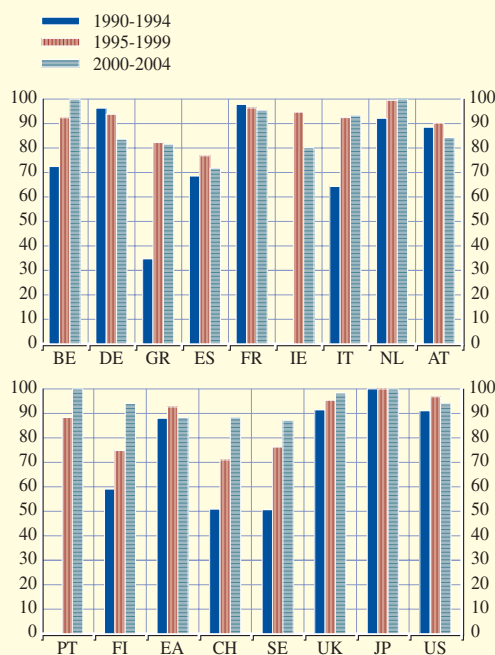
A measure that has been used previously in the finance and growth literature comes from the mandatory disclosure of firms' accounting information.<sup>10</sup> However, a potential shortcoming of measures of mandatory disclosure is that they neither measure how much information is (voluntarily) disclosed, nor do they capture whether information is used in capital markets.

To address some of these issues, a number of other measures of how a financial system deals with information frictions are presented here. Analysts, for example, study companies and make earnings forecasts to inform investors. They represent an important outside assessment of a company's condition. The more companies are covered by analysts, the more information about them is available in a financial system. Chart 3 presents the extent of analyst coverage over time.

In most countries, analyst coverage is either high or has increased significantly since 1990, except in Germany where the extent of coverage has shrunk. Spanish, Greek and Irish

Chart 3 Analyst coverage

(percentages of total stock market capitalisation)



Sources: Thomson Financial's First Call database, IMF and ECB calculations.

Notes: Stock market capitalisation of firms covered by at least one forecast of earnings per share for the current fiscal year. Data for Luxembourg are not available, while for the Netherlands and Portugal the data end in 2001. Data for the euro area are computed as an average of euro area countries' values weighted by the stock market capitalisation of each country.

companies are the least covered companies in the euro area.

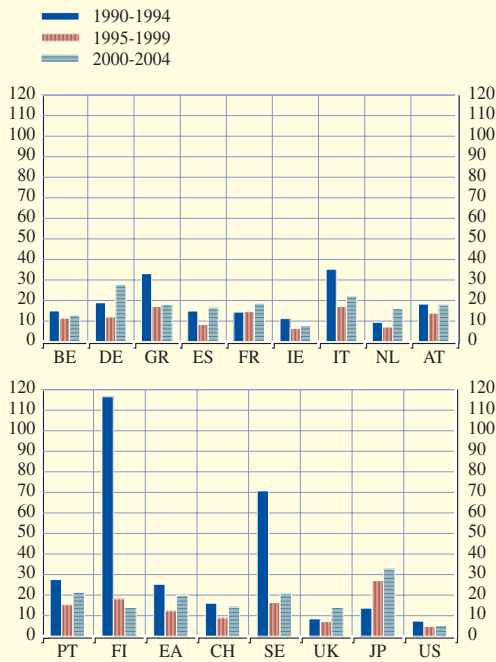
Related to the extent of analyst coverage is the dispersion of analysts' forecasts. If a firm discloses relevant and credible information, or if this information is readily available in a market, then analysts' earnings forecasts

<sup>9</sup> A caveat is that the location of trading says little about the location of counterparties, e.g. an investor in country A may enter into a swap agreement with an investor in country B, while the swap itself is traded in country C. This also illustrates that one country can benefit from the existence of standardised financial instruments and the performance of the financial system of another country, as long as there is enough financial integration.

<sup>10</sup> See for example R. Rajan and L. Zingales (1998), "Financial dependence and growth", *American Economic Review*, 88, pp. 559-86.

**Chart 4 Dispersion of analysts' forecasts**

(percentages of forecasted earnings per share)



Sources: Thomson Financial's First Call database and ECB calculations.  
 Notes: Standard deviation of the earnings per share (EPS) forecasts for a given year divided by the weighted average of the EPS forecasts. Data for Luxembourg are not available, while for the Netherlands and Portugal the data end in 2001. Euro area figures are averages of euro area countries' values weighted by the stock market capitalisation covered by analysts.

only with more analyst coverage, but also with a lower dispersion of analysts' forecasts.

Chart 4 presents the dispersion of analysts' forecasts. It shows that analysts disagree most in Germany, Italy, Sweden and Japan in the period 2000-2004. While the extent of coverage in the euro area is comparable to that in the United States, the dispersion of earnings forecasts is more than twice as high.

The dissemination of information by stock markets is an important function of a financial system. In order to determine how well a stock market incorporates useful information into stock prices and how efficient it therefore is in guiding capital to the best investment opportunities, the box below presents a decomposition of stock price volatility into market volatility and firm-specific volatility. If firms' stock prices are mainly driven by market factors, i.e. if there is a high synchronicity among stocks, then this indicates that the stock market does not efficiently transmit firm-specific information. In that case, the explanatory power (measured by the  $R^2$  statistic) of a regression of a firm's stock price on market factors should be high, i.e. most of firms' stock price variations are explained without firm-specific information.<sup>11</sup>

should converge. A financial system that aggregates and spreads information more efficiently may therefore be associated not

<sup>11</sup> See A. Durnev, R. Morck and B. Yeung (2003), "Value enhancing capital budgeting and firm-specific stock returns variation", *Journal of Finance*, 59, pp. 65-106.

**Box**

**IDIOSYNCRATIC FIRM INFORMATION IN THE STOCK MARKET – THE  $R^2$  INDICATOR**

To measure the information content of stock prices using the  $R^2$  statistic, i.e. the variation of the dependent variable in a regression that is explained by the independent variables, the following model is considered:

$$r_{ijt} = \alpha + \beta_1 MK_{jt} + \beta_2 EMU_t + \beta_3 US_t + \beta_4 EME_t + \varepsilon$$

where:

- $r_{ijt}$  is the return on stock  $i$  in country  $j$  at time  $t$
- $MK_{jt}$  is the return on the stock market index in country  $j$  at time  $t$

$EMU_t$  is the return on the euro area stock market index at time  $t$

$US_t$  is the return on the US stock market index at time  $t$

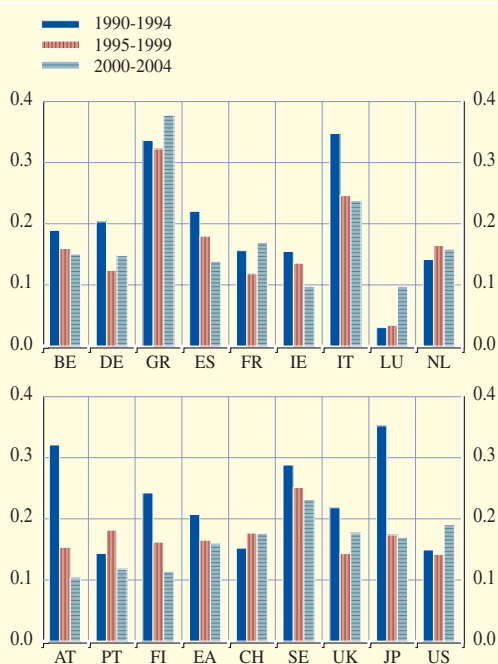
$EME_t$  is the return on an emerging markets index at time  $t$

In this specification, stock prices are driven by two sets of explanatory variables. First, there are the market factors (MK, EMU, US, EME) that are common to all stocks in a market. They capture market-wide information, i.e. the systematic information that enters into prices. Second, there is the error term  $\epsilon$  that captures the non-systematic or idiosyncratic element that drives stock prices. It is assumed to pick up firm-specific news or events since they would not affect the systematic factors. After computing the  $R^2$  statistic for a set of stocks in a given country, the average  $R^2$  is computed for the country. This is a measure of the information content of prices in a given market.

If the information disclosed by firms is relevant and credible, and if the stock market is efficient in aggregating and spreading information, e.g. a great deal of informed trading takes place, then the regression should not perform well in the sense that the  $R^2$  of the regression should be low. A low  $R^2$  therefore indicates that the stock market is able to convey information about valuable investment opportunities of firms (or the lack thereof). Conversely, if the  $R^2$  is high, the explanatory power of systematic factors is high. In this case, stock prices move for reasons other than firm-specific information, meaning that the stock market does not convey useful information about individual firms' investment opportunities.

The results reported in the chart are based on a sample of 4,051 companies listed in 17 countries from 1990 to 2004. The chart presents the  $R^2$  statistics for different periods of time across different countries.<sup>1</sup> Greece, Italy and Sweden have the highest  $R^2$ , i.e. in these countries stock markets incorporate the least amount of firm-specific information. The stock markets of Austria, Finland, Ireland and to some extent Portugal have in the last few years increasingly incorporated firm-specific information into prices. According to the  $R^2$  statistic, the euro area has since 2000 incorporated on average more firm-specific information into stock prices than the United Kingdom or the United States.

#### Information content of stock markets – the $R^2$ statistic



Sources: Datastream database and ECB calculations.  
Notes: Country average  $R^2$  statistics. Euro area figures are simple averages of euro area countries'  $R^2$  statistics.

<sup>1</sup> The average country  $R^2$  statistics from 2000 to 2004 are uncorrelated with average (i) industry composition and sectoral concentration of firms, (ii) stock market volatility and (iii) GDP growth over the same period.

### 3.4 CORPORATE GOVERNANCE

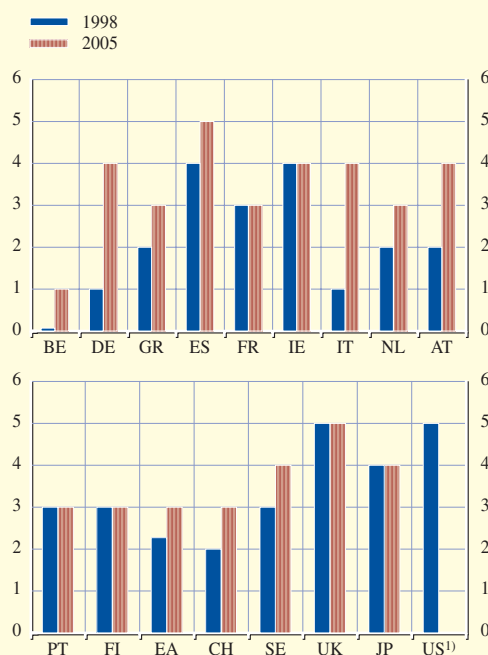
Corporate governance addresses the potential conflict between investors and managers, and among investors, e.g. large versus small shareholders. Better governance ensures that their interests are more aligned, that investors obtain a better return and that there will be a smaller loss of efficiency due to opportunistic behaviour by managers. One example of good governance is strong shareholder protection, e.g. if investors are allowed to vote in shareholder meetings even without being physically present, they can more easily dismiss management. By threatening management with dismissal, shareholders will be more likely to receive promised repayments, which in turn lowers the rate of return they demand on their investments. Alternative measures of corporate governance are the protection of creditors, e.g. how well does the law protect their claims in the case of bankruptcy, the presence of outsiders on executive boards or the independence of nomination and salary committees.<sup>12</sup>

Chart 5 presents a measure of how well the law protects shareholders with respect to voting at shareholder meetings. Shareholder rights are strong in Austria, Ireland, Spain, Switzerland, Sweden, the United Kingdom and the United States. Most euro area countries have strengthened these rights over the last seven years, but the level of shareholder protection in the euro area is still below that in the United States or the United Kingdom.

### 3.5 LEGAL SYSTEM

In the perfect market benchmark, there are no frictions because contracts covering all possible future contingencies can be written and, equally importantly, can be enforced. When a financial system allocates capital across time and space, contracts are needed to connect providers and users of capital. A financial investor relinquishes control of his funds now in return for a promised claim to future cash flows. In order for the promise not to be an empty one,

Chart 5 Shareholder rights



Sources: R. La Porta, F. López-de-Silanes, A. Shleifer and R. Vishny (1998), "Law and Finance", *Journal of Political Economy*, and OECD Corporate Governance and Company Law Database.<sup>2)</sup>

Notes: The index ranges from 0 to 6; the lower the score, the weaker the shareholder rights. The index is computed as the sum of the following variables: (1) proxy by mail allowed; (2) shares not blocked before meeting; (3) cumulative voting or proportional representation; (4) oppressed minorities mechanism; (5) pre-emptive rights; and (6) percentage of share capital to call an extraordinary shareholder meeting. Variables (1) to (5) equal 1 if allowed and 0 otherwise, while (6) equals 1 when the minimum required percentage is less than 20%, and 0 otherwise. Euro area figures are averages of euro area countries' scores.

1) The 2005 update for the United States is not available yet.

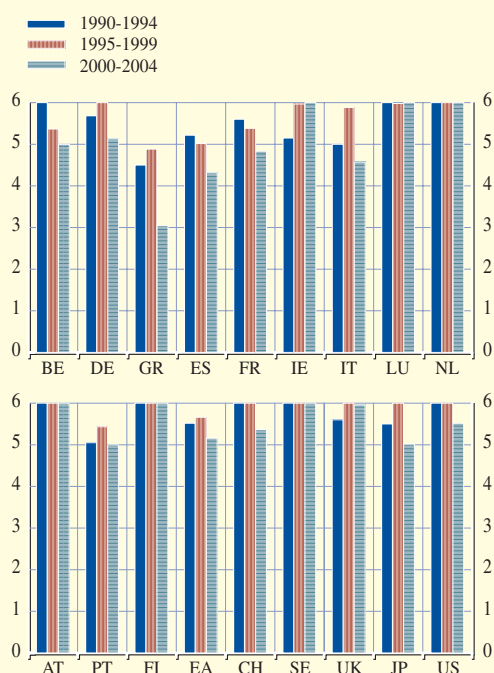
2) The underlying data were originally published by the OECD. However, this reproduction does not necessarily reflect the official views of the Organisation or of the governments of its member countries.

contracts are written and a well-functioning financial system must have an implicit or explicit mechanism to enforce them. The legal system, among other things, explicitly enforces financial contracts and thus contributes to the performance of financial systems.

It is extremely difficult to assess the many facets of a legal system in relation to the

<sup>12</sup> R. La Porta, F. López-de-Silanes, A. Shleifer and R. Vishny (2000), "Investor protection and corporate governance", *Journal of Financial Economics*, vol. 58, pp. 3-27.

Chart 6 Law and Order index



Source: International Country Risk Guide.

Notes: The index ranges from 0 to 6, with lower scores indicating weaker law and order. The law sub-component is an assessment of the strength and impartiality of the legal system, while the order sub-component is an assessment of popular observance of the law. Euro area figures are averages of euro area countries' scores.

financial system and many different measures of legal effectiveness are conceivable. Chart 6 presents one possible measure that is limited to the enforcement of law: the “Law and Order” index, which has been widely used in the law and finance literature (and elsewhere).<sup>13</sup> The index intends to capture the strength and impartiality of a legal system by considering issues such as the observance of the law, its strength and impartiality.<sup>14</sup>

Due to the limited scope of the index, its results must be interpreted very carefully. It does not for example consider a legal system's procedures and arrangements or its ability to foresee conflicts. According to the Law and Order index, all the countries considered here score highly. On average, the level of the Law

and Order index for the euro area is comparable to that for the United States or Japan.<sup>15</sup>

Chart 7 reports an indicator that measures another aspect of the efficiency of a legal system in reducing frictions impeding the flow of capital. It measures how many days it takes on average in a country to recoup a bounced cheque through the courts. A speedy resolution of financial conflict in courts reduces administrative costs and improves the functioning of a financial system.<sup>16</sup>

While the courts in most euro area countries allow a quick recovery of bounced cheques, it takes considerably longer to do so in Austria, Portugal and Italy.<sup>17</sup> It takes the least amount of time to resolve this particular type of financial conflict in the Netherlands and in Japan. The average time for the recovery of bounced cheques in the euro area is comparable to that in the United Kingdom and the United States.

13 The Law and Order index is part of the International Country Risk Guide (ICRG) published by the Project Risk Services group. The index has been used by R. La Porta, F. López-de-Silanes, A. Shleifer and R. Vishny (1998) in “Law and Finance”, *Journal of Political Economy*, 106, pp. 1113-1155. It is examined in the context of asset pricing by C. Erv, C. Harvey and T. Viskanta (1996) in “Political risk, economic risk and financial risk”, *Financial Analysts Journal*, 52, pp. 29-46. It is also used by the United Nations in its “Human Development Report”.

14 The index is the outcome of a subjective analysis by staff of Project Risk Services, a private sector company, based on questions such as: Are judges/magistrates appointed by qualification or by political affiliation/interest? How well paid are police and law enforcement officers relative to other professionals? Have higher courts ruled against government or against highly placed politicians or members of social/business elites?

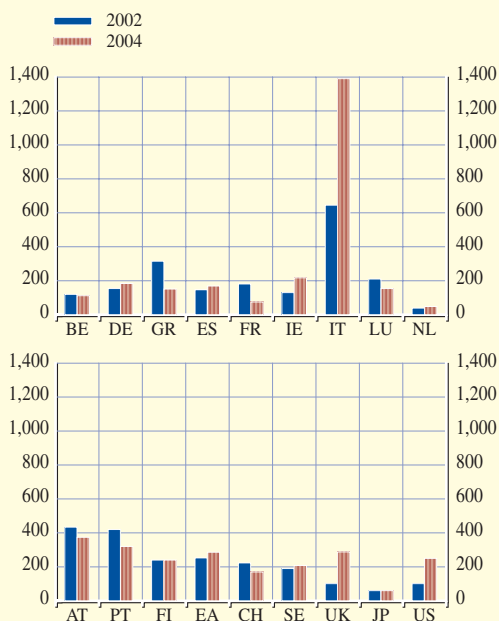
15 Although Greece obtains a somewhat lower score for the period 2000-04, its score jumped back up to 4.5 at the end of 2004.

16 S. Djankov, R. La Porta, F. López-de-Silanes and A. Shleifer (2003), “Courts: The Lex Mundi project”, *Quarterly Journal of Economics*, 118, pp. 453-517.

17 The 2004 data are not exactly comparable with the 2002 data (see the notes of Chart 7 for more details).

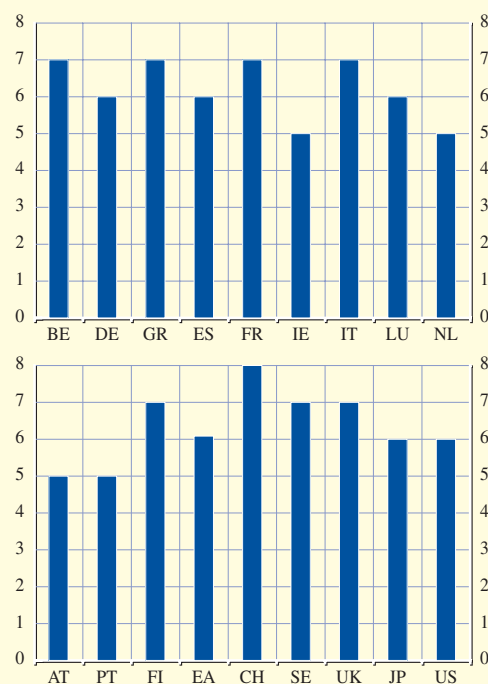
**Chart 7 Duration of enforcement**

(number of calendar days)



Sources: S. Djankov, R. La Porta, F. López-de-Silanes, A. Shleifer and R. Vishny (2003), "Courts: The Lex Mundi project", *Quarterly Journal of Economics*, and World Bank.  
Notes: Total number of calendar days needed to recoup a bounced cheque, i.e. between the moment of issuance of judgement and the moment the creditor obtains payment of a cheque. This is the sum of: (1) duration until completion of service of process; (2) duration of trial; and (3) duration of enforcement. Euro area figures are the average number of calendar days across euro area countries. 2004 data are not exactly comparable with 2002 data. The 2002 (2004) survey refers to a cheque worth the equivalent in local currency of 5% (200%) of GNP per capita of the respondent country. The 2004 survey also considers administrative procedures for the collection of overdue debt.

**Chart 8 Bank regulations supporting market discipline**



Source: 2004 World Bank survey conducted with national supervisory authorities.  
Notes: The index ranges from 0 to 8, with higher scores indicating easier private monitoring. Data relate to the status in 2003. The index combines information on the following categories: (1) external certified auditor required (yes=1, no=0); (2) explicit deposit insurance scheme (yes=1, no=0); (3) comprehensiveness of bank accounting (sum of the values (yes=1, no=0) assigned to: (a) income statement containing accrued but unpaid interest/principal while loan is non-performing; (b) consolidated accounts covering bank and any non-bank financial subsidiaries required; and (c) directors legally liable for erroneous/misleading information); (4) off-balance-sheet items disclosed to public (yes=1, no=0); (5) banks disclose risk management procedures to the public (yes=1, no=0); and (6) subordinated debt allowable (required as part of capital (yes=1, no=0)). Euro area figures are averages of euro area countries' scores.

### 3.6 REGULATION, SUPERVISION AND FINANCIAL STABILITY

It is widely recognised that the financial sector is "special" compared with many other sectors of the economy. First, it faces a greater risk of instability, both at the level of individual financial intermediaries and markets and at the level of the overall financial system. In particular, systemic financial crises can have large adverse effects on growth. Second, many households using retail financial services may lack financial knowledge and the ability to

collect information about the nature and risks of various financial contracts and about the viability of financial intermediaries to whom they entrust their savings. For these reasons, financial sectors tend to be subjected to more regulation and supervision than most other sectors. This regulation and supervision aims to stabilise financial intermediaries and financial systems as well as to protect consumers. In pursuing financial stability and consumer protection, efficiency can however sometimes suffer, for example when regulations inadvertently deter efforts

to innovate, lead to adverse risk-shifting incentives or impose excessive administrative costs on financial intermediaries. This is one reason why recent regulatory efforts place increasing importance on accurately assessing risks and on the role of market discipline.<sup>18</sup>

Chart 8 therefore presents a measure that relies on potential complementarities between regulation and private market monitoring. It aggregates formal regulations that ease the private monitoring of banks, in particular by wholesale investors, e.g. accounting and audit requirements. Stronger incentives for private monitoring in turn have been shown to lower net interest margins and to reduce the proportion of non-performing loans.<sup>19</sup>

According to the index, there is a relatively broad scope for market discipline in all the countries covered. Switzerland has a regulatory environment that is most conducive to private monitoring. On average, the extent of these regulations in the euro area is comparable to the United States and Japan, while it is slightly smaller than in the United Kingdom and Sweden.

### 3.7 COMPETITION, OPENNESS AND FINANCIAL INTEGRATION

More competition among suppliers of capital in a financial system reduces frictions. It eliminates inefficient suppliers, frees up resources that are captured through market power and ensures value maximisation as a means of survival. Less restrictions, openness and integration in turn support competition by easing the exchange of goods and services and allowing easier entry of competitors.<sup>20</sup>

However, with respect to banking, the overall effect of competition on growth is theoretically ambiguous. More competition could force banks to lower lending rates and increase the provision of credit. But it could also reduce incentives to acquire information about borrowers and to monitor them, leading to

poorer loan quality and a higher cost of capital.<sup>21</sup> Similarly, restrictions on bank activities could, on the one hand, make banks more transparent, and thus easier to monitor, and limit their degree of market power. On the other hand, restrictions could prevent banks from exploiting economies of scale and limit their franchise value, thereby reducing their incentives for sound and prudent behaviour.

Chart 9 shows whether banks are allowed to undertake fee-based activities, e.g. the underwriting and selling of securities and insurance, in addition to deposit-taking and lending.<sup>22</sup>

Most European banks, except French and Irish banks, were previously unrestricted in their activities, but are now not allowed to undertake the full range of activities.<sup>23</sup> In Luxembourg and Finland, banks remain unrestricted in their activities. In contrast, US and Japanese banks were strongly regulated, but recently saw a loosening of the restrictions across both securities and insurance businesses.

18 See, for example, the provisions in pillar 3 of the new framework of the Basel Committee on Banking Supervision ("Basel II: International Convergence of Capital Measurement and Capital Standards: A Revised Framework", June 2004).

19 See J. Barth, G. Caprio and R. Levine (2004), "Bank regulation and supervision: What works best?", *Journal of Financial Intermediation*, 13, pp. 205-248.

20 See, for instance, London Economics (2002), "Quantification of the macroeconomic impact of integration of EU financial markets", a study commissioned by the European Commission on the economic benefits of financial integration, which is available on the Commission's website. Moreover, M. Giannetti, L. Guiso, T. Jappelli, M. Padula and M. Pagano (2002), "Financial markets, corporate financing and growth", DG ECFIN Economic Paper No 179, argue that integration and openness support domestic financial development through external competitive pressures.

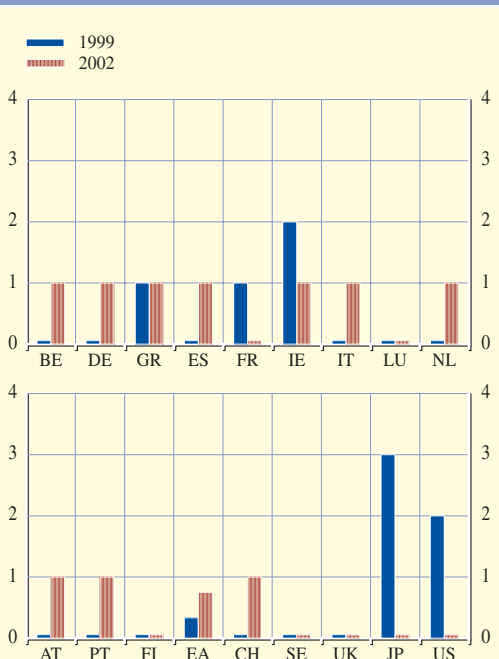
21 In practice, however, the benefits of banking competition appear to outweigh its costs. See S. Claessens and L. Laeven (2005), "Financial sector competition, financial dependence and growth", *Journal of the European Economic Association*, 3, pp. 179-207.

22 The measure has been used for example by J. Barth, G. Caprio and R. Levine (2004), *op. cit.*

23 Restrictions have been tightened in particular for banks' insurance business.



**Chart 9 Bank activity restrictions**



Sources: 2001 and 2003 editions of the World Bank's Bank Regulation and Supervision Database and ECB calculations.  
 Notes: The index ranges from 0 to 4, with a lower score indicating fewer restrictions. It is the sum of the scores in two categories, insurance and securities. The range in each category is as follows: 0 = unrestricted, the full range of activities can be conducted or but some or all must be conducted in subsidiaries; 1 = restricted, less than the full range of activities can be conducted in the bank or subsidiaries; 2 = prohibited, the activity cannot be conducted in either the bank or subsidiaries. Euro area figures are averages of euro area countries' scores.

### 3.8 ECONOMIC FREEDOM, AND POLITICAL AND SOCIO-ECONOMIC FACTORS

The functions of a financial system centre on the provision of information, the enforcement of contracts and the facilitation of transactions. These functions are affected by political and socio-economic factors in addition to the more tangible forces presented so far. This last subsection therefore briefly mentions some issues that are harder to measure but nevertheless are important for a broad discussion of the performance of financial systems.

Not only the legal system but also the general institutional environment partly determines the functioning of a financial

system.<sup>24</sup> Governance structures that mitigate the control problem between financial investors and managers are, for example, embedded in traditions, social norms, religion and politics. A manager's sense of duty towards outside investors will ease the conflict of interest between him and his investors even when there are few formal governance arrangements. The idea is that explicit contracts can neither anticipate nor include all possible contingencies, nor can they be perfectly enforced under all circumstances. All economic exchange depends to some extent on trust and fairness, and on what is perceived as "fair", which are all shaped by socio-economic and ethical factors. It has been shown that social capital, measured either using surveys on how people trust each other or using a metric of civic engagement such as voter turnout at local elections, matters in a financial system, e.g. it can affect access to credit.<sup>25</sup> Similarly, politics shape the laws governing creditor and shareholder protection and partly determine the protection of private property rights vis-à-vis the rights of the State. Economic freedom captures the notion that fewer administrative burdens on economic activity, e.g. less red tape, mean less frictions in the flow of capital.

## 4 CONCLUSION

This article presents a framework for assessing the performance of financial systems. The approach taken is a functional one, i.e. a financial system is viewed as performing a number of functions to overcome market imperfections. The article shows how the functional framework translates into a number of groups of financial system characteristics that can be used to structure the assessment of performance. The quality of the financial system's performance of its functions can then

24 O. Williamson (2000), "The New Institutional Economics: Taking Stock, Looking Ahead", *American Economic Review*, vol. 38, pp. 595-613.

25 See for example L. Guiso, P. Sapienza and L. Zingales (2004), "The role of social capital in financial development", *American Economic Review*, 94, pp. 526-56.

be evaluated with a set of economic indicators under each group. The framework and the choice of indicators are particularly geared towards an assessment of industrialised countries with relatively developed financial systems.

To illustrate the approach, the article applies a selection of these indicators to euro area countries, to the euro area aggregate and to a reference group of non-euro area countries. Some are updates of indicators used previously in the finance and growth literature and others are new. A number of preliminary conclusions emerge from them. First, there is in general a fair amount of heterogeneity in financial system performance across euro area countries. Second, performance, as measured by the indicators displayed, can vary a lot across functions and dimensions. Some systems that score highly in one dimension may not necessarily do so in another. Looking at the whole sample of countries, it is noteworthy that the financial system in the United Kingdom, and to a lesser extent that in the United States, stand out somewhat in that they perform well across most of the indicators presented here.

Although a number of caveats need to be kept in mind, the differences in financial system performance identified in this article seem to suggest that there is further scope for structural reforms of financial sectors in the euro area. The efficiency gains that can be expected from such reforms would also benefit the ECB as they would support the smooth implementation and transmission of monetary policy through euro area financial markets.



# EURO AREA STATISTICS





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1) For further information, please contact us at: [statistics@ecb.int](mailto:statistics@ecb.int). See the ECB's website ([www.ecb.int](http://www.ecb.int)) for longer runs and more detailed data.

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#### Conventions used in the tables

“-”	data do not exist/data are not applicable
“.”	data are not yet available
“..”	nil or negligible
“billion”	10 <sup>9</sup>
(p)	provisional
s.a.	seasonally adjusted
n.s.a.	non-seasonally adjusted



# EURO AREA OVERVIEW

Summary of economic indicators for the euro area  
(annual percentage changes, unless otherwise indicated)

## 1. Monetary developments and interest rates

	M1 <sup>1)</sup>	M2 <sup>1)</sup>	M3 <sup>1),2)</sup>	M3 <sup>1),2)</sup> 3-month moving average (centred)	MFI loans to euro area residents excluding MFIs and general government <sup>1)</sup>	Securities other than shares issued in euro by non- financial and non- monetary financial corporations <sup>1)</sup>	3-month interest rate (EURIBOR, % per annum, period averages)	10-year government bond yield (% per annum, period averages)
	1	2	3	4	5	6	7	8
2003	10.9	8.0	8.1	-	4.9	19.2	2.33	4.16
2004	10.0	6.3	5.8	-	6.1	9.9	2.11	4.14
2004 Q4	9.3	6.4	6.1	-	6.9	7.7	2.16	3.84
2005 Q1	9.6	7.1	6.7	-	7.3	9.0	2.14	3.67
Q2	9.8	7.5	7.1	-	7.5	13.2	2.12	3.41
Q3	.	.	.	-	.	.	2.13	3.26
2005 Apr.	9.2	7.4	6.8	6.9	7.4	12.8	2.14	3.57
May	10.1	7.6	7.3	7.2	7.5	14.0	2.13	3.41
June	10.9	8.1	7.6	7.6	8.0	13.9	2.11	3.25
July	11.1	8.3	7.9	7.9	8.3	12.7	2.12	3.32
Aug.	11.5	8.5	8.1	.	8.4	.	2.13	3.32
Sep.	.	.	.	.	.	.	2.14	3.16

## 2. Prices, output, demand and labour markets

	HICP	Industrial producer prices	Hourly labour costs	Real GDP	Industrial production excluding construction	Capacity utilisation in manufacturing (percentages)	Employment	Unemployment (% of labour force)
	1	2	3	4	5	6	7	8
2003	2.1	1.4	3.1	0.7	0.3	81.0	0.3	8.7
2004	2.1	2.3	2.5	2.1	2.0	81.6	0.6	8.9
2004 Q4	2.3	3.8	2.3	1.5	1.1	82.0	0.8	8.8
2005 Q1	2.0	4.1	3.0	1.3	0.8	81.5	0.8	8.8
Q2	2.0	3.9	2.3	1.1	0.6	81.1	0.7	8.7
Q3	.	.	.	.	.	.	.	.
2005 Apr.	2.1	4.3	-	-	1.2	81.1	-	8.8
May	2.0	3.5	-	-	0.0	-	-	8.7
June	2.1	4.0	-	-	0.5	-	-	8.6
July	2.2	4.1	-	-	0.6	81.2	-	8.5
Aug.	2.2	4.0	-	-	-	-	-	8.6
Sep.	2.5	.	-	-	.	-	-	.

## 3. Balance of payments, reserve assets and exchange rates

(EUR billions, unless otherwise indicated)

	Balance of payments (net transactions)				Reserve assets (end-of-period positions)	Effective exchange rate of the euro: EER-23 <sup>3)</sup> (index, 1999 Q1 = 100)		USD/EUR exchange rate
	Current and capital accounts	Goods	Direct investment	Portfolio investment		Nominal	Real (CPI)	
2003	33.5	102.7	5.4	43.4	306.5	99.9	101.7	1.1312
2004	64.2	102.7	-78.1	72.8	280.6	103.8	105.8	1.2439
2004 Q4	21.7	20.1	-44.1	27.3	280.6	105.7	107.7	1.2977
2005 Q1	2.0	14.5	-24.1	2.6	284.9	105.7	107.8	1.3113
Q2	-9.7	19.8	-11.5	114.3	302.2	103.4	105.6	1.2594
Q3	.	.	.	.	.	101.9	104.1	1.2199
2005 Apr.	-9.8	4.2	-4.8	-11.0	288.9	105.1	107.2	1.2938
May	-1.3	6.9	3.3	22.7	291.7	104.0	106.2	1.2694
June	1.4	8.6	-9.9	102.6	302.2	101.2	103.5	1.2165
July	1.0	9.1	-80.1	73.7	296.2	101.7	103.8	1.2037
Aug.	.	.	.	.	295.6	102.3	104.5	1.2292
Sep.	.	.	.	.	.	101.8	104.0	1.2256

Sources: ECB, European Commission (Eurostat and Economic and Financial Affairs DG) and Reuters.

Note: For more information on the data, see the relevant tables later in this section.

- Annual percentage changes of monthly data refer to the end of the month, whereas those of quarterly and yearly data refer to the annual change in the period average of the series. See the technical notes for details.
- M3 and its components exclude holdings by non-euro area residents of money market fund shares/units and debt securities with a maturity of up to two years.
- For the definition of the trading partner groups and other information, please refer to the General notes.





# MONETARY POLICY STATISTICS

## 1.1 Consolidated financial statement of the Eurosystem (EUR millions)

### 1. Assets

	2005 9 Sep.	2005 16 Sep.	2005 23 Sep.	2005 30 Sep.
<b>Gold and gold receivables</b>	137,829	137,772	137,772	149,882
<b>Claims on non-euro area residents in foreign currency</b>	158,074	159,398	160,666	160,042
<b>Claims on euro area residents in foreign currency</b>	21,884	20,961	21,230	21,950
<b>Claims on non-euro area residents in euro</b>	8,995	9,222	9,059	8,969
<b>Lending to euro area credit institutions in euro</b>	384,509	369,502	377,550	384,014
Main refinancing operations	294,499	279,501	287,499	293,500
Longer-term refinancing operations	89,999	89,999	89,999	89,999
Fine-tuning reverse operations	0	0	0	0
Structural reverse operations	0	0	0	0
Marginal lending facility	3	1	6	512
Credits related to margin calls	8	1	46	3
<b>Other claims on euro area credit institutions in euro</b>	3,386	3,598	3,592	3,392
<b>Securities of euro area residents in euro</b>	89,933	89,589	90,077	90,850
<b>General government debt in euro</b>	40,750	40,750	40,750	40,723
<b>Other assets</b>	133,622	133,457	133,484	136,222
<b>Total assets</b>	978,982	964,249	974,180	996,044

### 2. Liabilities

	2005 9 Sep.	2005 16 Sep.	2005 23 Sep.	2005 30 Sep.
<b>Banknotes in circulation</b>	531,994	530,439	528,903	533,209
<b>Liabilities to euro area credit institutions in euro</b>	151,508	151,431	148,119	145,175
Current accounts (covering the minimum reserve system)	151,495	151,409	148,098	145,104
Deposit facility	10	20	16	71
Fixed-term deposits	0	0	0	0
Fine-tuning reverse operations	0	0	0	0
Deposits related to margin calls	3	2	5	0
<b>Other liabilities to euro area credit institutions in euro</b>	127	127	127	127
<b>Debt certificates issued</b>	0	0	0	0
<b>Liabilities to other euro area residents in euro</b>	61,500	47,002	60,248	65,427
<b>Liabilities to non-euro area residents in euro</b>	10,685	10,568	10,333	11,057
<b>Liabilities to euro area residents in foreign currency</b>	205	267	293	246
<b>Liabilities to non-euro area residents in foreign currency</b>	7,208	7,708	9,535	10,430
<b>Counterpart of special drawing rights allocated by the IMF</b>	5,896	5,896	5,896	5,885
<b>Other liabilities</b>	59,163	60,115	60,030	62,336
<b>Revaluation accounts</b>	92,292	92,292	92,292	103,749
<b>Capital and reserves</b>	58,404	58,404	58,404	58,403
<b>Total liabilities</b>	978,982	964,249	974,180	996,044

Source: ECB.

## 1.2 Key ECB interest rates

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

With effect from <sup>1)</sup>	Deposit facility		Main refinancing operations			Marginal lending facility	
	Level	Change	Fixed rate tenders	Variable rate tenders		Level	Change
			Fixed rate	Minimum bid rate			
	1	2	3	4	5	6	7
1999 1 Jan.	2.00	-	3.00	-	-	4.50	-
4 <sup>2)</sup>	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 <sup>3)</sup>	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
2001 11 May	3.50	-0.25	-	4.50	-0.25	5.50	-0.25
31 Aug.	3.25	-0.25	-	4.25	-0.25	5.25	-0.25
18 Sep.	2.75	-0.50	-	3.75	-0.50	4.75	-0.50
9 Nov.	2.25	-0.50	-	3.25	-0.50	4.25	-0.50
2002 6 Dec.	1.75	-0.50	-	2.75	-0.50	3.75	-0.50
2003 7 Mar.	1.50	-0.25	-	2.50	-0.25	3.50	-0.25
6 June	1.00	-0.50	-	2.00	-0.50	3.00	-0.50

Source: ECB.

- 1) From 1 January 1999 to 9 March 2004, the date refers to the deposit and marginal lending facilities. For main refinancing operations, changes in the rate are effective from the first operation following the date indicated. The change on 18 September 2001 was effective on that same day. From 10 March 2004 onwards, the date refers to the deposit and marginal lending facilities and to the main refinancing operations (changes effective from the first main refinancing operation following the Governing Council discussion), unless otherwise 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 monetary 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.

### 1.3 Eurosystem monetary policy operations allotted through tenders <sup>1), 2)</sup>

(EUR millions; interest rates in percentages per annum)

#### 1. Main and longer-term refinancing operations <sup>3)</sup>

Date of settlement	Bids (amount)	Number of participants	Allotment (amount)	Variable rate tenders			Running for (...) days
				Minimum bid rate	Marginal rate <sup>4)</sup>	Weighted average rate	
	1	2	3	4	5	6	7
<b>Main refinancing operations</b>							
2005 8 June	365,346	316	279,000	2.00	2.05	2.05	7
15	372,104	340	283,500	2.00	2.05	2.05	7
22	378,472	364	310,000	2.00	2.05	2.05	7
29	353,941	343	308,000	2.00	2.05	2.06	7
6 July	389,743	336	307,500	2.00	2.05	2.05	7
13	388,642	334	298,500	2.00	2.05	2.05	7
20	406,178	355	308,500	2.00	2.05	2.05	7
27	391,489	357	317,000	2.00	2.05	2.06	7
3 Aug.	414,656	336	314,000	2.00	2.05	2.06	7
10	432,277	345	308,000	2.00	2.05	2.05	7
17	445,746	354	303,000	2.00	2.05	2.06	7
24	474,374	367	310,000	2.00	2.05	2.06	7
31	433,707	339	293,000	2.00	2.05	2.06	7
7 Sep.	447,874	332	294,500	2.00	2.05	2.06	7
14	435,111	356	279,500	2.00	2.06	2.06	7
21	396,280	402	287,500	2.00	2.06	2.06	7
28	364,417	361	293,500	2.00	2.06	2.07	7
5 Oct.	382,662	348	288,000	2.00	2.06	2.07	7
<b>Longer-term refinancing operations</b>							
2004 30 Sep.	37,414	138	25,000	-	2.06	2.08	84
28 Oct.	46,646	187	25,000	-	2.10	2.11	91
25 Nov.	51,095	174	25,000	-	2.13	2.14	91
23 Dec.	34,466	155	25,000	-	2.12	2.14	98
2005 27 Jan.	58,133	164	30,000	-	2.09	2.10	91
24 Feb.	40,340	145	30,000	-	2.08	2.09	91
31 Mar.	38,462	148	30,000	-	2.09	2.10	91
28 Apr.	47,958	148	30,000	-	2.08	2.09	91
26 May	48,282	140	30,000	-	2.08	2.08	98
30 June	47,181	141	30,000	-	2.06	2.07	91
28 July	46,758	166	30,000	-	2.07	2.08	92
1 Sep.	62,563	153	30,000	-	2.08	2.09	91
29	52,795	142	30,000	-	2.09	2.10	84

#### 2. Other tender operations

Date of settlement	Type of operation	Bids (amount)	Number of participants	Allotment (amount)	Fixed rate tenders	Variable rate tenders			Running for (...) days
					Fixed rate	Minimum bid rate	Marginal rate <sup>4)</sup>	Weighted average rate	
	1	2	3	4	5	6	7	8	9
2001 13 Sep.	Reverse transaction	40,495	45	40,495	4.25	-	-	-	1
28 Nov.	Reverse transaction	73,096	166	53,000	-	3.25	3.28	3.29	7
2002 4 Jan.	Reverse transaction	57,644	61	25,000	-	3.25	3.30	3.32	3
10	Reverse transaction	59,377	63	40,000	-	3.25	3.28	3.30	1
18 Dec.	Reverse transaction	28,480	50	10,000	-	2.75	2.80	2.82	6
2003 23 May	Collection of fixed-term deposits	3,850	12	3,850	2.50	-	-	-	3
2004 11 May	Collection of fixed-term deposits	16,200	24	13,000	2.00	-	-	-	1
8 Nov.	Reverse transaction	33,175	42	6,500	-	2.00	2.06	2.07	1
7 Dec.	Collection of fixed-term deposits	18,185	16	15,000	2.00	-	-	-	1
2005 18 Jan.	Reverse transaction	33,065	28	8,000	-	2.00	2.05	2.05	1
7 Feb.	Reverse transaction	17,715	24	2,500	-	2.00	2.05	2.05	1
8 Mar.	Collection of fixed-term deposits	4,300	5	3,500	2.00	-	-	-	1
7 June	Collection of fixed-term deposits	3,708	6	3,708	2.00	-	-	-	1
12 July	Collection of fixed-term deposits	9,605	11	9,605	2.00	-	-	-	1
9 Aug.	Collection of fixed-term deposits	500	1	500	2.00	-	-	-	1
6 Sep.	Reverse transaction	51,060	41	9,500	-	2.00	2.09	2.10	1

Source: ECB.

1) The amounts shown may differ slightly from those in Section 1.1 due to operations allotted but not settled.

2) With effect from April 2002, split tender operations, i.e. operations with one-week maturity conducted as standard tenders in parallel with a main refinancing operation, are classified as main refinancing operations. For split tender operations conducted before this month, see Table 2 in Section 1.3.

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.

4) In liquidity-providing (absorbing) operations, the marginal rate refers to the lowest (highest) rate at which bids were accepted.

### 1.4 Minimum reserve and liquidity statistics

(EUR billions; period averages of daily positions, unless otherwise indicated; interest rates as percentages per annum)

#### 1. Reserve base of credit institutions subject to reserve requirements

Reserve base as at <sup>1)</sup> :	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	Deposits (over 2 years' agreed maturity and notice period)	Repos	Debt securities over 2 years' agreed maturity
	1	2	3	4	5	6
2003	11,538.7	6,283.8	412.9	1,459.1	759.5	2,623.5
2004	12,415.9	6,593.7	458.1	1,565.2	913.7	2,885.3
2005 Q1	12,866.9	6,783.2	472.3	1,599.3	1,010.8	3,001.1
2005 Apr.	13,081.7	6,888.4	496.7	1,607.3	1,067.3	3,022.1
May	13,224.8	6,988.9	494.8	1,616.4	1,069.5	3,055.3
June	13,328.1	7,021.1	488.2	1,676.0	1,027.9	3,114.9
July	13,431.5	7,064.6	496.2	1,682.8	1,068.0	3,119.9

#### 2. Reserve maintenance

Maintenance period ending on:	Required reserves	Credit institutions current accounts	Excess reserves	Deficiencies	Interest rate on minimum reserves
	1	2	3	4	5
2003	131.8	132.6	0.8	0.0	2.00
2004	137.9	138.5	0.6	0.0	2.05
2005 Q1	140.5	141.3	0.8	0.0	2.05
Q2	144.6	145.5	0.9	0.0	2.05
2005 12 July	147.2	147.9	0.7	0.0	2.05
9 Aug.	149.2	149.8	0.6	0.0	2.05
6 Sep.	149.7	150.2	0.6	0.0	2.05
11 Oct.	150.7	.	.	.	.

#### 3. Liquidity

Maintenance period ending on:	Liquidity-providing factors					Liquidity-absorbing factors					Credit institutions current accounts	Base money
	Monetary policy operations of the Eurosystem					Banknotes in circulation	Central government deposits with the Eurosystem	Other factors (net)				
	Eurosystem's net assets in gold and foreign currency	Main refinancing operations	Longer-term refinancing operations	Marginal lending facility	Other liquidity-providing operations				Deposit facility	Other liquidity-absorbing operations		
	1	2	3	4	5	6	7	8	9	10	11	12
2003	320.1	235.5	45.0	0.6	0.0	0.1	0.0	416.1	57.0	-4.5	132.6	548.7
2004	298.0	265.7	75.0	0.1	0.0	0.1	0.5	475.4	60.2	-36.0	138.5	614.1
2005 Q1	280.2	277.8	82.2	0.1	0.0	0.1	0.1	489.5	68.5	-59.2	141.3	630.9
2005 12 Apr.	282.1	278.2	86.9	0.2	0.0	0.1	0.0	498.6	67.4	-62.1	143.3	642.0
10 May	287.0	276.5	90.0	0.1	0.0	0.1	0.0	505.5	62.9	-58.9	144.0	649.7
7 June	286.8	273.1	90.0	0.1	0.0	0.2	0.1	512.8	53.5	-62.0	145.5	658.5
12 July	293.3	297.6	90.0	0.1	0.0	0.2	0.3	522.6	67.4	-57.3	147.9	670.6
9 Aug.	305.5	309.5	90.0	0.0	0.0	0.3	0.0	532.6	67.4	-45.0	149.8	682.7
6 Sep.	304.8	303.5	90.0	0.0	0.3	0.1	0.0	531.5	63.1	-46.2	150.2	681.8

Source: ECB.

1) End of period.



## MONEY, BANKING AND INVESTMENT FUNDS

### 2.1 Aggregated balance sheet of euro area MFIs

(EUR billions; outstanding amounts at end of period)

#### 1. Assets

	Total	Loans to euro area residents			Holdings of securities other than shares issued by euro area residents				Money market fund shares/units <sup>1)</sup>	Holdings of shares/other equity issued by euro area residents	External assets	Fixed assets	Remaining assets	
		Total	General government	Other euro area residents	MFIs	Total	General government	Other euro area residents						MFIs
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Eurosysteem														
2003	1,086.8	471.3	22.6	0.6	448.0	133.6	121.5	1.3	10.8	-	12.8	317.9	12.4	138.8
2004	1,197.3	546.5	21.5	0.6	524.3	154.8	140.0	1.7	13.1	-	14.2	291.6	14.0	176.2
2005 Q1	1,274.5	599.9	21.5	0.6	577.8	167.8	151.9	1.6	14.4	-	14.0	296.6	12.5	183.7
2005 Apr.	1,286.4	602.9	21.5	0.6	580.8	169.3	153.1	1.6	14.7	-	13.7	300.8	13.1	186.7
May	1,275.5	581.0	21.5	0.6	558.9	173.6	156.3	1.8	15.4	-	13.9	304.1	13.1	189.8
June	1,353.6	638.4	21.2	0.6	616.6	176.9	158.8	2.0	16.1	-	14.1	315.2	13.3	195.8
July	1,353.4	642.4	21.2	0.6	620.6	176.8	159.6	1.8	15.5	-	14.4	309.2	13.3	197.2
Aug. <sup>(p)</sup>	1,327.8	610.7	21.2	0.6	588.9	180.6	162.8	1.9	15.9	-	14.4	309.5	13.3	199.3
MFIs excluding the Eurosysteem														
2003	19,795.4	12,113.1	817.5	7,101.8	4,193.9	2,944.0	1,242.6	427.7	1,273.6	67.3	894.9	2,567.8	161.8	1,046.4
2004	21,351.8	12,826.4	812.5	7,556.1	4,457.8	3,187.7	1,299.9	465.2	1,422.6	72.5	942.9	2,942.8	159.6	1,219.8
2005 Q1	22,027.0	13,051.3	806.6	7,669.3	4,575.4	3,295.2	1,358.5	481.2	1,455.5	73.1	970.5	3,182.3	156.5	1,298.3
2005 Apr.	22,483.9	13,229.4	811.3	7,720.1	4,698.0	3,340.8	1,372.3	491.8	1,476.7	76.3	1,043.4	3,297.3	156.5	1,340.2
May	22,700.7	13,327.6	809.2	7,784.2	4,734.1	3,343.3	1,369.2	497.3	1,476.7	75.7	1,045.8	3,352.6	157.1	1,398.7
June	22,772.4	13,249.3	808.4	7,917.6	4,523.3	3,390.0	1,382.5	506.4	1,501.1	75.3	1,000.7	3,398.3	163.5	1,495.3
July	22,863.2	13,322.0	808.8	7,975.0	4,538.1	3,393.9	1,378.3	504.8	1,510.8	75.0	999.8	3,443.7	164.5	1,464.3
Aug. <sup>(p)</sup>	22,813.3	13,302.8	810.0	7,980.4	4,512.4	3,382.7	1,370.4	503.2	1,509.1	80.6	998.9	3,429.1	164.6	1,454.6

#### 2. Liabilities

	Total	Currency in circulation	Deposits of euro area residents			Money market fund shares/units <sup>2)</sup>	Debt securities issued <sup>3)</sup>	Capital and reserves	External liabilities	Remaining liabilities	
			Total	Central government	Other general government/other euro area residents						MFIs
	1	2	3	4	5	6	7	8	9	10	11
Eurosysteem											
2003	1,086.8	450.5	324.0	21.3	16.9	285.8	-	1.6	143.8	27.5	139.4
2004	1,197.3	517.3	346.6	24.7	15.0	306.8	-	0.5	138.4	27.2	167.4
2005 Q1	1,274.5	516.4	411.5	61.1	17.6	332.7	-	0.5	149.9	24.9	171.3
2005 Apr.	1,286.4	523.3	410.6	59.3	15.8	335.5	-	0.5	152.5	26.0	173.5
May	1,275.5	529.0	386.0	46.3	17.2	322.5	-	0.5	160.0	24.7	175.2
June	1,353.6	540.8	433.6	76.4	18.7	338.5	-	0.6	173.6	24.4	180.5
July	1,353.4	550.6	426.2	68.5	13.8	344.0	-	0.6	170.0	23.9	182.0
Aug. <sup>(p)</sup>	1,327.8	544.4	402.6	56.6	13.4	332.6	-	0.6	171.6	25.2	183.5
MFIs excluding the Eurosysteem											
2003	19,795.4	0.0	10,774.8	134.4	6,275.5	4,364.9	648.8	3,161.4	1,145.0	2,606.4	1,458.9
2004	21,351.8	0.0	11,487.5	137.7	6,640.9	4,709.0	677.4	3,496.9	1,199.5	2,815.0	1,675.6
2005 Q1	22,027.0	0.0	11,653.8	126.3	6,706.7	4,820.7	687.7	3,614.8	1,213.5	3,085.5	1,771.7
2005 Apr.	22,483.9	0.0	11,840.1	121.6	6,759.7	4,958.8	704.1	3,667.7	1,227.8	3,198.7	1,845.5
May	22,700.7	0.0	11,893.7	127.2	6,808.0	4,958.5	710.5	3,695.4	1,236.3	3,285.5	1,879.3
June	22,772.4	0.0	11,844.1	134.4	6,921.4	4,788.3	696.4	3,762.4	1,266.1	3,226.9	1,976.6
July	22,863.2	0.0	11,891.2	143.5	6,949.5	4,798.2	710.1	3,775.4	1,276.2	3,263.0	1,947.3
Aug. <sup>(p)</sup>	22,813.3	0.0	11,811.7	111.3	6,928.1	4,772.3	719.4	3,786.1	1,281.3	3,253.1	1,961.6

Source: ECB.

- 1) Amounts issued by euro area residents. Amounts issued by non-euro area residents are included in external assets.
- 2) Amounts held by euro area residents.
- 3) Amounts issued with maturity up to two years held by non-euro area residents are included in external liabilities.

## 2.2 Consolidated balance sheet of euro area MFIs

(EUR billions; outstanding amounts at end of period; transactions during period)

### 1. Assets

	Total	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	Fixed assets	Remaining assets
		Total	General government	Other euro area residents	Total	General government	Other euro area residents				
	1	2	3	4	5	6	7	8	9	10	11
Outstanding amounts											
2003	14,551.8	7,942.6	840.1	7,102.5	1,793.1	1,364.1	429.0	623.6	2,885.7	174.2	1,132.6
2004	15,719.1	8,390.7	834.0	7,556.8	1,906.8	1,439.9	466.9	666.2	3,234.5	173.6	1,347.2
2005 Q1	16,260.4	8,498.1	828.1	7,669.9	1,993.2	1,510.4	482.8	683.9	3,478.9	169.0	1,437.3
2005 Apr.	16,564.9	8,553.5	832.8	7,720.7	2,018.8	1,525.4	493.4	740.4	3,598.0	169.6	1,484.7
May	16,751.9	8,615.5	830.7	7,784.9	2,024.7	1,525.6	499.1	739.4	3,656.7	170.3	1,545.3
June	17,050.1	8,747.7	829.5	7,918.2	2,049.7	1,541.4	508.3	715.6	3,713.4	176.8	1,646.8
July	17,104.8	8,805.6	830.0	7,975.6	2,044.3	1,537.8	506.5	706.7	3,752.9	177.8	1,617.4
Aug. <sup>(p)</sup>	17,082.5	8,812.1	831.2	7,981.0	2,038.3	1,533.1	505.2	705.2	3,738.5	177.9	1,610.5
Transactions											
2003	766.6	384.3	12.1	372.2	170.4	116.3	54.1	19.3	224.8	-3.6	-28.6
2004	1,267.8	500.7	-5.9	506.6	91.9	58.1	33.8	34.6	435.0	2.7	202.8
2005 Q1	449.0	106.8	-6.6	113.4	82.5	66.1	16.4	15.7	185.3	-4.1	62.8
2005 Apr.	289.8	55.4	4.6	50.8	21.6	11.9	9.7	58.2	109.5	0.1	45.0
May	106.0	56.8	-2.4	59.2	0.8	-3.9	4.7	-4.1	-6.6	0.7	58.5
June	141.6	88.6	-1.4	90.0	15.3	6.5	8.8	-26.9	17.4	0.5	46.7
July	69.3	61.0	0.5	60.5	-3.0	-0.6	-2.4	-9.8	50.5	1.0	-30.5
Aug. <sup>(p)</sup>	-17.0	7.8	1.2	6.6	-8.3	-6.3	-2.1	-0.9	-8.0	0.1	-7.7

### 2. Liabilities

	Total	Currency in circulation	Deposits of central government	Deposits of other general government/ other euro area residents	Money market fund shares/ units <sup>1)</sup>	Debt securities issued <sup>2)</sup>	Capital and reserves	External liabilities	Remaining liabilities	Excess of inter-MFI liabilities
Outstanding amounts										
2003	14,551.8	397.9	155.7	6,292.3	581.5	1,878.5	1,004.7	2,634.0	1,598.3	8.9
2004	15,719.1	468.4	162.4	6,655.9	604.9	2,061.7	1,047.0	2,842.2	1,842.9	33.6
2005 Q1	16,260.4	471.8	187.4	6,724.4	614.6	2,145.5	1,062.9	3,110.4	1,943.0	0.4
2005 Apr.	16,564.9	481.1	180.9	6,775.5	627.8	2,176.8	1,063.5	3,224.7	2,019.1	15.5
May	16,751.9	485.8	173.5	6,825.2	634.8	2,203.7	1,076.1	3,310.2	2,054.5	-12.0
June	17,050.1	496.6	210.8	6,940.1	621.1	2,245.8	1,140.5	3,251.3	2,157.1	-13.2
July	17,104.8	506.4	212.0	6,963.3	635.1	2,249.6	1,138.7	3,286.9	2,129.3	-16.6
Aug. <sup>(p)</sup>	17,082.5	500.9	168.0	6,941.5	638.8	2,261.7	1,144.7	3,278.3	2,145.1	3.5
Transactions										
2003	766.6	79.0	15.1	313.7	56.7	133.5	39.0	130.8	-60.8	59.8
2004	1,267.8	70.5	6.1	377.4	22.3	197.1	50.4	276.8	229.3	37.7
2005 Q1	449.0	3.4	25.0	57.8	9.9	65.3	13.1	211.9	107.2	-44.4
2005 Apr.	289.8	9.3	-6.5	50.2	13.7	29.2	-2.9	107.4	76.1	13.3
May	106.0	4.8	-7.4	42.5	7.3	14.7	4.7	32.8	48.1	-41.5
June	141.6	10.7	37.3	75.1	-14.7	39.3	32.2	-79.8	45.2	-3.7
July	69.3	9.9	1.2	26.8	13.1	4.7	1.1	44.0	-30.6	-1.0
Aug. <sup>(p)</sup>	-17.0	-5.5	-44.4	-21.0	3.2	13.2	5.8	-3.3	14.3	20.8

Source: ECB.

1) Amounts held by euro area residents.

2) Amounts issued with maturity up to two years held by non-euro area residents are included in external liabilities.

## 2.3 Monetary statistics

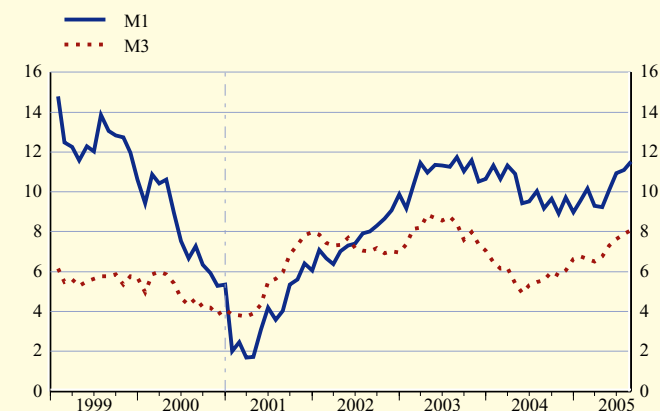
(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period, transactions during period)

### 1. Monetary aggregates<sup>1)</sup> and counterparts

	M1		M2	M3-M2	M3	M3 3-month moving average (centred)	Longer-term financial liabilities	Credit to general government	Credit to other euro area residents		Net external assets <sup>2)</sup>
	1	2	3	4	5	6	7	8	Loans		11
									9	10	
Outstanding amounts											
2003	2,680.6	2,553.3	5,233.9	907.2	6,141.1	-	4,133.3	2,226.1	8,156.0	7,097.8	230.6
2004	2,912.6	2,661.0	5,573.6	960.6	6,534.2	-	4,454.5	2,298.2	8,690.9	7,551.6	373.3
2005 Q1	3,007.2	2,675.4	5,682.7	945.0	6,627.6	-	4,579.5	2,328.5	8,827.5	7,670.2	383.3
2005 Apr.	3,024.0	2,694.8	5,718.8	956.5	6,675.3	-	4,611.1	2,352.6	8,911.0	7,704.4	406.2
May	3,050.4	2,702.2	5,752.7	972.2	6,724.8	-	4,656.0	2,338.7	8,976.4	7,768.5	367.2
June	3,258.1	2,559.2	5,817.3	980.9	6,798.1	-	4,807.1	2,352.2	9,108.7	7,892.0	460.6
July	3,300.9	2,573.0	5,873.9	994.8	6,868.7	-	4,809.1	2,364.0	9,182.6	7,963.4	469.3
Aug. <sup>(p)</sup>	3,327.8	2,585.5	5,913.4	1,002.7	6,916.0	-	4,835.0	2,375.1	9,230.8	8,007.6	456.3
Transactions											
2003	259.4	113.4	372.9	32.2	405.1	-	236.5	131.9	445.9	372.3	96.0
2004	240.4	111.8	352.2	56.0	408.2	-	340.7	54.6	575.0	506.1	160.4
2005 Q1	91.8	8.2	100.0	-20.4	79.6	-	107.1	25.2	135.3	118.8	7.2
2005 Apr.	16.4	18.9	35.4	11.8	47.1	-	26.0	21.0	84.4	34.3	20.2
May	23.5	4.4	27.9	15.7	43.6	-	23.9	-18.2	56.4	59.1	-51.5
June	46.4	15.7	62.2	8.7	70.9	-	80.8	4.1	85.6	80.4	74.8
July	43.3	14.2	57.5	13.1	70.6	-	8.5	14.8	75.4	74.5	11.4
Aug. <sup>(p)</sup>	27.2	12.9	40.1	7.3	47.3	-	26.9	9.6	49.4	45.4	-12.0
Growth rates											
2003 Dec.	10.6	4.6	7.6	3.8	7.1	7.0	6.0	6.3	5.8	5.5	96.0
2004 Dec.	9.0	4.4	6.7	6.2	6.6	6.5	8.2	2.4	7.1	7.2	160.4
2005 Mar.	9.3	4.8	7.1	2.8	6.5	6.6	8.7	2.4	7.4	7.5	93.9
2005 Apr.	9.2	5.3	7.4	3.4	6.8	6.9	8.4	2.9	7.7	7.4	89.0
May	10.1	4.9	7.6	5.8	7.3	7.2	8.4	1.5	7.8	7.5	70.5
June	10.9	5.1	8.1	5.1	7.6	7.6	9.7	1.1	8.1	8.0	154.2
July	11.1	5.3	8.3	5.6	7.9	7.9	9.3	1.1	8.3	8.3	161.7
Aug. <sup>(p)</sup>	11.5	5.3	8.5	5.5	8.1	.	9.2	1.0	8.5	8.4	126.9

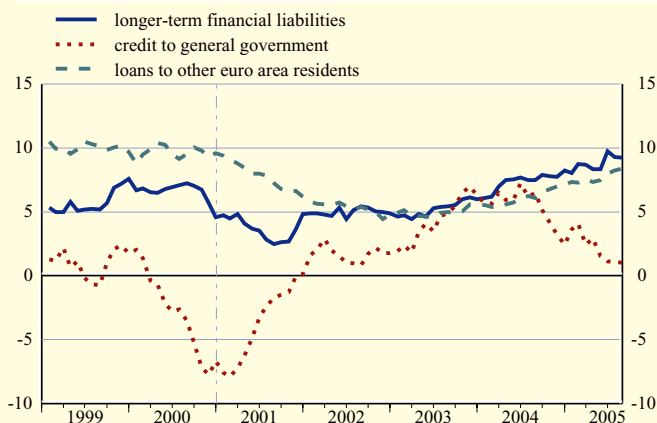
### C1 Monetary aggregates

(annual growth rates; seasonally adjusted)



### C2 Counterparts

(annual growth rates; seasonally adjusted)



Source: ECB.

1) Monetary liabilities of MFIs and central government (post office, treasury) vis-à-vis non-MFI euro area residents excluding central government (M1, M2, M3: see glossary).

2) Values in section 'growth rates' are sums of the transactions during the 12 months ending in the period indicated.

## 2.3 Monetary statistics

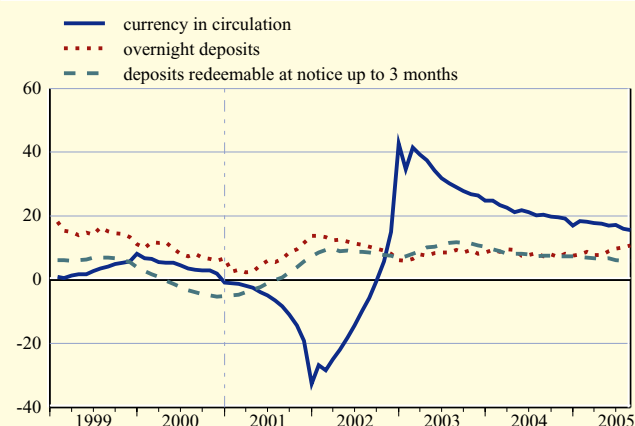
(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period, transactions during period)

### 2. Components of monetary aggregates and longer-term financial liabilities

	Currency in circulation	Overnight deposits	Deposits with agreed maturity up to 2 years	Deposits redeemable at notice up to 3 months	Repos	Money market fund shares/units	Debt securities up to 2 years	Debt securities over 2 years	Deposits redeemable at notice over 3 months	Deposits with agreed maturity over 2 years	Capital and reserves
	1	2	3	4	5	6	7	8	9	10	11
Outstanding amounts											
2003	386.9	2,293.7	1,031.0	1,522.3	218.4	596.1	92.7	1,789.6	90.7	1,250.0	1,003.1
2004	452.7	2,460.0	1,026.5	1,634.5	239.4	618.9	102.3	1,962.6	89.6	1,357.3	1,044.9
2005 Q1	477.6	2,529.7	1,019.3	1,656.1	225.8	613.2	106.1	2,038.7	90.9	1,387.1	1,062.8
2005 Apr.	481.5	2,542.5	1,030.5	1,664.3	215.7	619.8	121.0	2,056.7	91.3	1,395.2	1,067.9
May	487.0	2,563.5	1,023.9	1,678.3	231.3	627.4	113.5	2,085.9	91.4	1,396.1	1,082.6
June	493.7	2,764.3	1,040.7	1,518.5	239.5	622.7	118.8	2,125.2	91.6	1,448.6	1,141.7
July	494.7	2,806.2	1,046.1	1,526.9	243.1	632.3	119.4	2,126.1	90.8	1,453.9	1,138.2
Aug. <sup>(p)</sup>	501.5	2,826.4	1,048.8	1,536.8	252.5	630.9	119.3	2,146.2	89.8	1,455.2	1,143.7
Transactions											
2003	77.5	181.9	-29.7	143.1	-10.3	57.6	-15.1	149.2	-13.2	61.9	38.5
2004	65.7	174.7	-0.8	112.6	23.1	21.7	11.2	185.2	-1.1	106.6	50.0
2005 Q1	24.9	66.9	-13.2	21.4	-13.7	-5.6	-1.0	62.4	0.8	28.9	15.0
2005 Apr.	4.0	12.5	10.8	8.1	-10.1	7.2	14.7	16.1	0.5	8.0	1.5
May	5.4	18.1	-9.4	13.8	15.5	7.9	-7.6	17.2	0.0	-0.2	6.9
June	6.8	39.7	13.4	2.3	8.2	-5.7	6.2	35.6	-0.5	18.9	26.9
July	1.0	42.3	5.8	8.4	3.6	8.8	0.6	1.8	-0.8	8.2	-0.6
Aug. <sup>(p)</sup>	6.7	20.4	3.0	9.9	9.4	-2.0	-0.2	21.3	-1.0	1.5	5.2
Growth rates											
2003 Dec.	24.9	8.6	-2.8	10.4	-4.6	11.0	-14.9	8.9	-12.7	5.2	3.9
2004 Dec.	17.0	7.6	-0.1	7.4	10.7	3.6	12.3	10.3	-1.2	8.5	5.0
2005 Mar.	17.8	7.8	1.7	6.8	4.0	1.8	6.5	10.6	0.5	9.1	5.4
2005 Apr.	17.5	7.8	3.3	6.6	0.3	2.6	14.6	10.4	1.2	8.7	4.9
May	17.0	8.9	1.9	6.7	8.3	4.2	10.0	10.6	1.7	8.2	5.0
June	17.2	9.8	3.5	6.1	10.2	2.2	10.7	11.8	1.4	8.8	7.6
July	16.0	10.2	4.0	6.0	6.7	3.7	13.7	11.2	0.3	8.8	7.2
Aug. <sup>(p)</sup>	15.6	10.8	4.2	5.9	10.9	2.4	12.1	11.4	-0.9	8.3	7.3

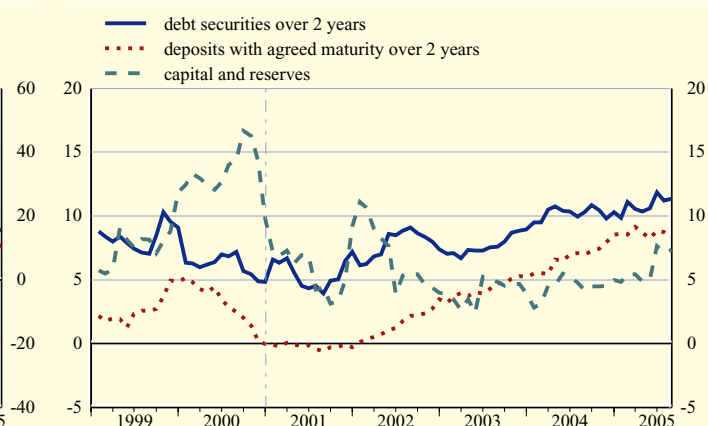
### C3 Components of monetary aggregates

(annual growth rates; seasonally adjusted)



### C4 Components of longer-term financial liabilities

(annual growth rates; seasonally adjusted)



Source: ECB.



## 2.4 MFI loans, breakdown <sup>1)</sup>

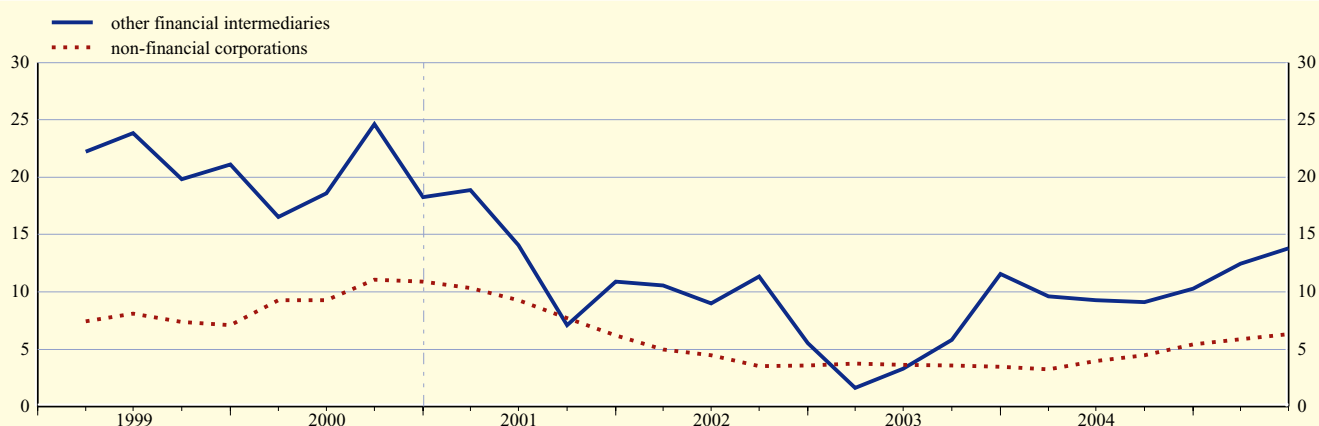
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

### 1. Loans to financial intermediaries and non-financial corporations

	Insurance corporations and pension funds		Other financial intermediaries <sup>2)</sup>		Non-financial corporations			
	Total		Total		Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years
	1	Up to 1 year 2	3	Up to 1 year 4	5	6	7	8
Outstanding amounts								
2003	35.4	22.1	511.4	325.0	3,034.3	961.5	524.1	1,548.8
2004	48.6	31.4	545.4	333.5	3,153.7	974.7	547.8	1,631.3
2005 Q1	58.2	39.7	560.6	350.5	3,190.2	984.6	554.7	1,650.9
2005 Apr.	59.3	40.6	557.1	343.8	3,215.9	992.6	559.7	1,663.6
May	62.1	42.9	567.7	351.9	3,235.1	994.4	564.3	1,676.4
June	63.9	44.2	580.5	361.6	3,281.4	1,022.5	566.3	1,692.7
July	63.8	43.6	578.8	356.3	3,307.9	1,023.1	574.6	1,710.3
Aug. <sup>(p)</sup>	64.6	43.1	573.4	350.0	3,294.6	1,000.0	572.6	1,722.0
Transactions								
2003	4.2	2.2	53.4	26.2	102.9	-7.9	15.9	94.9
2004	13.1	9.1	51.2	26.8	163.9	24.1	31.2	108.5
2005 Q1	8.6	7.9	11.5	15.1	37.0	7.8	7.7	21.5
2005 Apr.	1.1	1.0	-3.8	-6.9	27.2	8.3	6.2	12.7
May	2.7	2.2	8.3	6.6	17.4	1.0	4.7	11.8
June	1.8	1.3	11.6	9.1	30.7	13.7	1.8	15.2
July	0.0	-0.6	-1.1	-4.9	27.4	1.2	8.3	18.0
Aug. <sup>(p)</sup>	0.7	-0.5	-5.7	-6.2	-12.2	-22.9	-1.8	12.5
Growth rates								
2003 Dec.	11.8	11.6	11.6	8.8	3.5	-0.8	3.1	6.5
2004 Dec.	36.9	41.5	10.3	8.8	5.4	2.5	6.0	7.0
2005 Mar.	23.7	21.8	12.5	17.3	5.9	3.9	6.6	6.9
2005 Apr.	14.3	7.8	9.7	10.7	6.0	4.3	6.6	6.9
May	8.8	0.6	10.2	11.3	6.2	4.9	6.4	7.0
June	17.7	10.6	13.8	18.3	6.3	4.4	6.6	7.3
July	11.5	3.9	14.9	18.9	6.8	4.9	7.3	7.8
Aug. <sup>(p)</sup>	18.6	9.9	16.5	21.7	6.7	4.4	6.3	8.2

### C5 Loans to financial intermediaries and non-financial corporations

(annual growth rates)



Source: ECB.

1) MFI sector excluding the Eurosystem; sectoral classification is based on ESA 95.

2) This category includes investment funds.

## 2.4 MFI loans, breakdown <sup>1)</sup>

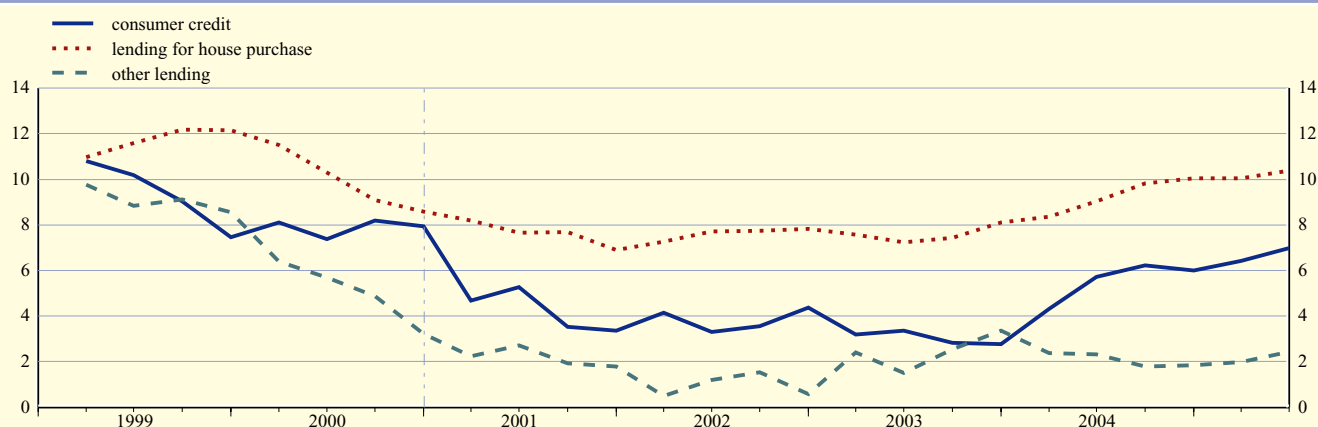
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

### 2. Loans to households <sup>2)</sup>

	Total	Consumer credit				Lending for house purchase				Other lending			
	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	
	1	2	3	4	5	6	7	8	9	10	11	12	13
Outstanding amounts													
2003	3,520.6	484.5	112.0	181.0	191.5	2,360.5	14.4	63.3	2,282.7	675.6	145.0	95.5	435.1
2004	3,808.3	515.4	120.3	189.6	205.6	2,591.5	14.6	65.8	2,511.1	701.4	144.0	99.2	458.2
2005 Q1	3,860.4	519.3	120.2	191.1	208.0	2,640.2	14.3	67.1	2,558.9	700.8	144.4	98.7	457.8
2005 Apr.	3,887.7	522.9	119.8	192.6	210.5	2,662.2	14.3	65.0	2,582.9	702.7	142.5	100.2	460.0
May	3,919.4	527.5	121.2	194.5	211.8	2,686.1	14.3	65.0	2,606.9	705.8	142.6	100.8	462.4
June	3,991.8	537.7	125.2	196.9	215.5	2,737.1	14.5	65.7	2,656.8	717.0	149.8	101.1	466.2
July	4,024.4	538.4	122.1	198.4	217.9	2,772.9	14.6	66.3	2,692.0	713.1	145.1	101.2	466.9
Aug. <sup>(p)</sup>	4,047.8	540.0	123.1	198.3	218.7	2,794.7	14.3	66.7	2,713.7	713.0	143.5	101.3	468.2
Transactions													
2003	211.7	13.0	8.4	6.1	-1.4	177.3	-5.9	1.7	181.4	21.4	-6.2	-4.7	32.3
2004	278.5	29.0	7.1	8.6	13.3	236.9	0.9	2.9	233.1	12.6	-0.8	2.0	11.5
2005 Q1	56.2	4.4	-0.3	1.6	3.1	49.5	-0.2	1.3	48.4	2.2	1.3	-0.4	1.3
2005 Apr.	26.3	4.2	-0.3	1.6	2.8	21.5	0.0	-0.8	22.3	0.6	-1.7	0.1	2.2
May	30.8	4.8	1.5	2.0	1.3	23.0	0.0	0.2	22.9	3.0	0.0	0.7	2.2
June	45.9	8.4	4.1	2.0	2.3	29.2	0.3	0.8	28.2	8.3	6.9	-0.2	1.6
July	34.2	1.3	-2.9	1.6	2.5	36.0	0.0	0.5	35.4	-3.1	-4.5	0.2	1.3
Aug. <sup>(p)</sup>	23.8	2.2	1.1	-0.1	1.3	21.7	-0.2	0.4	21.5	-0.1	-1.4	0.1	1.2
Growth rates													
2003 Dec.	6.4	2.8	8.0	3.4	-0.2	8.1	-26.3	2.6	8.6	3.4	-4.1	-4.8	8.5
2004 Dec.	7.9	6.0	6.3	4.8	6.9	10.0	6.0	4.6	10.2	1.9	-0.6	2.0	2.6
2005 Mar.	8.0	6.4	7.7	4.6	7.4	10.1	5.0	8.1	10.1	2.0	2.0	1.1	2.2
2005 Apr.	8.0	6.4	6.6	4.7	8.0	10.1	5.4	6.2	10.2	1.9	1.2	0.5	2.5
May	8.2	7.2	8.4	5.7	8.0	10.1	5.0	5.9	10.3	2.3	2.2	1.2	2.6
June	8.4	7.0	7.7	5.6	7.9	10.4	2.4	4.0	10.6	2.4	3.5	0.7	2.5
July	8.5	6.8	6.4	5.7	8.2	10.6	3.7	4.1	10.8	2.2	2.8	1.0	2.2
Aug. <sup>(p)</sup>	8.6	7.0	6.6	5.9	8.4	10.7	2.4	4.1	10.9	2.3	2.9	1.2	2.4

### C6 Loans to households

(annual growth rates)



Source: ECB.

- 1) MFI sector excluding the Eurosystem; sectoral classification is based on ESA 95.
- 2) Including non-profit institutions serving households.

## 2.4 MFI loans, breakdown <sup>1)</sup>

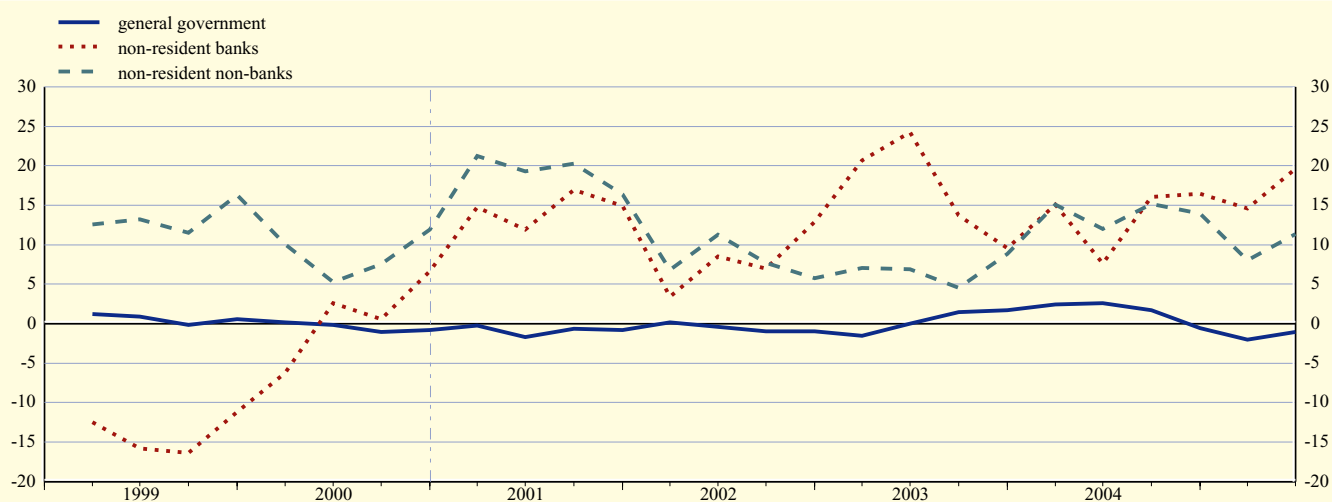
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

### 3. Loans to government and non-euro area residents

	General government					Non-euro area residents				
	Total	Central government	Other general government			Total	Banks <sup>2)</sup>	Non-banks		
			State government	Local government	Social security funds			Total	General government	Other
	1	2	3	4	5	6	7	8	9	10
Outstanding amounts										
2003	817.5	128.4	265.1	388.9	35.0	1,757.9	1,182.2	575.7	59.3	516.4
2004	812.5	130.7	252.3	405.7	23.8	1,974.6	1,342.2	632.4	61.3	571.1
2005 Q1	806.6	129.3	248.1	406.6	22.5	2,136.5	1,463.8	672.7	61.9	610.7
Q2 <sup>(p)</sup>	808.4	125.3	247.6	412.3	23.3	2,291.8	1,579.6	712.2	63.5	648.7
Transactions										
2003	13.7	-5.9	-12.2	16.6	15.3	159.4	109.2	50.1	-5.0	55.0
2004	-4.7	3.1	-13.9	17.3	-11.2	275.5	194.9	80.4	1.8	78.6
2005 Q1	-6.6	-1.6	-4.2	0.5	-1.3	124.8	98.6	26.2	0.6	25.5
Q2 <sup>(p)</sup>	1.2	-4.4	-0.7	5.5	0.7	93.2	78.3	14.9	1.6	13.3
Growth rates										
2003 Dec.	1.7	-4.4	-4.4	4.4	77.5	9.3	9.6	8.8	-7.7	11.0
2004 Dec.	-0.6	2.4	-5.2	4.4	-32.1	15.6	16.4	13.9	3.0	15.2
2005 Mar.	-2.0	-2.8	-5.5	4.6	-42.1	12.4	14.6	8.0	1.1	8.8
June <sup>(p)</sup>	-1.0	-1.4	-2.6	5.2	-46.8	17.0	19.7	11.3	4.4	12.1

### C7 Loans to government and non-euro area residents

(annual growth rates)



Source: ECB.

1) MFI sector excluding the Eurosystem; sectoral classification is based on ESA 95.

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

## 2.5 Deposits held with MFIs, breakdown <sup>1)</sup>

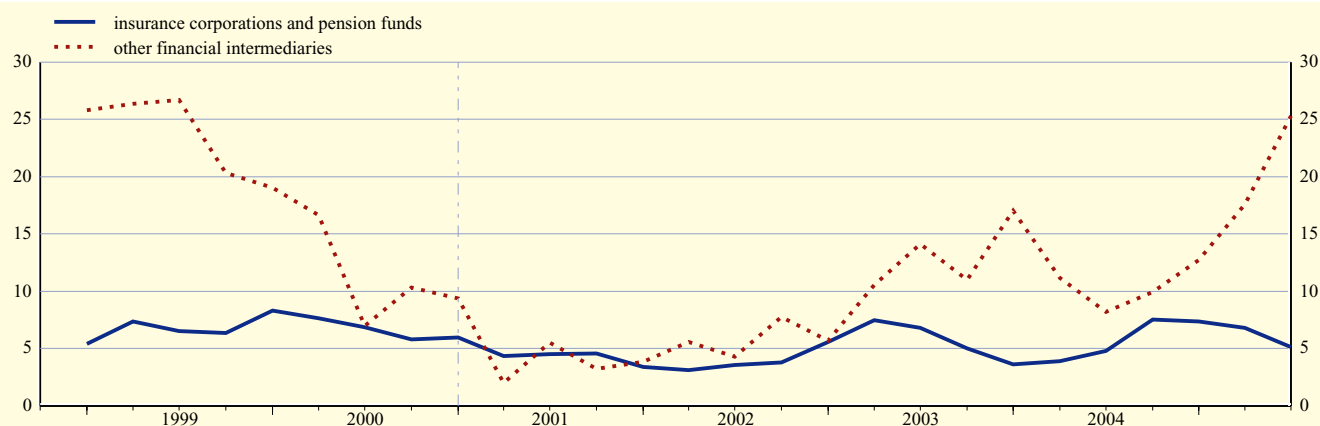
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

### 1. Deposits by financial intermediaries

	Insurance corporations and pension funds							Other financial intermediaries <sup>2)</sup>						
	Total	Overnight	With agreed maturity		Redeemable at notice		Repos	Total	Overnight	With agreed maturity		Redeemable at notice		Repos
			Up to 2 years	Over 2 years	Up to 3 months	Over 3 months				Up to 2 years	Over 2 years	Up to 3 months	Over 3 months	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Outstanding amounts														
2003	542.4	58.9	41.7	420.5	1.3	0.8	19.1	565.6	180.9	130.8	143.3	6.1	0.1	104.4
2004	583.2	59.2	51.4	449.4	1.2	1.3	20.8	636.6	180.3	139.0	187.3	10.1	0.1	119.8
2005 Q1	597.0	65.7	48.5	460.3	1.3	1.3	19.8	692.9	213.3	134.2	205.2	11.5	0.1	128.7
2005 Apr.	602.6	65.7	50.6	462.5	1.3	1.3	21.1	703.4	208.5	143.9	210.7	13.1	0.1	127.1
May	602.1	65.1	50.4	461.9	1.6	1.3	21.8	728.8	216.5	144.7	215.2	12.7	0.1	139.6
June	596.1	61.6	48.5	462.9	1.1	1.6	20.5	790.6	225.5	149.0	264.5	11.1	0.1	140.4
July	603.6	64.2	51.9	464.8	1.1	1.6	20.1	797.4	221.9	155.9	267.5	11.6	0.1	140.3
Aug. <sup>(p)</sup>	604.0	59.1	51.0	466.0	1.1	1.6	25.2	797.1	217.3	157.5	268.0	11.4	0.1	142.9
Transactions														
2003	19.0	1.6	3.9	11.8	0.3	0.4	1.1	82.8	25.3	-0.2	38.5	3.2	0.1	16.0
2004	39.9	0.7	10.3	27.7	-0.1	-0.1	1.5	72.2	0.9	5.8	43.7	4.1	0.0	17.7
2005 Q1	12.5	6.4	-3.1	10.0	0.1	0.0	-1.0	48.8	32.1	-9.4	16.0	1.3	0.0	8.7
2005 Apr.	5.6	-0.1	2.1	2.3	0.0	0.0	1.3	10.1	-4.9	9.6	5.4	1.6	0.0	-1.5
May	-0.9	-0.8	-0.4	-0.7	0.3	0.0	0.7	23.1	7.1	0.3	4.0	-0.6	0.0	12.4
June	-6.4	-4.1	-2.0	1.0	0.0	0.0	-1.2	23.8	7.3	0.9	15.0	-0.2	0.0	0.8
July	7.6	2.7	3.4	1.9	-0.1	0.0	-0.4	9.9	-3.3	7.0	5.9	0.5	0.0	-0.2
Aug. <sup>(p)</sup>	0.4	-5.1	-0.9	1.2	0.0	0.1	5.1	-0.3	-4.7	1.4	0.5	-0.3	0.0	2.7
Growth rates														
2003 Dec.	3.6	2.8	9.9	2.9	41.3	58.8	6.0	17.0	16.3	-0.2	36.4	70.4	-	17.1
2004 Dec.	7.4	1.2	24.6	6.6	-8.0	-43.1	7.9	12.7	0.5	4.3	30.4	67.6	-	17.1
2005 Mar.	6.8	2.3	16.4	7.5	1.7	-51.5	-10.4	17.6	8.5	9.3	40.1	50.0	-	11.4
2005 Apr.	6.7	6.1	22.9	6.8	-9.4	-52.2	-16.2	16.8	7.2	8.7	41.2	60.1	-	8.0
May	6.4	14.4	11.2	5.5	11.2	-53.8	-3.9	21.2	12.4	9.0	44.2	60.3	-	17.7
June	5.1	2.5	15.7	4.8	18.3	31.3	-3.0	25.3	15.9	14.2	48.2	50.1	-	20.7
July	6.2	14.9	13.2	4.9	13.8	32.1	-8.3	26.9	18.9	18.9	47.4	56.2	-	18.3
Aug. <sup>(p)</sup>	6.3	10.0	9.4	5.1	11.4	32.6	13.0	28.3	23.1	15.9	44.2	55.3	-	25.0

### C8 Deposits by financial intermediaries

(annual growth rates)



Source: ECB.

1) MFI sector excluding the Eurosystem; sectoral classification is based on ESA 95.

2) This category includes investment funds.

## 2.5 Deposits held with MFIs, breakdown <sup>1)</sup>

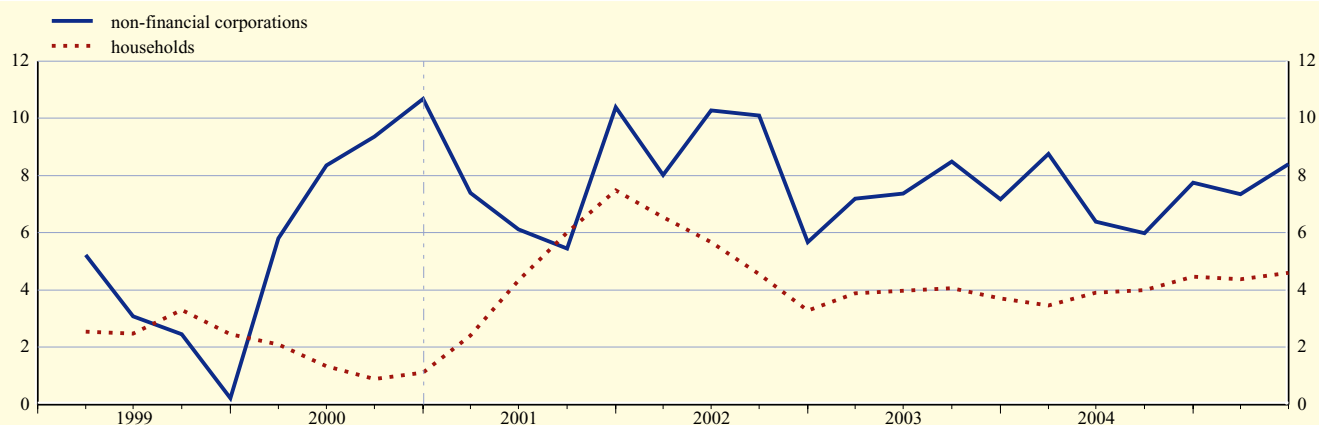
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

### 2. Deposits by non-financial corporations and households

	Non-financial corporations							Households <sup>2)</sup>						
	Total	Overnight	With agreed maturity		Redeemable at notice		Repos	Total	Overnight	With agreed maturity		Redeemable at notice		Repos
			Up to 2 years	Over 2 years	Up to 3 months	Over 3 months				Up to 2 years	Over 2 years	Up to 3 months	Over 3 months	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Outstanding amounts														
2003	1,050.1	633.3	280.2	67.6	38.1	1.0	30.0	3,978.6	1,311.8	544.0	600.8	1,379.2	89.9	52.9
2004	1,114.6	674.7	291.1	73.8	44.2	1.1	29.7	4,162.0	1,403.0	515.0	634.3	1,466.1	88.0	55.6
2005 Q1	1,096.3	675.3	280.2	72.1	44.0	1.1	23.6	4,177.0	1,409.1	513.2	632.8	1,481.9	88.7	51.2
2005 Apr.	1,102.1	678.7	284.9	69.2	44.7	1.1	23.5	4,206.1	1,433.8	514.7	633.5	1,485.1	88.2	50.8
May	1,112.7	692.4	282.8	69.3	45.5	1.1	21.7	4,214.9	1,440.0	514.6	630.7	1,489.7	87.8	52.1
June	1,136.2	723.3	275.9	71.6	41.6	1.5	22.2	4,245.3	1,629.3	510.9	630.6	1,336.1	87.2	51.2
July	1,136.1	720.1	279.7	71.2	42.2	1.4	21.5	4,264.4	1,642.3	512.9	629.8	1,339.3	86.4	53.6
Aug. <sup>(p)</sup>	1,138.1	713.6	287.9	71.0	41.8	1.3	22.5	4,237.6	1,609.9	515.6	630.0	1,342.0	85.4	54.6
Transactions														
2003	70.4	40.9	20.3	3.3	10.2	0.0	-4.2	141.9	95.3	-45.4	10.0	117.4	-13.7	-21.8
2004	80.8	48.5	17.1	6.7	8.0	0.7	-0.2	178.1	90.5	-29.6	31.1	85.2	-1.9	2.7
2005 Q1	-20.0	-0.5	-12.1	-1.1	-0.2	0.0	-6.1	14.8	5.4	-2.0	-0.1	15.8	0.2	-4.5
2005 Apr.	5.5	3.3	4.6	-2.9	0.7	0.0	-0.1	29.0	24.7	1.4	0.6	3.2	-0.4	-0.4
May	7.9	12.2	-3.1	-0.2	0.7	0.0	-1.8	7.2	5.9	-1.1	-2.9	4.4	-0.5	1.3
June	22.6	27.0	-7.4	3.0	-0.4	-0.1	0.5	29.7	32.2	-4.1	-0.1	3.3	-0.5	-1.0
July	0.2	-3.0	3.9	-0.3	0.6	-0.2	-0.8	19.3	13.1	2.2	-0.8	3.2	-0.8	2.5
Aug. <sup>(p)</sup>	2.6	-6.3	8.6	-0.2	-0.4	-0.1	1.0	-26.6	-32.3	2.8	0.2	2.7	-1.0	1.0
Growth rates														
2003 Dec.	7.2	6.7	7.7	5.3	41.5	-3.9	-12.4	3.7	7.9	-7.7	1.7	9.3	-13.2	-29.2
2004 Dec.	7.8	7.7	6.2	9.9	21.2	72.2	-0.8	4.5	6.9	-5.4	5.2	6.2	-2.1	5.2
2005 Mar.	7.4	9.3	3.7	4.4	15.2	68.0	-8.3	4.4	6.6	-2.7	3.8	5.6	0.1	-1.3
2005 Apr.	7.7	9.3	7.0	-1.4	15.3	66.5	-11.2	4.7	7.2	-1.6	3.7	5.5	0.9	-2.9
May	7.0	10.2	2.9	-2.8	16.0	69.5	-16.7	4.5	6.6	-1.1	3.0	5.4	1.3	3.2
June	8.4	10.8	5.0	2.9	14.9	-5.8	-12.9	4.6	7.7	-1.4	2.8	4.8	1.1	1.5
July	8.5	11.7	4.4	1.8	14.9	-17.5	-19.0	4.7	8.2	-0.9	2.6	4.6	0.1	2.0
Aug. <sup>(p)</sup>	8.7	11.3	7.3	1.5	12.4	-24.4	-22.0	4.5	7.8	0.0	2.2	4.6	-0.9	0.1

### C9 Deposits by non-financial corporations and households

(annual growth rates)



Source: ECB.

1) MFI sector excluding the Eurosystem; sectoral classification is based on ESA 95.

2) Including non-profit institutions serving households.

### 2.5 Deposits held with MFIs, breakdown <sup>1)</sup>

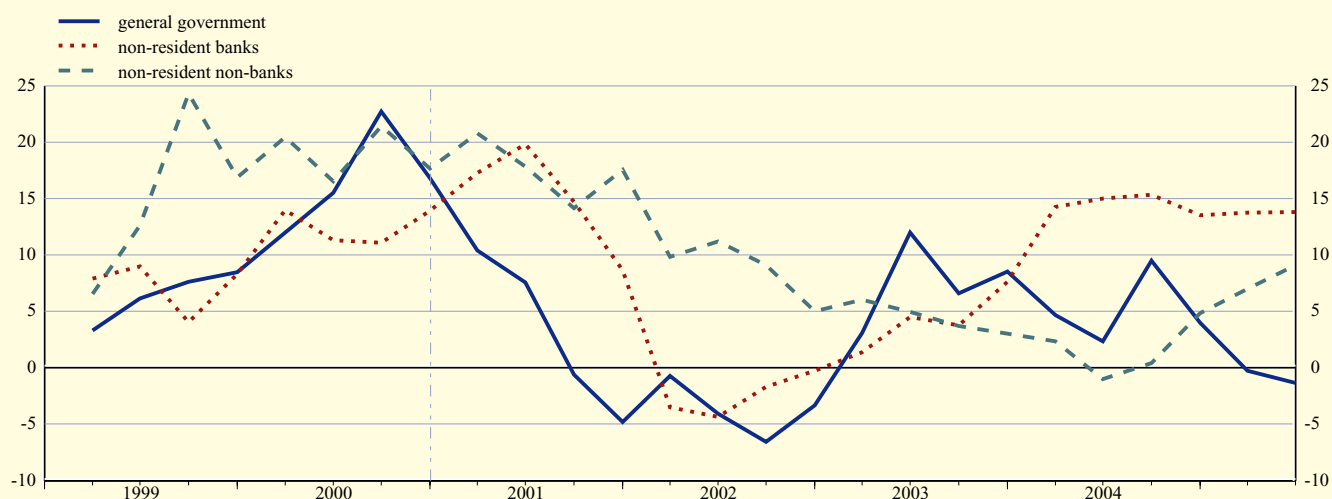
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

### 3. Deposits by government and non-euro area residents

	General government					Non-euro area residents				
	Total	Central government	Other general government			Total	Banks <sup>2)</sup>	Non-banks		
			State government	Local government	Social security funds			Total	General government	Other
	1	2	3	4	5	6	7	8	9	10
Outstanding amounts										
2003	273.3	134.4	31.1	66.9	40.9	2,245.1	1,580.8	664.3	96.1	568.2
2004	282.2	137.7	30.5	69.6	44.3	2,428.9	1,748.0	680.9	103.4	577.5
2005 Q1	269.9	126.3	33.4	67.5	42.7	2,669.1	1,935.7	733.4	105.4	628.0
Q2 <sup>(p)</sup>	287.7	134.4	35.1	69.8	48.4	2,783.5	2,039.0	744.5	117.6	626.9
Transactions										
2003	21.5	23.3	-0.5	-2.3	1.0	138.6	117.5	21.1	-1.3	22.4
2004	11.0	2.7	1.8	2.8	3.8	247.1	214.8	32.0	6.9	25.1
2005 Q1	-12.2	-11.4	2.8	-2.1	-1.6	188.2	147.1	41.0	2.0	39.1
Q2 <sup>(p)</sup>	17.7	8.1	1.7	2.2	5.7	40.7	47.5	-6.8	12.3	-19.1
Growth rates										
2003 Dec.	8.6	21.3	-1.5	-3.4	2.6	6.2	7.6	3.0	-1.3	3.7
2004 Dec.	4.0	2.0	5.6	4.1	9.2	11.0	13.5	4.8	7.2	4.4
2005 Mar.	-0.3	-10.5	19.6	8.3	8.6	11.8	13.7	7.0	4.1	7.5
June <sup>(p)</sup>	-1.4	-14.2	19.4	8.3	16.9	12.5	13.8	9.1	14.8	8.1

### C10 Deposits by government and non-euro area residents

(annual growth rates)



Source: ECB.

- 1) MFI sector excluding the Eurosystem; sectoral classification is based on ESA 95.
- 2) The term "banks" is used in this table to indicate institutions of a similar type to MFIs resident outside the euro area.

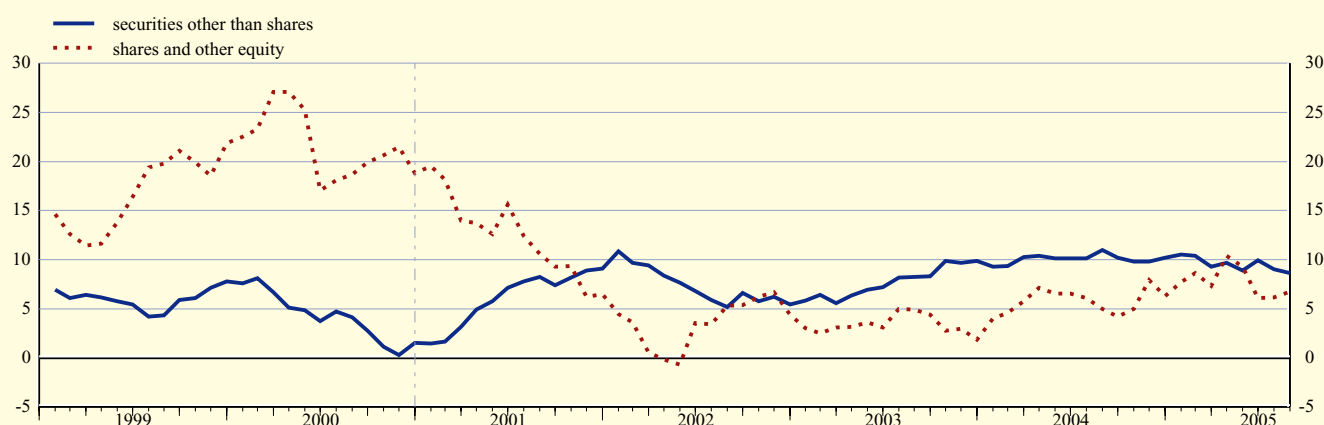
## 2.6 MFI holdings of securities, breakdown <sup>1)</sup>

(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

	Securities other than shares								Shares and other equity			
	Total	MFIs		General government		Other euro area residents		Non-euro area residents	Total	MFIs	Non-MFIs	Non-euro area residents
		Euro	Non-euro	Euro	Non-euro	Euro	Non-euro					
	1	2	3	4	5	6	7	8	9	10	11	12
Outstanding amounts												
2003	3,576.3	1,216.2	57.4	1,227.1	15.6	409.1	18.6	632.3	1,071.4	279.7	615.3	176.4
2004	3,939.5	1,362.7	59.9	1,284.1	15.8	449.0	16.3	751.7	1,158.1	286.4	656.4	215.2
2005 Q1	4,093.1	1,388.9	66.6	1,342.7	15.8	464.9	16.3	797.9	1,217.0	296.1	674.4	246.5
2005 Apr.	4,160.0	1,411.7	65.0	1,354.4	17.9	474.2	17.7	819.2	1,281.7	312.3	731.1	238.3
May	4,198.8	1,409.6	67.2	1,351.1	18.1	478.0	19.3	855.5	1,283.0	315.9	729.9	237.2
June	4,260.9	1,435.1	66.0	1,366.8	15.8	486.0	20.4	871.0	1,234.7	294.8	705.9	234.0
July	4,267.7	1,443.6	67.2	1,362.3	16.0	485.0	19.8	873.9	1,240.4	303.1	696.7	240.5
Aug. <sup>(p)</sup>	4,274.3	1,441.9	67.2	1,354.2	16.1	482.9	20.4	891.5	1,240.4	303.8	695.2	241.5
Transactions												
2003	324.6	90.8	4.1	79.0	0.8	52.3	1.7	95.9	18.8	7.2	19.3	-7.8
2004	368.4	148.1	4.9	40.3	1.3	34.8	-1.3	140.4	67.6	2.2	34.5	30.8
2005 Q1	137.7	29.1	4.7	55.3	-0.5	17.0	-0.5	32.5	57.1	9.4	16.1	31.6
2005 Apr.	60.6	23.0	-2.1	9.5	1.9	8.5	1.3	18.5	67.3	16.6	58.2	-7.4
May	16.4	-2.0	0.5	-6.3	-0.4	3.5	1.0	20.0	-6.6	2.7	-4.2	-5.2
June	43.7	24.6	-1.9	7.2	-2.6	7.9	0.8	7.8	-46.5	-15.1	-26.9	-4.5
July	10.7	7.6	1.9	-2.2	0.4	-1.8	-0.5	5.2	-0.5	3.9	-9.8	5.3
Aug. <sup>(p)</sup>	4.3	-2.4	-0.1	-9.3	0.2	-2.8	0.5	18.2	-0.3	1.1	-1.0	-0.3
Growth rates												
2003 Dec.	9.9	8.1	8.7	6.9	5.0	14.8	8.2	17.2	1.9	2.7	3.4	-4.2
2004 Dec.	10.2	12.2	8.4	3.3	7.7	8.4	-7.3	22.0	6.3	0.8	5.6	17.2
2005 Mar.	9.3	9.1	14.1	3.9	-4.1	11.2	-4.6	19.1	7.3	1.9	4.0	26.4
2005 Apr.	9.7	10.1	8.6	4.0	-10.3	12.0	-0.2	18.7	10.4	5.5	9.3	21.4
May	8.9	9.0	10.6	1.3	7.4	11.5	10.8	21.4	9.3	5.1	8.7	17.4
June	9.9	11.3	5.3	1.3	-10.0	12.2	12.6	23.6	6.1	1.1	6.8	10.9
July	9.0	10.4	9.4	1.5	-6.6	11.6	16.1	19.4	6.2	3.2	6.7	8.4
Aug. <sup>(p)</sup>	8.6	9.8	7.0	0.8	-2.8	11.1	20.7	19.4	6.7	4.0	8.2	6.1

## C11 MFI holdings of securities

(annual growth rates)



Source: ECB.

1) MFI sector excluding the Eurosystem; sectoral classification is based on ESA 95.

## 2.7 Revaluation of selected MFI balance sheet items <sup>1)</sup>

(EUR billions)

### 1. Write-offs/write-downs of loans to households <sup>2)</sup>

	Consumer credit				Lending for house purchase				Other lending			
	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years
	1	2	3	4	5	6	7	8	9	10	11	12
2003	-2.7	-1.1	-0.5	-1.1	-3.2	-0.3	-0.1	-2.8	-7.4	-2.8	-0.3	-4.3
2004	-3.2	-1.3	-0.7	-1.3	-3.4	-0.3	-0.1	-3.0	-6.6	-2.3	-0.3	-4.0
2005 Q1	-1.3	-0.6	-0.2	-0.5	-1.2	-0.1	0.0	-1.1	-2.7	-1.1	-0.1	-1.6
2005 Apr.	-0.3	-0.1	-0.1	-0.1	-0.1	0.0	0.0	-0.1	-0.3	-0.1	0.0	-0.2
May	-0.2	-0.1	0.0	-0.1	-0.1	0.0	0.0	-0.1	-0.4	-0.2	0.0	-0.2
June	-0.3	-0.1	-0.1	-0.1	-0.5	0.0	0.0	-0.5	-0.9	-0.4	0.0	-0.4
July	-0.4	-0.2	0.0	-0.1	-0.2	0.0	0.0	-0.2	-0.3	-0.1	0.0	-0.1
Aug. <sup>(p)</sup>	-0.3	-0.1	0.0	-0.1	-0.1	0.0	0.0	-0.1	-0.3	-0.1	0.0	-0.1

### 2. Write-offs/write-downs of loans to non-financial corporations and non-euro area residents

	Non-financial corporations				Non-euro area residents		
	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year
	1	2	3	4	5	6	7
2003	-17.7	-8.8	-1.3	-7.6	-1.1	-0.3	-0.7
2004	-16.1	-8.8	-0.8	-6.4	-1.6	-0.5	-1.1
2005 Q1	-5.1	-2.5	-0.7	-1.9	-0.3	-0.1	-0.3
2005 Apr.	-0.8	-0.5	0.0	-0.3	0.0	0.0	0.0
May	-1.1	-0.5	0.0	-0.6	-0.2	0.0	-0.2
June	-1.8	-1.0	-0.1	-0.8	-0.1	0.0	-0.1
July	-0.5	-0.3	-0.1	-0.2	-0.1	0.0	-0.1
Aug. <sup>(p)</sup>	-0.5	-0.2	-0.1	-0.2	-0.1	0.0	0.0

### 3. Revaluation of securities held by MFIs

	Securities other than shares								Shares and other equity			
	Total	MFIs		General government		Other euro area residents		Non-euro area residents	Total	MFIs	Non-MFIs	Non-euro area residents
		Euro	Non-euro	Euro	Non-euro	Euro	Non-euro					
	1	2	3	4	5	6	7	8	9	10	11	12
2003	-1.2	-0.8	-0.3	3.0	0.0	-1.1	-0.1	-1.9	19.4	8.0	5.0	6.4
2004	13.5	1.5	-0.1	10.8	-0.2	0.9	-0.1	0.6	8.1	1.3	3.4	3.5
2005 Q1	5.9	1.0	0.1	3.8	0.1	-0.7	0.1	1.6	4.6	0.5	2.7	1.4
2005 Apr.	3.8	0.4	0.0	2.2	0.0	0.8	0.0	0.4	-3.1	-0.8	-1.5	-0.8
May	6.0	0.5	0.1	2.9	0.1	0.3	0.1	2.2	7.8	0.8	3.0	4.1
June	7.7	2.0	0.1	2.8	0.1	0.6	0.0	2.1	5.3	1.1	2.8	1.4
July	-0.8	0.6	0.0	-2.3	-0.1	0.5	0.0	0.6	4.8	1.5	2.1	1.2
Aug. <sup>(p)</sup>	1.7	0.3	0.1	1.3	0.0	0.3	0.1	-0.4	0.2	-0.6	-0.5	1.3

Source: ECB.

- 1) MFI sector excluding the Eurosystem; sectoral classification is based on ESA 95.  
2) Including non-profit institutions serving households.



## 2.8 Currency breakdown of selected MFI balance sheet items <sup>1)</sup>

(percentages of total; outstanding amounts in EUR billions; end of period)

### 1. Deposits

	MFIs <sup>2)</sup>							Non-MFIs						
	All currencies outstanding amount	Euro <sup>3)</sup>	Non-euro currencies				All currencies outstanding amount	Euro <sup>3)</sup>	Non-euro currencies					
			Total	USD	JPY	CHF			GBP	Total	USD	JPY	CHF	GBP
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
	By euro area residents													
2003	4,364.9	91.3	8.7	5.4	0.5	1.5	0.9	6,409.9	97.3	2.7	1.7	0.3	0.1	0.3
2004	4,709.0	91.4	8.6	5.0	0.5	1.5	1.1	6,778.5	97.2	2.8	1.7	0.3	0.1	0.4
2005 Q1	4,820.7	91.0	9.0	5.4	0.5	1.4	1.1	6,833.0	97.0	3.0	1.9	0.3	0.1	0.4
Q2 <sup>(p)</sup>	4,788.3	90.8	9.2	5.5	0.5	1.4	1.1	7,055.8	96.9	3.1	1.9	0.3	0.1	0.4
	By non-euro area residents													
2003	1,580.8	46.9	53.1	35.6	1.8	3.6	9.4	664.3	51.0	49.0	32.1	2.1	2.2	9.6
2004	1,748.0	46.7	53.3	35.8	2.1	3.2	9.5	680.9	55.4	44.6	28.9	1.5	2.2	9.3
2005 Q1	1,935.7	46.9	53.1	35.2	2.4	2.9	9.7	733.4	54.6	45.4	29.4	1.5	2.0	9.2
Q2 <sup>(p)</sup>	2,039.0	45.8	54.2	35.9	2.3	3.0	9.8	744.5	52.3	47.7	30.9	1.5	2.2	9.9

### 2. Debt securities issued by euro area MFIs

	All currencies outstanding amount	Euro <sup>3)</sup>	Non-euro currencies				
			Total				
			USD	JPY	CHF	GBP	
1	2	3	4	5	6	7	
2003	3,304.0	85.4	14.6	7.9	1.5	1.7	2.3
2004	3,653.9	84.6	15.4	7.6	1.7	1.9	2.7
2005 Q1	3,794.9	83.4	16.6	8.2	1.7	1.9	2.9
Q2 <sup>(p)</sup>	3,943.5	82.4	17.6	9.0	1.8	1.9	3.0

Source: ECB.

- 1) MFI sector excluding the Eurosystem; sectoral classification is based on ESA 95.
- 2) For non-euro area residents, the term "MFIs" refers to institutions of a similar type to euro area MFIs.
- 3) Including items expressed in the national denominations of the euro.

## 2.8 Currency breakdown of selected MFI balance sheet items <sup>1)</sup>

(percentages of total; outstanding amounts in EUR billions; end of period)

### 3. Loans

	MFIs <sup>2)</sup>							Non-MFIs						
	All currencies outstanding amount	Euro <sup>3)</sup>	Non-euro currencies				All currencies outstanding amount	Euro <sup>3)</sup>	Non-euro currencies					
			Total						Total					
			USD	JPY	CHF	GBP			USD	JPY	CHF	GBP		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
	To euro area residents													
2003	4,193.9	-	-	-	-	-	-	7,919.3	96.5	3.5	1.6	0.3	1.2	0.3
2004	4,457.8	-	-	-	-	-	-	8,368.6	96.6	3.4	1.4	0.2	1.3	0.4
2005 Q1	4,575.4	-	-	-	-	-	-	8,475.9	96.5	3.5	1.5	0.2	1.3	0.4
Q2 <sup>(p)</sup>	4,523.3	-	-	-	-	-	-	8,726.0	96.4	3.6	1.7	0.2	1.3	0.4
	To non-euro area residents													
2003	1,182.2	50.2	49.8	29.3	4.7	2.5	9.2	575.7	38.8	61.2	43.6	2.4	4.6	7.0
2004	1,342.2	51.4	48.6	29.9	3.7	2.2	8.7	632.4	42.2	57.8	40.1	2.6	4.5	7.2
2005 Q1	1,463.8	51.8	48.2	29.2	3.4	2.1	9.2	672.7	41.8	58.2	42.1	1.4	4.3	7.1
Q2 <sup>(p)</sup>	1,579.6	49.5	50.5	31.1	3.8	2.2	8.8	712.2	40.5	59.5	43.3	1.1	4.4	7.3

### 4. Holdings of securities other than shares

	Issued by MFIs <sup>2)</sup>							Issued by non-MFIs						
	All currencies outstanding amount	Euro <sup>3)</sup>	Non-euro currencies				All currencies outstanding amount	Euro <sup>3)</sup>	Non-euro currencies					
			Total						Total					
			USD	JPY	CHF	GBP			USD	JPY	CHF	GBP		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
	Issued by euro area residents													
2003	1,273.6	95.5	4.5	1.7	0.3	0.9	1.3	1,670.3	98.0	2.0	1.0	0.5	0.3	0.2
2004	1,422.6	95.8	4.2	1.8	0.3	0.5	1.3	1,765.1	98.2	1.8	0.9	0.5	0.1	0.3
2005 Q1	1,455.5	95.4	4.6	2.1	0.4	0.4	1.5	1,839.7	98.3	1.7	0.9	0.4	0.1	0.3
Q2 <sup>(p)</sup>	1,501.1	95.6	4.4	2.0	0.3	0.4	1.4	1,888.9	98.1	1.9	1.0	0.4	0.1	0.3
	Issued by non-euro area residents													
2003	276.9	45.1	54.9	30.6	1.2	4.9	15.4	355.5	45.8	54.2	31.1	5.8	5.8	6.4
2004	341.3	50.3	49.7	28.6	1.0	0.5	17.0	410.4	44.8	55.2	30.5	8.6	0.7	9.2
2005 Q1	359.8	48.9	51.1	30.3	1.0	0.5	16.5	438.0	43.7	56.3	32.7	7.2	0.8	9.1
Q2 <sup>(p)</sup>	395.6	47.0	53.0	30.9	0.9	0.5	17.9	475.4	41.4	58.6	34.0	7.4	0.8	10.0

Source: ECB.

1) MFI sector excluding the Eurosystem; sectoral classification is based on ESA 95.

2) For non-euro area residents, the term "MFIs" refers to institutions of a similar type to euro area MFIs.

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

## 2.9 Aggregated balance sheet of euro area investment funds <sup>1)</sup>

(EUR billions; outstanding amounts at end of period)

### 1. Assets

	Total 1	Deposits 2	Holdings of securities other than shares			Holdings of shares/ other equity 6	Holdings of investment fund shares 7	Fixed assets 8	Other assets 9
			Total 3	Up to 1 year 4	Over 1 year 5				
2003 Q4	3,174.3	235.1	1,389.0	67.4	1,321.6	1,033.6	243.9	133.7	139.1
2004 Q1	3,356.2	266.5	1,434.5	70.4	1,364.1	1,103.9	263.2	136.9	151.2
Q2	3,373.2	244.9	1,430.8	69.4	1,361.5	1,121.1	278.5	140.3	157.6
Q3	3,392.8	246.7	1,472.8	72.1	1,400.6	1,095.3	281.0	144.4	152.6
Q4	3,509.0	240.1	1,497.6	71.9	1,425.7	1,157.8	293.7	146.9	172.9
2005 Q1 <sup>(p)</sup>	3,708.7	265.5	1,560.5	72.8	1,487.7	1,222.8	315.9	151.1	193.0

### 2. Liabilities

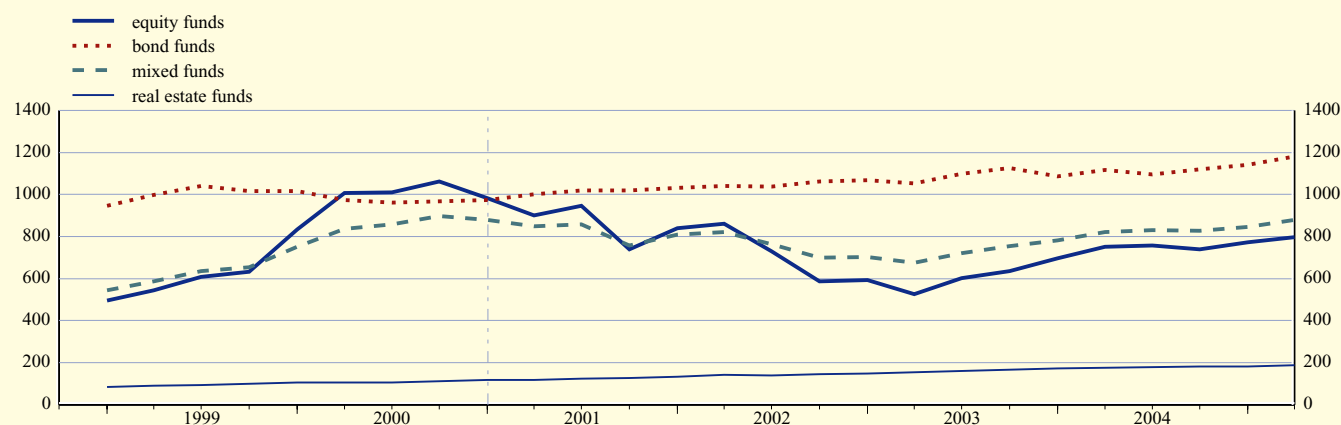
	Total 1	Deposits and loans taken 2	Investment fund shares 3	Other liabilities 4
2004 Q1	3,356.2	49.6	3,173.8	132.9
Q2	3,373.2	50.4	3,196.2	126.6
Q3	3,392.8	49.5	3,216.6	126.7
Q4	3,509.0	48.5	3,322.4	138.2
2005 Q1 <sup>(p)</sup>	3,708.7	56.0	3,478.4	174.4

### 3. Total assets/liabilities broken down by investment policy and type of investor

	Total 1	Funds by investment policy					Funds by type of investor	
		Equity funds 2	Bond funds 3	Mixed funds 4	Real estate funds 5	Other funds 6	General public funds 7	Special investors' funds 8
2003 Q4	3,174.3	697.8	1,086.3	783.0	171.7	435.5	2,317.7	856.6
2004 Q1	3,356.2	750.4	1,116.3	820.6	176.2	492.8	2,469.8	886.4
Q2	3,373.2	756.5	1,094.2	830.0	179.7	512.7	2,479.5	893.7
Q3	3,392.8	740.1	1,119.0	825.8	182.4	525.5	2,495.4	897.4
Q4	3,509.0	772.4	1,140.9	844.4	182.3	568.9	2,588.3	920.7
2005 Q1 <sup>(p)</sup>	3,708.7	797.1	1,179.4	879.5	186.2	666.5	2,758.1	950.6

### C12 Total assets of investment funds

(EUR billions)



Source: ECB.

1) Other than money market funds. Data refer to euro area countries excluding Ireland. For further details, see the General notes.

## 2.10 Assets of euro area investment funds broken down by investment policy and type of investor

(EUR billions; outstanding amounts at end of period)

## 1. Funds by investment policy

	Total 1	Deposits 2	Holdings of securities other than shares			Holdings of shares/ other equity 6	Holdings of investment fund shares 7	Fixed assets 8	Other assets 9
			Total 3	Up to 1 year 4	Over 1 year 5				
Equity funds									
2003 Q4	697.8	29.3	31.3	2.9	28.4	593.6	21.1	-	22.5
2004 Q1	750.4	32.8	32.2	3.0	29.2	635.6	23.4	-	26.5
Q2	756.5	31.5	31.6	3.2	28.3	642.8	25.3	-	25.3
Q3	740.1	31.5	33.0	3.7	29.3	625.3	25.1	-	25.1
Q4	772.4	28.5	33.9	3.7	30.2	653.4	28.0	-	28.6
2005 Q1 <sup>(p)</sup>	797.1	31.2	33.9	3.7	30.3	674.9	28.9	-	28.2
Bond funds									
2003 Q4	1,086.3	82.5	905.7	31.6	874.1	31.0	21.6	-	45.5
2004 Q1	1,116.3	97.3	918.4	35.3	883.1	32.6	21.4	-	46.6
Q2	1,094.2	79.1	910.0	36.3	873.7	33.0	21.8	-	50.3
Q3	1,119.0	80.8	932.4	38.8	893.6	31.9	23.4	-	50.5
Q4	1,140.9	77.5	943.6	39.9	903.7	36.9	23.4	-	59.5
2005 Q1 <sup>(p)</sup>	1,179.4	90.3	964.0	41.3	922.7	36.4	26.0	-	62.6
Mixed funds									
2003 Q4	783.0	49.4	323.8	22.1	301.7	272.3	100.5	0.3	36.7
2004 Q1	820.6	52.9	333.7	21.2	312.5	286.6	107.2	0.3	39.9
Q2	830.0	52.3	340.1	22.3	317.7	278.9	114.9	0.3	43.5
Q3	825.8	52.3	347.8	22.0	325.9	270.5	115.6	0.3	39.4
Q4	844.4	50.4	347.0	20.1	326.8	281.6	121.3	0.2	43.9
2005 Q1 <sup>(p)</sup>	879.5	55.9	358.5	20.8	337.7	290.3	124.1	0.1	50.6
Real estate funds									
2003 Q4	171.7	13.2	9.3	0.6	8.7	0.8	8.5	132.7	7.4
2004 Q1	176.2	14.7	9.1	0.6	8.5	0.7	7.7	135.9	8.0
Q2	179.7	15.0	8.6	0.6	7.9	0.7	7.7	139.2	8.7
Q3	182.4	14.4	8.5	0.6	7.9	0.7	7.5	143.1	8.0
Q4	182.3	14.6	7.1	0.7	6.4	0.9	6.9	144.8	8.0
2005 Q1 <sup>(p)</sup>	186.2	13.3	7.8	0.7	7.1	1.0	6.9	148.9	8.3

## 2. Funds by type of investor

	Total 1	Deposits 2	Holdings of securities other than shares 3	Holdings of shares/ other equity 4	Holdings of investment fund shares 5	Fixed assets 6	Other assets 7
2003 Q4	2,317.7	191.6	913.2	815.7	183.8	115.5	98.0
2004 Q1	2,469.8	219.2	948.7	877.3	198.8	117.8	107.9
Q2	2,479.5	202.1	945.8	890.2	211.0	120.5	109.8
Q3	2,495.4	205.7	974.3	872.6	213.2	124.0	105.5
Q4	2,588.3	201.2	992.9	926.0	221.4	127.4	119.4
2005 Q1 <sup>(p)</sup>	2,758.1	223.5	1,045.0	979.2	240.2	130.7	139.5
Special investors' funds							
2003 Q4	856.6	43.4	475.8	217.9	60.0	18.3	41.2
2004 Q1	886.4	47.3	485.8	226.5	64.4	19.1	43.3
Q2	893.7	42.8	485.0	230.8	67.5	19.8	47.8
Q3	897.4	41.0	498.4	222.7	67.7	20.4	47.2
Q4	920.7	38.9	504.7	231.8	72.3	19.5	53.5
2005 Q1 <sup>(p)</sup>	950.6	42.1	515.5	243.6	75.7	20.4	53.5

Source: ECB.



## FINANCIAL AND NON-FINANCIAL ACCOUNTS

### 3.1 Main financial assets of non-financial sectors

(EUR billions and annual growth rates; outstanding amounts at end of period, transactions during the period)

	Currency and deposits											Memo: deposits of non-banks with banks outside the euro area
	Total	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 <sup>1)</sup>		
				Total	Overnight	With agreed maturity	Redeemable at notice	Repos				
	1	2	3	4	5	6	7	8	9	10	11	
Outstanding amounts												
2003 Q4	15,657.3	5,883.9	352.4	5,183.2	2,027.5	1,559.1	1,511.4	85.2	155.7	192.6	347.3	
2004 Q1	15,869.1	5,914.7	350.8	5,180.6	2,020.6	1,545.0	1,533.9	81.2	183.8	199.4	396.7	
Q2	16,151.3	6,051.9	372.1	5,263.9	2,101.2	1,529.5	1,553.9	79.4	223.7	192.2	397.2	
Q3	16,240.3	6,076.3	383.5	5,284.3	2,104.2	1,532.2	1,565.1	82.8	204.1	204.4	394.9	
Q4	16,597.9	6,234.8	413.5	5,434.9	2,165.2	1,577.9	1,603.7	88.2	162.4	224.0	386.8	
2005 Q1	16,878.2	6,251.4	408.4	5,433.3	2,174.8	1,560.0	1,620.0	78.5	187.4	222.2	428.7	
Transactions												
2003 Q4	162.8	127.5	29.7	118.0	79.0	7.9	36.3	-5.2	-28.1	8.0	11.0	
2004 Q1	148.6	28.3	-1.6	-5.0	-7.6	-15.8	22.4	-3.9	28.1	6.8	44.2	
Q2	291.0	139.5	21.2	86.1	82.0	-14.7	20.7	-1.9	39.4	-7.2	0.0	
Q3	120.3	28.8	11.5	24.8	4.6	5.5	11.3	3.4	-19.7	12.2	1.7	
Q4	165.3	167.3	30.0	159.4	65.2	49.9	38.9	5.4	-41.7	19.6	4.4	
2005 Q1	168.7	16.0	-5.0	-3.5	7.9	-17.4	15.7	-9.7	25.0	-0.5	35.1	
Growth rates												
2003 Q4	4.7	5.6	21.2	4.3	7.6	-1.0	8.1	-23.4	11.0	9.0	25.3	
2004 Q1	4.4	5.3	20.9	4.3	8.8	-1.3	6.5	-23.0	5.9	7.5	26.1	
Q2	4.8	5.3	19.5	4.2	8.3	-1.7	6.3	-15.7	12.8	4.8	21.9	
Q3	4.7	5.6	18.8	4.4	8.1	-1.1	6.2	-8.5	10.7	10.7	16.5	
Q4	4.6	6.2	17.3	5.1	7.1	1.6	6.2	3.6	3.9	16.3	14.5	
2005 Q1	4.7	5.9	16.4	5.2	7.9	1.5	5.6	-3.3	1.7	12.1	10.4	
Securities other than shares												
			Shares <sup>2)</sup>					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		
	12	13	14	15	16	17	18	19	20	21		
Outstanding amounts												
2003 Q4	1,904.9	191.0	1,713.9	3,932.1	2,036.3	1,895.8	406.6	3,936.3	3,561.1	375.2		
2004 Q1	1,923.8	198.8	1,725.0	4,020.8	2,070.1	1,950.7	420.9	4,009.8	3,624.7	385.1		
Q2	1,955.2	215.5	1,739.7	4,068.1	2,125.5	1,942.6	424.2	4,076.1	3,686.5	389.5		
Q3	1,974.6	214.8	1,759.8	4,034.8	2,097.1	1,937.7	424.7	4,154.6	3,761.5	393.1		
Q4	1,967.5	202.0	1,765.6	4,166.4	2,216.1	1,950.3	407.4	4,229.1	3,831.9	397.2		
2005 Q1	2,006.4	212.8	1,793.6	4,299.4	2,306.4	1,993.0	415.7	4,321.0	3,916.3	404.7		
Transactions												
2003 Q4	1.3	11.5	-10.2	-17.6	-17.8	0.1	-10.2	51.7	51.1	0.6		
2004 Q1	10.7	7.6	3.1	37.2	7.1	30.1	15.1	72.4	62.5	9.9		
Q2	37.4	16.0	21.4	58.3	58.0	0.3	-0.5	55.8	51.4	4.5		
Q3	15.3	-0.2	15.5	13.5	10.6	2.9	-2.2	62.7	59.1	3.6		
Q4	-18.9	-13.8	-5.1	-49.6	-37.4	-12.2	-15.8	66.5	62.5	4.0		
2005 Q1	44.9	8.9	36.0	29.7	1.5	28.2	8.9	78.1	69.7	8.5		
Growth rates												
2003 Q4	-1.2	-2.5	-1.1	4.2	1.3	7.1	8.5	6.9	7.1	4.7		
2004 Q1	-1.0	1.4	-1.2	3.7	2.1	5.1	2.8	6.6	6.8	5.4		
Q2	3.0	20.8	1.1	3.4	4.0	2.9	1.7	6.3	6.4	5.1		
Q3	3.3	18.8	1.7	2.5	3.3	1.8	0.5	6.2	6.4	4.9		
Q4	2.3	5.0	2.0	1.5	1.9	1.1	-0.8	6.5	6.6	5.8		
2005 Q1	4.1	5.5	3.9	1.3	1.6	1.0	-2.3	6.6	6.7	5.3		

Source: ECB.

1) Covering deposits with euro area central government (S.1311 in ESA 95), other financial intermediaries (S.123 in ESA 95) and insurance corporations and pension funds (S.125 in ESA 95).

2) Excluding unquoted shares.

## 3.2 Main liabilities of non-financial sectors

(EUR billions and annual growth rates; outstanding amounts at end of period, transactions during the period)

	Loans taken from euro area MFIs and other financial corporations by												Memo: loans taken from banks outside the euro area by non-banks
	Total			General government			Non-financial corporations			Households <sup>1)</sup>			
	Total	Taken from euro area MFIs		Total	Short-term	Long-term	Total	Short-term	Long-term	Total	Short-term	Long-term	
1	2	3	4	5	6	7	8	9	10	11	12	13	
Outstanding amounts													
2003 Q4	16,655.7	8,496.4	7,395.7	965.1	82.3	882.7	3,664.5	1,167.3	2,497.2	3,866.8	284.6	3,582.2	266.5
2004 Q1	17,010.1	8,543.6	7,464.5	978.8	86.3	892.4	3,649.3	1,163.7	2,485.5	3,915.5	278.7	3,636.8	338.5
Q2	17,220.7	8,698.1	7,595.2	979.9	91.7	888.1	3,694.0	1,172.9	2,521.1	4,024.3	290.7	3,733.6	335.8
Q3	17,330.7	8,777.4	7,672.9	976.4	90.4	885.9	3,695.2	1,153.2	2,542.0	4,105.8	288.0	3,817.8	309.1
Q4	17,696.9	8,906.6	7,796.7	974.1	80.9	893.2	3,746.9	1,178.0	2,568.8	4,185.7	293.3	3,892.3	317.9
2005 Q1	18,066.0	8,992.6	7,879.3	968.9	77.4	891.5	3,777.9	1,179.9	2,598.0	4,245.8	293.2	3,952.6	331.8
Transactions													
2003 Q4	134.1	117.5	118.4	23.2	9.8	13.5	15.4	-17.2	32.7	78.8	3.8	75.0	-1.4
2004 Q1	211.2	56.4	75.9	15.2	4.0	11.2	-12.8	-3.8	-9.0	54.1	-4.4	58.5	66.7
Q2	277.7	161.3	134.4	-0.5	5.3	-5.9	69.5	16.3	53.2	92.4	8.7	83.6	-2.8
Q3	152.0	79.4	86.1	-3.2	-1.3	-1.8	-1.4	-17.2	15.8	84.0	-2.3	86.2	-23.3
Q4	117.5	141.6	140.1	-2.3	-9.5	7.2	63.9	25.7	38.2	80.0	6.6	73.4	18.5
2005 Q1	233.4	83.7	86.6	-5.9	-3.5	-2.4	25.4	5.0	20.4	64.3	0.8	63.5	31.6
Growth rates													
2003 Q4	4.9	5.0	4.6	2.0	35.5	-0.5	3.4	0.1	5.0	7.4	-1.9	8.2	13.1
2004 Q1	4.6	4.5	4.7	3.6	25.9	1.7	1.8	-1.7	3.5	7.4	-0.7	8.1	35.4
Q2	4.7	5.1	5.3	4.7	28.3	2.6	2.2	-2.5	4.5	7.9	0.9	8.5	33.6
Q3	4.8	5.0	5.7	3.9	24.5	2.1	1.9	-1.9	3.7	8.1	2.1	8.6	14.2
Q4	4.6	5.2	5.9	1.0	-1.8	1.2	3.3	1.8	3.9	8.0	3.1	8.4	22.2
2005 Q1	4.6	5.5	6.0	-1.2	-10.4	-0.3	4.3	2.6	5.1	8.2	5.0	8.4	7.1
Securities other than shares issued by													
	General government						Non-financial corporations			Quoted shares issued by non-financial corporations	Deposit liabilities of central government	Pension fund reserves of non- financial corporations	
Total	Total	Short-term	Long-term	Total	Short-term	Long-term	Total	Short-term	Long-term				
14	15	16	17	18	19	20	21	22	23				
Outstanding amounts													
2003 Q4	4,958.7	4,341.1	551.4	3,789.6	617.7	196.7	421.0	2,726.3	181.7	292.5			
2004 Q1	5,146.9	4,531.1	594.4	3,936.7	615.7	209.0	406.8	2,834.1	189.0	296.5			
Q2	5,197.2	4,566.0	619.9	3,946.0	631.3	219.0	412.3	2,842.8	181.9	300.7			
Q3	5,290.8	4,651.1	617.5	4,033.6	639.7	217.4	422.3	2,763.5	194.0	305.0			
Q4	5,297.2	4,661.4	585.0	4,076.4	635.8	213.2	422.6	2,980.1	213.5	299.5			
2005 Q1	5,420.8	4,766.3	594.4	4,171.9	654.5	231.3	423.2	3,138.3	212.0	302.3			
Transactions													
2003 Q4	4.5	-4.2	-14.2	10.0	8.7	0.8	7.9	0.2	7.4	4.4			
2004 Q1	142.5	149.3	42.7	106.6	-6.8	12.4	-19.2	2.1	7.3	2.9			
Q2	118.5	100.8	25.4	75.4	17.7	10.7	7.1	1.8	-7.1	3.1			
Q3	51.3	41.0	-1.1	42.1	10.3	-1.0	11.2	5.9	12.1	3.2			
Q4	-49.6	-45.0	-32.9	-12.1	-4.6	-4.2	-0.5	2.4	19.4	3.8			
2005 Q1	143.1	120.5	7.7	112.8	22.6	19.2	3.4	3.9	-0.2	2.8			
Growth rates													
2003 Q4	6.5	5.8	13.8	4.8	11.6	22.2	7.2	0.8	8.9	4.9			
2004 Q1	6.1	6.3	11.1	5.7	4.7	14.0	0.6	1.0	7.5	4.8			
Q2	6.1	6.5	8.2	6.2	3.4	15.8	-2.0	0.3	4.8	4.7			
Q3	6.3	6.5	9.4	6.1	4.9	11.9	1.7	0.4	11.3	4.7			
Q4	5.3	5.7	6.2	5.6	2.7	9.1	-0.3	0.4	17.5	4.5			
2005 Q1	5.1	4.8	-0.1	5.5	7.5	11.8	5.2	0.5	12.8	4.4			

Source: ECB.

1) Including non-profit institutions serving households.

### 3.3 Main financial assets and liabilities of insurance corporations and pension funds

(EUR billions and annual growth rates; outstanding amounts at end of period, transactions during the period)

Main financial assets												
Total	Deposits with euro area MFIs					Loans			Securities other than shares			
	Total	Overnight	With agreed maturity	Redeemable at notice	Repos	Total	Short-term	Long-term	Total	Short-term	Long-term	
1	2	3	4	5	6	7	8	9	10	11	12	
Outstanding amounts												
2003 Q4	3,633.0	542.4	58.9	462.3	2.1	19.1	349.0	60.0	289.0	1,476.3	59.4	1,416.9
2004 Q1	3,759.9	557.3	64.7	468.3	2.3	22.0	349.3	60.8	288.5	1,541.0	62.0	1,479.0
Q2	3,774.7	565.4	59.9	482.0	2.3	21.2	342.6	59.0	283.5	1,544.3	63.4	1,480.9
Q3	3,837.2	573.6	61.5	489.8	2.3	20.0	348.7	62.2	286.5	1,589.8	63.3	1,526.5
Q4	3,918.1	583.2	59.2	500.8	2.5	20.8	329.0	56.0	273.0	1,644.5	61.9	1,582.6
2005 Q1	4,043.8	597.0	65.7	508.8	2.7	19.8	332.6	58.7	273.9	1,695.7	62.4	1,633.3
Transactions												
2003 Q4	71.2	10.2	1.5	7.9	0.3	0.5	-3.7	1.2	-4.9	50.2	-1.4	51.6
2004 Q1	81.5	14.6	5.7	5.9	0.2	2.8	0.0	0.6	-0.6	47.0	2.3	44.7
Q2	26.1	7.2	-4.9	13.7	-0.6	-0.9	-6.7	-1.6	-5.0	24.4	0.9	23.5
Q3	54.3	8.2	1.6	7.8	-0.1	-1.1	5.6	2.6	3.0	29.4	-0.6	30.0
Q4	52.1	9.9	-1.7	10.6	0.2	0.7	-19.4	-5.9	-13.5	51.5	-0.5	52.0
2005 Q1	91.4	12.5	6.4	6.9	0.2	-1.0	3.7	2.8	0.9	48.6	0.3	48.2
Growth rates												
2003 Q4	6.7	3.6	2.9	3.5	17.9	6.1	0.2	-13.1	3.5	11.3	14.7	11.1
2004 Q1	6.9	3.9	5.0	3.0	38.5	18.7	-0.1	0.4	-0.2	10.5	11.7	10.5
Q2	6.1	4.8	-6.4	6.9	6.5	-6.3	-3.0	-2.4	-3.1	10.6	8.4	10.7
Q3	6.6	7.5	6.8	7.7	-12.8	6.7	-1.3	4.8	-2.6	10.5	1.9	10.9
Q4	5.9	7.4	1.2	8.2	-12.0	7.8	-5.8	-7.1	-5.6	10.3	3.4	10.6
2005 Q1	6.0	6.8	2.2	8.3	-11.6	-10.5	-4.8	-3.5	-5.1	10.0	0.1	10.4

Main financial assets						Main liabilities							
Shares <sup>1)</sup>				Prepayments of insurance premiums and reserves for outstanding claims	Total	Loans taken from euro area MFIs and other financial corporations		Securities other than shares	Quoted shares	Insurance technical reserves			
Total	Quoted shares	Mutual fund shares	Money market fund shares			Total	Taken from euro area MFIs			Total	Net equity of households in life insurance reserves and pension fund reserves	Prepayments of insurance premiums and reserves for outstanding claims	
													13
Outstanding amounts													
2003 Q4	1,157.5	526.5	631.0	64.1	107.8	3,914.3	54.9	35.4	23.0	189.9	3,646.4	3,112.5	534.0
2004 Q1	1,200.8	539.6	661.2	63.4	111.5	4,009.4	64.7	46.3	23.7	190.9	3,730.1	3,182.9	547.2
Q2	1,209.9	538.6	671.2	63.6	112.6	4,079.2	71.1	53.7	24.2	193.3	3,790.6	3,238.3	552.3
Q3	1,210.5	531.2	679.4	63.1	114.6	4,135.5	68.8	52.5	22.6	185.7	3,858.3	3,300.6	557.8
Q4	1,245.6	553.3	692.3	68.4	115.9	4,222.2	65.5	48.6	23.6	207.1	3,926.0	3,364.5	561.5
2005 Q1	1,299.2	601.4	697.8	68.5	119.2	4,332.3	74.2	58.2	24.4	219.5	4,014.3	3,441.2	573.0
Transactions													
2003 Q4	21.8	6.7	15.1	4.1	-7.2	42.6	-9.6	-8.9	2.5	5.0	44.7	43.4	1.3
2004 Q1	16.2	-1.1	17.3	-0.8	3.6	81.3	9.6	10.8	0.4	0.8	70.5	57.3	13.2
Q2	0.0	-7.5	7.5	-0.1	1.1	58.2	6.1	7.0	0.6	0.1	51.5	46.5	5.1
Q3	9.0	3.2	5.7	-0.5	2.1	58.1	-2.3	-1.1	-1.3	2.1	59.5	54.1	5.5
Q4	8.7	0.9	7.8	5.4	1.4	53.6	-3.0	-3.6	0.7	0.1	55.9	52.2	3.6
2005 Q1	23.4	5.5	17.9	0.2	3.2	84.7	7.8	8.6	0.7	0.1	76.0	63.5	12.5
Growth rates													
2003 Q4	5.3	2.6	7.5	11.3	-1.1	7.1	16.7	12.7	26.4	6.2	6.9	7.3	4.7
2004 Q1	6.6	3.6	8.8	5.9	-0.1	6.9	7.5	8.5	25.4	8.3	6.7	6.9	5.2
Q2	4.5	0.7	7.5	-1.7	-0.9	6.4	12.3	18.8	23.7	3.5	6.3	6.6	4.8
Q3	4.3	0.3	7.5	4.6	-0.4	6.2	6.0	17.5	10.9	4.8	6.3	6.5	4.7
Q4	2.9	-0.8	6.1	6.3	7.6	6.4	19.0	36.9	1.7	1.6	6.5	6.7	5.1
2005 Q1	3.4	0.4	5.9	8.0	7.0	6.3	13.3	23.7	2.8	1.2	6.5	6.8	4.9

Source: ECB.

1) Excluding unquoted shares.

## 3.4 Annual saving, investment and financing

(EUR billions, unless otherwise indicated)

## 1. All sectors in the euro area

	Net acquisition of non-financial assets					Net acquisition of financial assets							
	Total	Gross fixed capital formation	Consumption of fixed capital (-)	Changes in inventories <sup>1)</sup>	Non-produced assets	Total	Monetary gold and SDRs	Currency and deposits	Securities other than shares <sup>2)</sup>	Loans	Shares and other equity	Insurance technical reserves	Other investment (net) <sup>3)</sup>
	1	2	3	4	5	6	7	8	9	10	11	12	13
1997	338.2	1,136.1	-797.1	-0.9	0.0	1,951.2	-0.2	390.9	330.7	464.6	491.4	224.1	49.7
1998	404.8	1,201.3	-823.6	27.0	0.2	2,419.2	11.0	419.6	360.1	515.3	845.0	213.7	54.6
1999	444.5	1,290.9	-863.7	17.1	0.2	3,117.8	1.3	559.2	429.1	878.8	942.2	259.2	47.9
2000	486.6	1,394.2	-913.1	22.2	-16.7	2,910.7	1.3	350.9	264.6	829.9	1,189.1	251.3	23.5
2001	466.2	1,449.6	-973.6	-11.8	2.0	2,590.6	-0.5	579.0	449.1	731.2	602.3	248.8	-19.4
2002	413.7	1,439.3	-1,005.4	-21.3	1.1	2,292.7	0.9	656.6	279.7	632.8	468.4	220.8	33.5
2003	433.1	1,464.8	-1,034.5	2.4	0.5	2,403.0	1.7	678.6	426.8	578.8	456.6	240.7	19.8

	Changes in net worth <sup>4)</sup>				Net incurrence of liabilities					
	Total	Gross saving	Consumption of fixed capital (-)	Net capital transfers receivable	Total	Currency and deposits	Securities other than shares <sup>2)</sup>	Loans	Shares and other equity	Insurance technical reserves
	14	15	16	17	18	19	20	21	22	23
1997	455.7	1,241.8	-797.1	11.0	1,833.7	509.7	318.0	393.1	382.5	230.3
1998	486.5	1,299.1	-823.6	11.1	2,337.4	648.8	323.2	484.6	659.8	221.0
1999	498.0	1,352.0	-863.7	9.7	3,064.3	934.9	503.4	765.2	597.1	263.7
2000	515.1	1,419.4	-913.1	8.8	2,882.2	539.5	416.9	882.9	788.7	254.1
2001	486.0	1,449.4	-973.6	10.2	2,570.8	668.9	489.9	634.3	521.6	256.0
2002	472.7	1,468.2	-1,005.4	9.9	2,233.7	572.9	442.0	618.0	376.2	224.7
2003	443.5	1,472.8	-1,034.5	5.2	2,392.7	676.2	514.0	539.3	420.3	242.8

## 2. Non-financial corporations

	Net acquisition of non-financial assets			Net acquisition of financial assets					Changes in net worth <sup>4)</sup>		Net incurrence of liabilities			
	Total	Gross fixed capital formation	Consumption of fixed capital (-)	Total	Currency and deposits	Securities other than shares <sup>2)</sup>	Loans	Shares and other equity	Total	Gross saving	Total	Securities other than shares <sup>2)</sup>	Loans	Shares and other equity
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1997	150.3	591.9	-453.2	272.3	26.0	-12.1	65.8	100.8	104.8	521.3	317.8	12.1	175.9	120.1
1998	193.7	635.1	-470.6	439.8	45.7	-11.5	110.9	204.5	147.6	569.1	485.9	22.8	257.2	194.9
1999	212.0	683.1	-490.7	654.0	24.5	93.6	186.0	336.3	106.7	547.6	759.3	47.5	434.1	261.1
2000	306.1	751.6	-522.4	921.0	74.2	87.4	230.4	511.4	79.9	554.9	1,147.2	61.0	597.1	480.7
2001	215.7	778.9	-558.8	638.2	101.6	44.6	169.2	232.1	91.3	590.5	762.6	99.7	355.5	295.9
2002	171.9	757.6	-581.0	515.7	31.8	-55.7	174.2	253.1	108.6	633.2	579.0	21.0	352.0	190.8
2003	156.7	746.4	-597.9	360.9	69.3	-57.9	107.6	191.3	80.5	647.0	437.1	55.0	174.1	194.9

3. Households<sup>5)</sup>

	Net acquisition of non-financial assets			Net acquisition of financial assets					Changes in net worth <sup>4)</sup>		Net incurrence of liabilities		Memo:	
	Total	Gross fixed capital formation	Consumption of fixed capital (-)	Total	Currency and deposits	Securities other than shares <sup>2)</sup>	Shares and other equity	Insurance technical reserves	Total	Gross saving	Total	Loans	Disposable income	Gross saving ratio <sup>6)</sup>
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1997	154.1	374.7	-210.3	441.3	69.3	-20.8	192.5	217.6	425.7	615.5	169.7	168.3	3,852.4	16.0
1998	171.4	387.8	-215.1	453.0	92.9	-119.0	287.4	209.3	409.7	593.4	214.6	213.3	3,954.9	15.0
1999	185.5	418.2	-230.2	478.8	122.6	-28.5	195.8	245.2	395.9	580.1	268.4	266.9	4,105.3	14.1
2000	200.4	442.2	-239.5	433.8	66.2	35.3	122.6	245.9	407.7	607.5	226.4	224.7	4,329.8	14.0
2001	192.1	452.6	-256.5	414.1	180.7	82.7	45.4	229.1	430.0	650.1	176.2	174.3	4,619.4	14.1
2002	186.9	463.8	-260.6	469.7	220.6	83.1	-1.0	211.3	443.3	661.2	213.2	211.1	4,747.8	13.9
2003	209.3	485.0	-268.7	515.9	224.2	16.6	83.6	229.8	465.0	697.9	260.2	257.9	4,904.2	14.2

Source: ECB.

- 1) Including net acquisition of valuables.
- 2) Excluding financial derivatives.
- 3) Financial derivatives, other accounts receivable/payable and statistical discrepancies.
- 4) Arising from saving and net capital transfers receivable, after allowance for consumption of fixed capital (-).
- 5) Including non-profit institutions serving households.
- 6) Gross saving as a percentage of disposable income.





## FINANCIAL MARKETS

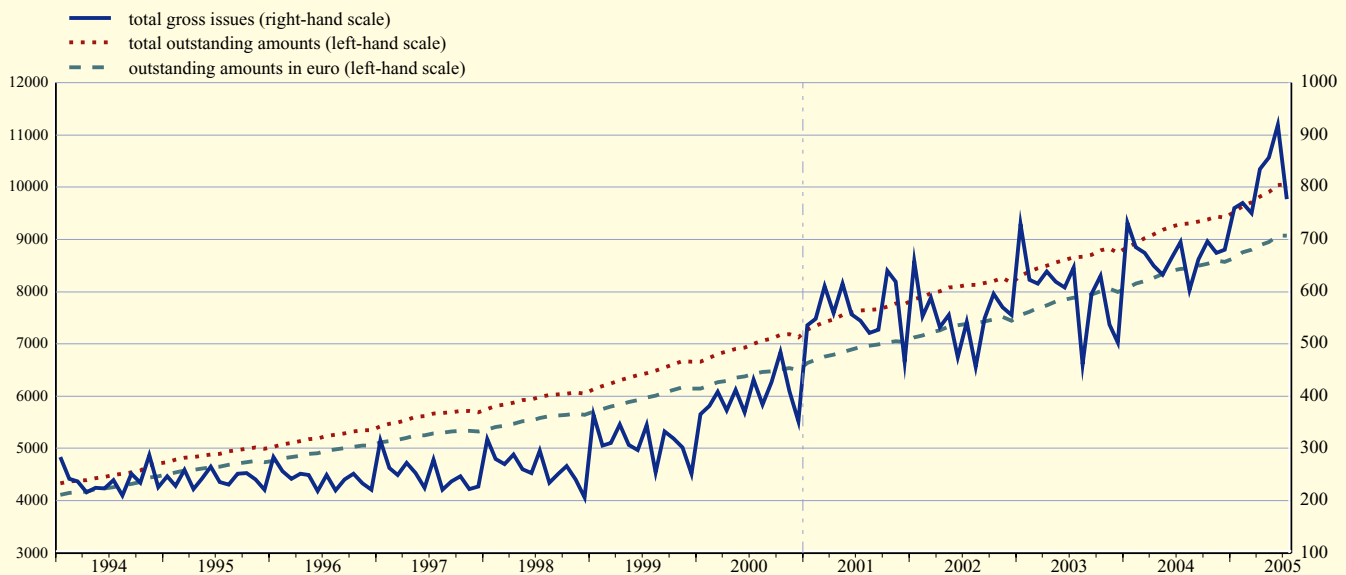
### 4.1 Securities, other than shares, by original maturity, residency of the issuer and currency

(EUR billions, unless otherwise indicated; transactions during the month and end-of-period outstanding amounts; nominal values)

	Total in euro <sup>1)</sup>				By euro area residents							
	Outstanding amounts	Gross issues	Redemptions	Net issues	Total				Of which in euro			
					Outstanding amounts	Gross issues	Redemptions	Net issues	Outstanding amounts (%)	Gross issues (%)	Redemptions (%)	Net issues
	1	2	3	4	5	6	7	8	9	10	11	12
<b>Total</b>												
2004 July	9,761.5	707.9	686.3	21.5	9,296.0	695.2	654.0	41.3	90.8	94.1	94.6	35.5
Aug.	9,794.2	619.8	590.5	29.3	9,311.6	603.7	590.2	13.5	90.8	94.7	94.8	12.8
Sep.	9,907.3	725.3	616.5	108.8	9,344.6	661.4	621.5	39.9	91.0	94.9	94.5	40.5
Oct.	9,932.8	712.2	690.4	21.7	9,381.1	696.7	656.3	40.3	91.0	93.7	94.9	30.2
Nov.	10,024.0	703.7	619.0	84.8	9,437.7	674.0	615.4	58.6	91.1	94.3	94.3	55.7
Dec.	10,028.1	706.6	701.9	4.7	9,410.7	680.4	703.0	-22.6	91.1	95.3	95.2	-21.4
2005 Jan.	10,093.5	763.3	710.5	52.8	9,523.1	759.5	678.3	81.3	90.8	93.8	95.4	65.1
Feb.	10,214.0	792.9	675.5	117.3	9,637.3	769.2	654.2	115.0	90.9	94.5	95.1	104.5
Mar.	10,322.2	798.2	691.0	107.2	9,706.3	750.5	695.4	55.1	90.7	93.9	94.9	44.6
Apr.	10,378.5	833.7	780.8	52.9	9,818.2	834.3	734.3	100.0	90.6	94.4	95.9	83.7
May	10,441.2	870.7	807.6	63.1	9,907.8	856.3	791.6	64.7	90.3	95.4	95.6	60.3
June	10,627.2	990.7	806.5	184.1	10,044.3	918.8	789.8	129.0	90.3	94.6	95.0	118.9
July	.	.	.	.	10,053.2	777.6	769.8	7.8	90.3	94.7	95.1	4.3
<b>Long-term</b>												
2004 July	8,848.1	190.3	153.1	37.1	8,350.3	173.4	139.1	34.4	91.1	91.8	93.7	28.8
Aug.	8,875.5	87.2	61.9	25.3	8,365.8	75.3	59.8	15.5	91.1	86.9	91.6	10.6
Sep.	8,970.1	191.6	102.0	89.7	8,415.7	157.0	104.6	52.4	91.2	91.6	89.0	50.7
Oct.	9,006.8	174.0	140.2	33.8	8,436.5	158.0	132.2	25.8	91.2	88.1	93.7	15.3
Nov.	9,082.7	168.7	98.6	70.1	8,490.7	155.1	95.6	59.5	91.2	89.1	92.2	50.1
Dec.	9,107.8	148.4	123.7	24.7	8,498.6	136.0	119.9	16.1	91.3	91.6	90.4	16.2
2005 Jan.	9,177.5	198.5	138.6	59.8	8,586.0	195.0	133.1	61.9	91.1	89.7	92.9	51.3
Feb.	9,293.7	220.7	107.0	113.7	8,689.4	199.4	95.5	103.9	91.2	90.4	89.5	94.8
Mar.	9,368.4	202.6	128.5	74.2	8,757.1	183.9	125.9	58.0	91.0	88.9	90.2	50.0
Apr.	9,421.5	181.2	129.8	51.5	8,837.6	181.1	110.2	70.9	90.9	90.2	94.3	59.4
May	9,489.4	178.1	111.7	66.4	8,925.1	164.9	99.7	65.2	90.7	90.9	91.0	59.2
June	9,668.3	296.4	121.2	175.2	9,089.6	253.6	102.0	151.6	90.6	91.1	88.2	141.1
July	.	.	.	.	9,086.3	145.2	147.6	-2.4	90.6	90.0	93.5	-7.4

### C13 Total outstanding amounts and gross issues of securities, other than shares, issued by euro area residents

(EUR billions)



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

1) Total euro-denominated securities, other than shares, issued by euro area residents and non-euro area residents.

#### 4.2 Securities, other than shares, issued by euro area residents, by sector of the issuer and instrument type

(EUR billions unless otherwise indicated; nominal values)

### 1. Outstanding amounts

(end of period)

	Total						Of which in euro (%)					
	Total	MFIs (including Eurosystem)	Non-MFI corporations		General government		Total	MFIs (including Eurosystem)	Non-MFI corporations		General government	
			Non-monetary financial corporations	Non-financial corporations	Central government	Other general government			Non-monetary financial corporations	Non-financial corporations	Central government	Other general government
1	2	3	4	5	6	7	8	9	10	11	12	
	Total											
2003	8,748	3,352	665	589	3,923	219	91.4	85.0	87.5	88.3	97.7	95.4
2004	9,411	3,713	735	592	4,120	250	91.1	84.1	90.4	87.6	97.8	95.7
2004 Q3	9,345	3,643	690	601	4,169	242	91.0	84.0	89.0	87.3	97.6	95.7
2004 Q4	9,411	3,713	735	592	4,120	250	91.1	84.1	90.4	87.6	97.8	95.7
2005 Q1	9,706	3,849	755	605	4,238	259	90.7	83.2	90.7	87.9	97.6	95.7
2005 Q2	10,044	3,994	830	613	4,341	266	90.3	82.6	90.9	87.3	97.4	96.0
2005 Apr.	9,818	3,907	771	613	4,264	262	90.6	83.0	90.6	87.8	97.6	95.8
2005 May	9,908	3,938	792	620	4,296	262	90.3	82.6	90.7	87.7	97.4	96.0
2005 June	10,044	3,994	830	613	4,341	266	90.3	82.6	90.9	87.3	97.4	96.0
2005 July	10,053	4,016	830	614	4,325	268	90.3	82.5	91.1	87.5	97.4	96.1
	Short-term											
2003	861	390	6	94	367	3	89.3	78.4	100.0	94.1	99.6	88.0
2004	912	447	7	90	362	5	88.7	78.5	94.1	95.5	99.5	87.3
2004 Q3	929	412	6	100	405	6	88.9	77.8	96.2	95.5	98.5	85.8
2004 Q4	912	447	7	90	362	5	88.7	78.5	94.1	95.5	99.5	87.3
2005 Q1	949	457	8	105	374	5	87.6	76.3	96.7	96.7	98.6	86.4
2005 Q2	955	462	7	103	377	5	87.2	75.8	97.6	96.8	98.4	76.6
2005 Apr.	981	483	8	111	374	5	87.4	76.6	97.5	96.7	98.5	81.1
2005 May	983	477	8	114	378	5	87.2	75.8	97.5	97.2	98.4	81.8
2005 June	955	462	7	103	377	5	87.2	75.8	97.6	96.8	98.4	76.6
2005 July	967	475	8	103	376	5	87.3	76.3	97.7	97.2	98.5	81.8
	Total long-term <sup>1)</sup>											
2003	7,887	2,962	659	495	3,556	216	91.6	85.9	87.4	87.2	97.5	95.5
2004	8,499	3,265	728	502	3,758	245	91.3	84.8	90.4	86.2	97.6	95.8
2004 Q3	8,416	3,231	684	501	3,764	236	91.2	84.8	89.0	85.7	97.5	96.0
2004 Q4	8,499	3,265	728	502	3,758	245	91.3	84.8	90.4	86.2	97.6	95.8
2005 Q1	8,757	3,393	747	500	3,863	254	91.0	84.1	90.6	86.0	97.5	95.9
2005 Q2	9,090	3,532	822	510	3,965	260	90.6	83.4	90.8	85.4	97.3	96.4
2005 Apr.	8,838	3,425	763	502	3,890	257	90.9	83.9	90.6	85.9	97.5	96.1
2005 May	8,925	3,461	784	506	3,917	257	90.7	83.5	90.6	85.6	97.3	96.3
2005 June	9,090	3,532	822	510	3,965	260	90.6	83.4	90.8	85.4	97.3	96.4
2005 July	9,086	3,541	822	511	3,949	263	90.6	83.3	91.0	85.5	97.3	96.4
	Of which long-term fixed rate											
2003	6,115	1,884	406	419	3,240	165	91.8	85.4	80.4	86.7	97.4	95.4
2004	6,378	1,929	416	412	3,436	186	91.7	83.9	83.9	85.5	97.5	95.6
2004 Q3	6,390	1,951	408	415	3,436	180	91.5	84.0	82.2	85.2	97.5	95.8
2004 Q4	6,378	1,929	416	412	3,436	186	91.7	83.9	83.9	85.5	97.5	95.6
2005 Q1	6,515	1,968	426	407	3,517	196	91.5	83.2	84.4	85.3	97.4	95.8
2005 Q2	6,671	2,003	445	414	3,607	203	91.1	82.4	84.2	84.7	97.2	96.1
2005 Apr.	6,552	1,972	430	408	3,543	199	91.4	82.9	84.1	85.2	97.4	96.0
2005 May	6,599	1,983	433	410	3,573	199	91.2	82.6	83.9	84.9	97.3	96.0
2005 June	6,671	2,003	445	414	3,607	203	91.1	82.4	84.2	84.7	97.2	96.1
2005 July	6,648	1,998	440	413	3,590	205	91.1	82.4	84.3	84.7	97.2	96.1
	Of which long-term variable rate											
2003	1,579	959	249	59	262	51	91.3	87.5	98.7	89.4	97.5	95.8
2004	1,868	1,148	309	77	275	59	90.9	86.9	99.0	88.9	97.7	96.6
2004 Q3	1,771	1,101	273	73	269	56	90.6	86.8	98.9	87.6	97.5	96.3
2004 Q4	1,868	1,148	309	77	275	59	90.9	86.9	99.0	88.9	97.7	96.6
2005 Q1	1,956	1,212	317	79	291	58	90.5	86.4	98.9	89.1	98.0	96.3
2005 Q2	2,115	1,293	374	83	308	57	90.4	86.0	98.7	88.5	98.0	97.2
2005 Apr.	2,003	1,233	330	80	302	58	90.4	86.1	98.9	88.4	98.0	96.3
2005 May	2,034	1,251	348	81	297	58	90.3	85.9	98.8	88.4	98.0	97.2
2005 June	2,115	1,293	374	83	308	57	90.4	86.0	98.7	88.5	98.0	97.2
2005 July	2,129	1,302	379	83	307	57	90.2	85.7	98.8	88.4	98.0	97.2

Source: ECB.

1) The residual difference between total long-term debt securities and fixed and variable rate long-term debt securities consists of zero coupon bonds and revaluation effects.

## 4.2 Securities, other than shares, issued by euro area residents, by sector of the issuer and instrument type

(EUR billions unless otherwise indicated; nominal values)

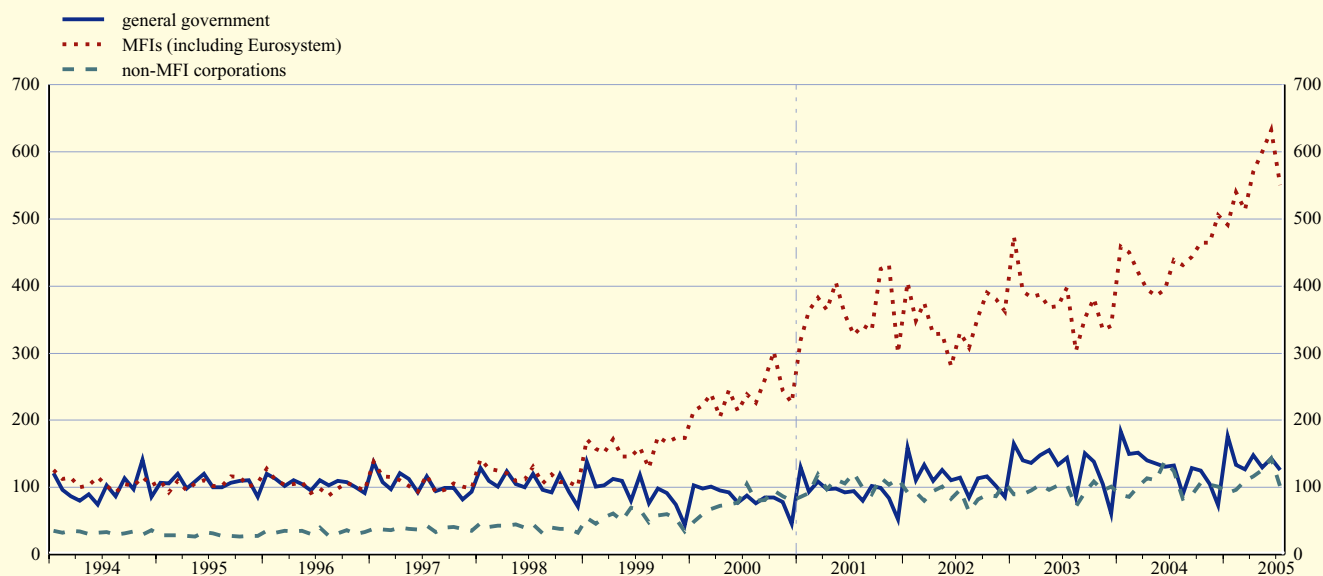
### 2. Gross issues

(transactions during the period)

	Total						Long-term <sup>1)</sup>					
	Total	MFIs (including Eurosystem)	Non-MFI corporations		General government		Total	MFIs (including Eurosystem)	Non-MFI corporations		General government	
			Non-monetary financial corporations	Non-financial corporations	Central government	Other general government			Non-monetary financial corporations	Non-financial corporations	Central government	Other general government
1	2	3	4	5	6	7	8	9	10	11	12	
	Total						Long-term fixed rate					
2003	7,206.3	4,485.6	244.7	909.8	1,478.8	87.4	1,284.8	414.2	113.7	89.0	626.4	41.4
2004	8,048.8	5,252.0	222.3	1,028.0	1,463.6	82.8	1,193.0	407.5	69.2	60.6	619.8	35.9
2004 Q3	1,960.3	1,313.4	40.9	255.5	334.2	16.3	247.9	86.6	9.2	14.0	131.9	6.1
Q4	2,051.0	1,434.1	84.3	228.4	283.9	20.4	258.7	92.7	25.6	14.7	117.1	8.5
2005 Q1	2,279.3	1,543.6	49.8	248.3	412.5	25.0	386.5	136.5	21.0	15.1	198.9	14.9
Q2	2,609.3	1,801.5	108.4	277.7	399.0	22.7	342.0	100.7	27.6	14.9	187.1	11.8
2005 Apr.	834.3	569.9	31.4	84.9	140.0	8.0	105.0	29.9	7.1	3.5	60.8	3.8
May	856.3	599.7	29.0	97.2	126.3	4.1	97.4	24.3	5.6	2.9	63.4	1.1
June	918.8	631.8	48.0	95.6	132.7	10.6	139.6	46.4	15.0	8.5	62.8	6.9
July	777.6	549.9	13.1	88.1	119.0	7.5	93.5	23.7	2.9	4.3	59.2	3.3
	Of which short-term						Long-term variable rate					
2003	5,332.7	3,698.2	41.3	796.1	767.6	29.4	507.8	336.8	89.5	11.7	53.3	16.5
2004	6,147.2	4,383.4	43.9	930.9	755.6	33.4	618.8	403.9	109.1	31.8	60.5	13.5
2004 Q3	1,554.7	1,118.9	10.8	230.4	185.9	8.7	136.5	95.3	20.8	10.2	8.6	1.6
Q4	1,601.9	1,222.9	12.0	204.7	154.7	7.5	175.1	105.0	46.6	7.4	11.7	4.4
2005 Q1	1,700.9	1,262.4	12.4	229.1	188.4	8.6	167.6	129.5	16.3	3.4	16.9	1.5
Q2	2,009.7	1,557.8	10.9	254.7	178.0	8.4	234.0	127.3	69.6	6.8	27.7	2.5
2005 Apr.	653.1	501.8	4.2	79.2	65.2	2.8	68.4	33.4	20.2	1.6	11.8	1.5
May	691.4	537.3	3.5	91.8	56.0	2.8	61.0	34.0	19.8	2.1	4.8	0.2
June	665.1	518.6	3.3	83.7	56.8	2.8	104.6	59.9	29.6	3.1	11.1	0.8
July	632.4	489.9	3.1	80.9	55.7	2.8	43.7	31.4	7.1	1.8	2.1	1.3

### C14 Gross issues of securities, other than shares, by sector

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



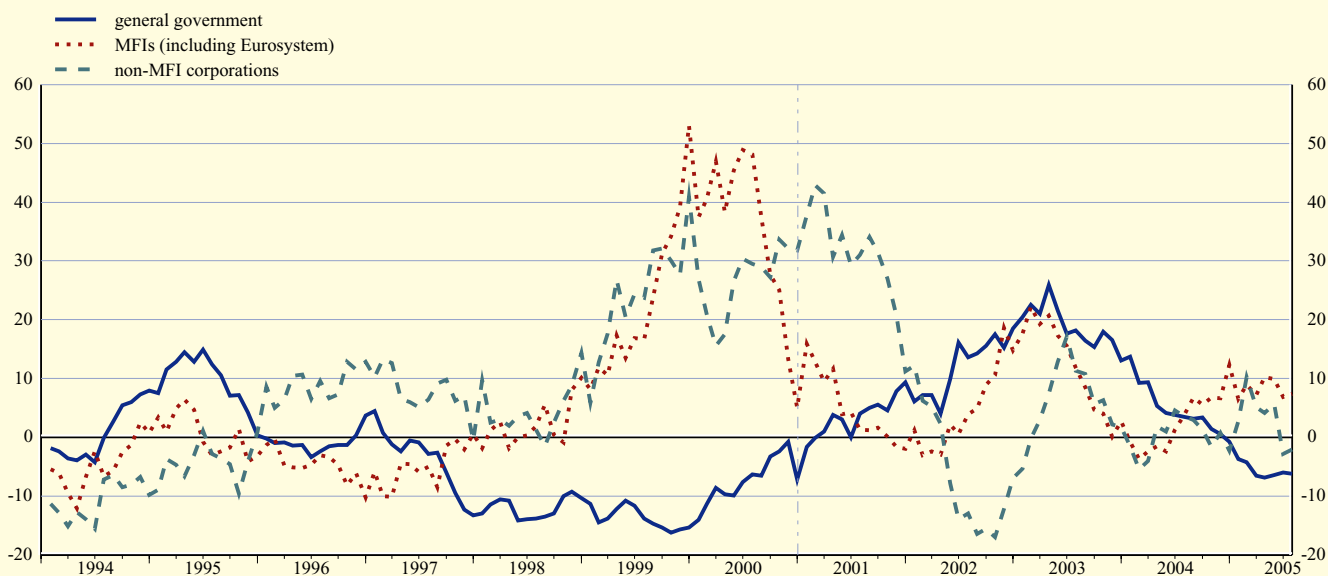
Source: ECB.

1) The residual difference between total long-term debt securities and fixed and variable rate long-term debt securities consists of zero coupon bonds and revaluation effects.

4.3 Annual growth rates of securities, other than shares, issued by euro area residents <sup>1)</sup>  
(percentage changes)

	Total						Short-term					
	Total	MFIs (including Eurosystem)	Non-MFI corporations		General government		Total	MFIs (including Eurosystem)	Non-MFI corporations		General government	
			Non-monetary financial corporations	Non-financial corporations	Central government	Other general government			Non-monetary financial corporations	Non-financial corporations	Central government	Other general government
1	2	3	4	5	6	7	8	9	10	11	12	
In all currencies combined												
2003	6.7	5.1	25.1	8.6	4.5	26.0	14.0	12.2	1.1	5.7	19.2	-2.2
2004	6.9	7.9	13.4	3.7	5.0	17.6	3.2	2.2	-9.6	0.9	4.9	29.9
2004 Q3	7.2	8.6	11.4	3.6	5.4	16.4	3.9	4.6	-10.7	4.0	3.1	32.4
2004 Q4	6.8	8.8	9.9	3.0	4.8	14.5	3.7	7.4	8.9	-1.0	0.5	66.9
2005 Q1	7.2	9.1	11.6	2.8	5.1	13.7	2.6	8.4	34.1	3.1	-4.3	35.4
2005 Q2	7.3	8.9	17.2	4.5	4.5	12.0	1.6	9.0	43.6	1.6	-6.8	16.1
2005 Feb.	7.4	9.4	11.1	3.0	5.3	13.0	3.3	8.9	45.7	8.3	-4.6	31.5
2005 Mar.	7.1	8.8	14.4	4.4	4.6	11.9	0.9	7.2	47.6	3.0	-7.0	36.2
2005 Apr.	7.5	9.0	15.8	5.4	4.7	12.7	2.1	10.2	46.3	1.9	-7.1	16.2
2005 May	7.1	8.5	18.4	4.7	4.2	11.7	2.2	9.9	39.9	3.9	-6.6	11.9
2005 June	7.7	9.6	20.0	2.7	4.6	11.1	0.1	6.8	41.6	-5.0	-6.2	7.8
2005 July	7.3	9.3	18.8	1.5	4.3	12.7	0.4	7.4	40.9	-4.3	-6.3	-0.3
In euro												
2003	6.4	3.8	30.6	9.4	4.4	24.9	15.6	15.8	0.9	4.8	19.3	-8.2
2004	6.6	6.6	16.8	2.8	5.1	17.3	3.1	1.7	-11.1	0.9	4.8	29.5
2004 Q3	6.7	7.0	15.1	2.4	5.5	16.3	3.0	2.5	-13.3	4.4	3.0	28.8
2004 Q4	6.4	7.6	13.1	1.8	4.8	14.6	3.6	7.7	3.9	0.0	0.6	72.7
2005 Q1	6.7	7.7	14.9	2.3	5.0	13.8	2.8	9.8	28.5	5.1	-4.2	33.2
2005 Q2	7.0	7.7	20.8	4.6	4.5	12.3	1.8	10.8	39.8	3.7	-6.6	9.9
2005 Feb.	6.9	7.8	14.3	2.6	5.2	13.1	3.5	10.3	41.2	10.5	-4.5	28.6
2005 Mar.	6.7	7.3	18.1	4.3	4.6	12.1	1.0	8.2	42.8	5.1	-6.8	39.2
2005 Apr.	7.1	7.6	19.3	5.4	4.8	12.9	2.1	11.8	42.6	3.9	-6.9	10.1
2005 May	6.8	7.4	22.2	4.9	4.2	12.1	2.5	12.1	36.4	6.3	-6.6	3.4
2005 June	7.5	8.7	23.6	2.6	4.5	11.5	0.4	8.8	38.2	-3.4	-6.0	-1.2
2005 July	7.1	8.4	22.1	1.7	4.2	13.3	1.0	9.9	43.2	-1.9	-6.3	-3.2

C15 Annual growth rates of short-term debt securities, by sector of the issuer, in all currencies combined  
(percentage changes)



Source: ECB.

1) For the calculation of the growth rates, see the Technical notes.

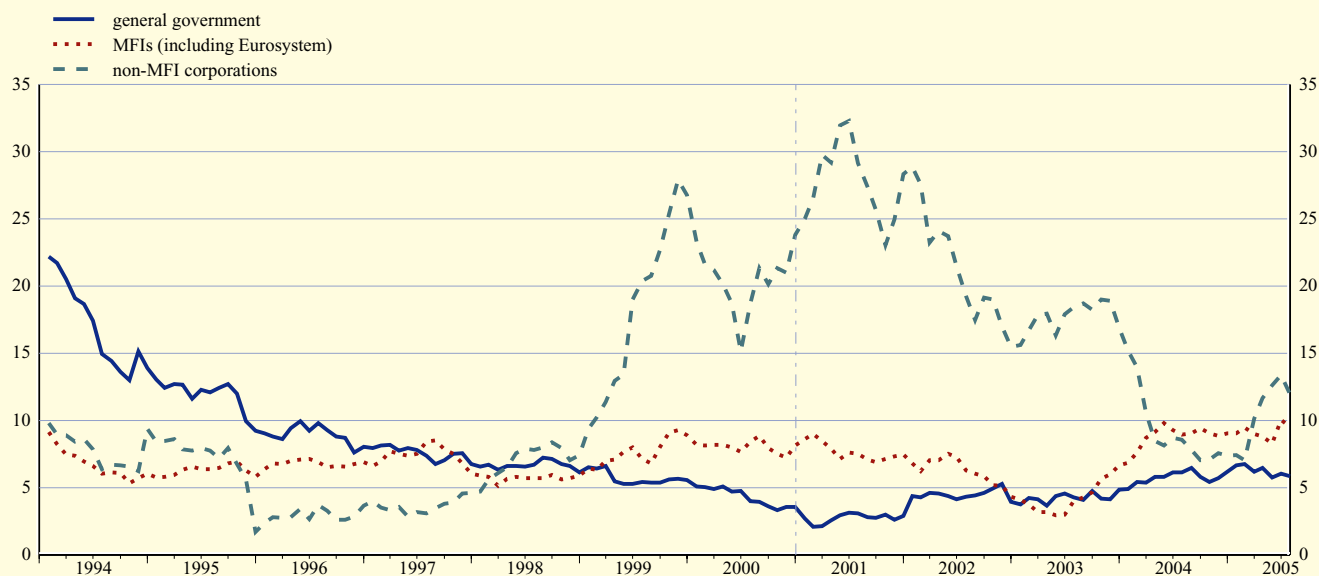
#### 4.3 Annual growth rates of securities, other than shares, issued by euro area residents <sup>1)</sup> (cont'd)

(percentage changes)

	Long-term fixed rate						Long-term variable rate					
	Total	MFIs (including Eurosystem)	Non-MFI corporations		General government		Total	MFIs (including Eurosystem)	Non-MFI corporations		General government	
			Non-monetary financial corporations	Non-financial corporations	Central government	Other general government			Non-monetary financial corporations	Non-financial corporations	Central government	Other general government
13	14	15	16	17	18	19	20	21	22	23	24	
	In all currencies combined											
2003	5.2	2.1	15.3	11.9	4.4	22.6	8.5	8.3	51.2	-13.4	-9.2	43.2
2004	5.1	3.1	6.4	3.2	5.8	14.7	16.2	18.4	27.2	8.1	0.6	26.4
2004 Q3	4.9	3.1	3.5	1.2	6.2	13.5	17.6	19.1	27.1	18.2	3.3	25.1
Q4	4.3	2.4	2.6	0.7	5.7	12.3	17.8	20.2	22.6	29.0	2.3	18.7
2005 Q1	4.7	2.8	3.9	-1.2	6.3	13.7	18.3	19.4	23.8	27.7	7.7	12.4
Q2	4.8	2.5	6.1	1.3	5.8	14.7	19.5	19.1	34.8	26.4	8.5	3.2
2005 Feb.	4.9	2.9	3.6	-2.1	6.8	12.9	18.3	20.3	22.6	26.0	6.5	11.9
Mar.	4.5	2.4	5.8	0.6	5.6	13.6	19.0	19.6	28.2	27.3	9.3	5.1
Apr.	5.1	2.5	5.4	2.3	6.3	15.0	18.9	18.8	32.6	26.5	7.8	5.4
May	4.6	2.2	6.2	1.0	5.6	15.0	18.9	17.9	37.9	25.7	7.7	1.7
June	4.8	3.1	7.5	0.7	5.5	14.6	22.1	21.8	38.9	26.8	10.8	0.2
July	4.6	2.9	6.3	0.2	5.2	16.6	20.7	20.6	37.1	15.5	10.1	1.9
	In euro											
2003	4.6	0.1	20.5	12.2	4.2	21.3	8.6	7.7	51.2	-8.9	-9.3	43.7
2004	4.8	1.3	10.4	1.8	5.9	14.7	15.7	17.7	27.3	8.4	0.5	25.3
2004 Q3	4.7	1.2	7.5	-0.4	6.4	13.8	16.9	18.3	27.3	15.7	3.3	24.0
Q4	4.0	0.3	6.3	-0.9	5.8	12.5	17.1	19.6	22.9	26.5	2.3	18.1
2005 Q1	4.3	0.5	7.9	-2.5	6.2	13.7	17.5	18.2	24.0	26.7	7.8	12.9
Q2	4.4	0.3	10.1	0.9	5.8	15.1	19.0	18.2	34.9	24.7	8.9	3.9
2005 Feb.	4.5	0.4	7.5	-3.4	6.7	13.0	17.4	18.9	22.8	25.0	6.6	12.4
Mar.	4.2	0.2	10.2	-0.1	5.6	13.8	18.1	18.0	28.4	26.7	9.7	5.3
Apr.	4.8	0.2	9.2	1.9	6.4	15.4	18.2	17.7	32.8	24.5	8.2	5.6
May	4.2	0.1	10.3	0.5	5.6	15.4	18.6	17.1	38.0	23.7	8.1	2.8
June	4.5	0.9	11.5	0.5	5.4	15.1	22.0	21.4	38.7	25.1	11.4	1.2
July	4.2	0.9	10.0	-0.3	5.0	17.1	20.5	19.8	37.0	17.0	10.6	3.0

#### C16 Annual growth rates of long-term debt securities, by sector of the issuer, in all currencies combined

(percentage changes)



Source: ECB.

1) For the calculation of the growth rates, see the Technical notes.

4.4 Quoted shares issued by euro area residents <sup>1)</sup>

(EUR billions, unless otherwise indicated; market values)

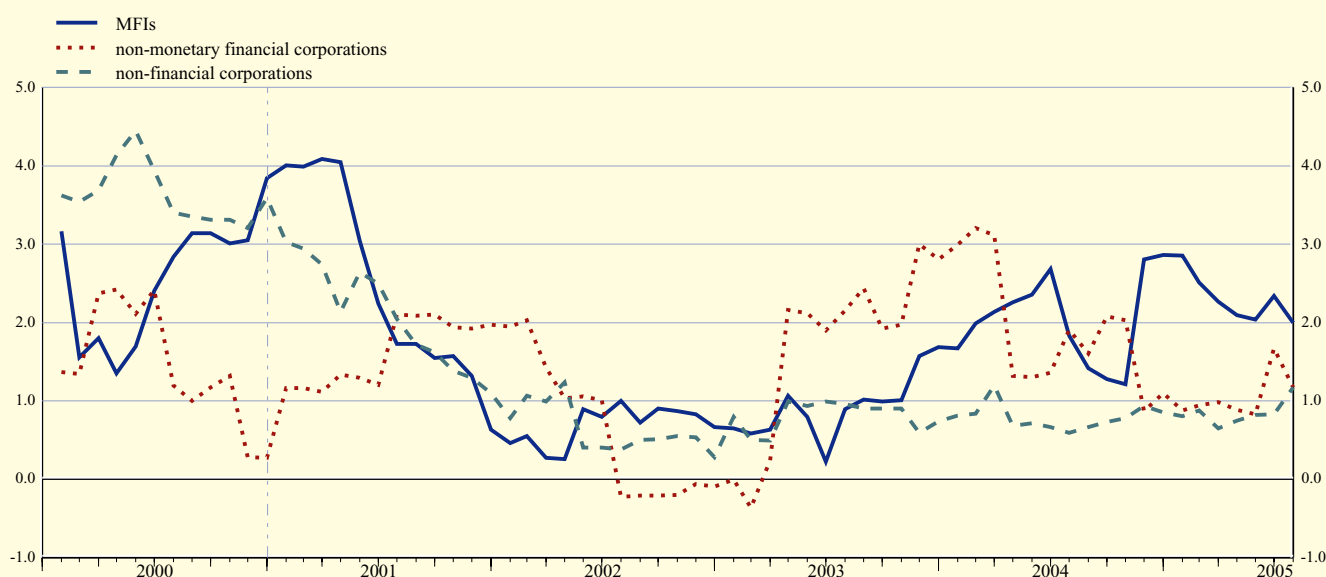
## 1. Outstanding amounts and annual growth rates

(outstanding amounts as end-of-period)

	Total			MFIs		Non-monetary financial corporations		Non-financial corporations	
	Total	Index Dec. 01 = 100 (%)	Annual growth rates (%)	Total	Annual growth rates (%)	Total	Annual growth rates (%)	Total	Annual growth rates (%)
	1	2	3	4	5	6	7	8	9
2003 July	3,366.5	101.1	1.1	528.0	0.9	330.9	2.2	2,507.6	1.0
Aug.	3,413.4	101.1	1.1	506.5	1.0	325.5	2.4	2,581.5	0.9
Sep.	3,276.7	101.1	1.0	494.8	1.0	307.1	1.9	2,474.7	0.9
Oct.	3,484.0	101.2	1.0	535.2	1.0	333.2	2.0	2,615.6	0.9
Nov.	3,546.9	101.3	1.0	549.5	1.6	337.9	3.0	2,659.6	0.6
Dec.	3,647.4	101.4	1.1	569.5	1.7	348.6	2.8	2,729.3	0.7
2004 Jan.	3,788.6	101.4	1.1	584.1	1.7	372.3	3.0	2,832.2	0.8
Feb.	3,852.1	101.5	1.2	587.9	2.0	374.3	3.2	2,889.9	0.8
Mar.	3,766.5	101.8	1.5	571.9	2.1	355.0	3.1	2,839.6	1.2
Apr.	3,748.5	101.9	1.0	579.4	2.3	361.1	1.3	2,808.0	0.7
May	3,687.9	101.9	1.0	568.1	2.4	350.6	1.3	2,769.2	0.7
June	3,790.1	102.0	1.0	582.5	2.7	362.0	1.4	2,845.7	0.7
July	3,679.8	102.0	0.9	562.3	1.8	354.0	1.9	2,763.5	0.6
Aug.	3,621.2	102.0	0.9	562.5	1.4	353.1	1.6	2,705.6	0.7
Sep.	3,707.9	102.1	0.9	579.6	1.3	362.3	2.1	2,766.1	0.7
Oct.	3,787.6	102.2	1.0	598.0	1.2	372.6	2.0	2,817.1	0.8
Nov.	3,906.5	102.5	1.2	623.9	2.8	386.5	0.9	2,896.2	0.9
Dec.	4,033.8	102.6	1.2	643.7	2.9	405.6	1.1	2,984.5	0.8
2005 Jan.	4,138.0	102.6	1.1	662.6	2.9	412.2	0.9	3,063.3	0.8
Feb.	4,254.5	102.7	1.1	681.1	2.5	431.8	0.9	3,141.5	0.9
Mar.	4,242.4	102.7	0.9	677.7	2.3	421.8	1.0	3,142.9	0.7
Apr.	4,094.7	102.9	1.0	656.0	2.1	400.6	0.9	3,038.1	0.7
May	4,272.6	103.0	1.0	678.1	2.0	414.0	0.8	3,180.5	0.8
June	4,382.2	103.2	1.2	698.0	2.3	431.1	1.7	3,253.0	0.8
July	4,631.7	103.4	1.3	727.8	2.0	456.4	1.2	3,447.5	1.2

## C17 Annual growth rates for quoted shares issued by euro area residents

(annual percentage changes)



Source: ECB.

1) For the calculation of the index and the growth rates, see the Technical notes.

#### 4.4 Quoted shares issued by euro area residents <sup>1)</sup>

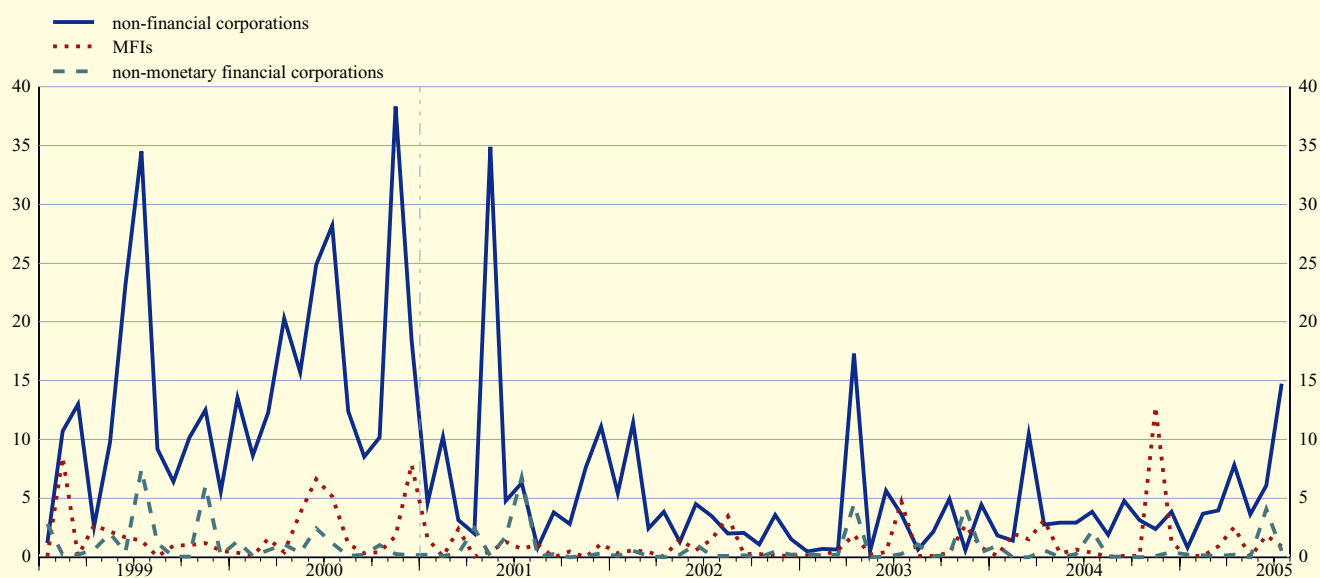
(EUR billions; market values)

### 2. Transactions during the month

	Total			MFIs			Non-monetary financial corporations			Non-financial corporations		
	Gross issues	Redemptions	Net issues	Gross issues	Redemptions	Net issues	Gross issues	Redemptions	Net issues	Gross issues	Redemptions	Net issues
	1	2	3	4	5	6	7	8	9	10	11	12
2003 July	8.6	2.0	6.6	4.7	0.2	4.5	0.2	0.0	0.2	3.6	1.8	1.8
Aug.	1.8	1.4	0.4	0.1	0.0	0.1	1.1	0.1	1.0	0.6	1.3	-0.7
Sep.	2.3	2.1	0.3	0.1	0.1	0.0	0.1	1.6	-1.5	2.2	0.4	1.8
Oct.	5.4	3.9	1.6	0.4	0.0	0.4	0.2	0.0	0.1	4.9	3.8	1.1
Nov.	7.5	5.5	2.1	2.7	0.0	2.7	4.2	0.3	3.9	0.6	5.1	-4.5
Dec.	5.7	1.6	4.0	0.8	0.1	0.8	0.4	0.9	-0.5	4.4	0.6	3.8
2004 Jan.	2.9	1.0	1.9	0.1	0.0	0.1	0.9	0.0	0.9	1.8	1.0	0.8
Feb.	3.5	0.7	2.8	2.0	0.0	2.0	0.0	0.2	-0.2	1.4	0.5	1.0
Mar.	12.0	1.3	10.7	1.5	0.0	1.5	0.0	0.1	-0.1	10.5	1.1	9.3
Apr.	6.5	0.6	5.8	3.1	0.1	3.1	0.6	0.1	0.5	2.8	0.5	2.3
May	3.3	3.6	-0.4	0.3	0.0	0.3	0.0	0.0	0.0	2.9	3.6	-0.6
June	3.8	2.2	1.6	0.7	1.6	-1.0	0.3	0.0	0.2	2.9	0.5	2.4
July	6.4	3.6	2.8	0.4	0.0	0.4	2.2	0.0	2.2	3.8	3.6	0.2
Aug.	2.0	2.9	-0.9	0.1	2.2	-2.2	0.0	0.0	0.0	1.9	0.7	1.2
Sep.	4.9	2.2	2.7	0.1	0.9	-0.8	0.0	0.0	0.0	4.8	1.3	3.5
Oct.	3.2	0.5	2.7	0.1	0.0	0.1	0.0	0.0	0.0	3.1	0.5	2.7
Nov.	15.2	3.3	11.9	12.8	0.3	12.4	0.1	0.0	0.1	2.4	3.0	-0.6
Dec.	5.5	2.2	3.2	1.2	0.0	1.2	0.4	0.1	0.3	3.9	2.1	1.8
2005 Jan.	1.1	1.2	-0.1	0.1	0.0	0.1	0.2	0.0	0.2	0.8	1.1	-0.3
Feb.	3.9	0.6	3.3	0.1	0.0	0.1	0.2	0.1	0.1	3.7	0.5	3.2
Mar.	5.0	1.8	3.2	0.9	0.9	0.0	0.1	0.1	0.0	3.9	0.8	3.1
Apr.	10.6	2.4	8.2	2.5	0.0	2.5	0.2	0.1	0.1	7.8	2.3	5.6
May	3.6	2.4	1.2	0.0	0.0	0.0	0.0	0.3	-0.3	3.6	2.1	1.5
June	12.0	4.5	7.6	1.9	1.0	0.9	4.1	0.4	3.7	6.1	3.1	3.0
July	16.2	6.5	9.7	0.9	2.9	-2.0	0.5	0.0	0.5	14.7	3.6	11.2

#### C18 Gross issues of quoted shares by sector of the issuer

(EUR billions; transactions during the month; market values)



Source: ECB.

1) For the calculation of the index and the growth rates, see the Technical notes.

## 4.5 MFI interest rates on euro-denominated deposits and loans by euro area residents

(percentages per annum; outstanding amounts as end-of-period, new business as period average, unless otherwise indicated)

## 1. Interest rates on deposits (new business)

	Deposits from households						Deposits from non-financial corporations				Repos
	Overnight <sup>1)</sup>	With agreed maturity			Redeemable at notice <sup>1,2)</sup>		Overnight <sup>1)</sup>	With agreed maturity			
		Up to 1 year	Over 1 and up to 2 years	Over 2 years	Up to 3 months	Over 3 months		Up to 1 year	Over 1 and up to 2 years	Over 2 years	
	1	2	3	4	5	6	7	8	9	10	11
2004 Aug.	0.72	1.91	2.18	2.67	1.95	2.53	0.87	1.98	2.37	3.99	1.98
Sep.	0.72	1.90	2.20	2.48	2.00	2.52	0.90	2.00	2.32	3.68	1.99
Oct.	0.72	1.92	2.29	2.48	2.00	2.52	0.89	2.04	2.34	3.56	2.00
Nov.	0.73	1.94	2.20	2.50	2.01	2.51	0.90	2.04	2.23	3.39	2.02
Dec.	0.73	1.95	2.19	2.31	2.00	2.52	0.90	2.08	2.70	3.51	2.02
2005 Jan.	0.74	1.95	2.29	2.54	1.98	2.49	0.93	2.04	2.25	3.26	2.05
Feb.	0.74	1.95	2.19	2.33	1.97	2.49	0.93	2.03	2.25	3.47	2.03
Mar.	0.74	1.93	2.16	2.40	1.96	2.47	0.94	2.00	2.35	3.15	1.99
Apr.	0.74	2.01	2.09	2.32	1.95	2.45	0.95	2.01	2.23	2.92	2.00
May	0.75	1.94	2.01	2.20	1.97	2.43	0.95	2.01	2.12	3.31	2.00
June	0.69	1.95	2.21	2.20	2.17	2.38	0.91	2.01	2.05	3.57	2.00
July	0.68	1.94	2.01	2.19	2.15	2.34	0.94	2.01	2.21	2.97	2.00

## 2. Interest rates on loans to households (new business)

	Bank overdraft <sup>1)</sup>	Consumer credit				Annual percentage rate of charge <sup>3)</sup>	Lending for house purchase				Annual percentage rate of charge <sup>3)</sup>	Other lending by initial rate fixation			
		By initial rate fixation			Annual percentage rate of charge <sup>3)</sup>		By initial rate fixation					Annual percentage rate of charge <sup>3)</sup>	Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 years
		Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 years			Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 and up to 10 years	Over 10 years					
	1	2	3	4	5	6	7	8	9	10	11	12	13		
2004 Aug.	9.86	7.08	6.89	8.58	8.15	3.50	4.19	4.87	4.65	4.29	3.91	5.07	5.02		
Sep.	9.60	6.92	6.96	8.45	8.07	3.49	4.14	4.82	4.66	4.24	3.90	4.98	5.00		
Oct.	9.53	6.80	6.87	8.34	7.87	3.50	4.12	4.77	4.64	4.18	4.08	4.87	4.92		
Nov.	9.48	6.89	6.84	8.23	7.85	3.45	4.07	4.66	4.58	4.09	3.96	4.89	4.82		
Dec.	9.53	6.73	6.60	7.67	7.59	3.43	3.95	4.49	4.41	4.07	3.82	4.59	4.65		
2005 Jan.	9.60	6.97	6.81	8.32	8.01	3.44	3.97	4.43	4.45	4.07	3.96	4.64	4.62		
Feb.	9.65	6.20	6.83	8.18	7.77	3.40	3.94	4.39	4.33	3.98	3.99	4.73	4.49		
Mar.	9.62	6.62	6.72	8.12	7.83	3.40	3.89	4.35	4.27	3.97	3.84	4.60	4.57		
Apr.	9.62	6.60	6.64	8.19	7.81	3.40	3.89	4.36	4.28	3.95	3.97	4.71	4.62		
May	9.64	6.96	6.56	8.00	7.82	3.38	3.85	4.28	4.20	3.93	3.86	4.68	4.61		
June	9.61	6.62	6.49	7.90	7.72	3.32	3.76	4.13	4.09	3.89	3.84	4.60	4.50		
July	9.52	6.67	6.61	7.96	7.80	3.33	3.70	4.06	4.05	3.87	3.88	4.53	4.30		

## 3. Interest rates on loans to non-financial corporations (new business)

	Bank overdraft <sup>1)</sup>	Other loans up to EUR 1 million by initial rate fixation			Other loans over EUR 1 million by initial rate fixation			
		Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 years	Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 years	
								1
2004 Aug.		5.44	4.06	4.89	4.73	2.98	3.12	4.30
Sep.		5.37	4.00	4.85	4.68	2.99	3.41	4.46
Oct.		5.39	4.02	4.87	4.64	2.99	3.30	4.27
Nov.		5.37	4.02	4.79	4.55	2.95	3.41	4.31
Dec.		5.26	3.97	4.67	4.46	3.05	3.55	4.10
2005 Jan.		5.38	3.97	4.69	4.47	3.02	3.30	4.10
Feb.		5.30	3.91	4.76	4.36	3.02	3.34	3.81
Mar.		5.28	3.89	4.51	4.32	3.02	3.48	4.11
Apr.		5.22	3.88	4.51	4.34	3.00	3.54	3.99
May		5.14	3.91	4.45	4.24	2.99	3.61	3.80
June		5.12	3.87	4.45	4.14	2.92	3.44	3.88
July		5.12	3.85	4.41	4.09	2.96	3.55	3.78

Source: ECB.

- 1) For this instrument category, new business and outstanding amounts coincide. End-of-period.
- 2) For this instrument category, households and non-financial corporations are merged and allocated to the household sector, since the outstanding amounts of non-financial corporations are negligible compared with those of the household sector in all participating Member States combined.
- 3) The annual percentage rate of charge covers the total cost of a loan. The total cost comprises an interest rate component and a component of other (related) charges, such as the cost of inquiries, administration, preparation of documents, guarantees, etc.



#### 4.5 MFI interest rates on euro-denominated deposits and loans by euro area residents

(percentages per annum; outstanding amounts as end-of-period, new business as period average, unless otherwise indicated)

#### 4. Interest rates on deposits (outstanding amounts)

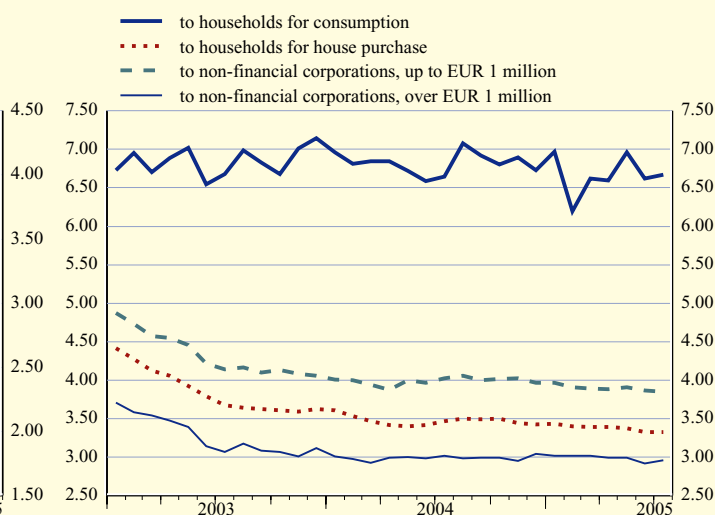
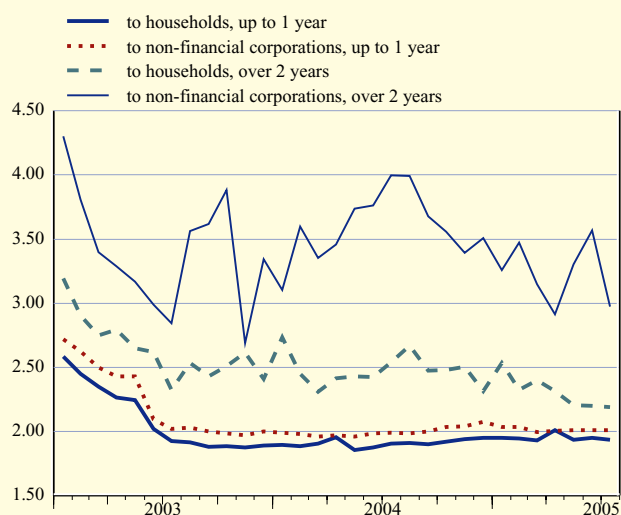
	Deposits from households					Deposits from non-financial corporations			Repos
	Overnight <sup>1)</sup>	With agreed maturity		Redeemable at notice <sup>1),2)</sup>		Overnight <sup>1)</sup>	With agreed maturity		
		Up to 2 years	Over 2 years	Up to 3 months	Over 3 months		Up to 2 years	Over 2 years	
	1	2	3	4	5	6	7	8	9
2004 Aug.	0.72	1.90	3.24	1.95	2.53	0.87	2.10	3.99	1.98
Sep.	0.72	1.90	3.22	2.00	2.52	0.90	2.12	3.97	1.97
Oct.	0.72	1.90	3.27	2.00	2.52	0.89	2.10	3.89	1.98
Nov.	0.73	1.90	3.26	2.01	2.51	0.90	2.12	3.86	2.00
Dec.	0.73	1.92	3.24	2.00	2.52	0.90	2.16	3.77	2.02
2005 Jan.	0.74	1.91	3.23	1.98	2.49	0.93	2.12	3.73	2.01
Feb.	0.74	1.92	3.26	1.97	2.49	0.93	2.11	3.70	2.00
Mar.	0.74	1.92	3.22	1.96	2.47	0.94	2.09	3.70	1.99
Apr.	0.74	1.93	3.22	1.95	2.45	0.95	2.10	3.57	1.99
May	0.75	1.92	3.19	1.97	2.43	0.95	2.10	3.50	2.00
June	0.69	1.92	3.22	2.17	2.38	0.91	2.11	3.55	2.01
July	0.68	1.91	3.18	2.15	2.34	0.94	2.11	3.50	1.97

#### 5. Interest rates on loans (outstanding amounts)

	Loans to households						Loans to non-financial corporations		
	Lending for house purchase, with maturity			Consumer credit and other loans, with maturity			With maturity		
	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
	1	2	3	4	5	6	7	8	9
2004 Aug.	4.81	4.61	4.91	8.17	7.06	5.86	4.42	3.97	4.51
Sep.	4.82	4.58	4.90	8.06	7.13	5.85	4.45	3.99	4.52
Oct.	4.69	4.54	4.88	8.05	7.07	5.80	4.41	3.97	4.48
Nov.	4.67	4.52	4.86	7.94	6.98	5.82	4.40	3.96	4.48
Dec.	4.78	4.50	4.83	7.94	7.00	5.80	4.34	3.97	4.44
2005 Jan.	4.78	4.45	4.79	8.07	6.97	5.77	4.41	3.90	4.41
Feb.	4.74	4.45	4.76	8.07	7.03	5.76	4.39	3.92	4.46
Mar.	4.75	4.41	4.78	8.08	6.97	5.77	4.38	3.91	4.40
Apr.	4.69	4.38	4.74	8.02	6.94	5.76	4.34	3.86	4.37
May	4.63	4.36	4.71	8.00	6.87	5.74	4.33	3.85	4.35
June	4.63	4.33	4.67	7.92	6.93	5.72	4.32	3.85	4.35
July	4.58	4.29	4.64	7.89	6.86	5.70	4.30	3.82	4.29

**C19 New deposits with agreed maturity**  
(percentages per annum excluding charges; period averages)

**C20 New loans at floating rate and up to 1 year initial rate fixation**  
(percentages per annum excluding charges; period averages)

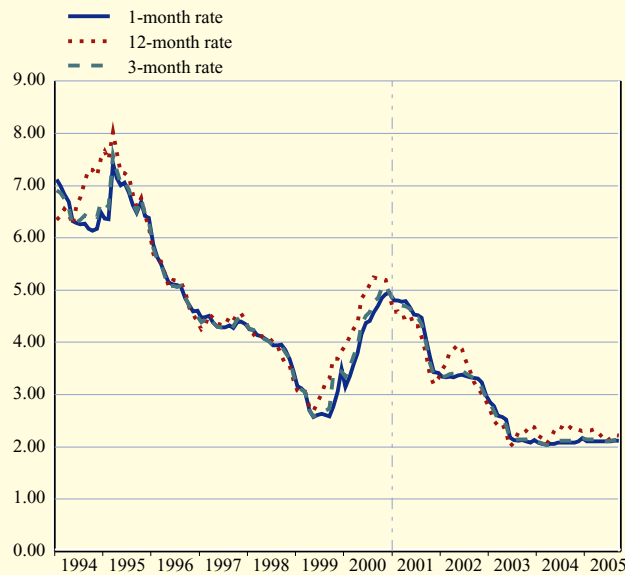


Source: ECB.

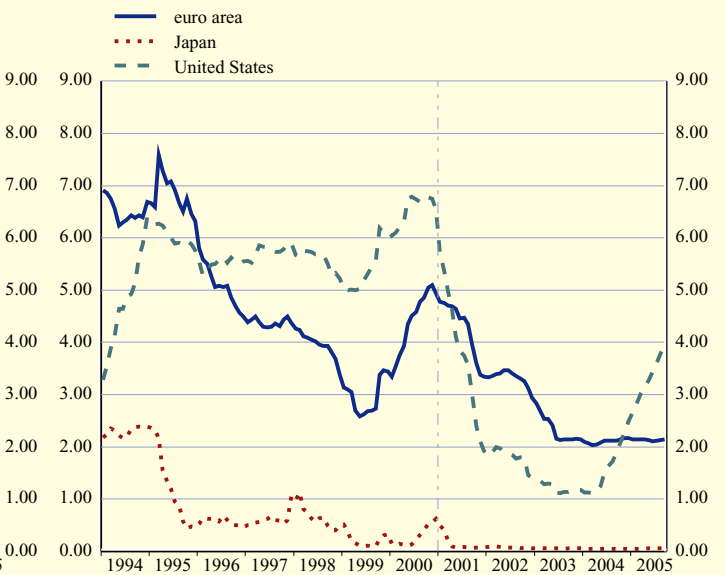
**4.6 Money market interest rates**  
(percentages per annum; period averages)

	Euro area <sup>1)</sup>					United States	Japan
	Overnight deposits (EONIA)	1-month deposits (EURIBOR)	3-month deposits (EURIBOR)	6-month deposits (EURIBOR)	12-month deposits (EURIBOR)	3-month deposits (LIBOR)	3-month deposits (LIBOR)
	1	2	3	4	5	6	7
2002	3.29	3.30	3.32	3.35	3.49	1.80	0.08
2003	2.32	2.35	2.33	2.31	2.34	1.22	0.06
2004	2.05	2.08	2.11	2.15	2.27	1.62	0.05
2004 Q3	2.05	2.08	2.12	2.19	2.35	1.75	0.05
Q4	2.08	2.12	2.16	2.20	2.32	2.30	0.05
2005 Q1	2.06	2.11	2.14	2.19	2.32	2.84	0.05
Q2	2.07	2.10	2.12	2.14	2.19	3.28	0.05
Q3	2.08	2.11	2.13	2.15	2.20	3.77	0.06
2004 Sep.	2.05	2.08	2.12	2.20	2.38	1.90	0.05
Oct.	2.11	2.09	2.15	2.19	2.32	2.08	0.05
Nov.	2.09	2.11	2.17	2.22	2.33	2.31	0.05
Dec.	2.05	2.17	2.17	2.21	2.30	2.50	0.05
2005 Jan.	2.08	2.11	2.15	2.19	2.31	2.66	0.05
Feb.	2.06	2.10	2.14	2.18	2.31	2.82	0.05
Mar.	2.06	2.10	2.14	2.19	2.34	3.03	0.05
Apr.	2.08	2.10	2.14	2.17	2.27	3.15	0.05
May	2.07	2.10	2.13	2.14	2.19	3.27	0.05
June	2.06	2.10	2.11	2.11	2.10	3.43	0.05
July	2.07	2.11	2.12	2.13	2.17	3.61	0.06
Aug.	2.06	2.11	2.13	2.16	2.22	3.80	0.06
Sep.	2.09	2.12	2.14	2.17	2.22	3.91	0.06

**C21 Euro area money market rates**  
(monthly; percentages per annum)



**C22 3-month money market rates**  
(monthly; percentages per annum)



Source: ECB.

1) Before January 1999 synthetic euro area rates were calculated on the basis of national rates weighted by GDP. For further information, see the General notes.

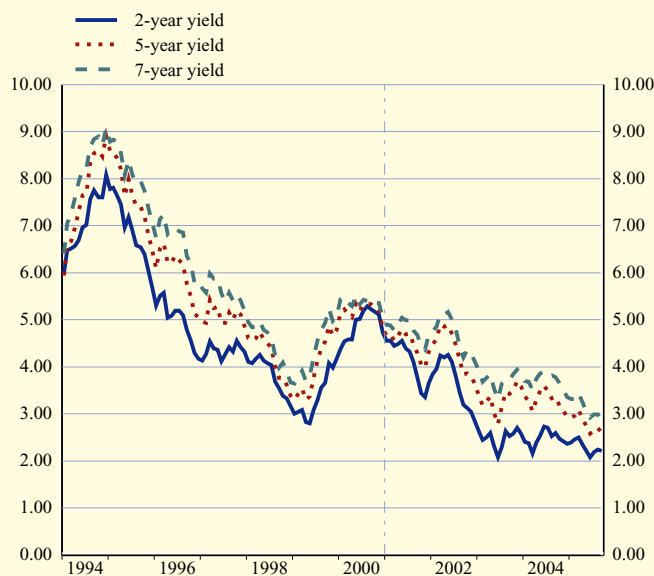
## 4.7 Government bond yields

(percentages per annum; period averages)

	Euro area <sup>1)</sup>					United States	Japan
	2 years	3 years	5 years	7 years	10 years	10 years	10 years
	1	2	3	4	5	6	7
2002	3.67	3.94	4.35	4.69	4.92	4.60	1.27
2003	2.49	2.74	3.32	3.74	4.16	4.00	0.99
2004	2.47	2.77	3.29	3.70	4.14	4.26	1.50
2004 Q3	2.61	2.89	3.39	3.80	4.21	4.29	1.64
Q4	2.41	2.62	3.06	3.51	3.84	4.17	1.45
2005 Q1	2.45	2.66	2.99	3.36	3.67	4.30	1.41
Q2	2.21	2.40	2.73	3.07	3.41	4.16	1.28
Q3	2.21	2.36	2.65	2.94	3.26	4.21	1.36
2004 Sep.	2.60	2.87	3.35	3.79	4.11	4.13	1.50
Oct.	2.47	2.71	3.18	3.66	3.98	4.08	1.49
Nov.	2.41	2.62	3.08	3.53	3.87	4.19	1.46
Dec.	2.36	2.53	2.93	3.35	3.69	4.23	1.40
2005 Jan.	2.39	2.57	2.92	3.31	3.63	4.21	1.37
Feb.	2.45	2.67	2.97	3.32	3.62	4.16	1.40
Mar.	2.49	2.74	3.08	3.44	3.76	4.49	1.45
Apr.	2.34	2.55	2.89	3.25	3.57	4.34	1.32
May	2.22	2.41	2.74	3.05	3.41	4.14	1.27
June	2.07	2.24	2.58	2.93	3.25	4.00	1.24
July	2.19	2.34	2.66	2.99	3.32	4.16	1.26
Aug.	2.24	2.40	2.70	2.99	3.32	4.26	1.43
Sep.	2.21	2.34	2.60	2.84	3.16	4.19	1.38

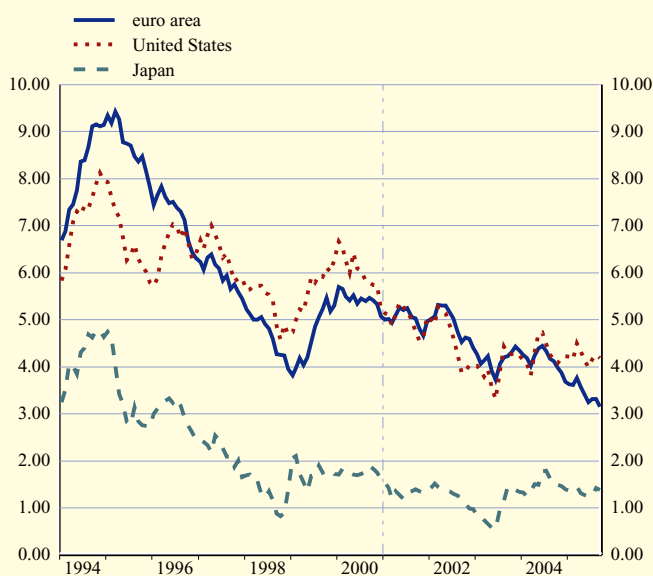
### C23 Euro area government bond yields

(monthly; percentages per annum)



### C24 10-year government bond yields

(monthly; percentages per annum)



Source: ECB.

- 1) 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.

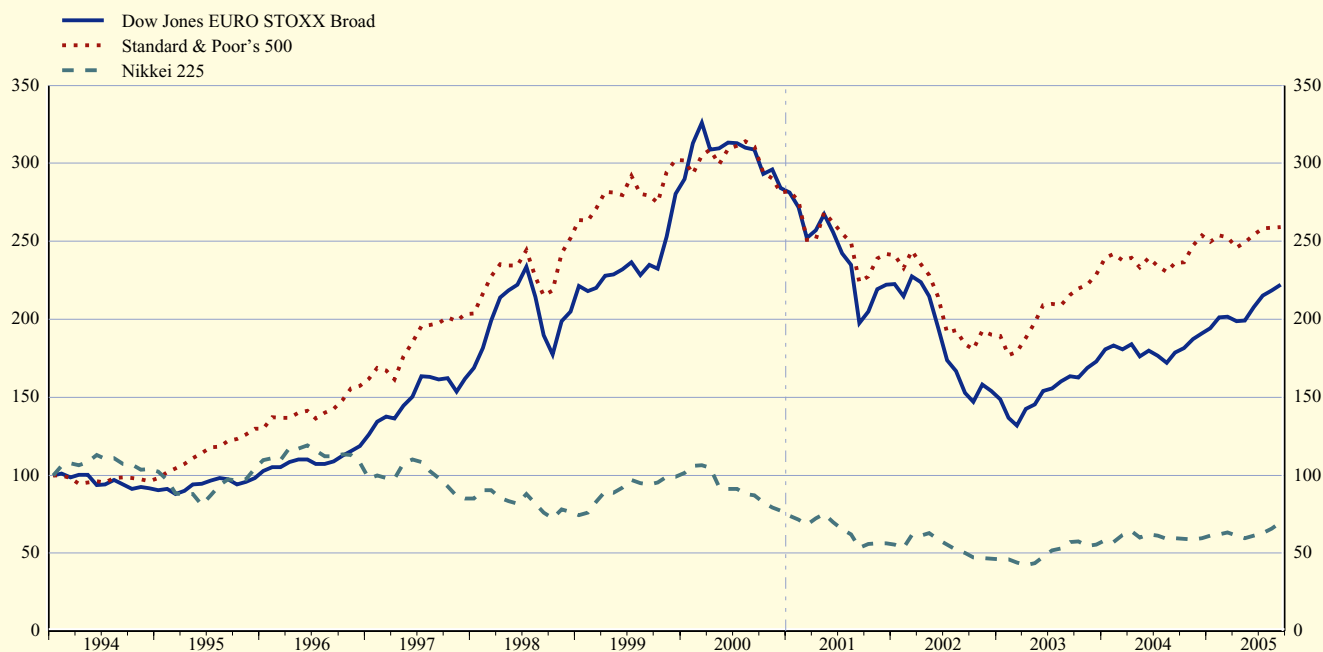
4.8 Stock market indices

(index levels in points; period averages)

	Dow Jones EURO STOXX indices												United States	Japan
	Benchmark		Main industry indices											
	Broad	50	Basic materials	Consumer services	Consumer goods	Oil & gas	Financials	Industrials	Technology	Utilities	Telecom.	Health care		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
2002	260.0	3,052.5	267.5	194.8	239.0	309.0	243.4	252.4	345.2	255.5	349.2	411.9	995.3	10,119.3
2003	213.3	2,422.7	212.5	144.9	193.8	259.5	199.3	213.5	275.2	210.7	337.5	304.5	964.9	9,312.9
2004	251.1	2,804.8	251.4	163.4	219.9	300.5	238.2	258.6	298.3	266.3	399.2	395.9	1,131.1	11,180.9
2004 Q3	244.0	2,708.7	246.8	159.3	216.4	305.0	228.7	253.1	259.9	266.8	379.8	402.6	1,104.4	11,152.3
2004 Q4	259.2	2,869.7	268.9	162.7	215.0	315.7	249.1	268.0	281.8	287.3	423.5	419.1	1,163.7	11,027.1
2005 Q1	276.2	3,025.3	290.4	177.0	227.9	335.8	269.0	290.9	274.8	309.6	446.5	427.0	1,191.7	11,594.1
2005 Q2	280.1	3,063.7	291.1	177.7	232.4	354.5	271.2	291.7	284.8	321.7	423.0	455.7	1,182.2	11,282.4
2005 Q3	303.4	3,308.0	311.9	185.0	256.7	411.3	293.4	318.6	303.8	346.0	439.7	466.5	1,223.6	12,310.8
2004 Sep.	248.0	2,748.6	251.1	160.0	215.1	311.8	234.6	259.9	261.9	270.1	384.4	413.7	1,117.5	11,076.8
2004 Oct.	252.1	2,794.4	259.1	157.4	211.5	315.5	240.4	262.5	273.3	278.8	401.2	415.1	1,118.1	11,028.9
2004 Nov.	260.0	2,882.7	269.5	163.8	215.6	317.3	249.4	267.7	290.3	287.4	421.1	422.3	1,169.5	10,963.5
2004 Dec.	264.8	2,926.0	277.2	166.5	217.7	314.4	256.8	273.2	281.3	295.0	446.2	419.6	1,199.7	11,086.3
2005 Jan.	269.4	2,957.0	277.0	172.0	221.6	318.1	262.8	284.2	270.4	302.9	450.6	423.8	1,181.6	11,401.1
2005 Feb.	279.0	3,050.4	294.2	179.5	230.0	338.5	270.1	295.1	277.4	317.5	453.8	428.7	1,199.7	11,545.7
2005 Mar.	279.8	3,065.8	299.4	179.3	232.0	349.5	273.7	293.5	276.5	308.7	436.3	428.6	1,193.9	11,812.4
2005 Apr.	275.9	3,013.7	290.0	176.7	227.9	345.5	269.0	287.6	268.5	314.2	426.1	443.1	1,164.4	11,377.2
2005 May	276.1	3,023.5	285.7	175.4	228.7	344.1	267.1	285.2	283.8	319.4	421.3	460.5	1,179.2	11,071.4
2005 June	288.2	3,151.7	297.7	181.0	240.4	373.4	277.4	302.0	301.5	331.2	421.7	462.8	1,202.3	11,402.7
2005 July	298.4	3,267.1	302.0	184.9	249.5	398.3	288.2	313.8	308.6	336.8	437.5	463.4	1,220.9	11,718.9
2005 Aug.	303.1	3,303.3	311.5	185.7	257.1	405.8	293.4	318.9	297.6	343.9	444.7	473.0	1,224.3	12,205.0
2005 Sep.	308.4	3,351.8	321.7	184.4	263.0	429.3	298.5	322.9	305.7	357.0	436.5	462.5	1,225.6	12,986.6

C25 Dow Jones EURO STOXX Broad, Standard & Poor's 500 and Nikkei 225

(January 1994 = 100; monthly averages)



Source: ECB.



# PRICES, OUTPUT, DEMAND AND LABOUR MARKETS

## 5.1 HICP, other prices and costs

(annual percentage changes, unless otherwise indicated)

### 1. Harmonised Index of Consumer Prices

	Total					Total (s.a., percentage change on previous period)					
	Index 1996 = 100	Total		Goods	Services	Total	Processed food	Unprocessed food	Non-energy industrial goods	Energy (n.s.a.)	Services
		Total excl. unprocessed food and energy									
% of total <sup>1)</sup>	100.0	100.0	83.8	59.0	41.0	100.0	12.0	7.6	30.8	8.6	41.0
	1	2	3	4	5	6	7	8	9	10	11
2001	108.5	2.3	1.9	2.3	2.5	-	-	-	-	-	-
2002	110.9	2.3	2.5	1.7	3.1	-	-	-	-	-	-
2003	113.2	2.1	2.0	1.8	2.5	-	-	-	-	-	-
2004	115.7	2.1	2.1	1.8	2.6	-	-	-	-	-	-
2004 Q2	115.8	2.3	2.1	2.1	2.6	0.7	1.1	-0.1	0.2	3.3	0.6
Q3	115.9	2.2	2.1	2.0	2.6	0.5	0.3	-0.2	0.2	1.9	0.7
Q4	116.6	2.3	2.0	2.1	2.7	0.5	0.3	0.1	0.1	1.8	0.6
2005 Q1	116.7	2.0	1.6	1.8	2.4	0.3	0.6	0.7	-0.1	0.3	0.5
Q2	118.1	2.0	1.5	1.8	2.3	0.7	0.3	0.3	0.1	4.5	0.5
2005 Apr.	117.9	2.1	1.4	2.1	2.2	0.1	0.2	-0.4	0.0	2.3	-0.1
May	118.2	2.0	1.6	1.6	2.5	0.2	0.0	0.3	0.0	-0.6	0.5
June	118.3	2.1	1.4	1.9	2.2	0.1	0.2	-0.2	0.0	1.6	0.0
July	118.2	2.2	1.4	2.1	2.3	0.3	0.2	-0.4	-0.1	2.8	0.3
Aug.	118.5	2.2	1.4	2.2	2.3	0.3	0.2	0.4	0.0	1.4	0.2
Sep. <sup>2)</sup>	.	2.5	.	.	.	.	.	.	.	.	.

	Goods						Services					
	Food (incl. alcoholic beverages and tobacco)			Industrial goods			Housing		Transport	Communication	Recreation and personal	Miscellaneous
	Total	Processed food	Unprocessed food	Total	Non-energy industrial goods	Energy	Rents					
% of total <sup>1)</sup>	19.6	12.0	7.6	39.4	30.8	8.6	10.4	6.4	6.4	2.8	14.8	6.6
	12	13	14	15	16	17	18	19	20	21	22	23
2001	4.5	2.9	7.0	1.2	0.9	2.2	1.8	1.4	3.6	-4.1	3.6	2.7
2002	3.1	3.1	3.1	1.0	1.5	-0.6	2.4	2.0	3.2	-0.3	4.2	3.4
2003	2.8	3.3	2.1	1.2	0.8	3.0	2.3	2.0	2.9	-0.6	2.7	3.4
2004	2.3	3.4	0.6	1.6	0.8	4.5	2.4	1.9	2.8	-2.0	2.4	5.1
2004 Q2	2.9	3.9	1.5	1.7	0.9	4.8	2.3	1.8	3.0	-1.9	2.4	4.9
Q3	2.0	3.6	-0.3	2.0	0.8	6.3	2.5	2.0	2.8	-2.6	2.5	5.3
Q4	1.4	2.8	-0.7	2.4	0.8	8.5	2.6	2.1	3.0	-2.6	2.4	5.3
2005 Q1	1.6	2.4	0.5	1.9	0.3	7.6	2.6	2.1	3.1	-1.9	2.4	3.5
Q2	1.3	1.6	0.8	2.1	0.3	8.8	2.7	2.1	2.4	-2.0	2.3	3.4
2005 Apr.	1.3	1.7	0.8	2.4	0.3	10.2	2.6	2.1	2.3	-1.7	1.9	3.5
May	1.3	1.5	1.0	1.8	0.4	6.9	2.7	2.2	2.5	-2.2	2.8	3.5
June	1.2	1.5	0.6	2.2	0.3	9.4	2.7	2.2	2.5	-2.1	2.2	3.2
July	1.1	1.6	0.3	2.6	0.0	11.8	2.5	2.1	2.7	-2.1	2.4	3.0
Aug.	1.5	1.7	1.1	2.6	0.0	11.6	2.6	2.1	2.6	-2.1	2.5	3.0
Sep.	.	.	.	.	.	.	.	.	.	.	.	.

Sources: Eurostat and ECB calculations.

1) Referring to the index period 2005.

2) Estimate based on first releases by Germany, Spain and Italy (and, when available, by other Member States), as well as on early information on energy prices.

## 5.1 HICP, other prices and costs

(annual percentage changes, unless otherwise indicated)

## 2. Industry, construction, residential property and commodity prices

	Industrial producer prices excluding construction										Construct- ion <sup>1)</sup>	Residential property prices <sup>2)</sup>	World market prices of raw materials <sup>3)</sup>	Oil prices <sup>4)</sup> (EUR per barrel)		
	Total (index 2000 = 100)	Total	Industry excluding construction and energy							Energy					Total	Total excluding energy
			Manu- facturing	Total	Intermed- iate goods	Capital goods	Consumer goods									
							Total	Durable	Non-durable							
% of total <sup>5)</sup>	100.0	100.0	89.5	82.5	31.6	21.3	29.5	4.0	25.5	17.5			100.0	32.8		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
2001	102.0	2.0	1.2	1.7	1.2	0.9	3.0	1.9	3.1	2.6	2.8	6.0	-8.3	-8.1	27.8	
2002	101.9	-0.1	0.3	0.5	-0.3	0.9	1.0	1.3	1.0	-2.3	2.7	6.8	-4.1	-0.9	26.5	
2003	103.4	1.4	0.9	0.8	0.8	0.3	1.1	0.6	1.2	3.8	2.1	7.1	-4.0	-4.5	25.1	
2004	105.7	2.3	2.5	2.0	3.5	0.7	1.3	0.7	1.4	3.9	2.6	7.4	18.4	10.8	30.5	
2004 Q3	106.4	3.1	3.5	2.5	4.7	0.9	1.4	0.8	1.5	6.1	3.0	-	26.9	11.9	33.3	
Q4	107.2	3.8	4.0	2.8	5.5	1.2	1.2	1.1	1.2	8.5	3.5	7.5 <sup>6)</sup>	22.9	1.3	34.5	
2005 Q1	108.2	4.1	3.8	2.8	5.1	1.6	1.2	1.4	1.1	10.0	3.5	-	22.9	1.9	36.6	
Q2	109.4	3.9	3.1	1.9	3.1	1.5	0.9	1.4	0.8	12.2	.	.	22.4	2.2	42.2	
Q3	.	.	.	.	.	.	.	.	.	.	.	.	33.5	11.6	50.9	
2005 Apr.	109.4	4.3	3.5	2.1	3.6	1.5	0.9	1.4	0.8	13.3	-	-	22.2	-1.9	41.4	
May	109.2	3.5	2.6	1.9	3.0	1.5	0.9	1.4	0.8	9.8	-	-	13.2	1.2	39.4	
June	109.7	4.0	3.1	1.7	2.6	1.4	0.8	1.5	0.7	13.5	-	-	31.9	7.6	45.7	
July	110.3	4.1	2.9	1.3	2.0	1.2	0.8	1.3	0.7	15.1	-	-	34.1	9.6	48.3	
Aug.	110.8	4.0	2.9	1.3	1.7	1.2	1.0	1.2	0.9	15.1	-	-	32.4	11.9	52.0	
Sep.	.	.	.	.	.	.	.	.	.	.	-	-	33.9	13.2	52.2	

3. Hourly labour costs<sup>7)</sup>

	Total (s.a. index 2000 = 100)	Total	By component		By selected economic activity			Memo item: indicator of negotiated wages
			Wages and salaries	Employers' social contributions	Mining, manufacturing and energy	Construction	Services	
% of total <sup>5)</sup>	100.0	100.0	73.3	26.7	36.8	8.9	54.4	
	1	2	3	4	5	6	7	8
2001	103.8	3.8	4.0	3.2	3.8	3.6	3.7	2.6
2002	107.4	3.5	3.3	4.1	3.3	4.1	3.5	2.7
2003	110.7	3.1	2.9	3.8	3.1	3.7	3.0	2.4
2004	113.5	2.5	2.3	3.0	2.8	2.7	2.3	2.1
2004 Q2	113.2	2.5	2.4	2.7	2.7	2.5	2.4	2.2
Q3	113.9	2.4	2.3	2.7	2.5	2.7	2.4	2.0
Q4	114.6	2.3	1.9	3.3	2.7	2.1	2.0	2.1
2005 Q1	115.4	3.0	2.5	4.6	3.2	2.4	3.1	2.2
Q2	116.0	2.3	2.0	3.1	2.3	1.5	2.4	2.1

Sources: Eurostat, HWWA (columns 13 and 14), Thomson Financial Datastream (column 15), ECB calculations based on Eurostat data (column 6 in Table 2 in Section 5.1 and column 7 in Table 3 in Section 5.1) and ECB calculations (column 12 in Table 2 in Section 5.1 and column 8 in Table 3 in Section 5.1).

- 1) Residential buildings, based on non-harmonised data.
- 2) Residential property price indicator for the euro area, based on non-harmonised sources.
- 3) Refers to the prices expressed in euro.
- 4) Brent Blend (for one-month forward delivery).
- 5) In 2000.
- 6) The quarterly data for the second (fourth) quarter refer to semi-annual averages of the first (second) half of the year, respectively. Since some national data are only available at annual frequency, the semi-annual estimate is partially derived from annual results; therefore, the accuracy of semi-annual data is lower than the accuracy of annual data.
- 7) Hourly labour costs for the whole economy, excluding agriculture, public administration, education, health and services not elsewhere classified. Owing to differences in coverage, the estimates for the components may not be consistent with the total.

## 5.1 HICP, other prices and costs

(annual percentage changes, unless otherwise indicated)

### 4. Unit labour costs, compensation per employee and labour productivity

(seasonally adjusted)

	Total (index 2000 = 100)	Total	By economic activity						
			Agriculture, hunting, forestry and fishing	Mining, manufacturing, and energy	Construction	Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate, renting and business services		
	1	2	3	4	5	6	7	8	
Unit labour costs <sup>1)</sup>									
2001	102.2	2.2	1.4	1.5	3.2	1.4	2.4	2.4	
2002	104.6	2.4	1.0	1.1	3.5	1.8	3.4	2.8	
2003	106.5	1.8	3.2	0.7	2.1	1.8	1.9	2.7	
2004	107.5	0.9	-7.9	-0.3	2.5	0.8	2.0	1.5	
2004 Q1	107.0	1.1	-8.6	0.8	1.0	1.4	1.9	2.0	
Q2	107.4	0.7	-8.6	-1.5	1.4	0.1	1.6	2.4	
Q3	107.5	0.5	-6.5	-1.4	4.5	1.2	2.5	0.4	
Q4	107.9	1.1	-8.0	0.8	3.0	0.4	2.0	1.5	
2005 Q1	108.8	1.7	.	-0.1	5.5	0.6	2.7	2.3	
Compensation per employee									
2001	102.5	2.5	0.6	2.9	3.5	2.6	0.9	2.8	
2002	105.1	2.5	2.5	2.6	3.3	2.4	2.2	2.7	
2003	107.5	2.3	1.0	2.7	2.5	1.9	1.9	2.5	
2004	109.7	2.1	0.0	3.1	2.6	1.5	1.2	2.4	
2004 Q1	109.0	2.4	-3.0	4.0	2.8	1.5	1.1	2.9	
Q2	109.7	2.4	-0.4	3.3	2.3	1.2	1.1	3.6	
Q3	109.9	1.7	3.3	2.6	3.1	1.7	1.6	1.2	
Q4	110.3	1.8	0.2	2.5	2.3	1.7	1.0	1.9	
2005 Q1	111.5	2.3	.	2.1	3.1	2.6	2.2	1.9	
Labour productivity <sup>2)</sup>									
2001	100.3	0.3	-0.8	1.4	0.3	1.2	-1.4	0.4	
2002	100.4	0.1	1.6	1.5	-0.2	0.6	-1.2	-0.1	
2003	100.9	0.5	-2.2	2.0	0.3	0.1	0.0	-0.1	
2004	102.1	1.2	8.6	3.4	0.1	0.8	-0.8	0.8	
2004 Q2	102.1	1.6	8.9	4.8	0.8	1.1	-0.5	1.2	
Q3	102.2	1.2	10.5	4.0	-1.3	0.5	-0.9	0.8	
Q4	102.2	0.7	8.9	1.7	-0.7	1.3	-1.0	0.5	
2005 Q1	102.5	0.6	2.6	2.2	-2.3	2.0	-0.4	-0.4	
Q2	102.5	0.4	1.7	2.1	-0.8	1.2	-0.5	-0.7	

### 5. Gross Domestic Product deflators

	Total (s.a. index 2000 = 100)	Total	Domestic demand			Exports <sup>3)</sup>	Imports <sup>3)</sup>	
			Total	Private consumption	Government consumption			Gross fixed capital formation
	1	2	3	4	5	6	7	8
2001	102.4	2.4	2.3	2.4	2.6	1.8	0.8	0.6
2002	105.0	2.6	2.2	2.1	2.7	1.8	-0.6	-1.7
2003	107.3	2.2	1.9	1.9	2.4	1.3	-0.6	-1.4
2004	109.3	1.9	2.0	2.0	2.2	2.7	1.3	1.5
2004 Q2	109.3	2.2	2.4	2.2	3.1	2.7	1.3	1.4
Q3	109.6	1.8	2.1	2.2	1.0	3.1	2.1	3.1
Q4	110.0	1.6	2.1	1.9	1.9	3.2	2.4	3.7
2005 Q1	110.5	1.8	2.2	1.8	1.9	3.6	2.6	3.8
Q2	110.9	1.3	1.6	1.6	1.4	2.7	1.9	3.1

Sources: ECB calculations based on Eurostat data.

- 1) Compensation (at current prices) per employee divided by value added (at constant prices) per person employed.
- 2) Value added (at constant prices) per person employed.
- 3) Deflators for exports and imports refer to goods and services and include cross-border trade within the euro area.

## 5.2 Output and demand

## 1. GDP and expenditure components

	GDP								
	Total	Domestic demand					External balance <sup>1)</sup>		
		Total	Private consumption	Government consumption	Gross fixed capital formation	Changes in inventories <sup>2)</sup>	Total	Exports <sup>1)</sup>	Imports <sup>1)</sup>
1	2	3	4	5	6	7	8	9	
<i>Current prices (EUR billions, seasonally adjusted)</i>									
2001	6,882.3	6,776.8	3,972.5	1,371.6	1,452.3	-19.6	105.5	2,561.3	2,455.8
2002	7,121.8	6,947.8	4,089.4	1,443.7	1,443.7	-29.1	174.1	2,595.7	2,421.6
2003	7,327.0	7,181.7	4,212.3	1,500.2	1,472.2	-2.9	145.4	2,596.8	2,451.5
2004	7,601.1	7,453.7	4,355.2	1,549.4	1,533.5	15.6	147.4	2,788.2	2,640.7
2004 Q2	1,898.0	1,855.4	1,084.0	388.5	381.6	1.4	42.6	694.3	651.7
Q3	1,909.0	1,874.0	1,091.8	388.9	386.9	6.5	35.0	709.6	674.6
Q4	1,918.3	1,892.0	1,104.1	389.7	390.8	7.4	26.3	714.7	688.4
2005 Q1	1,934.3	1,903.5	1,109.9	394.3	391.4	7.9	30.7	711.5	680.8
Q2	1,947.8	1,920.4	1,114.5	399.9	393.8	12.2	27.4	728.0	700.6
<i>percentage of GDP</i>									
2004	100.0	98.1	57.3	20.4	20.2	0.2	1.9	-	-
<i>Constant prices (ECU billions at 1995 prices, seasonally adjusted)</i>									
<i>quarter-on-quarter percentage changes</i>									
2004 Q2	0.5	0.4	0.1	0.3	0.1	-	-	2.5	2.6
Q3	0.3	0.7	0.2	0.4	0.5	-	-	1.3	2.5
Q4	0.2	0.5	0.8	-0.3	0.4	-	-	0.5	1.4
2005 Q1	0.4	0.1	0.2	0.5	-0.2	-	-	-0.7	-1.4
Q2	0.3	0.3	-0.1	0.3	0.2	-	-	2.1	2.1
<i>annual percentage changes</i>									
2001	1.7	0.9	1.8	2.2	0.0	-	-	4.0	2.1
2002	0.9	0.2	0.9	2.6	-2.4	-	-	1.9	0.3
2003	0.7	1.4	1.0	1.5	0.8	-	-	0.7	2.7
2004	2.1	2.0	1.5	1.1	1.8	-	-	6.4	6.5
2004 Q2	2.1	1.4	1.3	1.4	1.3	-	-	7.9	6.2
Q3	1.8	2.3	1.0	1.1	1.4	-	-	6.4	7.9
Q4	1.5	1.9	1.9	0.6	1.1	-	-	6.1	7.4
2005 Q1	1.3	1.8	1.3	0.9	0.8	-	-	3.7	5.1
Q2	1.1	1.6	1.1	0.9	1.0	-	-	3.2	4.6
<i>contributions to annual percentage changes of GDP in percentage points</i>									
2001	1.7	0.9	1.0	0.4	0.0	-0.5	0.8	-	-
2002	0.9	0.2	0.5	0.5	-0.5	-0.3	0.6	-	-
2003	0.7	1.4	0.6	0.3	0.2	0.3	-0.7	-	-
2004	2.1	1.9	0.9	0.2	0.4	0.4	0.1	-	-
2004 Q2	2.1	1.4	0.7	0.3	0.3	0.1	0.8	-	-
Q3	1.8	2.2	0.6	0.2	0.3	1.1	-0.4	-	-
Q4	1.5	1.9	1.1	0.1	0.2	0.5	-0.3	-	-
2005 Q1	1.3	1.7	0.7	0.2	0.2	0.6	-0.4	-	-
Q2	1.1	1.6	0.6	0.2	0.2	0.5	-0.4	-	-

Source: Eurostat.

1) Exports and imports cover goods and services and include cross-border intra-euro area trade. They are not fully consistent with Table 1 in Section 7.3.

2) Including acquisitions less disposals of valuables.



## 5.2 Output and demand

### 2. Value added by economic activity

	Gross value added (basic prices)						Intermediate consumption of FISIM <sup>1)</sup>	Taxes less subsidies on products	
	Total	Agriculture, hunting, forestry and fishing activities	Mining, manufacturing and energy	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
<i>Current prices (EUR billions, seasonally adjusted)</i>									
2001	6,381.7	160.4	1,384.9	360.5	1,346.3	1,726.2	1,403.4	215.7	716.2
2002	6,612.3	155.8	1,399.1	374.0	1,397.5	1,809.6	1,476.4	230.9	740.4
2003	6,805.5	155.2	1,414.9	391.6	1,430.4	1,878.1	1,535.4	238.6	760.2
2004	7,052.4	157.1	1,458.7	414.3	1,476.9	1,948.6	1,596.8	242.5	791.3
2004 Q2	1,763.7	39.4	365.6	103.2	369.2	485.5	400.7	61.2	195.4
Q3	1,770.5	39.0	367.3	103.8	371.0	490.6	398.9	60.0	198.5
Q4	1,778.2	39.6	366.5	105.8	371.9	493.0	401.4	61.3	201.4
2005 Q1	1,795.4	38.9	371.7	106.2	375.3	497.8	405.4	62.1	201.0
Q2	1,809.8	39.1	374.5	108.8	373.9	503.3	410.1	63.1	201.1
<i>percentage of value added</i>									
2004	100.0	2.2	20.7	5.9	20.9	27.6	22.6	-	-
<i>Constant prices (ECU billions at 1995 prices, seasonally adjusted)</i>									
<i>quarter-on-quarter percentage changes</i>									
2004 Q2	0.7	1.0	0.9	0.1	0.8	0.7	0.3	1.8	-1.1
Q3	0.2	0.2	0.1	-0.4	0.4	0.3	0.1	-0.3	0.8
Q4	0.2	1.2	-0.5	0.5	0.5	0.3	0.2	0.8	0.5
2005 Q1	0.4	-1.6	0.5	-1.1	1.2	0.6	0.0	-0.1	-0.5
Q2	0.4	0.4	0.6	1.7	-0.1	0.4	0.4	0.3	-0.8
<i>annual percentage changes</i>									
2001	1.9	-1.8	1.3	0.7	2.7	2.6	1.9	5.4	0.7
2002	1.0	-0.1	-0.2	-0.3	1.2	1.4	2.0	2.5	0.2
2003	0.6	-3.9	0.2	0.5	0.3	1.4	1.0	1.5	1.5
2004	2.2	8.0	2.5	1.7	2.1	2.1	1.6	4.4	1.7
2004 Q2	2.3	7.8	3.0	1.2	2.0	2.0	2.0	5.6	1.7
Q3	1.9	9.6	2.2	0.5	1.4	1.7	1.6	4.3	2.6
Q4	1.6	8.0	0.8	0.7	2.3	1.6	1.4	4.5	1.8
2005 Q1	1.5	0.8	1.1	-0.9	2.9	1.8	0.6	2.1	-0.2
Q2	1.2	0.2	0.8	0.6	2.0	1.6	0.6	0.6	0.1
<i>contributions to annual percentage changes of value added in percentage points</i>									
2001	1.9	0.0	0.3	0.0	0.6	0.7	0.4	-	-
2002	1.0	0.0	0.0	0.0	0.3	0.4	0.4	-	-
2003	0.6	-0.1	0.1	0.0	0.1	0.4	0.2	-	-
2004	2.2	0.2	0.6	0.1	0.5	0.5	0.3	-	-
2004 Q2	2.3	0.2	0.7	0.1	0.4	0.5	0.4	-	-
Q3	1.9	0.2	0.5	0.0	0.3	0.4	0.4	-	-
Q4	1.6	0.2	0.2	0.0	0.5	0.4	0.3	-	-
2005 Q1	1.5	0.0	0.2	0.0	0.6	0.5	0.1	-	-
Q2	1.2	0.0	0.2	0.0	0.4	0.4	0.1	-	-

Source: Eurostat.

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

## 5.2 Output and demand

(annual percentage changes, unless otherwise indicated)

## 3. Industrial production

	Total		Industry excluding construction								Construction	
	% of total <sup>1)</sup>	Total (s.a. index 2000 = 100)	Total		Industry excluding construction and energy					Energy		
			Manu- facturing	Total	Intermedi- ate goods	Capital goods	Consumer goods					
							Total	Durable	Non-durable			
1	2	3	4	5	6	7	8	9	10	11	12	
2002	-0.3	99.9	-0.5	-0.8	-0.7	-0.1	-1.7	-0.3	-5.5	0.7	1.1	0.8
2003	0.2	100.2	0.3	0.0	0.0	0.4	-0.2	-0.5	-4.6	0.2	3.0	0.0
2004	2.1	102.1	2.0	2.0	1.9	1.8	3.0	0.6	-0.1	0.7	2.5	0.1
2004 Q3	2.9	102.5	2.8	3.0	2.8	2.9	5.0	0.4	-0.5	0.5	2.6	-0.2
2004 Q4	1.2	102.3	1.1	0.8	0.5	1.1	1.7	-0.2	-3.6	0.4	2.7	-0.3
2005 Q1	-0.1	102.4	0.8	0.6	0.4	1.0	2.0	-0.4	-3.5	0.1	1.4	-4.0
2005 Q2	1.1	102.8	0.6	0.7	0.2	-0.3	1.8	0.6	-1.7	1.0	1.3	-0.5
2005 Feb.	-1.1	102.2	0.5	0.1	-0.1	0.2	1.4	-0.6	-3.7	-0.1	2.2	-6.0
2005 Mar.	-1.7	102.2	0.1	-0.8	-1.0	-0.5	1.9	-1.8	-4.0	-1.4	2.0	-6.3
2005 Apr.	2.1	103.0	1.2	2.0	1.8	0.4	3.0	0.9	-0.5	1.2	0.2	-1.3
2005 May	0.1	102.6	0.0	-0.4	-0.9	-0.6	0.4	0.7	-4.1	1.5	1.2	-1.4
2005 June	1.2	103.0	0.5	0.4	-0.3	-0.9	2.0	0.3	-0.5	0.4	2.6	1.2
2005 July	.	103.2	0.6	-0.1	-0.2	-0.2	2.0	0.2	-2.2	0.7	2.4	.
<i>month-on-month percentage changes (s.a.)</i>												
2005 Feb.	-1.5	-	-0.5	-1.1	-1.1	-1.4	-0.5	-0.9	-0.1	-1.0	3.8	-3.8
2005 Mar.	-0.6	-	-0.1	-0.4	-0.4	-0.9	1.3	-0.4	-0.4	-0.4	1.1	-1.6
2005 Apr.	2.4	-	0.8	1.9	1.8	1.2	0.0	1.6	2.2	1.5	-5.1	3.7
2005 May	-0.6	-	-0.4	-1.1	-1.2	-0.5	-0.2	-0.3	-2.0	0.0	2.3	-0.2
2005 June	0.4	-	0.4	0.6	0.4	0.0	1.1	-0.2	1.4	-0.4	1.6	2.0
2005 July	.	-	0.2	-0.1	0.2	0.8	0.1	0.2	-0.6	0.3	-0.1	.

## 4. Industrial new orders and turnover, retail sales and passenger car registrations

	Industrial new orders		Industrial turnover		Retail sales							New passenger car registrations	
	Manufacturing <sup>2)</sup> (current prices)		Manufacturing (current prices)		Current prices	Constant prices						Total (s.a.) thousands <sup>3)</sup>	Total
	Total (s.a. index 2000 = 100)	Total	Total (s.a. index 2000 = 100)	Total	Total	Total (s.a. index 2000 = 100)	Total	Food, beverages, tobacco	Non-food				
									Textiles, clothing, footwear	Household equipment			
1	2	3	4	5	6	7	8	9	10	11	12	13	
2002	98.4	-0.4	101.4	-0.6	1.9	101.7	0.3	1.2	-0.4	-1.9	-1.9	925	-4.4
2003	98.4	0.2	101.0	-0.3	1.8	102.1	0.4	1.1	-0.4	-2.8	0.2	911	-1.5
2004	106.2	8.1	105.9	4.9	1.7	103.0	0.9	0.8	0.9	0.8	2.5	922	1.1
2004 Q3	104.9	7.2	106.6	5.6	1.5	103.0	0.7	0.3	1.0	1.7	2.2	904	-3.4
2004 Q4	110.8	9.7	107.2	5.1	1.8	103.2	1.1	1.1	0.9	1.2	2.1	941	3.6
2005 Q1	106.2	3.0	106.7	2.5	1.9	104.0	1.1	1.0	1.1	0.3	0.7	922	0.4
2005 Q2	108.5	1.3	110.2	4.2	1.5	103.6	0.5	0.0	0.7	0.5	1.2	937	1.0
2005 Mar.	104.9	-0.5	107.0	-0.4	2.5	103.9	1.5	1.5	1.6	3.6	0.6	931	1.7
2005 Apr.	107.5	1.8	110.7	4.2	0.3	102.7	-0.8	-2.1	0.0	0.3	0.2	939	1.0
2005 May	107.4	-3.4	107.8	4.9	3.0	104.0	2.1	1.7	2.1	1.6	2.4	893	-4.2
2005 June	110.7	5.3	112.1	3.6	1.2	104.0	0.3	0.4	0.1	-0.5	1.1	979	6.1
2005 July	109.4	1.7	107.0	0.6	0.5	103.5	-0.2	-1.4	0.4	-0.2	1.3	938	3.0
2005 Aug.	.	.	.	.	2.2	104.4	2.0	1.2	2.9	.	.	927	7.4
<i>month-on-month percentage changes (s.a.)</i>													
2005 Mar.	-	-0.5	-	0.3	-0.1	-	0.1	-0.1	0.4	1.7	0.3	-	2.2
2005 Apr.	-	2.5	-	3.5	-0.1	-	-1.1	-2.0	-0.5	0.2	0.1	-	0.8
2005 May	-	-0.1	-	-2.6	0.8	-	1.2	2.2	0.6	-1.3	0.7	-	-4.8
2005 June	-	3.1	-	4.0	0.1	-	0.0	-0.2	0.1	1.1	0.3	-	9.6
2005 July	-	-1.2	-	-4.6	-0.5	-	-0.5	-0.8	-0.2	0.0	-0.2	-	-4.2
2005 Aug.	-	.	-	.	0.6	-	0.9	0.8	1.1	.	.	-	-1.1

Sources: Eurostat, except columns 12 and 13 in Table 4 in Section 5.2 (ECB calculations based on data from the ACEA, European Automobile Manufacturers' Association).

1) In 2000.

2) Includes manufacturing industries working mainly on the basis of orders, representing 62.6% of total manufacturing in 2000.

3) Annual and quarterly figures are averages of monthly figures in the period concerned.

## 5.2 Output and demand

(percentage balances,<sup>1)</sup> unless otherwise indicated; seasonally adjusted)

### 5. Business and Consumer Surveys

	Economic sentiment indicator <sup>2)</sup> (long-term average = 100)	Manufacturing industry					Consumer confidence indicator <sup>3)</sup>				
		Industrial confidence indicator				Capacity utilisation <sup>4)</sup>	Total <sup>5)</sup>	Financial situation over next 12 months	Economic situation over next 12 months	Unemployment situation over next 12 months	Savings over next 12 months
		Total <sup>5)</sup>	Order books	Stocks of finished products	Production expectations						
	1	2	3	4	5	6	7	8	9	10	11
2001	100.7	-9	-15	13	1	82.7	-5	2	-9	14	2
2002	94.4	-11	-25	11	3	81.2	-11	-1	-12	27	-3
2003	93.3	-11	-25	10	3	81.0	-18	-5	-21	38	-9
2004	100.0	-5	-16	8	10	81.6	-14	-4	-14	30	-8
2004 Q3	100.6	-4	-13	8	9	82.1	-14	-4	-14	30	-8
Q4	100.9	-3	-12	8	9	82.0	-13	-3	-14	29	-6
2005 Q1	99.0	-6	-15	11	6	81.5	-13	-3	-13	30	-8
Q2	96.3	-10	-20	13	3	81.1	-14	-3	-16	31	-7
Q3	98.0	-8	-18	11	6	.	-15	-5	-18	30	-7
2005 Apr.	96.5	-10	-19	13	4	81.1	-13	-3	-14	29	-8
May	96.1	-11	-21	14	2	-	-15	-4	-17	31	-7
June	96.3	-10	-21	12	4	-	-15	-4	-17	33	-7
July	97.5	-8	-18	11	4	81.2	-15	-4	-19	30	-9
Aug.	97.8	-8	-18	11	6	-	-15	-5	-18	31	-7
Sep.	98.6	-7	-17	10	6	-	-15	-5	-16	30	-7
	Construction confidence indicator			Retail trade confidence indicator				Services confidence indicator			
	Total <sup>5)</sup>	Order books	Employment expectations	Total <sup>5)</sup>	Present business situation	Volume of stocks	Expected business situation	Total <sup>5)</sup>	Business climate	Demand in recent months	Demand in the months ahead
	12	13	14	15	16	17	18	19	20	21	22
2001	-9	-15	-4	-8	-5	17	-1	15	16	8	20
2002	-18	-25	-11	-17	-20	18	-12	1	-4	-6	13
2003	-19	-26	-13	-12	-16	17	-3	2	-6	1	12
2004	-15	-23	-7	-8	-12	14	1	12	7	10	18
2004 Q3	-14	-22	-6	-8	-10	14	0	12	8	11	17
Q4	-12	-19	-5	-8	-14	13	3	11	8	9	16
2005 Q1	-12	-16	-7	-8	-12	12	1	11	6	7	18
Q2	-12	-18	-6	-8	-13	13	1	9	1	8	17
Q3	-9	-16	-2	-9	-12	14	0	11	4	11	17
2005 Apr.	-12	-19	-5	-8	-12	14	1	8	1	6	18
May	-12	-17	-7	-8	-13	11	1	10	1	11	16
June	-13	-19	-6	-9	-16	14	2	9	1	8	17
July	-12	-18	-5	-10	-14	15	-3	12	5	11	18
Aug.	-9	-16	-2	-9	-11	14	-1	9	-1	11	18
Sep.	-7	-14	0	-8	-12	15	5	11	7	10	16

Source: European Commission (Economic and Financial Affairs DG).

- 1) Difference between the percentages of respondents giving positive and negative replies.
- 2) The economic sentiment indicator is composed of the industrial, services, consumer, construction and retail trade confidence indicators; the industrial confidence indicator has a weight of 40%, the services confidence indicator a weight of 30%, the consumer confidence indicator a weight of 20% and the two other indicators a weight of 5% each. Values of the economic sentiment indicator above (below) 100 indicate above-average (below-average) economic sentiment, calculated for the period from January 1985.
- 3) Owing to changes in the questionnaire used for the French survey, euro area results from January 2004 onwards are not fully comparable with previous results.
- 4) Data are collected in January, April, July and October each year. The quarterly figures shown are averages of two successive surveys. Annual data are derived from quarterly averages.
- 5) The confidence indicators are calculated as simple averages of the components shown; the assessment of stocks (columns 4 and 17) and unemployment (column 10) are used with inverted signs for the calculation of confidence indicators.

5.3 Labour markets <sup>1)</sup>

(annual percentage changes, unless otherwise indicated)

## 1. Employment

	Whole economy		By employment status		By economic activity					
	Millions (s.a.)		Employees	Self-employed	Agriculture, hunting, forestry and fishing	Mining, manufacturing, and energy	Construction	Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate, renting and business services	Public administration, education, health and other services
% of total <sup>2)</sup>	100.0	100.0	84.4	15.6	4.5	18.1	7.3	25.0	15.2	29.9
	1	2	3	4	5	6	7	8	9	10
2001	134.429	1.5	1.7	0.2	-0.6	0.1	0.7	1.7	4.2	1.4
2002	135.422	0.7	0.9	0.1	-1.5	-1.6	0.1	0.6	2.6	2.0
2003	135.774	0.3	0.3	0.3	-1.9	-1.5	0.1	0.3	1.3	1.2
2004	136.550	0.6	0.5	1.1	-0.7	-1.7	1.1	0.9	2.5	0.8
2004 Q2	136.272	0.5	0.4	1.0	-0.8	-1.7	0.7	0.8	2.7	0.7
Q3	136.573	0.6	0.4	1.5	-0.2	-1.8	2.1	0.8	2.4	0.8
Q4	136.812	0.8	0.7	1.3	-0.6	-0.9	1.7	1.1	2.5	0.9
2005 Q1	136.899	0.8	0.7	1.1	-1.5	-1.2	2.2	0.9	2.3	1.0
Q2	137.233	0.7	0.7	0.8	-1.4	-1.4	1.6	0.7	2.1	1.3
	<i>quarter-on-quarter percentage changes (s.a.)</i>									
2004 Q2	0.313	0.2	0.1	0.7	-0.2	0.1	0.6	0.3	0.4	0.1
Q3	0.301	0.2	0.0	1.3	0.1	-0.5	1.1	0.4	0.6	0.2
Q4	0.239	0.2	0.2	0.1	-0.4	0.2	-0.4	0.1	0.5	0.3
2005 Q1	0.087	0.1	0.2	-0.9	-1.2	-0.9	0.1	0.1	0.8	0.5
Q2	0.334	0.2	0.2	0.5	0.1	-0.1	0.6	0.1	0.2	0.5

## 2. Unemployment

*(seasonally adjusted)*

	Total		By age <sup>3)</sup>				By gender <sup>4)</sup>			
	Millions	% of labour force	Adult		Youth		Male		Female	
			Millions	% of labour force	Millions	% of labour force	Millions	% of labour force	Millions	% of labour force
% of total <sup>2)</sup>	100.0		75.6		24.4		47.9		52.1	
	1	2	3	4	5	6	7	8	9	10
2001	11.018	7.9	8.092	6.6	2.925	16.1	5.037	6.3	5.981	9.9
2002	11.737	8.3	8.721	7.0	3.017	16.8	5.509	6.9	6.228	10.1
2003	12.515	8.7	9.397	7.5	3.117	17.6	5.963	7.4	6.552	10.5
2004	12.867	8.9	9.731	7.6	3.136	17.9	6.166	7.6	6.701	10.5
2004 Q2	12.889	8.9	9.711	7.6	3.178	18.1	6.151	7.6	6.738	10.6
Q3	12.895	8.9	9.757	7.6	3.138	18.0	6.151	7.5	6.744	10.6
Q4	12.857	8.8	9.760	7.6	3.097	17.9	6.260	7.7	6.597	10.3
2005 Q1	12.843	8.8	9.596	7.5	3.247	18.5	6.206	7.6	6.637	10.4
Q2	12.698	8.7	9.623	7.5	3.075	17.7	6.167	7.5	6.532	10.2
2005 Mar.	12.863	8.8	9.590	7.5	3.273	18.7	6.236	7.6	6.627	10.4
Apr.	12.831	8.8	9.668	7.5	3.164	18.1	6.222	7.6	6.610	10.3
May	12.654	8.7	9.655	7.5	2.999	17.3	6.162	7.5	6.492	10.1
June	12.609	8.6	9.548	7.4	3.062	17.6	6.116	7.5	6.493	10.1
July	12.461	8.5	9.560	7.4	2.901	16.9	6.036	7.4	6.424	10.0
Aug.	12.599	8.6	9.650	7.5	2.949	17.1	6.243	7.6	6.357	9.9

Sources: ECB calculations based on Eurostat data (in Table 1 in Section 5.3) and Eurostat (Table 2 in Section 5.3).

1) Data for employment refer to persons and are based on the ESA 95. Data for unemployment refer to persons and follow ILO recommendations.

2) In 2004.

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

4) Rates are expressed as a percentage of the labour force for the relevant gender.



## GOVERNMENT FINANCE

### 6.1 Revenue, expenditure and deficit/surplus <sup>1)</sup> (as a percentage of GDP)

#### 1. Euro area – revenue

	Total		Current revenue									Capital revenue		Memo: fiscal burden <sup>2)</sup>
	1	2	Direct taxes			Indirect taxes	Received by EU institutions		Social contributions			Sales	Capital taxes	
			Households	Corporations	3		4	5	6	7	8			
1996	47.2	46.8	11.8	9.1	2.3	13.3	0.7	17.3	8.6	5.5	2.4	0.4	0.3	42.7
1997	47.5	46.9	12.0	9.1	2.5	13.4	0.7	17.3	8.6	5.5	2.4	0.5	0.4	43.1
1998	46.9	46.6	12.3	9.6	2.3	14.0	0.6	16.3	8.4	4.9	2.3	0.3	0.3	42.9
1999	47.4	47.1	12.7	9.7	2.5	14.2	0.6	16.2	8.4	4.9	2.3	0.3	0.3	43.4
2000	47.1	46.8	12.8	9.9	2.7	14.1	0.6	16.0	8.3	4.9	2.3	0.3	0.3	43.2
2001	46.3	46.0	12.4	9.7	2.4	13.7	0.6	15.8	8.3	4.7	2.3	0.3	0.3	42.2
2002	45.7	45.4	12.0	9.5	2.2	13.6	0.4	15.8	8.3	4.7	2.3	0.3	0.3	41.7
2003	45.7	45.1	11.6	9.2	2.1	13.6	0.4	15.9	8.4	4.7	2.3	0.6	0.5	41.7
2004	45.2	44.7	11.5	8.9	2.3	13.7	0.3	15.7	8.2	4.6	2.2	0.5	0.4	41.3

#### 2. Euro area – expenditure

	Total		Current expenditure							Capital expenditure			Memo: primary expenditure <sup>3)</sup>		
	1	2	Total	Compensation of employees	Intermediate consumption	Interest	Current transfers	Social payments		Subsidies	Paid by EU institutions	Investment		Capital transfers	Paid by EU institutions
								7	8						
1996	51.4	47.6	11.1	4.8	5.7	26.0	23.0	2.2	0.6	3.8	2.6	1.3	0.0	45.8	
1997	50.1	46.5	11.0	4.8	5.1	25.7	22.9	2.1	0.6	3.6	2.4	1.2	0.1	45.0	
1998	49.2	45.4	10.7	4.7	4.7	25.4	22.4	2.1	0.5	3.8	2.4	1.4	0.1	44.5	
1999	48.7	44.8	10.6	4.8	4.1	25.3	22.3	2.0	0.5	3.9	2.5	1.4	0.1	44.6	
2000	48.1	44.3	10.5	4.8	4.0	25.0	22.0	1.9	0.5	3.8	2.5	1.3	0.1	44.1	
2001	48.2	44.1	10.4	4.8	3.9	25.1	22.0	1.9	0.5	4.0	2.6	1.5	0.0	44.3	
2002	48.2	44.4	10.5	4.9	3.6	25.3	22.5	1.8	0.5	3.9	2.5	1.4	0.0	44.7	
2003	48.7	44.7	10.6	5.0	3.4	25.7	22.9	1.8	0.5	4.0	2.6	1.4	0.1	45.3	
2004	48.0	44.1	10.5	4.9	3.2	25.4	22.6	1.8	0.5	3.9	2.5	1.4	0.0	44.7	

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

	Deficit (-)/surplus (+)					Primary deficit (-)/surplus (+)	Government consumption <sup>4)</sup>							
	Total	Central gov.	State gov.	Local gov.	Social security funds		Total	Compensation of employees	Intermediate consumption	Transfers in kind via market producers	Consumption of fixed capital	Sales (minus)	Collective consumption	Individual consumption
1996	-4.3	-3.7	-0.4	0.0	-0.1	1.4	20.4	11.1	4.8	5.0	1.9	2.4	8.6	11.8
1997	-2.7	-2.4	-0.4	0.1	0.1	2.4	20.2	11.0	4.8	5.0	1.8	2.4	8.5	11.7
1998	-2.3	-2.3	-0.2	0.1	0.1	2.4	19.8	10.7	4.7	5.0	1.8	2.3	8.3	11.5
1999	-1.3	-1.7	-0.1	0.1	0.4	2.8	19.9	10.6	4.8	5.0	1.8	2.3	8.3	11.5
2000	-1.0	-1.4	-0.1	0.1	0.5	3.0	19.8	10.5	4.8	5.0	1.8	2.3	8.2	11.6
2001	-1.9	-1.7	-0.4	0.0	0.3	2.0	19.9	10.4	4.8	5.1	1.8	2.3	8.2	11.7
2002	-2.6	-2.1	-0.5	-0.2	0.2	1.0	20.3	10.5	4.9	5.2	1.8	2.3	8.3	12.0
2003	-3.0	-2.3	-0.5	-0.2	0.0	0.4	20.5	10.6	5.0	5.3	1.8	2.3	8.4	12.2
2004	-2.7	-2.4	-0.3	-0.3	0.2	0.5	20.4	10.5	4.9	5.2	1.8	2.2	8.2	12.1

#### 4. Euro area countries – deficit (-)/surplus (+)<sup>5)</sup>

	BE <sup>1</sup>	DE <sup>2</sup>	GR <sup>3</sup>	ES <sup>4</sup>	FR <sup>5</sup>	IE <sup>6</sup>	IT <sup>7</sup>	LU <sup>8</sup>	NL <sup>9</sup>	AT <sup>10</sup>	PT <sup>11</sup>	FI <sup>12</sup>
2001	0.6	-2.9	-6.1	-0.5	-1.6	0.8	-3.2	6.1	-0.2	0.1	-4.2	5.2
2002	0.0	-3.8	-4.9	-0.3	-3.2	-0.4	-2.7	2.1	-2.0	-0.4	-2.8	4.3
2003	0.1	-4.1	-5.7	0.0	-4.2	0.2	-3.2	0.2	-3.2	-1.2	-2.9	2.5
2004	0.0	-3.7	-6.6	-0.1	-3.6	1.4	-3.2	-0.6	-2.1	-1.0	-3.0	2.1

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

- Revenue, expenditure and deficit/surplus are based on the ESA 95, but the figures exclude proceeds from the sale of UMTS licences in 2000 (the euro area deficit/surplus including those proceeds is equal to 0.1% of GDP). Transactions involving the EU budget are included and consolidated. Transactions among Member States' governments are not consolidated.
- The fiscal burden comprises taxes and social contributions.
- Comprises total expenditure minus interest expenditure.
- Corresponds to final consumption expenditure (P.3) of general government in the ESA 95.
- Ratios are computed using GDP excluding Financial Intermediation Services Indirectly Measured (FISIM). Includes proceeds from the sale of UMTS licences and settlements under swaps and forward rate agreements.

6.2 Debt <sup>1)</sup>

(as a percentage of GDP)

## 1. Euro area – by financial instrument and sector of the holder

	Total	Financial instruments				Holders				Other creditors <sup>3)</sup>
		Coins and deposits	Loans	Short-term securities	Long-term securities	Domestic creditors <sup>2)</sup>			Other sectors	
						Total	MFIs	Other financial corporations		
1	2	3	4	5	6	7	8	9	10	
1995	74.2	2.8	17.6	8.0	45.8	58.7	30.3	10.3	18.1	15.5
1996	75.6	2.8	17.1	7.9	47.7	59.2	31.0	12.0	16.2	16.4
1997	74.7	2.8	16.2	6.6	49.2	56.9	29.5	13.4	14.1	17.8
1998	73.3	2.8	15.1	5.7	49.8	53.5	27.7	14.3	11.5	19.8
1999	72.5	2.9	14.3	4.3	51.0	49.5	26.5	11.4	11.6	23.0
2000	70.1	2.7	13.2	3.7	50.5	44.9	23.4	10.4	11.1	25.2
2001	68.8	2.7	12.5	3.9	49.7	42.8	21.9	9.8	11.0	26.0
2002	68.7	2.7	11.9	4.5	49.6	40.3	20.5	8.9	11.0	28.4
2003	70.1	2.1	12.5	4.9	50.6	39.9	21.0	9.5	9.4	30.2
2004	70.5	2.2	12.0	4.8	51.5	39.4	20.1	9.8	9.5	31.0

## 2. Euro area – by issuer, maturity and currency denomination

	Total	Issued by <sup>4)</sup>				Original maturity			Residual maturity			Currencies	
		Central gov.	State gov.	Local gov.	Social security funds	Up to 1 year	Over 1 year	Variable interest rate	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Euro or participating currencies <sup>5)</sup>	Other currencies
1995	74.2	61.9	5.6	5.9	0.8	13.0	61.2	6.2	18.7	26.7	28.8	72.0	2.2
1996	75.6	63.3	5.9	5.8	0.5	12.3	63.2	5.9	20.1	26.2	29.3	73.4	2.2
1997	74.7	62.6	6.1	5.4	0.6	11.0	63.7	5.5	19.4	26.0	29.4	72.5	2.2
1998	73.3	61.5	6.1	5.3	0.4	9.3	64.0	5.8	16.8	27.0	29.5	71.2	2.1
1999	72.5	61.0	6.1	5.2	0.3	9.1	63.4	4.0	15.2	27.9	29.4	70.6	1.9
2000	70.1	58.9	6.0	5.0	0.3	8.1	61.9	3.4	15.1	28.5	26.6	68.3	1.8
2001	68.8	57.6	6.2	4.8	0.3	8.6	60.2	2.1	15.6	26.5	26.7	67.3	1.5
2002	68.7	57.2	6.4	4.8	0.3	8.9	59.8	1.9	16.5	25.3	26.9	67.4	1.3
2003	70.1	57.7	6.7	5.2	0.6	9.0	61.1	1.8	15.4	26.5	28.2	69.0	1.0
2004	70.5	58.1	6.8	5.2	0.4	9.8	60.7	0.8	15.6	26.9	28.0	69.5	0.9

3. Euro area countries <sup>6)</sup>

	BE	DE	GR	ES	FR	IE	IT	LU	NL	AT	PT	FI
	1	2	3	4	5	6	7	8	9	10	11	12
2001	108.0	59.6	114.4	56.3	56.8	35.9	110.9	6.7	51.5	67.0	53.6	43.6
2002	105.4	61.2	111.6	53.2	58.8	32.4	108.3	6.8	51.3	66.7	56.1	42.3
2003	100.0	64.8	108.8	49.4	63.2	31.5	106.8	6.7	52.6	65.1	57.7	45.2
2004	95.7	66.4	109.3	46.9	65.1	29.8	106.5	6.6	53.1	64.3	59.4	45.1

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

- 1) Gross general government debt at nominal value and consolidated between sub-sectors of government. Holdings by non-resident governments are not consolidated. Data are partially estimated.
- 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, this comprises debt in ECU, in domestic currency and in the currencies of other Member States which have adopted the euro.
- 6) Ratios are computed using GDP excluding Financial Intermediation Services Indirectly Measured (FISIM).

## 6.3 Change in debt <sup>1)</sup>

(as a percentage of GDP)

### 1. Euro area – by source, financial instrument and sector of the holder

	Total	Source of change				Financial instruments				Holders			Other creditors <sup>7)</sup>
		Borrowing requirement <sup>2)</sup>	Valuation effects <sup>3)</sup>	Other changes in volume <sup>4)</sup>	Aggregation effect <sup>5)</sup>	Coins and deposits	Loans	Short-term securities	Long-term securities	Domestic creditors <sup>6)</sup>	MFIs	Other financial corporations	
1996	3.9	4.3	0.0	0.0	-0.4	0.1	0.1	0.2	3.4	2.5	1.7	2.1	1.4
1997	2.0	2.2	0.4	-0.4	-0.1	0.0	-0.3	-1.1	3.4	-0.1	-0.4	1.8	2.1
1998	1.8	2.0	0.0	0.0	-0.1	0.1	-0.3	-0.6	2.7	-1.0	-0.5	1.5	2.8
1999	2.0	1.6	0.5	0.0	-0.1	0.2	-0.2	-1.2	3.1	-1.9	-0.1	-2.3	3.9
2000	1.0	0.9	0.1	0.0	0.0	0.0	-0.4	-0.4	1.9	-2.2	-1.8	-0.5	3.3
2001	1.8	1.6	0.0	0.1	0.0	0.2	-0.1	0.4	1.4	-0.2	-0.5	-0.1	2.0
2002	2.2	2.5	-0.4	0.1	0.0	0.1	-0.2	0.8	1.6	-1.0	-0.7	-0.6	3.2
2003	3.1	3.3	-0.1	0.0	0.0	-0.6	1.0	0.5	-2.3	0.6	1.1	0.8	2.5
2004	3.1	3.3	0.0	-0.1	0.0	0.2	0.0	0.0	2.9	1.1	-0.1	0.7	2.0

### 2. Euro area – deficit-debt adjustment

	Change in debt	Deficit (-) / surplus (+) <sup>8)</sup>	Deficit-debt adjustment <sup>9)</sup>											Other <sup>10)</sup>
			Total	Transactions in main financial assets held by general government							Valuation effects	Exchange rate effects	Other changes in volume	
				Total	Currency and deposits	Securities <sup>11)</sup>	Loans	Shares and other equity	Privatisations	Equity injections				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1996	3.9	-4.3	-0.4	-0.1	0.0	0.0	-0.1	-0.1	-0.2	0.2	0.0	-0.1	0.0	-0.3
1997	2.0	-2.7	-0.7	-0.5	0.1	-0.1	0.0	-0.5	-0.7	0.2	0.4	0.2	-0.4	-0.2
1998	1.8	-2.3	-0.5	-0.4	0.1	0.0	-0.1	-0.4	-0.6	0.2	0.0	0.0	0.0	0.0
1999	2.0	-1.3	0.7	0.0	0.6	0.0	0.1	-0.6	-0.7	0.0	0.5	0.3	0.0	0.2
2000	1.0	0.1	1.1	1.0	0.7	0.1	0.2	0.0	-0.4	0.2	0.1	0.1	0.0	0.0
2001	1.8	-1.9	-0.1	-0.5	-0.6	0.1	0.1	-0.1	-0.3	0.1	0.0	0.0	0.1	0.2
2002	2.2	-2.5	-0.3	0.1	0.0	0.0	0.1	0.0	-0.3	0.1	-0.4	0.0	0.1	-0.1
2003	3.1	-3.0	0.1	0.1	0.0	0.0	0.0	0.1	-0.4	0.1	-0.1	-0.1	0.0	0.1
2004	3.1	-2.7	0.4	0.3	0.2	0.1	0.2	-0.1	-0.3	0.1	0.0	0.0	-0.1	0.2

Source: ECB.

- 1) Data are partially estimated. Annual change in gross nominal consolidated debt is expressed as a percentage of GDP, i.e.  $[\text{debt}(t) - \text{debt}(t-1)] \div \text{GDP}(t)$ .
- 2) The borrowing requirement is by definition equal to transactions in 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) Includes, 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 is 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) Mainly composed of transactions in other assets and liabilities (trade credits, other receivables/payables and financial derivatives).
- 11) Excluding financial derivatives.

## 6.4 Quarterly revenue, expenditure and deficit/surplus <sup>1)</sup>

(as a percentage of GDP)

### 1. Euro area – quarterly revenue

	Total		Current revenue					Capital revenue		Memo: fiscal burden <sup>2)</sup>
	1	2	Direct taxes	Indirect taxes	Social contributions	Sales	Property income	8	Capital taxes	
1999 Q1	44.3	43.7	10.8	13.4	16.0	2.0	0.7	0.6	0.2	40.4
Q2	48.3	47.7	13.5	13.6	16.2	2.1	1.4	0.6	0.3	43.6
Q3	45.3	44.8	11.9	13.1	16.1	2.0	0.8	0.5	0.3	41.4
Q4	51.5	50.7	14.4	14.7	16.9	2.9	0.9	0.7	0.3	46.3
2000 Q1	44.1	43.5	11.2	13.3	15.6	1.9	0.7	0.6	0.3	40.3
Q2	48.2	47.6	14.0	13.5	15.9	2.1	1.2	0.6	0.3	43.8
Q3	45.0	44.5	12.1	12.8	15.9	2.0	0.8	0.5	0.3	41.1
Q4	50.7	50.1	14.1	14.3	16.8	3.0	0.9	0.6	0.3	45.6
2001 Q1	43.0	42.5	10.6	12.9	15.5	1.8	0.9	0.5	0.2	39.3
Q2	47.7	47.2	13.7	13.2	15.8	2.0	1.7	0.5	0.2	42.9
Q3	44.5	44.0	11.9	12.6	15.8	1.9	0.9	0.5	0.3	40.6
Q4	50.1	49.5	13.8	14.1	16.6	3.0	1.1	0.6	0.3	44.7
2002 Q1	42.8	42.3	10.3	13.0	15.7	1.7	0.8	0.5	0.2	39.3
Q2	46.5	45.9	12.8	12.9	15.7	2.0	1.6	0.6	0.3	41.8
Q3	44.5	43.9	11.4	13.0	15.7	2.0	0.8	0.5	0.3	40.5
Q4	50.0	49.3	13.7	14.3	16.5	3.0	0.9	0.7	0.3	44.8
2003 Q1	42.7	42.2	10.0	13.1	15.8	1.7	0.7	0.5	0.2	39.1
Q2	47.0	45.4	12.3	12.9	16.0	2.0	1.3	1.6	1.3	42.5
Q3	43.8	43.2	11.0	12.9	15.8	1.9	0.7	0.6	0.3	40.0
Q4	50.2	49.1	13.3	14.5	16.5	2.9	0.8	1.1	0.3	44.6
2004 Q1	42.2	41.7	9.7	13.1	15.6	1.7	0.6	0.6	0.3	38.8
Q2	45.7	44.7	12.3	13.2	15.6	2.0	0.9	0.9	0.7	41.7
Q3	43.5	42.9	10.9	12.9	15.7	1.9	0.7	0.6	0.3	39.8
Q4	50.4	49.3	13.2	14.7	16.5	2.9	0.8	1.0	0.4	44.9
2005 Q1	42.8	42.2	10.2	13.2	15.6	1.5	0.7	0.6	0.3	39.3

### 2. Euro area – quarterly expenditure and deficit/surplus

	Total		Current expenditure						Capital expenditure			Deficit (-)/ surplus (+)	Primary deficit (-)/ surplus (+)
	1	2	Total	Compensation of employees	Intermediate consumption	Interest	Current transfers	Social		Investment	Capital transfers		
								benefits	Subsidies				
1999 Q1	47.8	44.5	10.5	4.4	4.5	25.1	21.7	1.3	3.3	2.0	1.4	-3.6	1.0
Q2	47.8	44.2	10.6	4.6	4.2	24.8	21.5	1.5	3.6	2.4	1.2	0.4	4.6
Q3	47.8	44.1	10.4	4.6	4.0	25.2	21.5	1.6	3.7	2.5	1.2	-2.5	1.5
Q4	51.1	46.4	11.1	5.3	3.7	26.2	22.5	1.7	4.8	3.1	1.7	0.3	4.1
2000 Q1	46.6	43.2	10.3	4.5	4.1	24.3	21.1	1.2	3.4	2.0	1.4	-2.5	1.6
Q2	47.0	43.5	10.4	4.6	3.9	24.5	21.1	1.4	3.5	2.4	1.2	1.2	5.1
Q3	43.8	43.4	10.2	4.6	4.0	24.6	21.2	1.5	0.4	2.5	1.2	1.2	5.2
Q4	50.4	46.4	11.1	5.3	3.8	26.2	22.2	1.7	3.9	3.1	1.6	0.3	4.1
2001 Q1	46.1	42.7	10.2	4.1	4.1	24.4	21.2	1.2	3.5	2.0	1.5	-3.1	0.9
Q2	47.2	43.6	10.5	4.7	4.0	24.5	21.1	1.4	3.6	2.4	1.2	0.5	4.4
Q3	47.2	43.4	10.2	4.6	3.9	24.7	21.3	1.5	3.8	2.5	1.3	-2.8	1.2
Q4	51.9	46.8	11.1	5.7	3.7	26.4	22.4	1.6	5.1	3.2	1.9	-1.9	1.8
2002 Q1	46.7	43.2	10.4	4.2	3.8	24.8	21.5	1.2	3.5	2.0	1.6	-3.9	-0.1
Q2	47.6	44.1	10.5	4.9	3.7	24.9	21.5	1.4	3.5	2.4	1.2	-1.1	2.5
Q3	47.8	44.0	10.2	4.7	3.6	25.5	21.8	1.5	3.8	2.5	1.3	-3.4	0.2
Q4	51.8	47.2	11.2	5.7	3.4	26.9	23.0	1.6	4.6	2.9	1.7	-1.8	1.6
2003 Q1	47.2	43.7	10.4	4.4	3.6	25.3	21.8	1.2	3.6	1.9	1.6	-4.5	-0.9
Q2	48.3	44.7	10.6	4.8	3.5	25.8	22.1	1.4	3.6	2.4	1.2	-1.4	2.1
Q3	48.0	44.2	10.4	4.8	3.4	25.6	22.0	1.4	3.8	2.6	1.2	-4.2	-0.8
Q4	52.1	47.1	11.2	5.7	3.2	27.1	23.2	1.5	5.0	3.3	1.7	-1.9	1.3
2004 Q1	47.0	43.5	10.4	4.4	3.3	25.3	21.8	1.1	3.5	2.0	1.5	-4.7	-1.4
Q2	47.4	43.9	10.6	4.8	3.2	25.3	21.8	1.3	3.5	2.4	1.1	-1.7	1.5
Q3	47.0	43.5	10.1	4.6	3.3	25.5	21.9	1.4	3.5	2.5	1.0	-3.5	-0.3
Q4	51.7	46.5	11.1	5.7	3.1	26.7	23.0	1.5	5.1	3.1	1.9	-1.3	1.8
2005 Q1	46.9	43.4	10.4	4.4	3.3	25.3	21.6	1.1	3.5	1.9	1.6	-4.1	-0.9

Source: ECB calculations based on Eurostat and national data.

- 1) Revenue, expenditure and deficit/surplus are based on the ESA 95. Transactions involving the EU budget are not included. Including these transactions would increase both revenue and expenditure by, on average, about 0.2% of GDP. Otherwise, and except for different data transmission deadlines, the quarterly data are consistent with the annual data. The data are not seasonally adjusted.
- 2) The fiscal burden comprises taxes and social contributions.





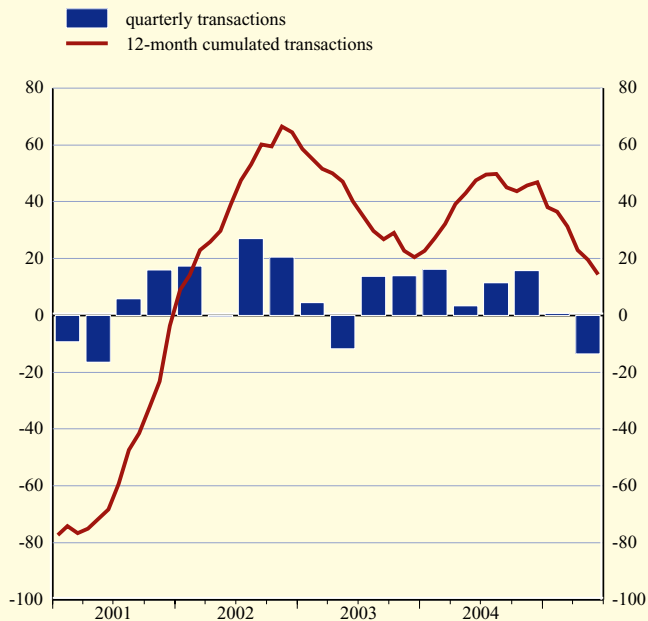
# EXTERNAL TRANSACTIONS AND POSITIONS

## 7.1 Balance of payments (EUR billions; net transactions)

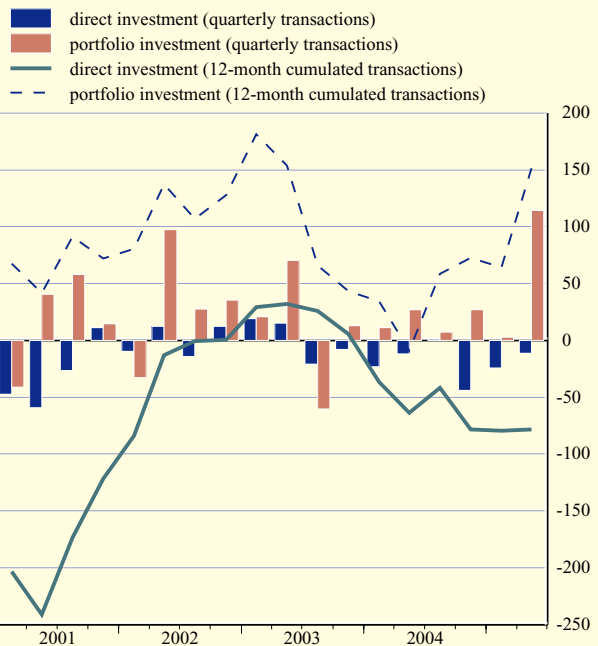
### 1. Summary balance of payments

	Current account					Capital account	Net lending/borrowing to/from rest of the world (columns 1+6)	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	14
2002	64.5	128.5	16.4	-31.9	-48.6	10.2	74.6	-43.9	0.6	127.8	-11.0	-159.1	-2.3	-30.7
2003	20.4	102.7	19.7	-45.8	-56.1	13.1	33.5	-5.9	5.4	43.4	-12.2	-72.5	30.0	-27.6
2004	46.8	102.7	27.7	-28.0	-55.7	17.4	64.2	-5.5	-78.1	72.8	-1.7	-10.8	12.3	-58.7
2004 Q2	3.4	31.4	10.4	-21.7	-16.7	4.0	7.4	11.3	-12.1	27.0	-1.2	0.4	-2.8	-18.6
Q3	11.4	23.5	8.8	-3.0	-18.0	4.1	15.5	3.1	1.1	7.2	-1.0	-7.7	3.5	-18.6
Q4	15.8	20.1	6.7	3.1	-14.0	5.9	21.7	-25.4	-44.1	27.3	-4.8	-6.1	2.4	3.7
2005 Q1	0.8	14.5	2.8	-4.4	-12.2	1.2	2.0	34.4	-24.1	2.6	-7.4	58.5	4.8	-36.4
Q2	-13.6	19.8	8.3	-26.0	-15.7	3.9	-9.7	34.9	-11.5	114.3	4.8	-75.4	2.7	-25.2
2004 July	8.3	13.5	3.7	-2.5	-6.4	1.3	9.6	-17.6	-7.2	-40.6	0.6	29.4	0.2	8.0
Aug.	3.3	5.2	2.6	0.8	-5.3	1.6	4.9	6.3	5.1	2.5	-4.2	-0.9	3.8	-11.2
Sep.	-0.1	4.9	2.5	-1.2	-6.3	1.1	1.0	14.4	3.3	45.3	2.5	-36.2	-0.5	-15.4
Oct.	3.4	8.4	4.1	-3.5	-5.6	0.6	4.1	-30.4	-13.4	-1.5	-4.0	-12.4	0.9	26.3
Nov.	4.7	4.5	1.2	3.5	-4.4	1.0	5.7	28.4	-5.8	-10.1	1.5	42.8	-0.1	-34.1
Dec.	7.6	7.2	1.4	3.1	-4.0	4.3	12.0	-23.4	-24.9	38.8	-2.2	-36.6	1.5	11.4
2005 Jan.	-6.6	0.8	0.3	-4.0	-3.6	-0.7	-7.3	24.4	-9.3	-15.7	-3.5	54.5	-1.6	-17.2
Feb.	4.4	5.9	1.1	0.0	-2.7	1.1	5.5	28.6	0.2	20.9	1.2	1.4	4.9	-34.1
Mar.	2.9	7.9	1.3	-0.4	-5.9	0.9	3.8	-18.6	-15.1	-2.5	-5.1	2.7	1.5	14.8
Apr.	-10.1	4.2	2.3	-12.5	-4.2	0.3	-9.8	-17.8	-4.8	-11.0	-0.6	-0.6	-0.8	27.6
May	-3.0	6.9	2.8	-7.4	-5.3	1.7	-1.3	36.3	3.3	22.7	0.4	7.3	2.6	-34.9
June	-0.5	8.6	3.2	-6.1	-6.3	1.9	1.4	16.5	-9.9	102.6	5.1	-82.1	0.9	-17.9
July	0.2	9.1	3.4	-6.7	-5.6	0.9	1.0	-2.9	-80.1	73.7	0.5	0.8	2.3	1.8
<i>12-month cumulated transactions</i>														
2005 July	6.3	73.5	26.3	-34.4	-59.1	14.7	21.0	61.8	-151.5	265.7	-8.5	-59.4	15.5	-82.8

### C26 B.o.p. current account balance (EUR billions)



### C27 B.o.p. net direct and portfolio investment (EUR billions)



Source: ECB.

## 7.1 Balance of payments

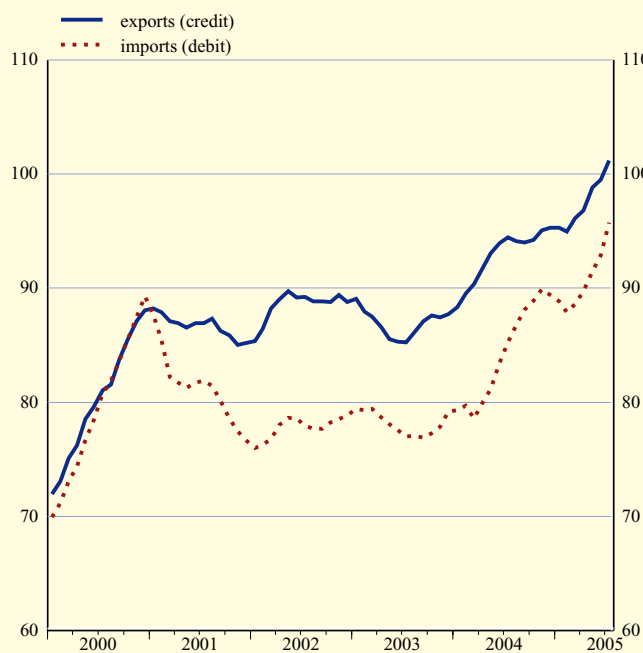
(EUR billions; transactions)

### 2. Current and capital accounts

	Current account											Capital account	
	Total			Goods		Services		Income		Current transfers		Credit	Debit
	Credit	Debit	Net	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit		
1	2	3	4	5	6	7	8	9	10	11	12	13	
2002	1,726.9	1,662.4	64.5	1,062.1	933.6	332.1	315.7	247.3	279.2	85.4	133.9	19.2	9.0
2003	1,675.4	1,655.0	20.4	1,039.7	937.0	329.3	309.6	225.6	271.5	80.8	137.0	23.3	10.1
2004	1,819.0	1,772.3	46.8	1,129.6	1,026.9	355.5	327.8	254.0	281.9	80.0	135.7	23.5	6.1
2004 Q2	455.9	452.5	3.4	285.0	253.6	89.8	79.4	66.0	87.7	15.0	31.7	5.3	1.3
Q3	451.7	440.3	11.4	279.6	256.1	96.4	87.5	60.3	63.3	15.4	33.4	5.6	1.6
Q4	480.4	464.7	15.8	298.8	278.8	92.1	85.5	71.4	68.4	18.0	32.0	7.6	1.6
2005 Q1	457.0	456.3	0.8	278.3	263.8	83.0	80.2	63.4	67.8	32.4	44.5	4.7	3.5
Q2	489.9	503.4	-13.6	306.6	286.8	89.5	81.1	77.4	103.3	16.5	32.2	5.4	1.5
2005 May	159.5	162.4	-3.0	100.9	94.0	28.9	26.1	24.2	31.6	5.5	10.8	2.1	0.4
June	170.3	170.8	-0.5	106.5	97.8	32.1	28.9	26.2	32.3	5.5	11.7	2.4	0.4
July	166.7	166.5	0.2	103.5	94.3	35.2	31.9	22.9	29.6	5.1	10.7	1.3	0.5
	Seasonally adjusted												
2004 Q2	452.4	435.7	16.7	281.9	250.3	89.1	81.8	61.4	71.2	20.0	32.4	.	.
Q3	454.6	450.7	3.9	282.0	264.4	89.7	82.0	63.3	69.5	19.6	34.9	.	.
Q4	464.1	455.6	8.5	285.9	268.2	89.5	82.8	68.9	71.1	19.8	33.6	.	.
2005 Q1	469.3	466.3	3.0	288.4	265.8	92.9	85.0	67.2	75.8	20.7	39.7	.	.
Q2	479.8	478.1	1.7	298.5	278.7	87.3	82.8	72.2	83.3	21.8	33.4	.	.
2004 Nov.	156.0	154.1	1.9	95.9	91.1	29.4	27.6	24.2	24.4	6.5	11.0	.	.
Dec.	153.0	150.1	2.9	94.5	87.2	29.3	27.7	22.6	23.1	6.7	12.0	.	.
2005 Jan.	156.2	157.0	-0.8	95.5	88.3	30.9	28.2	22.9	25.9	6.9	14.7	.	.
Feb.	152.7	151.2	1.5	94.9	88.3	31.0	28.1	20.0	23.6	6.7	11.2	.	.
Mar.	160.4	158.1	2.3	98.0	89.3	31.1	28.7	24.2	26.3	7.1	13.8	.	.
Apr.	159.2	158.5	0.8	97.6	91.7	28.4	26.7	25.7	29.6	7.6	10.5	.	.
May	161.1	159.2	1.9	101.0	93.5	28.8	27.4	24.0	26.7	7.3	11.6	.	.
June	159.4	160.4	-1.0	99.9	93.4	30.1	28.7	22.5	26.9	6.9	11.4	.	.
July	164.8	170.7	-5.9	102.6	100.4	31.7	29.9	23.9	30.0	6.6	10.4	.	.

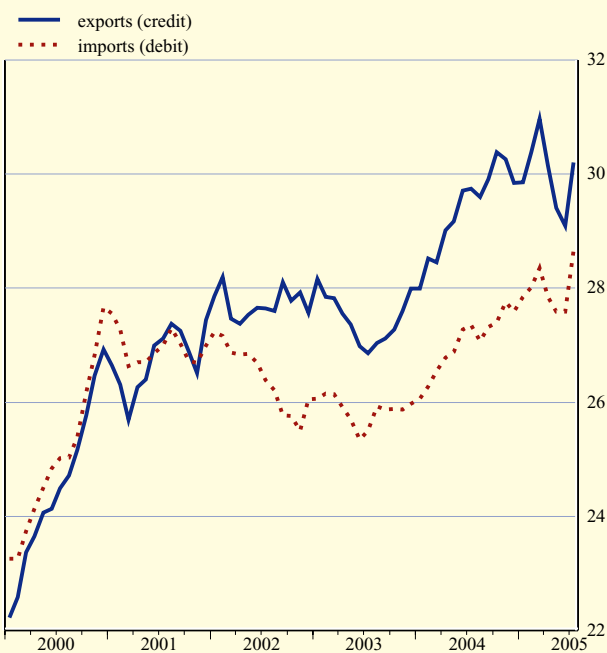
### C28 B.o.p. goods

(EUR billions, seasonally adjusted; three-month moving average)



### C29 B.o.p. services

(EUR billions, seasonally adjusted; three-month moving average)



Source: ECB.

## 7.1 Balance of payments

(EUR billions)

### 3. Income account

(transactions)

	Compensation of employees		Investment income											
	Credit	Debit	Total		Direct investment				Portfolio investment				Other investment	
			Credit	Debit	Equity		Debt		Equity		Debt		Credit	Debit
					Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
2002	14.9	6.2	232.4	273.0	56.4	51.8	7.6	7.1	19.8	52.3	65.6	71.0	83.0	90.8
2003	14.5	6.3	211.1	265.2	47.9	53.7	10.3	9.6	19.0	50.0	64.6	76.7	69.3	75.2
2004	15.1	6.3	238.9	275.6	66.7	56.8	11.8	11.2	23.9	56.6	73.9	79.3	62.7	71.7
2004 Q1	3.7	1.3	52.5	61.2	11.7	13.3	3.2	2.5	4.6	9.3	17.8	18.7	15.1	17.3
Q2	3.7	1.6	62.4	86.1	18.2	17.0	3.0	2.7	8.1	26.0	17.6	22.8	15.4	17.6
Q3	3.8	1.8	56.6	61.5	14.0	13.8	2.4	2.6	5.7	11.1	19.0	16.5	15.4	17.6
Q4	4.0	1.6	67.5	66.8	22.7	12.7	3.1	3.4	5.4	10.2	19.4	21.3	16.8	19.2
2005 Q1	3.7	1.5	59.8	66.3	13.8	12.9	2.8	2.8	6.1	11.2	19.2	19.0	18.0	20.4

### 4. Direct investment

(net transactions)

	By resident units abroad							By non-resident units in the euro area						
	Total	Equity capital and reinvested earnings			Other capital (mostly inter-company loans)			Total	Equity capital and reinvested earnings			Other capital (mostly inter-company loans)		
		Total	MFIs excluding Eurosystem	Non-MFIs	Total	MFIs excluding Eurosystem	Non-MFIs		Total	MFIs excluding Eurosystem	Non-MFIs	Total	MFIs excluding Eurosystem	Non-MFIs
2002	-179.9	-179.3	-22.3	-157.0	-0.6	0.0	-0.7	180.6	124.9	1.9	123.0	55.6	0.5	55.2
2003	-136.0	-112.7	-1.7	-111.0	-23.3	-0.1	-23.3	141.4	124.2	3.0	121.2	17.2	0.1	17.1
2004	-155.4	-163.8	-18.0	-145.8	8.4	0.1	8.3	77.3	75.3	3.2	72.1	2.1	0.8	1.3
2004 Q2	-27.9	-24.8	-3.6	-21.2	-3.1	0.0	-3.1	15.8	10.6	0.6	10.0	5.2	0.8	4.5
Q3	-16.4	-27.5	-1.1	-26.4	11.1	0.0	11.1	17.6	17.7	1.5	16.3	-0.1	0.4	-0.6
Q4	-82.7	-89.0	-8.4	-80.5	6.3	0.1	6.2	38.5	33.5	1.8	31.7	5.1	-0.1	5.1
2005 Q1	-36.4	-20.1	-2.8	-17.3	-16.3	0.1	-16.4	12.3	12.0	0.5	11.5	0.3	0.3	0.0
Q2	-29.5	-23.1	-2.7	-20.4	-6.4	0.0	-6.4	18.0	4.9	0.7	4.2	13.2	0.2	13.0
2004 July	-18.7	-16.4	0.1	-16.4	-2.3	0.0	-2.3	11.4	11.4	0.2	11.2	0.0	-0.1	0.1
Aug.	9.1	-7.3	0.2	-7.5	16.4	0.0	16.4	-4.0	-1.9	0.3	-2.3	-2.1	0.0	-2.0
Sep.	-6.8	-3.9	-1.3	-2.5	-3.0	0.0	-3.0	10.2	8.3	0.9	7.3	1.9	0.5	1.4
Oct.	-31.9	-25.0	0.0	-25.0	-6.9	0.0	-6.9	18.4	10.8	0.5	10.3	7.6	0.0	7.6
Nov.	-25.4	-24.4	-13.2	-11.2	-1.0	0.1	-1.1	19.6	11.6	0.6	11.0	8.0	0.0	8.0
Dec.	-25.4	-39.5	4.8	-44.3	14.1	0.0	14.1	0.5	11.0	0.7	10.3	-10.5	0.0	-10.5
2005 Jan.	-11.8	-7.6	-0.5	-7.1	-4.2	0.0	-4.2	2.5	4.6	0.1	4.5	-2.1	0.1	-2.1
Feb.	-2.9	-0.6	-1.5	0.9	-2.3	0.0	-2.3	3.1	3.0	0.4	2.6	0.1	0.1	0.1
Mar.	-21.8	-11.9	-0.8	-11.1	-9.9	0.1	-10.0	6.7	4.4	0.0	4.4	2.2	0.2	2.1
Apr.	-12.3	2.1	-1.3	3.4	-14.4	0.0	-14.4	7.4	8.5	0.3	8.2	-1.1	0.1	-1.2
May	5.0	-5.7	-0.6	-5.1	10.8	0.0	10.8	-1.8	-1.8	0.2	-2.0	0.0	0.0	0.0
June	-22.3	-19.5	-0.8	-18.7	-2.8	0.0	-2.8	12.4	-1.8	0.2	-2.0	14.2	0.0	14.2
July	-82.5	-75.0	-2.7	-72.2	-7.5	0.0	-7.5	2.4	3.9	0.2	3.8	-1.6	0.0	-1.6

Source: ECB.

## 7.1 Balance of payments

(EUR billions; transactions)

## 5. Portfolio investment by instrument and sector of holder

	Equity					Debt instruments									
	Assets				Liabilities	Bonds and notes					Money market instruments				
	Eurosysteem	MFIs excluding Eurosysteem	Non-MFIs			Eurosysteem	MFIs excluding Eurosysteem	Non-MFIs		Eurosysteem	MFIs excluding Eurosysteem	Non-MFIs		Liabilities	
			General gov.		General gov.			General gov.							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2002	-0.4	-7.4	-31.0	-4.4	86.2	-0.7	-17.4	-70.6	-0.9	157.9	2.0	-31.9	-18.8	-1.1	59.8
2003	-0.3	-12.8	-53.8	-2.6	117.2	-2.4	-45.1	-134.8	-0.2	170.4	0.2	-41.3	13.7	0.6	32.4
2004	0.0	-21.9	-52.3	-2.4	123.1	1.2	-80.8	-72.3	-1.3	211.4	-0.1	-42.9	-14.6	0.2	21.8
2004 Q2	0.0	-12.4	-3.8	-0.7	-4.1	0.3	-10.7	-17.6	-0.1	85.4	0.1	-5.0	-3.5	-2.4	-1.7
Q3	0.0	-2.5	-3.9	-0.6	38.5	0.7	-23.0	-15.0	-0.1	39.9	0.0	-14.7	-5.8	-0.7	-6.9
Q4	0.0	-0.9	-19.9	-0.2	68.1	0.6	-20.7	-22.2	-0.5	32.0	-0.1	-12.6	4.8	4.3	-1.8
2005 Q1	0.0	-27.6	-20.8	-0.9	36.0	-0.1	-35.6	-39.2	-0.3	45.6	0.3	5.7	-6.2	-3.6	44.6
Q2	-0.1	22.4	-14.0	.	36.5	-0.7	-32.6	-42.6	.	162.5	-0.4	-11.6	-3.0	.	-2.2
2004 July	0.0	-8.9	-0.5	-	10.2	-0.3	-12.9	0.7	-	-9.1	0.3	-19.1	1.4	-	-2.4
Aug.	0.0	-4.2	-7.5	-	15.8	0.4	-12.0	-0.7	-	9.8	-0.1	-3.5	-2.2	-	6.8
Sep.	0.0	10.6	4.0	-	12.6	0.6	1.9	-15.0	-	39.2	-0.1	7.9	-5.0	-	-11.3
Oct.	0.0	-3.7	-10.6	-	14.6	0.3	-13.7	-5.1	-	11.7	-0.1	0.6	0.2	-	4.3
Nov.	0.0	-9.1	-5.6	-	23.5	0.4	-5.9	-10.4	-	8.4	0.2	-14.5	5.0	-	-2.0
Dec.	0.0	11.9	-3.6	-	30.0	-0.1	-1.1	-6.7	-	11.9	-0.1	1.3	-0.4	-	-4.2
2005 Jan.	0.0	-9.2	-7.5	-	12.3	-0.1	-27.1	-2.1	-	4.7	0.2	-4.1	-5.8	-	23.0
Feb.	0.0	-16.5	-3.7	-	6.8	-0.2	-3.9	-16.3	-	37.6	0.1	17.1	-1.8	-	1.8
Mar.	0.0	-1.8	-9.5	-	16.9	0.2	-4.6	-20.8	-	3.3	0.0	-7.3	1.4	-	19.7
Apr.	0.0	11.3	-3.0	-	-46.7	-0.9	-8.3	-15.1	-	57.0	-0.3	-12.9	3.2	-	4.8
May	0.0	6.7	-10.9	-	25.9	-0.1	-15.6	-6.7	-	29.7	0.0	-2.6	-6.8	-	3.2
June	0.0	4.4	-0.1	-	57.3	0.3	-8.7	-20.7	-	75.8	-0.1	4.0	0.5	-	-10.3
July	-0.1	-3.5	-11.1	-	104.8	0.3	-1.8	-17.3	-	1.2	-0.6	0.4	-1.1	-	2.4

## 6. Other investment by sector

	Total		Eurosysteem		General government		MFIs (excluding Eurosysteem)						Other sectors			
	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Total		Long-term		Short-term		Assets	Liabilities		
							Assets	Liabilities	Assets	Liabilities	Assets	Liabilities				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2002	-225.1	66.0	-0.9	19.3	0.1	-	-8.3	-168.0	25.8	-35.0	52.1	-133.0	-26.3	-56.3	-	29.2
2003	-240.1	167.6	-0.8	10.0	-0.6	-	-3.9	-154.7	136.2	-59.9	64.4	-94.9	71.8	-84.0	-	25.3
2004	-288.7	277.9	0.1	7.3	-1.8	-1.9	-2.7	-259.6	246.5	-19.9	0.5	-239.7	246.0	-27.4	-5.4	26.8
2004 Q2	-18.6	19.0	0.9	1.7	-4.9	-4.9	3.1	-5.3	22.2	-2.3	6.7	-3.0	15.5	-9.3	10.1	-7.9
Q3	-17.9	10.2	-1.5	3.2	0.2	-0.2	2.2	-24.2	6.5	-7.8	-5.7	-16.5	12.2	7.6	-7.4	-1.7
Q4	-73.3	67.1	1.4	3.7	3.4	3.7	-1.7	-74.0	59.3	0.7	-0.8	-74.7	60.1	-4.1	7.8	5.7
2005 Q1	-172.2	230.7	0.5	4.7	4.4	3.2	0.3	-127.6	194.8	-22.0	9.0	-105.6	185.8	-49.5	-19.1	30.8
Q2	-158.5	83.1	-1.2	0.6	-8.9	-10.0	-1.8	-97.6	42.2	-20.9	24.0	-76.7	18.2	-50.9	11.6	42.0
2004 July	57.3	-27.8	-0.3	1.5	-0.3	-0.5	-0.4	46.1	-12.7	3.1	-7.8	43.0	-4.9	11.8	2.7	-16.2
Aug.	-31.8	30.9	-0.2	0.2	-0.2	-0.3	0.1	-31.3	18.8	-5.7	2.3	-25.5	16.5	-0.1	-1.2	11.8
Sep.	-43.4	7.2	-1.0	1.5	0.7	0.7	2.6	-39.0	0.4	-5.2	-0.2	-33.9	0.6	-4.0	-8.9	2.7
Oct.	-15.6	3.2	-0.2	1.3	2.0	2.2	0.2	-9.7	-0.3	8.3	5.3	-18.0	-5.6	-7.7	-0.6	2.0
Nov.	-66.6	109.5	0.5	2.0	-0.4	-0.8	1.0	-60.0	97.3	-0.4	3.3	-59.6	94.1	-6.8	-1.5	9.1
Dec.	8.9	-45.5	1.1	0.4	1.8	2.2	-2.9	-4.3	-37.8	-7.3	-9.4	2.9	-28.4	10.4	9.9	-5.3
2005 Jan.	-51.4	105.9	0.7	3.9	0.4	-1.1	2.6	-34.1	94.1	-9.1	11.5	-25.0	82.6	-18.4	-16.1	5.3
Feb.	-65.3	66.7	0.1	-3.5	-1.6	0.4	-4.3	-61.1	62.0	-8.4	4.7	-52.7	57.3	-2.7	5.1	12.5
Mar.	-55.4	58.1	-0.2	4.3	5.7	3.9	2.0	-32.4	38.8	-4.5	-7.1	-27.9	45.9	-28.5	-8.1	13.0
Apr.	-119.2	118.6	0.1	0.0	-5.7	-5.7	-2.1	-97.7	92.2	-10.4	0.2	-87.3	92.0	-16.0	9.8	28.5
May	-11.0	18.3	-0.8	-0.2	-0.1	1.8	0.4	18.8	19.1	-4.6	10.8	23.4	8.3	-28.8	-4.7	-1.0
June	-28.4	-53.8	-0.5	0.9	-3.0	-6.1	-0.1	-18.7	-69.1	-5.9	13.0	-12.8	-82.1	-6.1	6.5	14.5
July	-39.7	40.4	0.0	-1.1	-0.6	-4.3	0.3	-34.4	42.0	-10.3	3.4	-24.1	38.6	-4.6	-4.8	-0.8

Source: ECB.

## 7.1 Balance of payments

(EUR billions; transactions)

### 7. Other investment by sector and instrument

	Eurosystem				General government							
	Assets		Liabilities		Assets				Liabilities			
	Loans/currency and deposits	Other assets	Loans/currency and deposits	Other liabilities	Trade credits	Loans/currency and deposits			Other assets	Trade credits	Loans	Other liabilities
						Total	Loans	Currency and deposits				
1	2	3	4	5	6	7	8	9	10	11	12	
2002	-0.9	0.0	19.3	0.0	1.5	-0.4	-	-	-1.0	0.0	-8.0	-0.3
2003	-0.8	0.0	10.0	0.0	-0.1	0.4	-	-	-0.9	0.0	-4.2	0.3
2004	0.4	-0.3	7.1	0.2	0.0	0.1	2.0	-1.9	-1.9	0.0	-2.7	0.0
2004 Q1	-0.6	0.0	-1.3	0.0	0.0	0.2	0.7	-0.5	-0.8	0.0	-6.0	-0.3
Q2	0.9	0.0	1.5	0.2	0.0	-4.5	0.4	-4.9	-0.4	0.0	2.8	0.2
Q3	-1.5	0.0	3.3	-0.1	0.0	0.5	0.7	-0.2	-0.3	0.0	2.1	0.1
Q4	1.7	-0.3	3.5	0.2	0.0	3.9	0.2	3.7	-0.4	0.0	-1.6	-0.1
2005 Q1	0.5	0.0	4.7	0.0	0.0	5.0	1.8	3.2	-0.5	0.0	0.6	-0.2

	MFIs (excluding Eurosystem)				Other sectors							
	Assets		Liabilities		Assets				Liabilities			
	Loans/currency and deposits	Other assets	Loans/currency and deposits	Other liabilities	Trade credits	Loans/currency and deposits			Other assets	Trade credits	Loans	Other liabilities
						Total	Loans	Currency and deposits				
13	14	15	16	17	18	19	20	21	22	23	24	
2002	-163.0	-5.0	27.9	-2.1	-1.9	-50.7	-	-	-3.7	-3.7	26.2	6.6
2003	-154.2	-0.5	136.3	-0.1	0.2	-81.2	-	-	-3.0	3.4	22.7	-0.7
2004	-256.5	-3.1	243.6	2.9	-4.2	-18.0	-12.6	-5.4	-5.2	8.3	18.0	0.6
2004 Q1	-153.5	-2.6	156.8	1.6	-2.8	-17.2	-1.2	-16.0	-1.6	4.8	25.3	0.5
Q2	-4.7	-0.6	22.2	0.0	-3.2	-5.1	-15.3	10.1	-1.0	1.6	-7.4	-2.1
Q3	-22.5	-1.7	5.0	1.5	1.9	6.6	14.0	-7.4	-0.9	-0.2	-4.1	2.7
Q4	-75.8	1.8	59.6	-0.3	0.0	-2.3	-10.1	7.8	-1.8	2.2	4.2	-0.6
2005 Q1	-125.7	-1.9	192.0	2.8	-3.0	-43.7	-24.6	-19.1	-2.9	3.2	23.2	4.5

### 8. Reserve assets

	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	
2002	-2.3	0.7	0.2	-2.0	-1.2	-2.3	-15.3	0.0	8.1	8.5	-0.2	0.0
2003	30.0	1.7	0.0	-1.6	29.9	-1.8	1.6	0.0	23.2	6.9	0.1	0.0
2004	12.3	1.2	0.5	4.0	6.7	-3.8	3.7	0.3	17.8	-11.3	-0.1	0.0
2004 Q1	9.3	-0.1	-0.1	0.7	8.7	0.8	1.8	0.5	8.1	-2.4	-0.1	0.0
Q2	-2.8	0.5	0.1	0.6	-4.0	-3.3	2.2	0.0	5.4	-8.4	0.1	0.0
Q3	3.5	0.0	-0.1	1.5	2.1	2.6	-3.6	0.0	1.0	2.1	0.0	0.0
Q4	2.4	0.8	0.5	1.1	0.0	-3.9	3.4	-0.1	3.3	-2.6	-0.1	0.0
2005 Q1	4.8	0.8	0.0	1.6	2.4	5.2	-1.1	0.0	1.3	-2.9	0.0	0.0

Source: ECB.

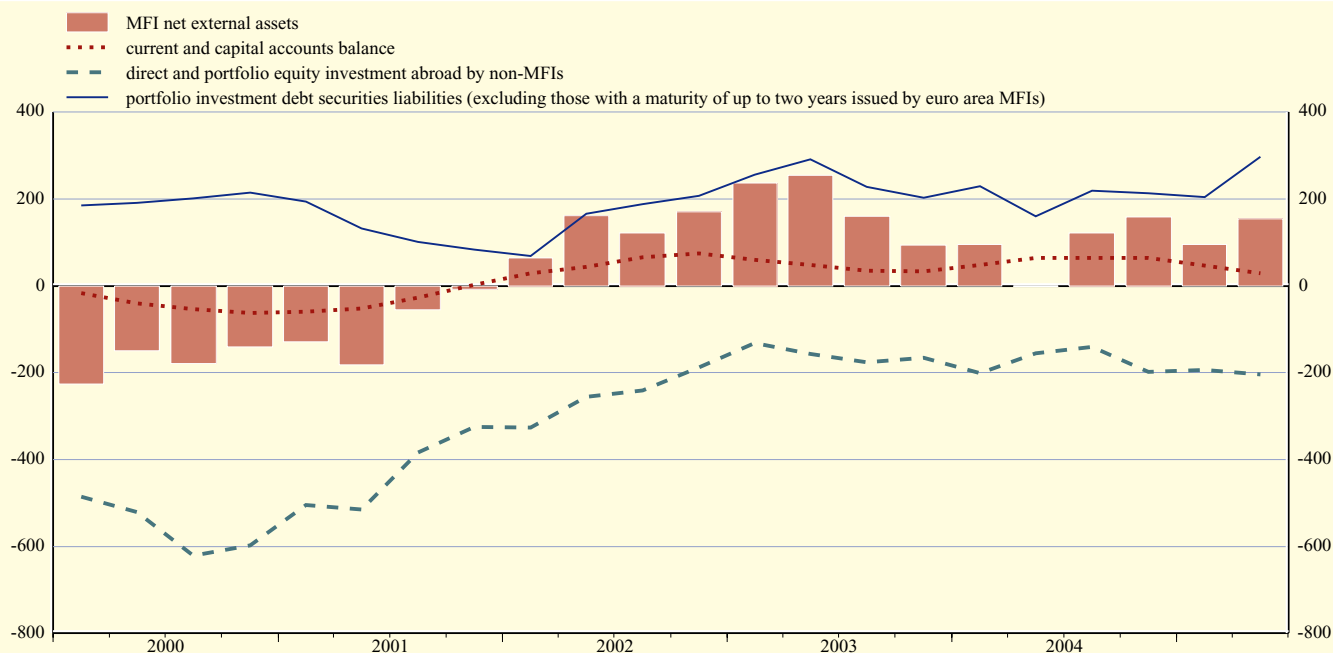
## 7.2 Monetary presentation of the balance of payments

(EUR billions; transactions)

	B.o.p. items balancing transactions in the external counterpart of M3											Memo: Transactions in the external counterpart of M3
	Current and capital accounts balance	Direct investment		Portfolio investment			Other investment		Financial derivatives	Errors and omissions	Total of columns 1 to 10	
		By resident units abroad (non-MFIs)	By non- resident units in the euro area	Assets	Liabilities		Assets	Liabilities				
					Non-MFIs	Equity <sup>1)</sup>						
1	2	3	4	5	6	7	8	9	10	11	12	
2002	74.6	-157.7	180.1	-120.5	49.9	208.0	-56.2	20.9	-11.0	-30.7	157.5	170.4
2003	33.5	-134.2	141.3	-174.9	121.5	203.1	-84.6	21.5	-12.2	-27.6	87.4	94.1
2004	64.2	-137.4	76.5	-139.1	113.1	213.3	-29.2	24.1	-1.7	-58.7	124.9	158.2
2004 Q2	7.4	-24.3	15.0	-24.9	-4.3	72.7	-14.2	-4.9	-1.2	-18.6	2.8	0.1
Q3	15.5	-15.4	17.2	-24.8	37.6	44.6	7.9	0.5	-1.0	-18.6	63.4	64.6
Q4	21.7	-74.3	38.6	-37.4	75.5	16.8	-0.7	4.1	-4.8	3.7	43.3	57.2
2005 Q1	2.0	-33.7	12.0	-66.2	28.9	71.0	-45.1	31.2	-7.4	-36.4	-43.8	-26.5
Q2	-9.7	-26.8	17.8	-59.6	10.6	165.6	-59.8	40.2	4.8	-25.2	57.9	59.8
2004 July	9.6	-18.8	11.5	1.6	5.9	-10.3	11.4	-16.6	0.6	8.0	3.0	-0.6
Aug.	4.9	8.9	-4.0	-10.3	15.5	17.9	-0.3	11.9	-4.2	-11.2	29.1	30.3
Sep.	1.0	-5.5	9.7	-16.0	16.1	37.0	-3.3	5.3	2.5	-15.4	31.3	34.9
Oct.	4.1	-31.9	18.5	-15.5	13.3	13.2	-5.7	2.2	-4.0	26.3	20.4	20.5
Nov.	5.7	-12.3	19.6	-11.0	27.3	4.2	-7.1	10.1	1.5	-34.1	3.9	10.3
Dec.	12.0	-30.2	0.5	-10.8	34.9	-0.6	12.2	-8.2	-2.2	11.4	19.0	26.4
2005 Jan.	-7.3	-11.2	2.4	-15.4	9.2	22.6	-18.0	7.9	-3.5	-17.2	-30.5	-17.4
Feb.	5.5	-1.4	3.0	-21.8	13.9	35.9	-4.3	8.2	1.2	-34.1	6.1	13.6
Mar.	3.8	-21.1	6.5	-29.0	5.8	12.6	-22.8	15.0	-5.1	14.8	-19.4	-22.7
Apr.	-9.8	-11.0	7.3	-14.9	-57.2	59.0	-21.6	26.4	-0.6	27.6	5.1	2.1
May	-1.3	5.6	-1.8	-24.4	14.2	30.8	-29.0	-0.6	0.4	-34.9	-41.1	-39.4
June	1.4	-21.5	12.4	-20.2	53.6	75.8	-9.2	14.4	5.1	-17.9	93.9	97.1
July	1.0	-79.8	2.4	-29.5	111.8	2.3	-5.2	-0.5	0.5	1.8	4.9	6.5
	<i>12-month cumulated transactions</i>											
2005 July	21.0	-211.2	76.4	-219.0	258.4	310.6	-114.3	92.1	-8.5	-82.8	122.6	162.1

## C30 Main b.o.p. transactions underlying the developments in MFI net external assets

(EUR billions; 12-month cumulated transactions)



Source: ECB.

1) Excluding money market fund shares/units.

2) Excluding debt securities with a maturity of up to two years issued by euro area MFIs.

## 7.3 Geographical breakdown of the balance of payments and international investment position

(EUR billions)

### 1. Balance of payments: current and capital accounts

(Cumulated transactions)

	Total	European Union (outside the euro area)						Canada	Japan	Switzerland	United States	Other
		Total	Denmark	Sweden	United Kingdom	Other EU countries	EU institutions					
2004 Q2 to 2005 Q1	1	2	3	4	5	6	7	8	9	10	11	12
<b>Credits</b>												
<b>Current account</b>	1,845.1	679.8	37.6	60.1	368.4	155.8	58.0	24.6	48.7	126.6	312.7	652.7
Goods	1,141.8	399.9	25.7	42.4	204.4	127.2	0.3	14.7	32.9	66.5	172.4	455.5
Services	361.2	127.4	6.8	9.6	89.7	17.1	4.2	4.8	10.5	35.5	73.6	109.4
Income	261.3	93.2	4.7	7.6	65.4	10.1	5.3	4.5	5.0	18.4	60.1	80.1
of which: investment income	246.2	88.3	4.6	7.5	63.9	10.0	2.4	4.4	5.0	12.2	58.4	77.9
Current transfers	80.8	59.4	0.4	0.5	9.0	1.3	48.2	0.6	0.3	6.2	6.6	7.7
<b>Capital account</b>	23.2	20.8	0.0	0.0	0.6	0.1	20.1	0.0	0.0	0.3	1.2	0.9
<b>Debits</b>												
<b>Current account</b>	1,813.7	602.4	34.1	57.5	291.1	131.6	88.0	19.0	83.8	120.8	267.3	720.6
Goods	1,052.2	312.7	24.3	38.9	143.9	105.7	0.0	8.6	51.7	52.5	112.8	513.9
Services	332.6	98.8	5.8	7.3	65.4	20.1	0.2	4.9	7.1	30.2	73.7	117.9
Income	287.2	96.5	3.8	10.5	74.0	4.3	4.0	3.8	24.6	32.8	71.6	57.9
of which: investment income	280.7	93.3	3.7	10.4	73.1	2.2	4.0	3.7	24.5	32.3	70.7	56.2
Current transfers	141.7	94.4	0.3	0.9	7.7	1.6	83.9	1.7	0.3	5.2	9.2	30.9
<b>Capital account</b>	8.0	0.9	0.0	0.0	0.4	0.2	0.3	0.1	0.0	0.2	0.4	6.4
<b>Net</b>												
<b>Current account</b>	31.3	77.5	3.5	2.5	77.3	24.1	-30.0	5.6	-35.1	5.8	45.4	-67.9
Goods	89.5	87.2	1.4	3.5	60.4	21.6	0.2	6.1	-18.8	14.0	59.5	-58.4
Services	28.6	28.7	1.1	2.2	24.3	-2.9	4.0	-0.1	3.4	5.3	-0.1	-8.6
Income	-26.0	-3.4	0.9	-2.9	-8.6	5.8	1.4	0.7	-19.6	-14.5	-11.5	22.3
of which: investment income	-34.6	-5.0	0.9	-2.9	-9.2	7.8	-1.6	0.7	-19.5	-20.1	-12.3	21.7
Current transfers	-60.9	-35.0	0.1	-0.3	1.3	-0.3	-35.7	-1.1	0.0	1.0	-2.5	-23.1
<b>Capital account</b>	15.2	19.9	0.0	0.0	0.3	-0.1	19.8	0.0	0.0	0.0	0.8	-5.5

### 2. Balance of payments: direct investment

(Cumulated transactions)

	Total	European Union (outside the euro area)						Canada	Japan	Switzerland	United States	Offshore financial centres	Other
		Total	Denmark	Sweden	United Kingdom	Other EU countries	EU institutions						
2004 Q2 to 2005 Q1	1	2	3	4	5	6	7	8	9	10	11	12	13
<b>Direct investment</b>	-79.2	-26.9	5.3	-1.3	-26.4	-4.5	0.0	-4.9	-6.1	12.0	12.6	-43.5	-22.5
Abroad	-163.4	-70.2	2.0	-6.6	-55.1	-10.5	0.0	0.6	-10.3	3.4	-3.6	-52.1	-31.2
Equity/reinvested earnings	-161.4	-63.1	-0.8	-2.3	-44.8	-15.2	0.0	1.2	-8.4	0.4	-18.9	-51.5	-21.2
Other capital	-2.0	-7.1	2.9	-4.3	-10.3	4.6	0.0	-0.6	-1.9	3.0	15.3	-0.7	-10.0
In the euro area	84.2	43.3	3.3	5.3	28.7	6.0	0.0	-5.5	4.2	8.5	16.2	8.7	8.8
Equity/reinvested earnings	73.7	38.6	0.6	4.2	32.8	1.0	0.0	-6.5	1.2	7.4	18.8	12.0	2.3
Other capital	10.5	4.7	2.7	1.1	-4.1	5.0	0.0	1.0	3.0	1.2	-2.6	-3.3	6.5

Source: ECB.

## 7.3 Geographical breakdown of the balance of payments and international investment position

(EUR billions)

## 3. Balance of payments: portfolio investment assets by instrument

(Cumulated transactions)

	Total	European Union (outside the euro area)						Canada	Japan	Switzerland	United States	Offshore financial centres	Other
		Total	Denmark	Sweden	United Kingdom	Other EU countries	EU institutions						
2004 Q2 to 2005 Q1	1	2	3	4	5	6	7	8	9	10	11	12	13
<b>Portfolio investment assets</b>	-311.5	-126.1	-2.9	-5.1	-95.0	-15.6	-7.5	-4.8	-41.8	-4.9	-43.3	-50.6	-40.0
Equity	-91.9	-22.4	3.0	-1.3	-21.9	-2.0	-0.1	-1.7	-18.8	-4.3	-18.4	-16.3	-10.0
Debt securities	-219.6	-103.6	-5.8	-3.8	-73.1	-13.6	-7.3	-3.1	-23.0	-0.7	-24.9	-34.3	-30.0
Bonds and notes	-182.6	-84.4	-4.2	-4.2	-55.4	-13.3	-7.3	-3.2	-9.7	-0.1	-42.6	-10.9	-31.7
Money market instruments	-37.0	-19.2	-1.6	0.4	-17.7	-0.3	0.0	0.1	-13.3	-0.6	17.7	-23.4	1.8

## 4. Balance of payments: other investment by sector

(Cumulated transactions)

	Total	European Union (outside the euro area)						Canada	Japan	Switzerland	United States	Offshore financial centres	Internat. organisations	Other
		Total	Denmark	Sweden	United Kingdom	Other EU countries	EU institutions							
2004 Q2 to 2005 Q1	1	2	3	4	5	6	7	8	9	10	11	12	13	14
<b>Other investment</b>	45.1	-23.6	-0.2	-8.7	-19.7	-3.4	8.4	1.7	22.7	6.2	24.8	-3.1	-0.8	17.2
Assets	-281.9	-234.2	-4.2	-16.8	-194.9	-17.9	-0.4	-0.3	17.8	-22.7	-12.8	-15.4	-2.9	-11.3
General government	3.2	1.5	-0.3	0.1	2.0	0.2	-0.6	0.0	0.0	0.0	0.4	-0.3	-1.6	3.3
MFIs	-229.9	-180.3	-4.7	-13.9	-144.4	-17.6	0.3	0.3	17.8	-24.9	-18.3	-1.3	-1.2	-21.9
Other sectors	-55.3	-55.4	0.7	-3.0	-52.5	-0.6	0.0	-0.6	0.0	2.2	5.1	-13.8	-0.1	7.3
Liabilities	327.1	210.6	4.0	8.0	175.2	14.5	8.9	2.1	4.9	28.9	37.6	12.4	2.1	28.5
General government	3.9	1.3	0.0	0.0	-1.0	0.0	2.2	0.0	-0.7	3.0	-0.4	0.0	-0.3	1.0
MFIs	296.2	191.8	4.2	6.5	164.2	12.8	4.0	1.1	4.2	15.8	26.0	11.8	2.6	43.0
Other sectors	27.0	17.5	-0.2	1.5	12.0	1.7	2.6	0.9	1.3	10.1	12.0	0.6	-0.1	-15.4

## 5. International investment position

(End-of-period outstanding amounts)

	Total	European Union (outside the euro area)						Canada	Japan	Switzerland	United States	Offshore financial centres	Internat. organisations	Other
		Total	Denmark	Sweden	United Kingdom	Other EU countries	EU institutions							
2003	1	2	3	4	5	6	7	8	9	10	11	12	13	14
<b>Direct investment</b>	79.7	-250.1	1.8	-11.1	-346.3	105.6	-0.1	33.0	5.0	71.2	-3.3	-40.2	-0.1	264.2
Abroad	2,110.4	683.3	25.9	63.5	485.0	108.8	0.0	73.0	53.6	231.6	492.8	218.5	0.0	357.6
Equity/reinvested earnings	1,647.3	524.9	22.6	40.3	377.0	85.0	0.0	59.5	45.4	171.4	350.5	206.0	0.0	289.5
Other capital	463.1	158.3	3.4	23.2	107.9	23.8	0.0	13.5	8.2	60.1	142.3	12.5	0.0	68.0
In the euro area	2,030.7	933.4	24.2	74.6	831.2	3.2	0.1	39.9	48.7	160.4	496.2	258.7	0.1	93.4
Equity/reinvested earnings	1,474.4	732.2	18.9	60.2	650.8	2.3	0.0	37.5	38.4	109.7	347.0	135.1	0.1	74.2
Other capital	556.4	201.1	5.2	14.4	180.5	1.0	0.1	2.4	10.2	50.7	149.1	123.6	0.0	19.1
<b>Portfolio investment assets</b>	2,607.4	799.4	48.3	91.7	568.3	45.0	46.1	57.0	117.5	84.7	960.3	284.5	27.8	276.2
Equity	1,054.6	267.4	8.3	26.0	223.5	9.6	0.0	6.8	80.7	75.7	441.6	74.9	0.5	107.0
Debt securities	1,552.8	532.0	40.0	65.7	344.8	35.5	46.1	50.2	36.8	9.0	518.7	209.6	27.3	169.2
Bonds and notes	1,317.0	433.8	37.5	53.6	262.3	34.9	45.5	49.0	35.2	7.9	423.6	197.0	26.2	144.2
Money market instruments	235.8	98.2	2.5	12.0	82.4	0.6	0.6	1.2	1.6	1.2	95.0	12.5	1.1	25.0
<b>Other investment</b>	-314.8	-76.5	33.5	18.1	23.4	12.2	-163.8	2.1	14.1	-52.5	-71.8	-239.6	-6.8	116.1
Assets	2,587.3	1,240.7	49.9	49.1	1,064.8	72.5	4.5	14.2	86.4	170.6	368.4	229.7	38.9	438.4
General government	92.7	9.4	0.0	0.0	4.2	2.4	2.8	0.0	0.3	0.1	2.8	1.1	33.2	45.8
MFIs	1,768.1	961.8	42.2	33.1	834.2	51.7	0.7	6.8	70.3	109.0	233.9	153.0	5.1	228.1
Other sectors	726.4	269.5	7.7	16.0	226.4	18.4	1.0	7.3	15.8	61.5	131.7	75.6	0.5	164.5
Liabilities	2,902.1	1,317.2	16.3	31.0	1,041.4	60.3	168.2	12.1	72.3	223.1	440.1	469.3	45.6	322.3
General government	43.5	25.6	0.0	0.1	4.1	0.2	21.1	0.0	1.6	0.3	5.2	0.3	3.0	7.6
MFIs	2,333.1	1,012.1	13.2	15.5	816.6	48.3	118.5	6.7	50.6	192.0	350.7	436.2	41.3	243.5
Other sectors	525.5	279.5	3.2	15.3	220.7	11.8	28.6	5.4	20.1	30.8	84.3	32.8	1.4	71.2

Source: ECB.



## 7.4 International investment position (including international reserves)

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

### 1. Summary international investment position

	Total	Total as a % of GDP	Direct investment	Portfolio investment	Financial derivatives	Other investment	Reserve assets
	1	2	3	4	5	6	7
Net international investment position							
2001	-398.8	-5.8	410.2	-820.8	2.5	-383.4	392.7
2002	-618.0	-8.7	204.2	-879.0	-12.0	-297.2	366.1
2003	-759.6	-10.4	79.7	-823.5	-7.5	-314.8	306.5
2004 Q2	-706.4	-9.3	134.4	-842.3	-10.2	-290.5	302.2
Q3	-714.1	-9.4	112.1	-865.8	-6.5	-252.4	298.5
Q4	-874.1	-11.5	58.1	-959.5	-14.4	-239.0	280.7
2005 Q1	-931.4	-11.8	108.6	-1,028.4	-20.8	-275.7	285.0
Outstanding assets							
2001	7,628.1	110.9	1,951.4	2,515.0	129.9	2,639.2	392.7
2002	7,260.6	102.0	1,877.4	2,302.6	135.9	2,578.6	366.1
2003	7,768.2	106.1	2,110.4	2,607.4	156.6	2,587.3	306.5
2004 Q2	8,317.6	109.2	2,188.7	2,821.9	150.6	2,854.2	302.2
Q3	8,429.8	110.7	2,202.0	2,869.5	167.7	2,892.0	298.5
Q4	8,525.7	112.0	2,252.4	2,933.8	164.9	2,893.9	280.7
2005 Q1	9,028.6	114.7	2,319.0	3,082.5	175.4	3,166.7	285.0
Outstanding liabilities							
2001	8,026.9	116.7	1,541.2	3,335.8	127.4	3,022.6	-
2002	7,878.6	110.7	1,673.2	3,181.6	147.9	2,875.9	-
2003	8,527.8	116.5	2,030.7	3,430.9	164.1	2,902.1	-
2004 Q2	9,024.0	118.5	2,054.3	3,664.2	160.8	3,144.7	-
Q3	9,143.9	120.1	2,090.0	3,735.3	174.2	3,144.4	-
Q4	9,399.8	123.4	2,194.3	3,893.2	179.4	3,132.9	-
2005 Q1	9,960.0	126.5	2,210.4	4,111.0	196.2	3,442.4	-

### 2. Direct investment

	By resident units abroad						By non-resident units in the euro area					
	Equity capital and reinvested earnings			Other capital (mostly inter-company loans)			Equity capital and reinvested earnings			Other capital (mostly inter-company loans)		
	Total	MFI excluding Eurosystem	Non- MFIs	Total	MFI excluding Eurosystem	Non- MFIs	Total	MFI excluding Eurosystem	Non- MFIs	Total	MFI excluding Eurosystem	Non- MFIs
1	2	3	4	5	6	7	8	9	10	11	12	
2001	1,555.8	124.6	1,431.2	395.6	0.8	394.8	1,175.1	32.5	1,142.6	366.1	2.8	363.3
2002	1,544.1	127.7	1,416.4	333.3	0.3	333.0	1,264.6	37.1	1,227.5	408.6	2.9	405.7
2003	1,647.3	114.8	1,532.5	463.1	0.4	462.7	1,474.4	47.6	1,426.8	556.4	2.9	553.5
2004 Q2	1,709.1	124.9	1,584.1	479.6	1.5	478.1	1,494.5	38.3	1,456.3	559.8	3.6	556.2
Q3	1,757.4	124.3	1,633.1	444.6	1.5	443.1	1,515.4	42.1	1,473.2	574.6	4.0	570.7
Q4	1,809.8	129.3	1,680.5	442.6	1.7	440.9	1,617.8	46.4	1,571.4	576.5	4.3	572.2
2005 Q1	1,853.2	132.9	1,720.2	465.8	1.1	464.7	1,629.5	43.8	1,585.7	580.9	4.5	576.4

### 3. Portfolio investment assets by instrument and sector of holder

	Equity				Debt instruments										
	Assets				Liabilities	Bonds and notes					Money market instruments				
						Assets		Liabilities	Assets			Liabilities	Assets		
	Eurosystem	MFI excluding Eurosystem	Non-MFI	Eurosystem	MFI excluding Eurosystem	Non-MFI	Eurosystem		MFI excluding Eurosystem	Non-MFI	General gov.		Other sectors		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
2001	0.6	38.5	6.7	1,070.9	1,640.5	2.0	424.8	8.2	783.6	1,514.8	2.8	135.1	0.2	41.6	180.5
2002	0.7	43.8	8.3	800.5	1,366.1	6.4	404.8	8.0	787.2	1,628.8	1.2	193.8	1.3	46.7	186.7
2003	1.8	52.6	11.5	988.8	1,516.2	8.3	463.7	8.0	837.1	1,701.3	1.1	184.8	0.6	49.2	213.4
2004 Q2	1.8	73.7	14.1	1,075.5	1,620.0	6.9	515.8	8.5	866.4	1,819.2	1.1	198.4	4.0	55.7	225.1
Q3	1.8	75.3	14.4	1,063.8	1,632.3	6.5	539.6	8.6	884.1	1,891.1	0.9	212.0	4.7	57.8	211.9
Q4	1.7	76.3	15.9	1,107.7	1,782.3	6.1	546.2	10.1	895.1	1,902.5	1.0	219.3	0.5	53.8	208.4
2005 Q1	1.7	106.0	15.9	1,144.4	1,861.1	5.9	588.1	9.3	934.6	1,997.6	0.5	214.0	4.1	58.0	252.2

Source: ECB.

## 7.4 International investment position (including international reserves)

(EUR billions, unless stated otherwise; end-of-period outstanding amounts)

## 4. Other investment by instrument

	Eurosysteem					General government							
	Assets		Liabilities			Assets				Liabilities			
	Loans/currency and deposits	Other assets	Loans/currency and deposits	Other liabilities	Trade credits	Loans/currency and deposits			Other assets	Trade credits	Loans	Other liabilities	
						Total	Loans	Currency and deposits					
1	2	3	4	5	6	7	8	9	10	11	12		
2001	3.0	0.1	40.5	0.2	3.1	68.6	-	-	55.8	0.2	44.8	12.3	
2002	3.4	0.1	57.2	0.2	1.3	58.7	-	-	54.4	0.1	42.8	13.5	
2003	4.2	0.6	65.3	0.2	1.4	53.2	49.1	4.1	38.1	0.0	39.7	3.8	
2004 Q2	4.3	0.6	66.0	0.2	1.4	60.6	50.2	10.5	39.5	0.0	39.0	3.5	
Q3	5.6	0.6	69.5	0.2	1.4	60.1	49.4	10.7	38.9	0.0	40.8	3.3	
Q4	4.6	2.2	71.8	0.2	1.4	58.5	51.3	7.2	38.9	0.0	41.0	3.1	
2005 Q1	4.0	2.2	77.5	0.2	1.4	55.6	49.4	6.2	39.6	0.0	42.6	2.8	

	MFIs (excluding Eurosysteem)				Other sectors							
	Assets		Liabilities		Assets				Liabilities			
	Loans/currency and deposits	Other assets	Loans/currency and deposits	Other liabilities	Trade credits	Loans/currency and deposits			Other assets	Trade credits	Loans	Other liabilities
						Total	Loans	Currency and deposits				
13	14	15	16	17	18	19	20	21	22	23	24	
2001	1,666.6	48.8	2,364.6	49.3	176.3	515.8	-	-	101.2	109.6	360.2	40.9
2002	1,631.3	55.3	2,197.7	42.9	183.6	496.7	-	-	93.9	102.6	369.3	49.6
2003	1,731.1	32.3	2,238.8	28.8	176.4	470.4	148.7	321.6	79.6	103.0	377.6	44.9
2004 Q2	1,943.5	25.1	2,458.8	32.8	169.9	509.0	189.2	319.8	100.4	111.0	385.7	47.5
Q3	1,946.2	29.1	2,437.5	38.3	169.7	538.3	198.9	339.4	102.1	111.4	393.4	50.0
Q4	1,955.2	45.4	2,426.9	44.2	155.8	527.4	199.1	328.3	104.5	106.4	392.3	47.0
2005 Q1	2,119.3	58.4	2,676.1	60.4	163.9	611.5	256.9	354.6	110.8	115.4	412.3	55.1

## 5. International reserves

	Reserve assets													Memo		
	Total	Monetary gold		Special drawing rights	Reserve position in the IMF	Total	Foreign exchange						Other claims	Claims on euro area residents in foreign currency	Predetermined short-term net drains in foreign currency	
		In EUR billions	In fine troy ounces (millions)				Currency and deposits	Securities				Financial derivatives				
								With monetary authorities and the BIS	With banks	Total	Equity					Bonds and notes
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
	Eurosysteem															
2002	366.1	130.4	399.022	4.8	25.0	205.8	10.3	35.3	159.8	1.0	120.2	38.5	0.4	0.0	22.4	-26.3
2003	306.5	130.0	393.543	4.4	23.3	148.9	10.0	30.4	107.8	0.9	80.5	26.5	0.7	0.0	20.3	-16.3
2004 Q4	280.7	125.4	389.998	3.9	18.6	132.8	12.5	25.5	94.6	0.5	58.2	35.9	0.1	0.0	19.1	-12.8
2005 Q1	285.0	127.7	387.359	4.0	17.4	135.8	7.7	27.8	100.4	0.5	59.0	40.9	-0.1	0.0	21.4	-15.1
2005 June	302.2	138.2	382.323	4.2	16.5	143.3	12.4	28.3	102.9	-	-	-	-0.3	0.0	23.4	-17.7
July	296.2	135.2	381.223	4.2	14.7	142.0	8.3	29.2	104.8	-	-	-	-0.3	0.0	23.4	-16.3
Aug.	295.6	135.2	380.520	4.2	14.2	142.0	9.1	29.1	104.1	-	-	-	-0.3	0.0	24.0	-18.1
	of which held by the European Central Bank															
2002	45.5	8.1	24.656	0.2	0.0	37.3	1.2	9.9	26.1	0.0	19.5	6.7	0.0	0.0	3.0	-5.2
2003	36.9	8.1	24.656	0.2	0.0	28.6	1.4	5.0	22.2	0.0	14.9	7.3	0.0	0.0	2.8	-1.5
2004 Q4	35.1	7.9	24.656	0.2	0.0	27.0	2.7	3.3	21.1	0.0	9.7	11.3	0.0	0.0	2.6	-1.3
2005 Q1	36.2	8.1	24.656	0.2	0.0	27.9	1.1	4.2	22.6	0.0	7.7	14.9	0.0	0.0	2.7	-0.9
2005 June	39.7	8.4	23.145	0.2	0.0	31.2	3.8	5.1	22.3	-	-	-	0.0	0.0	2.6	-1.4
July	39.7	8.2	23.145	0.2	0.0	31.4	2.1	6.5	22.8	-	-	-	0.0	0.0	2.0	-1.1
Aug.	39.5	8.2	23.145	0.2	0.0	31.1	2.3	6.7	22.0	-	-	-	0.0	0.0	2.3	-1.2

Source: ECB.

## 7.5 Trade in goods

(seasonally adjusted, unless otherwise indicated)

### 1. Values, volumes and unit values by product group

	Total (n.s.a.)		Exports (f.o.b.)					Imports (c.i.f.)					
	Exports	Imports	Total			Memo: Manufactures	Total			Memo: Manufactures	Oil		
			Intermediate	Capital	Consumption		Intermediate	Capital	Consumption				
	1	2	3	4	5	6	7	8	9	10	11	12	13
Values (EUR billions; annual percentage changes for columns 1 and 2)													
2001	6.1	-0.7	1,062.7	506.0	235.2	289.2	932.4	1,016.7	579.1	178.9	228.5	741.1	107.7
2002	2.0	-3.0	1,084.1	512.4	227.9	309.5	949.2	984.5	559.5	163.2	234.3	717.8	105.2
2003	-2.3	0.5	1,059.2	500.8	222.8	300.4	925.3	989.6	553.9	164.2	240.9	715.9	109.0
2004	8.7	9.0	1,145.8	540.9	242.4	310.2	988.4	1,072.4	597.1	179.2	252.4	760.7	128.2
2004 Q1	4.8	0.0	278.3	131.0	59.1	76.0	241.6	254.0	138.4	42.2	62.6	183.3	26.3
Q2	11.9	9.3	286.8	134.7	60.1	78.8	246.2	263.4	145.9	44.9	62.6	186.5	29.3
Q3	8.9	14.5	288.8	137.2	60.9	78.0	249.2	276.0	155.9	45.2	63.1	193.3	36.2
Q4	8.9	12.5	291.9	138.1	62.3	77.3	251.5	279.1	156.9	46.9	64.0	197.6	36.5
2005 Q1	3.6	8.9	291.9	137.5	61.8	77.3	255.3	278.5	154.8	44.8	63.5	197.1	36.0
Q2	6.5	10.9	301.7	142.2	63.2	80.2	258.1	291.0	162.5	48.0	64.2	201.0	39.8
2005 Feb.	3.9	8.4	96.8	45.6	20.3	25.5	83.5	91.9	50.4	14.6	20.9	65.2	11.0
Mar.	0.8	7.7	97.8	46.0	20.8	26.0	85.9	94.0	53.9	15.1	21.5	66.5	13.7
Apr.	5.0	10.9	99.6	47.3	20.9	26.3	85.7	96.5	53.5	16.4	21.1	66.4	13.4
May	7.5	13.5	101.2	47.4	20.9	26.6	86.8	97.6	54.7	15.6	21.7	67.7	13.0
June	7.0	8.4	100.9	47.5	21.3	27.3	85.6	97.0	54.3	16.1	21.4	66.9	13.4
July	3.6	10.5	101.8	47.0	22.1	27.4	88.8	100.9	56.3	16.4	22.8	71.0	13.8
Volume indices (2000 = 100; annual percentage changes for columns 1 and 2)													
2001	5.1	-0.8	105.0	102.1	108.6	107.8	105.4	99.1	99.3	96.3	100.6	97.8	99.3
2002	2.9	-0.7	108.0	105.0	106.2	115.0	108.2	98.3	98.8	89.5	104.1	96.4	101.4
2003	1.0	3.7	109.0	105.9	108.0	114.8	109.3	102.0	100.5	95.2	110.4	100.0	104.9
2004	8.6	6.3	117.9	113.9	118.7	118.6	117.2	107.7	102.6	105.7	116.7	106.1	104.5
2004 Q1	7.7	4.9	116.0	112.3	116.2	117.2	115.7	106.3	101.6	99.7	116.6	103.7	101.5
Q2	11.4	6.1	117.9	113.7	117.5	120.1	116.7	106.5	101.6	105.0	116.0	104.1	99.3
Q3	7.6	8.2	117.9	114.7	118.5	119.0	117.5	108.7	104.1	105.9	115.9	106.9	113.0
Q4	7.6	6.0	119.7	115.0	122.6	118.2	118.9	109.6	103.0	112.0	118.3	109.7	104.3
2005 Q1	1.5	2.6	119.1	113.6	121.8	117.8	120.0	109.9	102.4	108.5	116.9	109.3	106.3
Q2	4.7	4.8	122.0	116.3	124.1	121.3	120.8	111.1	102.6	114.8	117.9	110.8	101.4
2005 Feb.	1.5	2.2	118.8	113.0	120.0	116.6	118.0	108.8	99.7	106.0	115.7	108.4	97.4
Mar.	-1.3	0.0	119.2	113.2	123.5	118.4	120.7	109.7	104.2	109.0	118.7	110.1	112.3
Apr.	3.1	3.9	121.1	116.0	123.1	119.9	120.3	111.3	101.8	118.4	117.0	110.6	102.4
May	6.2	8.6	123.2	117.1	123.6	120.9	122.2	113.2	105.5	112.4	119.4	112.2	105.2
June	4.9	2.0	121.6	115.7	125.6	123.1	119.9	108.9	100.4	113.6	117.2	109.6	96.7
July	.	.	.	.	.	.	.	.	.	.	.	.	.
Unit value indices (2000 = 100; annual percentage changes for columns 1 and 2)													
2001	1.1	0.3	101.0	100.7	100.1	102.1	100.9	100.2	98.7	101.4	102.8	101.7	88.6
2002	-0.9	-2.3	100.1	99.1	99.2	102.4	100.1	97.8	95.8	99.6	101.9	100.0	84.6
2003	-3.2	-3.1	96.9	96.1	95.4	99.5	96.6	94.8	93.3	94.2	98.8	96.1	85.0
2004	0.1	2.5	96.9	96.4	94.4	99.5	96.2	97.2	98.4	92.6	97.9	96.2	99.6
2004 Q1	-2.7	-4.6	95.7	94.8	94.0	98.8	95.3	93.4	92.2	92.5	97.2	94.9	84.4
Q2	0.4	3.0	97.1	96.2	94.6	99.9	96.3	96.7	97.2	93.3	97.8	96.2	96.0
Q3	1.3	5.8	97.7	97.2	95.0	99.8	96.7	99.2	101.3	93.3	98.6	97.1	104.2
Q4	1.2	6.1	97.3	97.6	93.9	99.6	96.5	99.5	103.1	91.4	98.1	96.7	113.9
2005 Q1	2.1	6.0	97.7	98.4	93.8	99.9	97.0	99.0	102.3	90.1	98.4	96.9	110.4
Q2	1.7	5.8	98.7	99.4	94.1	100.6	97.5	102.3	107.3	91.4	98.6	97.4	128.0
2005 Feb.	2.4	6.1	97.5	98.4	93.8	99.7	96.9	99.0	102.5	90.3	98.3	96.9	110.8
Mar.	2.2	7.7	98.2	99.0	93.5	100.4	97.4	100.5	105.0	90.9	98.6	97.3	119.6
Apr.	1.9	6.7	98.5	99.4	94.3	100.2	97.5	101.6	106.7	90.6	97.9	96.7	128.2
May	1.2	4.5	98.2	98.8	93.8	100.3	97.2	101.0	105.3	90.7	98.6	97.1	120.7
June	2.0	6.2	99.3	100.0	94.2	101.2	97.8	104.3	109.8	92.7	99.2	98.3	135.2
July	.	.	.	.	.	.	.	.	.	.	.	.	.

Sources: Eurostat and ECB calculations based on Eurostat data (volume indices and seasonal adjustment of unit value indices).

## 7.5 Trade in goods

(EUR billions, unless otherwise indicated; seasonally adjusted)

## 2. Geographical breakdown

	Total	European Union (outside the euro area)				Russia	Switzer- land	Turkey	United States	Asia			Africa	Latin America	Other countries
		Denmark	Sweden	United Kingdom	Other EU countries					China	Japan	Other Asian countries			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
<b>Exports (f.o.b.)</b>															
2001	1,062.7	24.4	37.0	202.5	105.8	24.7	66.4	17.9	180.2	25.2	34.5	140.3	60.5	49.9	93.4
2002	1,084.1	25.3	37.1	205.8	112.1	27.1	64.0	21.4	184.1	29.9	33.1	140.5	59.5	43.4	100.7
2003	1,059.2	24.9	38.7	194.8	117.6	29.2	63.4	24.9	166.3	35.3	31.3	135.4	59.5	37.9	99.9
2004	1,145.8	25.5	41.6	203.3	126.8	35.6	66.2	31.8	173.5	40.3	33.1	149.8	63.6	40.2	114.6
2004 Q1	278.3	6.1	10.0	49.7	31.2	8.0	15.5	7.9	42.5	9.7	8.4	36.8	15.2	9.6	27.6
Q2	286.8	6.3	10.3	50.8	31.4	9.0	16.3	8.2	43.9	10.6	8.0	36.9	15.8	9.9	29.2
Q3	288.8	6.5	10.5	51.5	31.3	9.3	17.2	8.0	43.3	9.9	8.4	38.5	16.7	10.2	27.3
Q4	291.9	6.6	10.7	51.3	32.8	9.2	17.1	7.7	43.8	10.1	8.2	37.6	15.9	10.5	30.4
2005 Q1	291.9	6.6	10.9	50.0	33.0	9.8	17.4	8.0	43.5	10.3	8.5	39.0	17.0	11.0	27.1
Q2	301.7	6.9	11.1	50.0	34.0	10.6	16.8	8.1	45.4	9.9	8.4	40.4	17.0	11.1	31.9
2005 Feb.	96.8	2.2	3.6	16.7	10.9	3.2	5.6	2.6	14.4	3.4	2.8	12.5	5.5	3.7	9.9
Mar.	97.8	2.2	3.7	16.6	10.9	3.4	5.9	2.7	14.5	3.5	2.9	12.8	6.0	3.6	9.1
Apr.	99.6	2.3	3.7	16.6	11.4	3.4	5.6	2.7	15.0	3.2	2.9	13.8	5.6	3.9	9.5
May	101.2	2.3	3.7	16.9	11.3	3.5	5.7	2.7	15.1	3.3	2.7	13.3	6.0	3.7	10.9
June	100.9	2.3	3.6	16.6	11.4	3.6	5.5	2.6	15.2	3.3	2.8	13.3	5.4	3.6	11.5
July	101.8	2.2	3.6	17.3	11.4	3.4	5.7	2.8	14.8	3.6	2.8	14.4	5.9	4.0	9.7
<i>% share of total exports</i>															
2004	100.0	2.2	3.6	17.7	11.1	3.1	5.8	2.8	15.1	3.5	2.9	13.1	5.6	3.5	10.0
<b>Imports (c.i.f.)</b>															
2001	1,016.7	22.0	35.6	154.6	88.8	42.8	52.9	16.7	138.7	57.5	58.6	150.5	74.0	41.0	82.9
2002	984.5	23.0	35.6	149.7	93.5	42.0	52.1	17.7	125.6	61.8	52.7	142.7	67.9	39.4	80.8
2003	989.6	23.7	36.9	138.9	102.0	47.4	50.4	19.3	110.3	74.3	52.2	141.4	68.9	39.8	84.0
2004	1,072.4	24.4	39.4	142.0	107.5	56.2	53.5	22.8	113.7	92.0	53.6	163.2	72.2	44.9	87.1
2004 Q1	254.0	6.0	9.4	34.1	27.1	12.3	12.8	5.0	26.4	20.7	13.5	36.3	16.5	10.7	23.2
Q2	263.4	5.8	9.8	34.6	26.4	13.4	13.2	5.6	29.7	22.4	13.0	40.7	17.2	10.9	20.7
Q3	276.0	6.2	10.1	37.1	26.5	14.6	13.7	6.0	28.9	23.7	13.7	42.9	18.9	11.6	22.1
Q4	279.1	6.3	10.1	36.2	27.5	15.9	13.8	6.1	28.8	25.2	13.5	43.2	19.6	11.7	21.1
2005 Q1	278.5	6.1	10.0	35.5	27.1	16.7	13.5	6.2	29.0	26.5	13.0	40.4	20.1	12.0	22.5
Q2	291.0	6.4	10.2	36.3	28.9	17.4	14.3	5.8	29.7	27.5	12.5	45.6	21.6	11.8	23.0
2005 Feb.	91.9	2.0	3.3	11.8	9.1	5.8	4.4	2.0	9.6	8.7	4.2	13.9	6.4	4.0	6.7
Mar.	94.0	2.1	3.3	12.0	8.7	6.0	4.5	2.1	9.8	9.2	4.5	13.6	7.3	4.0	6.9
Apr.	96.5	2.1	3.4	12.4	9.4	5.7	4.6	2.0	9.9	8.9	4.1	14.7	7.0	3.9	8.3
May	97.6	2.3	3.4	12.1	9.9	5.9	4.8	2.1	9.9	9.4	4.3	14.9	7.5	3.9	7.2
June	97.0	2.0	3.3	11.8	9.6	5.8	4.9	1.8	9.9	9.3	4.1	16.0	7.1	3.9	7.4
July	100.9	2.0	3.4	12.4	10.1	5.6	4.9	1.9	9.8	9.8	4.3	15.5	7.8	4.1	9.2
<i>% share of total imports</i>															
2004	100.0	2.3	3.7	13.2	10.0	5.2	5.0	2.1	10.6	8.6	5.0	15.2	6.7	4.2	8.1
<b>Balance</b>															
2001	46.0	2.3	1.4	47.9	17.0	-18.1	13.5	1.2	41.5	-32.3	-24.1	-10.2	-13.6	8.9	10.5
2002	99.6	2.3	1.5	56.1	18.6	-14.9	12.0	3.8	58.4	-31.9	-19.7	-2.2	-8.3	4.0	19.9
2003	69.5	1.1	1.8	55.9	15.5	-18.2	12.9	5.5	56.0	-39.1	-20.9	-6.0	-9.3	-1.8	16.0
2004	73.4	1.2	2.2	61.3	19.3	-20.7	12.7	9.0	59.8	-51.7	-20.6	-13.4	-8.6	-4.6	27.5
2004 Q1	24.4	0.1	0.6	15.6	4.1	-4.3	2.7	2.9	16.2	-10.9	-5.1	0.5	-1.4	-1.1	4.4
Q2	23.4	0.5	0.6	16.2	5.1	-4.4	3.1	2.6	14.2	-11.8	-5.0	-3.9	-1.3	-1.0	8.5
Q3	12.8	0.2	0.4	14.4	4.9	-5.3	3.5	1.9	14.4	-13.8	-5.3	-4.4	-2.2	-1.3	5.2
Q4	12.8	0.3	0.6	15.1	5.3	-6.7	3.3	1.6	15.0	-15.2	-5.3	-5.6	-3.7	-1.2	9.3
2005 Q1	13.3	0.5	0.9	14.4	5.9	-7.0	4.0	1.7	14.5	-16.3	-4.5	-1.4	-3.1	-1.0	4.6
Q2	10.7	0.5	0.9	13.7	5.1	-6.8	2.5	2.3	15.7	-17.7	-4.1	-5.1	-4.6	-0.6	8.9
2005 Feb.	4.9	0.3	0.3	4.9	1.8	-2.6	1.2	0.5	4.8	-5.4	-1.4	-1.4	-1.0	-0.3	3.2
Mar.	3.8	0.1	0.4	4.7	2.1	-2.6	1.4	0.6	4.7	-5.6	-1.6	-0.8	-1.3	-0.4	2.2
Apr.	3.2	0.2	0.3	4.1	2.0	-2.3	1.0	0.8	5.1	-5.6	-1.2	-0.9	-1.5	0.0	1.2
May	3.6	0.1	0.3	4.8	1.3	-2.4	0.9	0.6	5.2	-6.1	-1.6	-1.6	-1.5	-0.2	3.6
June	3.9	0.3	0.3	4.8	1.8	-2.1	0.6	0.8	5.4	-5.9	-1.3	-2.7	-1.6	-0.4	4.0
July	1.0	0.2	0.2	4.9	1.4	-2.2	0.8	0.8	5.0	-6.2	-1.5	-1.1	-1.9	0.0	0.5

Sources: Eurostat and ECB calculations based on Eurostat data (balance and columns 5, 12 and 15).



## EXCHANGE RATES

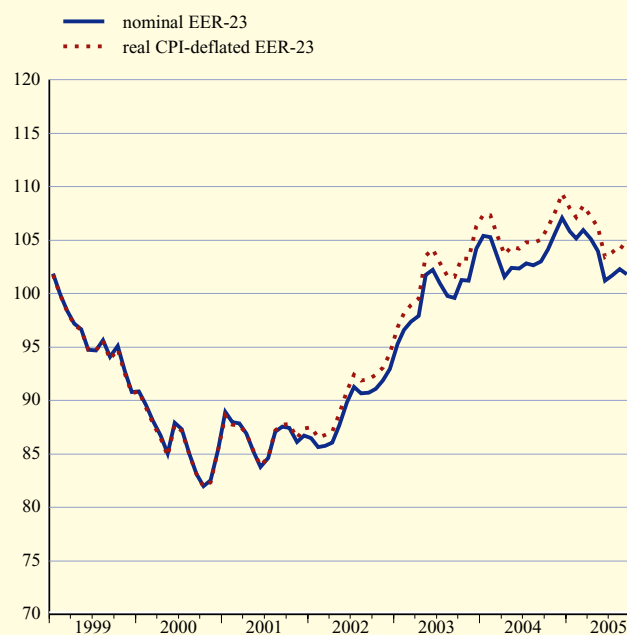
### 8.1 Effective exchange rates <sup>1)</sup>

(period averages; index 1999 Q1=100)

	EER-23						EER-42		
	Nominal	Real CPI	Real PPI	Real GDP deflator	Real ULCM	Real ULCT	Nominal	Real CPI	
	1	2	3	4	5	6	7	8	
2002	89.2	90.3	91.9	90.2	86.4	87.9	94.8	90.8	
2003	99.9	101.7	102.2	101.5	97.2	99.0	106.6	101.6	
2004	103.8	105.8	105.3	105.4	102.6	103.1	111.0	105.4	
2004 Q3	102.8	104.9	104.4	104.5	100.8	102.2	110.1	104.5	
Q4	105.7	107.7	106.7	107.0	104.6	104.6	113.0	107.1	
2005 Q1	105.7	107.8	107.1	107.0	103.3	104.3	112.6	106.5	
Q2	103.4	105.6	104.4	104.8	100.7	102.7	110.1	104.1	
Q3	101.9	104.1	102.8	.	.	.	108.3	102.3	
2004 Sep.	103.0	105.0	104.5	-	-	-	110.3	104.6	
Oct.	104.2	106.2	105.3	-	-	-	111.5	105.8	
Nov.	105.6	107.6	106.5	-	-	-	113.1	107.1	
Dec.	107.1	109.3	108.3	-	-	-	114.4	108.5	
2005 Jan.	105.8	108.0	107.2	-	-	-	112.9	106.9	
Feb.	105.1	107.2	106.6	-	-	-	111.9	105.8	
Mar.	106.0	108.2	107.4	-	-	-	112.9	106.8	
Apr.	105.1	107.2	106.0	-	-	-	111.9	105.8	
May	104.0	106.2	104.7	-	-	-	110.6	104.6	
June	101.2	103.5	102.3	-	-	-	107.6	101.9	
July	101.7	103.8	102.6	-	-	-	108.0	102.0	
Aug.	102.3	104.5	103.2	-	-	-	108.7	102.7	
Sep.	101.8	104.0	102.7	-	-	-	108.2	102.2	
	<i>% change versus previous month</i>								
2005 Sep.	-0.5	-0.5	-0.4	-	-	-	-0.4	-0.5	
	<i>% change versus previous year</i>								
2005 Sep.	-1.2	-1.0	-1.7	-	-	-	-1.9	-2.3	

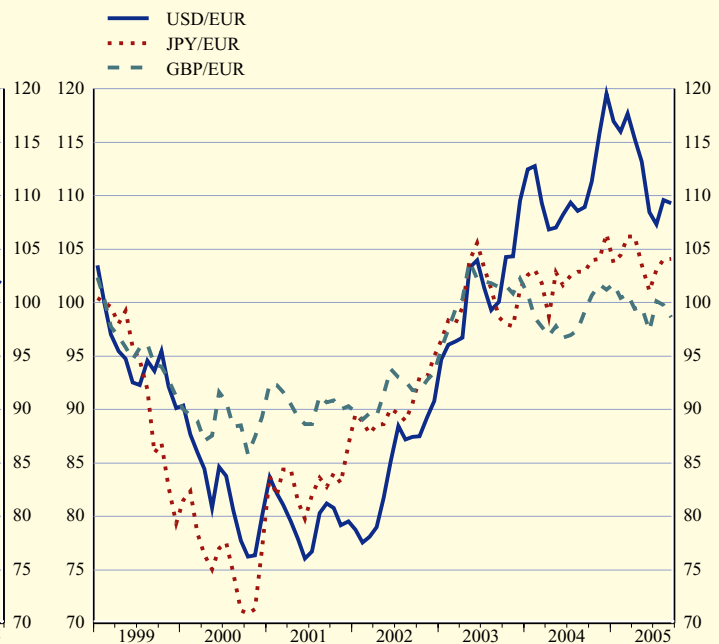
### C31 Effective exchange rates

(monthly averages; index 1999 Q1=100)



### C32 Bilateral exchange rates

(monthly averages; index 1999 Q1=100)



Source: ECB.

1) For the definition of the trading partner groups and other information, please refer to the General notes.

## 8.2 Bilateral exchange rates

(period averages; units of national currency per euro)

	Danish kroner 1	Swedish krona 2	Pound sterling 3	US dollar 4	Japanese yen 5	Swiss franc 6	South Korean won 7	Hong Kong dollar 8	Singapore dollar 9	Canadian dollar 10	Norwegian kroner 11	Australian dollar 12
2002	7.4305	9.1611	0.62883	0.9456	118.06	1.4670	1,175.50	7.3750	1.6912	1.4838	7.5086	1.7376
2003	7.4307	9.1242	0.69199	1.1312	130.97	1.5212	1,346.90	8.8079	1.9703	1.5817	8.0033	1.7379
2004	7.4399	9.1243	0.67866	1.2439	134.44	1.5438	1,422.62	9.6881	2.1016	1.6167	8.3697	1.6905
2005 Q1	7.4433	9.0736	0.69362	1.3113	137.01	1.5488	1,340.74	10.2257	2.1452	1.6083	8.2388	1.6878
Q2	7.4463	9.2083	0.67856	1.2594	135.42	1.5437	1,269.53	9.8090	2.0885	1.5677	8.0483	1.6389
Q3	7.4588	9.3658	0.68344	1.2199	135.62	1.5533	1,255.21	9.4782	2.0436	1.4668	7.8817	1.6054
2005 Mar.	7.4466	9.0884	0.69233	1.3201	138.83	1.5494	1,329.44	10.2960	2.1522	1.6064	8.1880	1.6806
Apr.	7.4499	9.1670	0.68293	1.2938	138.84	1.5475	1,306.82	10.0899	2.1375	1.5991	8.1763	1.6738
May	7.4443	9.1931	0.68399	1.2694	135.37	1.5449	1,272.34	9.8900	2.0962	1.5942	8.0814	1.6571
June	7.4448	9.2628	0.66895	1.2165	132.22	1.5391	1,231.12	9.4597	2.0342	1.5111	7.8932	1.5875
July	7.4584	9.4276	0.68756	1.2037	134.75	1.5578	1,248.53	9.3590	2.0257	1.4730	7.9200	1.6002
Aug.	7.4596	9.3398	0.68527	1.2292	135.98	1.5528	1,255.33	9.5529	2.0439	1.4819	7.9165	1.6144
Sep.	7.4584	9.3342	0.67760	1.2256	136.06	1.5496	1,261.46	9.5138	2.0603	1.4452	7.8087	1.6009
% change versus previous month												
2005 Sep.	0.0	-0.1	-1.1	-0.3	0.1	-0.2	0.5	-0.4	0.8	-2.5	-1.4	-0.8
% change versus previous year												
2005 Sep.	0.3	2.7	-0.5	0.3	1.2	0.4	-10.1	-0.2	-0.6	-8.3	-6.6	-8.0
	Czech koruna 13	Estonian kroon 14	Cyprus pound 15	Latvian lats 16	Lithuanian litas 17	Hungarian forint 18	Maltese lira 19	Polish zloty 20	Slovenian tolar 21	Slovak koruna 22	Bulgarian lev 23	New Roman- ian leu <sup>1)</sup> 24
2002	30.804	15.6466	0.57530	0.5810	3.4594	242.96	0.4089	3.8574	225.98	42.694	1.9492	31.270
2003	31.846	15.6466	0.58409	0.6407	3.4527	253.62	0.4261	4.3996	233.85	41.489	1.9490	37.551
2004	31.891	15.6466	0.58185	0.6652	3.4529	251.66	0.4280	4.5268	239.09	40.022	1.9533	40.510
2005 Q1	30.012	15.6466	0.58267	0.6962	3.4528	245.01	0.4316	4.0267	239.74	38.294	1.9559	37.069
Q2	30.129	15.6466	0.57824	0.6960	3.4528	249.75	0.4295	4.1301	239.54	38.919	1.9558	36.195
Q3	29.688	15.6466	0.57328	0.6960	3.4528	245.57	0.4293	4.0186	239.49	38.672	1.9558	35.250
2005 Mar.	29.771	15.6466	0.58319	0.6961	3.4528	244.81	0.4317	4.0123	239.70	38.253	1.9559	36.292
Apr.	30.134	15.6466	0.58282	0.6961	3.4528	248.19	0.4299	4.1559	239.65	39.232	1.9553	36.277
May	30.220	15.6466	0.57806	0.6960	3.4528	251.95	0.4293	4.1749	239.51	39.004	1.9561	36.175
June	30.034	15.6466	0.57405	0.6960	3.4528	249.04	0.4293	4.0606	239.47	38.535	1.9558	36.136
July	30.180	15.6466	0.57367	0.6961	3.4528	246.47	0.4293	4.0986	239.48	38.886	1.9558	35.647
Aug.	29.594	15.6466	0.57321	0.6960	3.4528	244.49	0.4293	4.0436	239.51	38.681	1.9557	35.034
Sep.	29.317	15.6466	0.57296	0.6961	3.4528	245.83	0.4293	3.9160	239.47	38.459	1.9558	35.097
% change versus previous month												
2005 Sep.	-0.9	0.0	0.0	0.0	0.0	0.6	0.0	-3.2	0.0	-0.6	0.0	0.2
% change versus previous year												
2005 Sep.	-7.2	0.0	-0.7	5.3	0.0	-0.7	0.4	-10.5	-0.2	-4.0	0.0	-
	Chinese yuan renminbi <sup>2)</sup> 25	Croatian kuna <sup>2)</sup> 26	Icelandic krona 27	Indonesian rupiah <sup>2)</sup> 28	Malaysian ringgit <sup>2)</sup> 29	New Zealand dollar 30	Philippine peso <sup>2)</sup> 31	Russian rouble <sup>2)</sup> 32	South African rand 33	Thai baht <sup>2)</sup> 34	New Turkish lira <sup>3)</sup> 35	
2002	7.8265	7.4130	86.18	8,785.12	3.5933	2.0366	48.837	29.7028	9.9072	40.637	1,439,680	
2003	9.3626	7.5688	86.65	9,685.54	4.2983	1.9438	61.336	34.6699	8.5317	46.923	1,694,851	
2004	10.2967	7.4967	87.14	11,127.34	4.7273	1.8731	69.727	35.8192	8.0092	50.077	1,777,052	
2005 Q1	10.8536	7.5081	80.67	12,165.35	4.9835	1.8299	72.084	36.5154	7.8793	50.622	1.7412	
Q2	10.4232	7.3443	80.79	12,032.61	4.7858	1.7597	68.847	35.3733	8.0799	50.497	1.7193	
Q3	9.9250	7.3728	77.64	12,216.99	4.6008	1.7640	68.335	34.7864	7.9392	50.375	1.6372	
2005 Mar.	10.9262	7.4577	79.15	12,377.13	5.0167	1.8081	71.842	36.4789	7.9635	50.908	1.7333	
Apr.	10.7080	7.3908	80.71	12,362.94	4.9163	1.7967	70.435	35.9794	7.9649	51.165	1.7645	
May	10.5062	7.3272	82.36	12,033.61	4.8237	1.7665	68.966	35.4730	8.0500	50.562	1.7396	
June	10.0683	7.3169	79.30	11,716.31	4.6234	1.7175	67.214	34.6951	8.2194	49.793	1.6560	
July	9.8954	7.3090	78.40	11,803.89	4.5590	1.7732	67.394	34.5513	8.0790	50.199	1.6133	
Aug.	9.9589	7.3684	78.37	12,283.08	4.6216	1.7675	68.768	35.0119	7.9508	50.604	1.6534	
Sep.	9.9177	7.4384	76.15	12,542.23	4.6190	1.7515	68.782	34.7750	7.7936	50.305	1.6430	
% change versus previous month												
2005 Sep.	-0.4	0.9	-2.8	2.1	-0.1	-0.9	0.0	-0.7	-2.0	-0.6	-0.6	
% change versus previous year												
2005 Sep.	-1.9	0.1	-13.1	11.8	-0.5	-5.5	0.1	-2.6	-2.5	-0.7	-	

Source: ECB.

1) Data prior to July 2005 refer to the Romanian leu; 1 new Romanian leu is equivalent to 10,000 old Romanian lei.

2) For these currencies the ECB computes and publishes euro reference exchange rates as from 1 April 2005. Previous data are indicative.

3) Data prior to January 2005 refer to the Turkish lira; 1 new Turkish lira is equivalent to 1,000,000 old Turkish liras.



## DEVELOPMENTS OUTSIDE THE EURO AREA

### 9.1 In other EU Member States

(annual percentage changes, unless otherwise indicated)

#### 1. Economic and financial developments

	Czech Republic	Denmark	Estonia	Cyprus	Latvia	Lithuania	Hungary	Malta	Poland	Slovenia	Slovakia	Sweden	United Kingdom
	1	2	3	4	5	6	7	8	9	10	11	12	13
HICP													
2003	-0.1	2.0	1.4	4.0	2.9	-1.1	4.7	1.9	0.7	5.7	8.5	2.3	1.4
2004	2.6	0.9	3.0	1.9	6.2	1.1	6.8	2.7	3.6	3.6	7.4	1.0	1.3
2004 Q4	2.7	1.2	4.4	2.8	7.2	3.0	5.9	2.2	4.5	3.5	6.0	1.1	1.4
2005 Q1	1.4	1.0	4.5	2.5	6.7	3.1	3.5	2.3	3.6	2.8	2.6	0.7	1.7
Q2	1.2	1.6	3.6	2.1	6.7	2.4	3.6	2.2	2.2	2.2	2.4	0.5	1.9
2005 Apr.	1.4	1.7	4.7	2.8	7.1	3.2	3.8	2.0	3.1	2.7	2.5	0.4	1.9
May	0.9	1.3	2.9	2.1	6.5	1.9	3.5	2.4	2.2	2.1	2.3	0.2	1.9
June	1.3	1.7	3.2	1.5	6.6	2.0	3.7	2.1	1.4	1.7	2.5	0.8	2.0
July	1.4	1.9	3.9	1.3	6.3	1.9	3.6	1.7	1.5	2.0	2.0	0.7	2.3
Aug.	1.4	2.3	4.2	1.5	6.3	2.3	3.5	2.5	1.8	1.8	2.1	1.0	2.4
General government deficit (-)/surplus (+) as a % of GDP <sup>1)</sup>													
2002	-6.8	1.4	1.5	-4.5	-2.3	-1.4	-8.5	-5.7	-3.3	-2.7	-7.8	-0.3	-1.6
2003	-12.5	1.0	2.6	-6.3	-1.2	-1.2	-6.5	-10.4	-4.8	-2.7	-3.8	0.2	-3.3
2004	-3.0	2.3	1.7	-4.1	-1.0	-1.4	-5.4	-5.1	-3.9	-2.1	-3.1	1.6	-3.1
General government gross debt as a % of GDP <sup>1)</sup>													
2002	29.8	47.6	5.8	65.2	14.2	22.4	55.5	63.3	41.2	29.8	43.7	52.4	38.2
2003	36.8	45.0	6.0	69.8	14.6	21.4	57.4	72.8	45.3	29.4	43.1	52.0	39.7
2004	36.8	43.2	5.5	72.0	14.7	19.6	57.4	75.9	43.6	29.8	42.5	51.1	41.5
Long-term government bond yield as a % per annum, period average													
2005 Mar.	3.62	3.82	-	5.89	3.94	3.73	6.83	4.72	5.55	3.89	3.60	3.86	4.87
Apr.	3.55	3.58	-	5.87	3.87	3.82	6.91	4.71	5.49	3.95	3.76	3.58	4.67
May	3.49	3.39	-	5.84	3.87	3.87	7.00	4.66	5.35	3.92	3.54	3.34	4.45
June	3.31	3.16	-	5.13	3.87	3.78	6.59	4.56	4.91	3.90	3.36	3.11	4.31
July	3.35	3.21	-	4.84	3.87	3.61	6.13	4.55	4.72	3.78	3.22	3.06	4.31
Aug.	3.37	3.24	-	4.84	3.87	3.50	5.85	4.43	4.88	3.79	3.24	3.14	4.34
3-month interest rate as a % per annum, period average													
2005 Mar.	2.08	2.19	2.40	4.96	3.26	2.49	-	2.98	6.15	4.05	2.29	2.11	4.99
Apr.	2.03	2.18	2.40	4.89	2.92	2.44	7.43	3.24	5.78	4.05	2.56	2.11	4.94
May	1.78	2.18	2.39	4.67	2.85	2.42	7.52	3.25	5.48	4.05	2.75	2.05	4.89
June	1.75	2.16	2.34	4.11	2.81	2.36	-	3.27	5.22	4.05	2.88	1.82	4.84
July	1.78	2.16	2.33	3.92	2.71	2.32	6.50	3.28	4.68	4.04	2.89	1.64	4.66
Aug.	1.79	2.17	2.33	3.85	2.76	2.33	6.35	3.26	4.67	4.02	2.94	1.67	4.59
Real GDP													
2003	3.2	0.7	6.7	1.9	7.2	10.5	2.9	-1.9	3.8	2.5	4.5	1.5	2.5
2004	4.4	2.4	7.8	3.7	8.3	7.0	4.2	0.4	5.4	4.6	5.5	3.6	3.2
2004 Q4	4.6	3.0	6.8	3.4	8.4	6.5	4.1	-1.1	3.7	3.2	5.8	2.7	2.5
2005 Q1	4.7	1.9	6.9	3.8	7.4	4.6	3.8	0.2	3.8	2.8	5.1	2.2	1.7
Q2	5.1	.	.	3.5	11.6	7.1	4.0	2.4	1.0	4.7	5.1	2.1	1.5
Current and capital accounts balance as a % of GDP													
2003	-6.3	3.3	-12.6	-3.3	-7.6	-6.5	-8.8	-5.6	-2.2	-1.0	-0.5	6.9	-1.4
2004	-5.7	2.4	-12.5	-5.0	-11.3	-5.9	-8.4	-8.6	-1.1	-2.5	-3.1	8.3	-1.8
2004 Q3	-7.4	2.5	-4.4	5.1	-11.6	-5.0	-8.1	-7.3	-0.7	-1.7	-3.9	8.8	-2.7
Q4	-7.8	0.5	-16.3	-12.7	-7.1	-2.4	-7.1	-18.1	0.5	-3.8	-3.6	7.0	-0.9
2005 Q1	2.9	4.3	-9.5	-13.6	-9.2	-3.7	-6.7	-10.0	1.5	-1.7	-1.9	8.5	-1.4
Unit labour costs													
2003	7.6	2.0	4.9	-	5.6	1.5	7.4	-	.	4.7	3.5	0.6	3.2
2004	1.2	0.9	3.0	-	8.8	.	.	-	.	3.8	2.1	.	2.0
2004 Q4	0.7	0.3	2.9	-	-	-	-	-	-	-	5.1	-0.4	1.3
2005 Q1	-0.2	1.9	3.1	-	-	-	-	-	-	-	5.7	2.6	5.0
Q2	0.7	.	2.4	-	-	-	-	-	-	-	3.6	0.0	3.1
Standardised unemployment rate as a % of labour force (s.a.)													
2003	7.8	5.6	10.2	4.5	10.4	12.7	5.7	8.0	19.2	6.5	17.5	5.6	4.9
2004	8.3	5.4	9.2	5.0	9.8	10.7	5.9	7.3	18.8	6.0	18.0	6.4	4.7
2004 Q4	8.2	5.2	8.4	5.3	9.7	9.6	6.1	7.0	18.4	5.8	17.1	6.4	4.6
2005 Q1	8.0	5.1	8.0	5.4	9.5	8.8	6.3	6.9	18.1	5.7	16.1	6.3	4.6
Q2	7.8	5.0	7.9	5.1	9.1	8.1	6.3	6.7	17.8	5.8	15.5	.	4.7
2005 Apr.	7.9	5.1	7.9	4.8	9.2	8.4	6.3	6.9	17.9	5.8	15.6	.	4.7
May	7.8	5.0	7.9	5.1	9.1	8.1	6.3	6.7	17.8	5.8	15.5	.	4.7
June	7.8	5.0	7.8	5.3	9.0	7.8	6.3	6.6	17.7	5.8	15.4	.	4.6
July	7.7	4.9	7.6	5.3	8.9	7.7	6.4	6.5	17.6	5.8	15.3	.	.
Aug.	7.7	4.8	7.4	5.5	8.8	7.5	6.4	6.4	17.5	5.8	15.2	.	.

Sources: European Commission (Economic and Financial Affairs DG and Eurostat); national data, Reuters and ECB calculations.

1) Ratios are computed using GDP excluding Financial Intermediation Services Indirectly Measured (FISIM).

9.2 In the United States and Japan

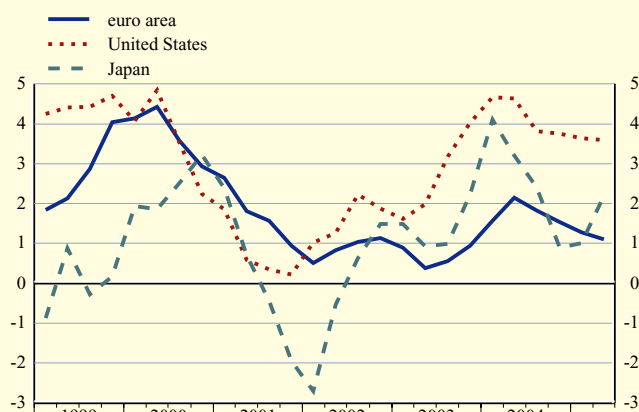
(annual percentage changes, unless otherwise indicated)

1. Economic and financial developments

	Consumer price index	Unit labour costs <sup>1)</sup> (manufacturing)	Real GDP	Industrial production index (manufacturing)	Unemployment rate as a % of labour force (s.a.)	Broad money <sup>2)</sup>	3-month interbank deposit rate <sup>3)</sup> as a % per annum	10-year government bond yield <sup>3)</sup> as a % per annum	Exchange rate <sup>5)</sup> as national currency per euro	Fiscal deficit (-)/surplus (+) as a % of GDP	Gross public debt <sup>5)</sup> as a % of GDP
	1	2	3	4	5	6	7	8	9	10	11
United States											
2001	2.8	0.2	0.8	-4.1	4.8	11.4	3.78	5.01	0.8956	-0.4	42.9
2002	1.6	-0.2	1.6	-0.1	5.8	8.0	1.80	4.60	0.9456	-3.8	45.3
2003	2.3	2.9	2.7	0.0	6.0	6.4	1.22	4.00	1.1312	-5.0	47.9
2004	2.7	-2.9	4.2	4.9	5.5	5.1	1.62	4.26	1.2439	-4.7	48.6
2004 Q3	2.7	-2.2	3.8	5.5	5.4	4.6	1.75	4.29	1.2220	-4.8	48.4
Q4	3.3	-1.5	3.8	5.1	5.4	5.8	2.30	4.17	1.2977	-4.3	48.6
2005 Q1	3.0	2.5	3.6	4.5	5.3	5.8	2.84	4.30	1.3113	-3.7	49.6
Q2	2.9	4.3	3.6	3.3	5.1	5.0	3.28	4.16	1.2594	.	.
Q3	.	.	.	.	.	.	3.77	4.21	1.2199	.	.
2005 May	2.8	-	-	3.1	5.1	4.7	3.27	4.14	1.2694	-	-
June	2.5	-	-	3.6	5.0	5.1	3.43	4.00	1.2165	-	-
July	3.2	-	-	2.9	5.0	5.4	3.61	4.16	1.2037	-	-
Aug.	3.6	-	-	3.0	4.9	6.1	3.80	4.26	1.2292	-	-
Sep.	.	-	-	.	.	.	3.91	4.19	1.2256	-	-
Japan											
2001	-0.7	4.4	0.2	-6.8	5.0	2.8	0.15	1.34	108.68	-6.1	134.7
2002	-0.9	-3.2	-0.3	-1.2	5.4	3.3	0.08	1.27	118.06	-7.9	141.5
2003	-0.3	-3.8	1.4	3.2	5.2	1.7	0.06	0.99	130.97	-7.7	149.2
2004	0.0	-5.2	2.7	5.5	4.7	1.9	0.05	1.50	134.44	.	.
2004 Q3	-0.1	-5.7	2.4	6.4	4.8	1.8	0.05	1.64	134.38	.	.
Q4	0.5	-1.5	0.9	1.8	4.6	2.0	0.05	1.45	137.11	.	.
2005 Q1	-0.2	-1.0	1.0	1.4	4.6	2.0	0.05	1.41	137.01	.	.
Q2	-0.1	0.9	2.2	0.3	4.4	1.7	0.05	1.28	135.42	.	.
Q3	.	.	.	.	.	.	0.06	1.36	135.62	.	.
2005 May	0.2	1.1	-	0.3	4.4	1.5	0.05	1.27	135.37	-	-
June	-0.5	0.6	-	0.2	4.2	1.6	0.05	1.24	132.22	-	-
July	-0.3	.	-	-2.3	.	1.7	0.06	1.26	134.75	-	-
Aug.	-0.3	.	-	1.6	.	1.7	0.06	1.43	135.98	-	-
Sep.	.	.	-	.	.	.	0.06	1.38	136.06	-	-

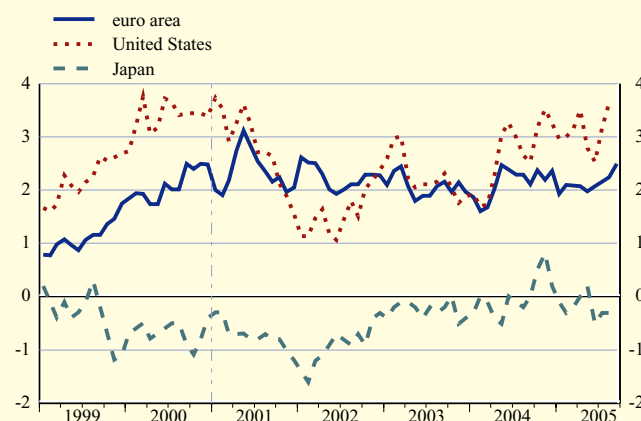
C33 Real gross domestic product

(annual percentage changes; quarterly)



C34 Consumer price indices

(annual percentage changes; monthly)



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

- 1) Data for the United States are seasonally adjusted.
- 2) Average-of-period values; M3 for US, M2+CDs for Japan.
- 3) For more information, see Sections 4.6 and 4.7.
- 4) For more information, see Section 8.2.
- 5) Gross consolidated general government debt (end of period).



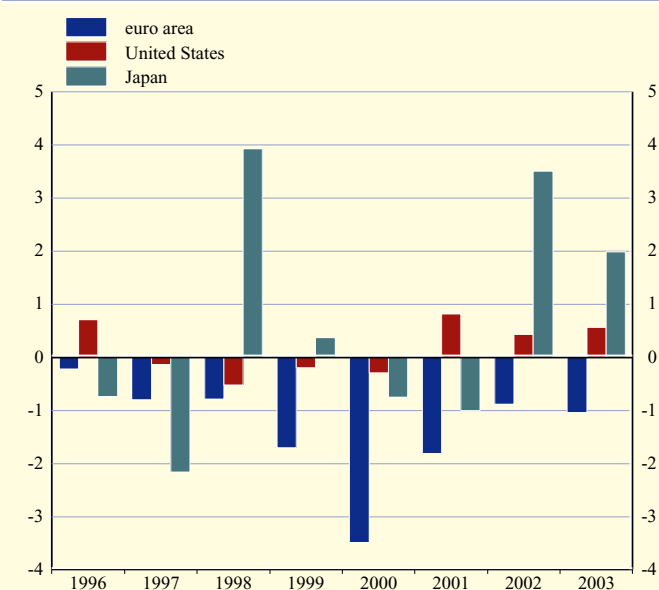
## 9.2 In the United States and Japan

(as a percentage of GDP)

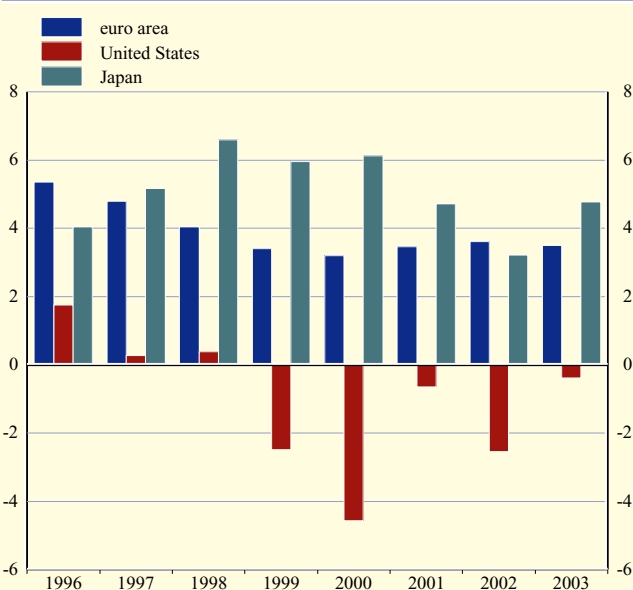
### 2. Saving, investment and financing

	National saving and investment			Investment and financing of non-financial corporations						Investment and financing of households <sup>1)</sup>			
	Gross saving 1	Gross capital formation 2	Net lending to the rest of the world 3	Gross capital formation 4	Gross fixed capital formation 5	Net acquisition of financial assets 6	Gross saving 7	Net incurrence of liabilities 8	Securities and shares 9	Capital expenditures <sup>2)</sup> 10	Net acquisition of financial assets 11	Gross saving <sup>3)</sup> 12	Net incurrence of liabilities 13
United States													
2001	16.4	19.1	-3.7	7.9	8.3	1.8	7.5	0.9	1.7	12.8	5.0	10.8	5.7
2002	14.2	18.4	-4.4	7.0	7.0	1.2	7.7	0.8	-0.1	13.0	4.2	11.4	6.7
2003	13.4	18.5	-4.6	6.8	6.8	0.8	8.0	0.3	0.8	13.3	7.8	11.3	8.1
2004	13.4	19.6	-5.6	7.3	7.0	4.4	8.0	3.4	0.7	13.5	6.6	11.0	9.4
2003 Q3	13.3	18.6	-4.5	6.8	6.9	-0.1	8.1	-0.6	0.3	13.5	8.7	11.7	7.6
2003 Q4	13.9	18.8	-4.3	7.0	6.9	1.2	8.3	0.4	0.1	13.5	5.1	11.2	4.3
2004 Q1	13.4	19.0	-5.0	7.1	6.8	5.3	8.2	4.0	1.0	13.3	7.2	11.0	10.0
2004 Q2	13.3	19.8	-5.6	7.4	7.0	3.7	8.1	2.4	-0.5	13.6	4.8	10.7	8.6
2004 Q3	13.5	19.8	-5.5	7.3	7.1	3.7	8.4	2.3	0.5	13.6	7.1	10.9	9.1
2004 Q4	13.5	19.9	-6.2	7.5	7.2	5.1	7.3	4.8	1.8	13.6	7.5	11.4	9.8
2005 Q1	13.4	20.2	-6.4	7.6	7.2	3.5	7.7	3.0	1.2	13.7	5.8	10.0	8.3
2005 Q2	13.8	20.0	-6.2	7.4	7.3	3.5	8.1	2.5	0.5	13.8	2.8	9.7	8.4
Japan													
2001	26.6	25.8	2.0	15.3	15.3	-2.8	14.4	-6.4	0.2	4.9	2.8	8.6	0.2
2002	25.7	24.2	2.8	13.8	14.1	-1.7	15.4	-7.4	-0.8	4.8	-0.2	9.1	-2.1
2003	26.4	23.9	3.1	14.3	14.4	2.3	16.1	-5.3	0.2	4.6	0.3	9.2	-0.6
2004	.	23.9	.	.	.	4.6	.	0.8	0.8	.	1.9	.	-0.7
2003 Q3	25.9	24.0	3.7	.	.	9.2	.	-5.6	-0.6	.	-3.7	.	1.4
2003 Q4	27.9	24.8	2.9	.	.	10.5	.	5.5	1.1	.	9.5	.	-1.4
2004 Q1	31.0	24.0	3.9	.	.	12.5	.	-1.9	-0.6	.	-7.2	.	2.6
2004 Q2	.	23.0	.	.	.	-13.7	.	-11.2	0.6	.	8.0	.	-6.2
2004 Q3	.	23.8	.	.	.	7.1	.	0.7	0.2	.	-2.1	.	1.5
2004 Q4	.	24.6	.	.	.	12.1	.	14.6	2.8	.	8.3	.	-0.5
2005 Q1	.	24.4	.	.	.	8.6	.	-2.3	-2.9	.	-8.1	.	3.3
2005 Q2	.	23.7	.	.	.	-17.9	.	-16.5	1.0	.	7.5	.	-6.6

**C35 Net lending of non-financial corporations**  
(as a percentage of GDP)



**C36 Net lending of households<sup>1)</sup>**  
(as a percentage of GDP)



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

1) Including non-profit institutions serving households.

2) Gross capital formation in Japan. Capital expenditures in the United States include purchases of consumer durable goods.

3) Gross saving in the United States is increased by expenditures on consumer durable goods.



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## TECHNICAL NOTES

### RELATING TO THE EURO AREA OVERVIEW

#### CALCULATION OF GROWTH RATES FOR MONETARY DEVELOPMENTS

The average growth rate for the quarter ending in month  $t$  is calculated as:

$$a) \left( \frac{0.5I_t + \sum_{i=1}^2 I_{t-i} + 0.5I_{t-3}}{0.5I_{t-12} + \sum_{i=1}^2 I_{t-i-12} + 0.5I_{t-15}} - 1 \right) \times 100$$

where  $I_t$  is the index of adjusted outstanding amounts as at month  $t$  (see also below). Likewise, for the year ending in month  $t$ , the average growth rate is calculated as:

$$b) \left( \frac{0.5I_t + \sum_{i=1}^{11} I_{t-i} + 0.5I_{t-12}}{0.5I_{t-12} + \sum_{i=1}^{11} I_{t-i-12} + 0.5I_{t-24}} - 1 \right) \times 100$$

### RELATING TO SECTIONS 2.1 TO 2.6

#### CALCULATION OF TRANSACTIONS

Monthly transactions are calculated from monthly differences in outstanding amounts adjusted for reclassifications, other revaluations, exchange rate variations and any other changes which do not arise from transactions.

If  $L_t$  represents the outstanding amount at the end of month  $t$ ,  $C_t^M$  the reclassification adjustment in month  $t$ ,  $E_t^M$  the exchange rate adjustment and  $V_t^M$  the other revaluation adjustments, the transactions  $F_t^M$  in month  $t$  are defined as:

$$c) F_t^M = (L_t - L_{t-1}) - C_t^M - E_t^M - V_t^M$$

Similarly, the quarterly transactions  $F_t^Q$  for the quarter ending in month  $t$  are defined as:

$$d) F_t^Q = (L_t - L_{t-3}) - C_t^Q - E_t^Q - V_t^Q$$

where  $L_{t-3}$  is the amount outstanding at the end of month  $t-3$  (the end of the previous quarter)

and, for example,  $C_t^Q$  is the reclassification adjustment in the quarter ending in month  $t$ .

For those quarterly series for which monthly observations are now available (see below), the quarterly transactions can be derived as the sum of the three monthly transactions in the quarter.

#### CALCULATION OF GROWTH RATES FOR MONTHLY SERIES

Growth rates may be calculated from transactions or from the index of adjusted outstanding amounts. If  $F_t^M$  and  $L_t$  are defined as above, the index  $I_t$  of adjusted outstanding amounts in month  $t$  is defined as:

$$e) I_t = I_{t-1} \times \left( 1 + \frac{F_t^M}{L_{t-1}} \right)$$

The base of the index (of the non-seasonally adjusted series) is currently set as December 2001 = 100. Time series of the index of adjusted outstanding amounts are available on the ECB's website ([www.ecb.int](http://www.ecb.int)) under the "Money, banking and financial markets" sub-section of the "Statistics" section.

The annual growth rate  $a_t$  for month  $t$  – i.e. the change in the 12 months ending in month  $t$  – may be calculated using either of the following two formulae:

$$f) a_t = \left[ \prod_{i=0}^{11} \left( 1 + \frac{F_{t-i}^M}{L_{t-i}} \right) - 1 \right] \times 100$$

$$g) a_t = \left( \frac{I_t}{I_{t-12}} - 1 \right) \times 100$$

Unless otherwise indicated, the annual growth rates refer to the end of the indicated period. For example, the annual percentage change for the year 2002 is calculated in g) by dividing the index of December 2002 by the index of December 2001.

Growth rates for intra-annual periods may be derived by adapting formula g). For example, the month-on-month growth rate  $a_t^M$  may be calculated as:

$$h) a_t^M = \left( \frac{I_t}{I_{t-1}} - 1 \right) \times 100$$

Finally, the three-month moving average (centred) for the annual growth rate of M3 is obtained as  $(a_{t+1} + a_t + a_{t-1})/3$ , where  $a_t$  is defined as in f) or g) above.

#### CALCULATION OF GROWTH RATES FOR QUARTERLY SERIES

If  $F_t^Q$  and  $L_{t-3}$  are defined as above, the index  $I_t$  of adjusted outstanding amounts for the quarter ending in month  $t$  is defined as:

$$i) I_t = I_{t-3} \times \left( 1 + \frac{F_t^Q}{L_{t-3}} \right)$$

The annual growth rate in the four quarters ending in month  $t$ , i.e.  $a_t$ , may be calculated using formula g).

#### SEASONAL ADJUSTMENT OF THE EURO AREA MONETARY STATISTICS<sup>1</sup>

The approach used relies on a multiplicative decomposition through X-12-ARIMA.<sup>2</sup> The seasonal adjustment may include a day-of-the-week adjustment, and for some series is carried out indirectly by means of a linear combination of components. In particular, this is the case for M3, derived by aggregating the seasonally adjusted series for M1, M2 less M1, and M3 less M2.

The seasonal adjustment procedures are first applied to the index of adjusted outstanding amounts.<sup>3</sup> The resulting estimates of the seasonal factors are then applied to the levels and to the adjustments arising from reclassifications and revaluations, in turn yielding seasonally adjusted transactions.

Seasonal (and trading day) factors are revised at annual intervals or as required.

#### RELATING TO SECTIONS 3.1 TO 3.3

#### CALCULATION OF GROWTH RATES

Growth rates are calculated on the basis of financial transactions and therefore exclude reclassifications, revaluations, exchange rate variations and any other changes which do not arise from transactions.

If  $T_t$  represents the transactions in quarter  $t$  and  $L_t$  represents the outstanding amount at the end of quarter  $t$ , then the growth rate for the quarter  $t$  is calculated as:

$$j) \frac{\sum_{i=0}^3 T_{t-i}}{L_{t-4}} \times 100$$

#### RELATING TO SECTION 4.3 AND 4.4

#### CALCULATION OF GROWTH RATES FOR DEBT SECURITIES AND QUOTED SHARES

Growth rates are calculated on the basis of financial transactions and therefore exclude reclassifications, revaluations, exchange rate variations and any other changes which do not arise from transactions. They may be calculated from transactions or from the index of adjusted outstanding amounts. If  $N_t^M$  represents the

<sup>1</sup> For details, see "Seasonal adjustment of monetary aggregates and HICP for the euro area", ECB (August 2000) and the "Statistics" section of the ECB's website ([www.ecb.int](http://www.ecb.int)), under the "Money, banking and financial markets" sub-section.

<sup>2</sup> 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, pp.127-152, or "X-12-ARIMA Reference Manual", Time Series Staff, Bureau of the Census, Washington, D.C.

For internal purposes, the model-based approach of TRAMO-SEATS is also used. For details on TRAMO-SEATS, see Gomez, V. and Maravall, A. (1996), "Programs TRAMO and SEATS: Instructions for the User", Banco de España, Working Paper No. 9628, Madrid.

<sup>3</sup> It follows that for the seasonally adjusted series, the level of the index for the base period, i.e. December 2001, generally differs from 100, reflecting the seasonality of that month.

transactions (net issues) in month  $t$  and  $L_t$  the level outstanding at the end of the month  $t$ , the index  $I_t$  of adjusted outstanding amounts in month  $t$  is defined as:

$$k) \quad I_t = I_{t-1} \times \left( 1 + \frac{N_t}{L_{t-1}} \right)$$

As a base, the index is set equal to 100 on December 2001. The growth rate  $a_t$  for month  $t$  corresponding to the change in the 12 months ending in month  $t$ , may be calculated using either of the following two formulae:

$$l) \quad a_t = \left[ \prod_{i=0}^{11} \left( 1 + \frac{N_{t-i}^M}{L_{t-i-1}} \right) - 1 \right] \times 100$$

$$m) \quad a_t = \left( \frac{I_t}{I_{t-12}} - 1 \right) \times 100$$

The method used to calculate the growth rates for securities other than shares is the same as that used for the monetary aggregates, the only difference being that an “N” is used rather than an “F”. The reason for this is to distinguish between the different ways of obtaining “net issues” for securities issues statistics, where the ECB collects information on gross issues and redemptions separately, and “transactions” used for the monetary aggregates.

The average growth rate for the quarter ending in month  $t$  is calculated as:

$$n) \quad \left( \frac{0.5I_t + \sum_{i=1}^2 I_{t-i} + 0.5I_{t-3}}{0.5I_{t-12} + \sum_{i=1}^2 I_{t-i-12} + 0.5I_{t-15}} - 1 \right) \times 100$$

where  $I_t$  is the index of adjusted outstanding amounts as at month  $t$ . Likewise, for the year ending in month  $t$ , the average growth rate is calculated as:

$$o) \quad \left( \frac{0.5I_t + \sum_{i=1}^{11} I_{t-i} + 0.5I_{t-12}}{0.5I_{t-12} + \sum_{i=1}^{11} I_{t-i-12} + 0.5I_{t-24}} - 1 \right) \times 100$$

The calculation formula used for Section 4.3 is also used for Section 4.4 and is likewise based on that used for the monetary aggregates. Section 4.4 is based on market values and the basis for the calculation are financial transactions, which exclude reclassifications, revaluations or any other changes that do not arise from transactions. Exchange rate variations are not included as all quoted shares covered are denominated in euro.

#### RELATING TO TABLE I IN SECTION 5.1

#### SEASONAL ADJUSTMENT OF THE HICP<sup>4</sup>

The approach used relies on multiplicative decomposition through X-12-ARIMA (see footnote 2 on page S74). The seasonal adjustment of the overall HICP for the euro area is carried out indirectly by aggregating the seasonally adjusted euro area series for processed food, unprocessed food, industrial goods excluding energy, and services. Energy is added without adjustment since there is no statistical evidence of seasonality. Seasonal factors are revised at annual intervals or as required.

#### RELATING TO TABLE 2 IN SECTION 7.1

#### SEASONAL ADJUSTMENT OF THE BALANCE OF PAYMENTS CURRENT ACCOUNT

The approach relies on multiplicative decomposition through X-12-ARIMA (see footnote 2 on page S74). The raw data for goods and services, income and current transfers are pre-adjusted to take a working-day effect into account. For goods, services and current transfers, the working-day adjustment is corrected for national public holidays. Data on

4 For details, see “Seasonal adjustment of monetary aggregates and HICP for the euro area”, ECB (August 2000) and the “Statistics” section of the ECB’s website ([www.ecb.int](http://www.ecb.int)), under the “Money, banking and financial markets” sub-section.

service credits are also pre-adjusted for Easter. The seasonal adjustment for these items is carried out using these pre-adjusted series. Current transfers debits are not pre-adjusted. 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 (and trading day) factors are revised at semi-annual intervals or as required.



## GENERAL NOTES

The “Euro area statistics” section of the Monthly Bulletin focuses on statistics for the euro area as a whole. More detailed and longer runs of data, with further explanatory notes, are available in the “Statistics” section of the ECB’s website ([www.ecb.int](http://www.ecb.int)). Services available under the “Data services” sub-section include a browser interface with search facilities, subscription to different datasets and a facility for downloading data directly as compressed Comma Separated Value (CSV) files. For further information, please contact us at: [statistics@ecb.int](mailto:statistics@ecb.int).

In general, the cut-off date for the statistics included in the Monthly Bulletin is the day preceding the first meeting in the month of the Governing Council. For this issue, the cut-off date was 5 October 2005.

All data relate to the Euro 12, unless otherwise indicated. For the monetary data, the Harmonised Index of Consumer Prices (HICP), investment fund and financial market statistics, the statistical series relating to the euro area cover the EU Member States that had adopted the euro at the time to which the statistics relate. Where applicable, this is shown in the tables by means of a footnote; in the charts, the break is indicated by a dotted line. In these cases, where underlying data are available, absolute and percentage changes for 2001, calculated from a base in 2000, use a series which takes into account the impact of Greece’s entry into the euro area.

Given that the composition of the ECU does not coincide with the former currencies of the countries 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 EU Member States which have not adopted the euro. To avoid this effect on the monetary statistics, the pre-1999 data in Sections 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 otherwise indicated,

price and cost statistics before 1999 are based on data expressed in national currency terms.

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

Recent data are often provisional and may be revised. Discrepancies between totals and their components may arise from rounding.

The group “Other EU Member States” comprises the Czech Republic, Denmark, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Slovenia, Slovakia, Sweden and United Kingdom.

In most cases, the terminology used within the tables follows international standards, such as those contained in the European System of Accounts 1995 (ESA 95) and the IMF Balance of Payments Manual. Transactions refer to voluntary exchanges (measured directly or derived), while flows also encompass changes in outstanding amounts owing to price and exchange rate changes, write-offs, and other changes.

In the tables, the term “up to (x) years” means “up to *and including* (x) years”.

### OVERVIEW

Developments in key indicators for the euro area are summarised in an overview table.

### MONETARY POLICY STATISTICS

Section 1.4 shows statistics on minimum reserve and liquidity factors. Annual and quarterly observations refer to averages of the last reserve maintenance period of the year/quarter. Until December 2003, the maintenance periods started on the 24th calendar day of a month and ran to the 23rd of the following month. On 23 January 2003 the ECB announced changes to the operational



framework, which were implemented on 10 March 2004. As a result of these changes, maintenance periods start on the settlement day of the main refinancing operation (MRO) following the Governing Council meeting at which the monthly assessment of the monetary policy stance is scheduled. A transitional maintenance period was defined to cover the period from 24 January to 9 March 2004.

Table 1 in Section 1.4 shows the components of the reserve base of credit institutions subject to reserve requirements. The 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. When a credit institution cannot provide evidence of the amount of its issues of debt securities with a maturity of up to two years held by the institutions mentioned above, it may deduct a certain percentage of these liabilities from its reserve base. The percentage for calculating the reserve base was 10% until November 1999 and 30% thereafter.

Table 2 in Section 1.4 contains average data for completed maintenance periods. The amount of the 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 from the end of each calendar month. Subsequently, each credit institution deducts from this figure a lump-sum allowance of €100,000. The resulting required reserves are then aggregated at the euro area level (column 1). The current account holdings (column 2) are the aggregate average daily current account holdings of credit institutions, including those that serve the fulfilment of reserve requirements. The excess reserves (column 3) are the average current account holdings over the maintenance period in excess of the required reserves. The deficiencies (column 4) are defined as the average shortfalls of current account holdings from required reserves over the maintenance period, computed

on the basis of those credit institutions that have not fulfilled their reserve requirement. The interest rate on minimum reserves (column 5) is equal to 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 Section 1.3).

Table 3 in Section 1.4 shows the banking system's liquidity position, which is defined as the current account holdings in euro of credit institutions in the euro area with the Eurosystem. All amounts are derived from the consolidated financial statement of the Eurosystem. The other liquidity-absorbing operations (column 7) exclude the issuance of debt certificates initiated by national central banks in Stage Two of EMU. The net other factors (column 10) represent the netted remaining items in the consolidated financial statement of the Eurosystem. The credit institutions' current accounts (column 11) are equal to the difference between the sum of liquidity-providing factors (columns 1 to 5) and the sum of liquidity-absorbing factors (columns 6 to 10). The base money (column 12) is calculated as the sum of the deposit facility (column 6), the banknotes in circulation (column 8) and the credit institutions' current account holdings (column 11).

## **MONEY, BANKING AND INVESTMENT FUNDS**

Section 2.1 shows the aggregated balance sheet of the monetary financial institution (MFI) sector, i.e. the sum of the harmonised balance sheets of all MFIs resident in the euro area. MFIs are central banks, credit institutions as defined under Community law, money market funds and other institutions whose business it is to receive deposits and/or close substitutes for deposits from entities other than MFIs and, for their own account (at least in economic terms), to grant credits and/or make investments in securities. A complete list of MFIs is published on the ECB's website.

Section 2.2 shows the consolidated balance sheet of the MFI sector, which is obtained by netting the aggregated balance sheet positions between MFIs in the euro area. Due to limited heterogeneity in recording practices, the sum of the inter-MFI positions is not necessarily zero; the balance is shown in column 10 of the liabilities side of Section 2.2. Section 2.3 sets out the euro area monetary aggregates and counterparts. These are derived from the consolidated MFI balance sheet, and include positions of non-MFIs resident in the euro area held with MFIs resident in the euro area; they also take account of some monetary assets/liabilities of central government. Statistics on monetary aggregates and counterparts are adjusted for seasonal and trading-day effects. The external liabilities item of Sections 2.1 and 2.2 shows the holdings by non-euro area residents of i) shares/units issued by money market funds located in the euro area and ii) debt securities issued with a maturity of up to two years by MFIs located in the euro area. In Section 2.3, however, these holdings are excluded from the monetary aggregates and contribute to the item “net external assets”.

Section 2.4 provides an analysis by sector, type and original maturity of loans granted by MFIs other than the Eurosystem (the banking system) resident in the euro area. Section 2.5 shows a sectoral and instrument analysis of deposits held with the euro area banking system. Section 2.6 shows the securities held by the euro area banking system, by type of issuer.

Sections 2.2 to 2.6 include transactions, which are derived as differences in outstanding amounts adjusted for reclassifications, revaluations, exchange rate variations and any other changes which do not arise from transactions. Section 2.7 shows selected revaluations which are used in the derivation of transactions. Sections 2.2 to 2.6 also provide growth rates in terms of annual percentage changes based on the transactions. Section 2.8 shows a quarterly currency breakdown of selected MFI balance sheet items.

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 “Guidance Notes to the Regulation ECB/2001/13 on the MFI Balance Sheet Statistics” (ECB, November 2002) explains practices recommended to be followed by the NCBs. Since 1 January 1999 the statistical information has been collected and compiled on the basis of Regulation ECB/1998/16 of 1 December 1998 concerning the consolidated balance sheet of the Monetary Financial Institutions sector<sup>1</sup>, as last amended by Regulation ECB/2003/10<sup>2</sup>.

In line with this Regulation, the balance sheet item “money market paper” has been merged with the item “debt securities” on both the assets and liabilities side of the MFI balance sheet.

Section 2.9 shows end-of-quarter outstanding amounts for the balance sheet of the euro area investment funds (other than money market funds). The balance sheet is aggregated and therefore includes, among the liabilities, holdings by investment funds of shares/units issued by other investment funds. Total assets/liabilities are also broken down by investment policy (equity funds, bond funds, mixed funds, real estate funds and other funds) and by type of investor (general public funds and special investors’ funds). Section 2.10 shows the aggregated balance sheet for each investment fund sector as identified by investment policy and type of investor.

## FINANCIAL AND NON-FINANCIAL ACCOUNTS

Sections 3.1 and 3.2 show quarterly data on financial accounts for non-financial sectors in the euro area, comprising general government (S.13 in the ESA 95), non-financial corporations (S.11 in the ESA 95), and households (S.14 in the ESA 95) including non-

1 OJL 356, 30.12.1998, p. 7.

2 OJL 250, 2.10.2003, p. 19.

profit institutions serving households (S.15 in the ESA 95). The data cover non-seasonally adjusted amounts 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 (“short-term” refers to an original maturity of up to one year; “long-term” refers to an original maturity of over one year). Whenever possible, the financing taken from MFIs is presented separately. The information on financial investment (assets) is currently less detailed than that on financing, especially since a breakdown by sector is not possible.

Section 3.3 shows quarterly data on financial accounts for insurance corporations and pension funds (S.125 in the ESA 95) in the euro area. As in Sections 3.1 and 3.2, the data cover non-seasonally adjusted amounts outstanding and financial transactions, and show the main financial investment and financing activities of this sector.

The quarterly data in these three sections are based on quarterly national financial accounts data and MFI balance sheet and securities issues statistics. Sections 3.1 and 3.2 also refer to data taken from the BIS international banking statistics. Although all euro area countries contribute to the MFI balance sheet and securities issues statistics, Ireland and Luxembourg do not yet provide quarterly national financial accounts data.

Section 3.4 shows annual data on saving, investment (financial and non-financial) and financing for the euro area as a whole, and separately for non-financial corporations and households. These annual data provide, in particular, fuller sectoral information on the acquisition of financial assets and are consistent with the quarterly data in the two previous sections.

## FINANCIAL MARKETS

The series on financial market statistics for the euro area cover the EU Member States that had adopted the euro at the time to which the statistics relate.

Statistics on securities other than shares and quoted shares (Sections 4.1 to 4.4) are produced by the ECB using data from the ESCB and the BIS. Section 4.5 presents MFI interest rates on euro-denominated deposits and loans by euro area residents. Statistics on money market interest rates, long-term government bond yields and stock market indices (Sections 4.6 to 4.8) are produced by the ECB using data from wire services.

Statistics on securities issues cover securities other than shares (debt securities), which are presented in Sections 4.1, 4.2 and 4.3, and quoted shares, which are presented in Section 4.4. Debt securities are broken down into short-term and long-term securities. “Short-term” means securities with an original maturity of one year or less (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”. Long-term debt securities issued by euro area residents are further broken down into fixed and variable rate issues. Fixed rate issues consist of issues where the coupon rate does not change during the life of the issues. Variable rate issues include all issues where the coupon is periodically refixed by reference to an independent interest rate or index. The statistics on debt securities are estimated to cover approximately 95% of total issues by euro area residents. Euro-denominated securities indicated in Sections 4.1, 4.2 and 4.3 also include items expressed in national denominations of the euro.

Section 4.1 shows securities issued, redemptions, net issues and outstanding amounts for all maturities, with an additional breakdown of long-term maturities. Net issues

differ from the changes in outstanding amounts owing to valuation changes, reclassifications and other adjustments.

Columns 1 to 4 show the outstanding amounts, gross issues, redemptions and net issues for all euro-denominated issues. Columns 5 to 8 show the outstanding amounts, gross issues, redemptions and net issues for all securities other than shares (i.e. debt securities) issued by euro area residents. Columns 9 to 11 show the percentage share of the outstanding amounts, gross issues and redemptions of securities that have been issued in euro by euro area residents. Column 12 shows euro-denominated net issues by euro area residents.

Section 4.2 contains a sectoral breakdown of outstanding amounts and gross issues for issuers resident in the euro area which is in line with the ESA 95<sup>3</sup>. The ECB is included in the Eurosystem.

The total outstanding amounts for total and long-term debt securities in column 1 of Table 1 in Section 4.2 correspond to the data on outstanding amounts for total and long-term debt securities issued by euro area residents in Section 4.1, column 5. The outstanding amounts for total and long-term debt securities issued by MFIs in Table 4.2.1, column 2, are broadly comparable with data for debt securities issued as shown on the liabilities side of the aggregated MFI balance sheet in Table 2 of Section 2.1, column 8.

The total gross issues for total debt securities in column 1 of Table 2 in Section 4.2 correspond to the data on total gross issues by euro area residents in Section 4.1, column 6. The residual difference between long-term debt securities in Section 4.1, column 6, and total fixed and variable rate long-term debt securities in Table 2 of Section 4.2, column 7 consists of zero coupon bonds and revaluation effects.

Section 4.3 shows annual growth rates for debt securities issued by euro area residents (broken down by maturity, type of instrument, sector of

the issuer and currency), which are based on financial transactions that occur when an institutional unit incurs or redeems liabilities. The annual growth rates therefore exclude reclassifications, revaluations, exchange rate variations and any other changes which do not arise from transactions. Annual percentage changes for monthly data refer to the end of the month, whereas for quarterly and yearly data, those percentage changes refer to the annual change in the period average. See the technical notes for details.

Section 4.4, columns 1, 4, 6 and 8, show the outstanding amounts of quoted shares issued by euro area residents broken down by issuing sector. The monthly data for quoted shares issued by non-financial corporations correspond to the quarterly series shown in Section 3.2 (main liabilities, column 21).

Section 4.4, columns 3, 5, 7 and 9, show annual growth rates for quoted shares issued by euro area residents (broken down by the sector of the issuer), which are based on financial transactions that occur when an issuer sells or redeems shares for cash excluding investments in the issuers' own shares. Transactions include the quotation of an issuer on a stock exchange for the first time and the creation or deletion of new instruments. The calculation of annual growth rates excludes reclassifications, revaluations and any other changes which do not arise from transactions.

Section 4.5 presents statistics on all the interest rates that MFIs resident in the euro area apply to euro-denominated deposits and loans vis-à-vis households and non-financial corporations resident in the euro area. Euro area MFI interest

<sup>3</sup> The code numbers in the ESA 95 for the sectors shown in tables in the Monthly Bulletin are: MFIs (including the Eurosystem), which comprises the ECB, the NCBs of the euro area countries (S.121) and other monetary financial institutions (S.122); non-monetary financial corporations, which 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); and other general government, which comprises state government (S.1312), local government (S.1313) and social security funds (S.1314).

rates are calculated as a weighted average (by corresponding business volume) of the euro area countries' interest rates for each category.

MFI interest rate statistics are broken down by type of business coverage, sector, instrument category and maturity, period of notice or initial period of interest rate fixation. The new MFI interest rate statistics replace the ten transitional statistical series on euro area retail interest rates that have been published in the ECB's Monthly Bulletin since January 1999.

Section 4.6 presents money market interest rates for the euro area, the United States and Japan. For the euro area, a broad spectrum of money market interest rates is covered spanning from interest rates on overnight deposits to those on twelve-month deposits. Before January 1999 synthetic euro area interest rates were calculated on the basis of national rates weighted by GDP. With the exception of the overnight rate to December 1998, monthly, quarterly and yearly values are period averages. Overnight deposits are represented by interbank deposit bid rates up to December 1998. From January 1999 column 1 of Section 4.6 shows the euro overnight index average (EONIA). These are end-of-period rates up to December 1998 and period averages thereafter. From January 1999 interest rates on one-, three-, six- and twelve-month deposits are euro interbank offered rates (EURIBOR); until December 1998, London interbank offered rates (LIBOR) where available. For the United States and Japan, interest rates on three-month deposits are represented by LIBOR.

Section 4.7 presents government bond yields for the euro area, the United States and Japan. Until December 1998, two-, three-, five- and seven-year euro area yields were end-of-period values and ten-year yields period averages. Thereafter, all yields are period averages. Until December 1998, euro area yields were 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 the United States and Japan, ten-year yields are period averages.

Section 4.8 shows stock market indices for the euro area, the United States and Japan.

## PRICES, OUTPUT, DEMAND AND LABOUR MARKETS

Most of the data described in this section are 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. Statistics on hourly labour costs, GDP and expenditure components, value added by economic activity, industrial production, retail sales and passenger car registrations are adjusted for the variations in the number of working days.

The Harmonised Index of Consumer Prices (HICP) for the euro area (Section 5.1) is available from 1995 onwards. It is based on national HICPs, which 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/HICP). The HICP covers monetary expenditure on final consumption by households on the economic territory of the euro area. The table includes seasonally adjusted HICP data which are compiled by the ECB.

Industrial producer prices (Table 2 in Section 5.1), industrial production, industrial new orders, industrial turnover and retail sales (Section 5.2) are covered by Council Regulation (EC) No 1165/98 of 19 May 1998 concerning short-term statistics<sup>4</sup>. The breakdown by end-use of products for industrial producer prices and industrial production is the harmonised sub-division of industry excluding construction (NACE sections C to E) into Main Industrial

4 OJL 162, 5.6.1998, p. 1.

Groupings (MIGs) as defined by Commission Regulation (EC) No 586/2001 of 26 March 2001<sup>5</sup>. Industrial producer prices reflect the ex-factory gate prices of producers. They include indirect taxes except VAT and other deductible taxes. Industrial production reflects the value added of the industries concerned.

World market prices of raw materials (Table 2 in Section 5.1) measures price changes of euro-denominated euro area imports compared with the base period.

The labour cost indices (Table 3 in Section 5.1) measure the changes in labour costs per hour worked in industry (including construction) and market services. Their methodology is laid down in Regulation (EC) No 450/2003 of the European Parliament and of the Council of 27 February 2003 concerning the labour cost index<sup>6</sup> and in the implementing Commission Regulation (EC) No 1216/2003 of 7 July 2003<sup>7</sup>. A breakdown of hourly labour costs for the euro area is available by labour cost component (wages and salaries, and employers' social contributions plus employment-related taxes paid by the employer less subsidies received by the employer) and by economic activity. The ECB calculates the indicator of negotiated wages (memo item in Table 3 of Section 5.1) on the basis of non-harmonised, national-definition data.

Unit labour cost components (Table 4 in Section 5.1), GDP and its components (Tables 1 and 2 in Section 5.2), GDP deflators (Table 5 in Section 5.1) and employment statistics (Table 1 in Section 5.3) are results of the ESA 95 quarterly national accounts.

Industrial new orders (Table 4 in Section 5.2) measure the orders received during the reference period and cover industries working mainly on the basis of orders – in particular textile, pulp and paper, chemical, metal, capital goods and durable consumer goods industries. The data are calculated on the basis of current prices.

Indices for turnover in industry and for the retail trade (Table 4 in Section 5.2) measure the turnover, including all duties and taxes with the exception of VAT, invoiced during the reference period. Retail trade turnover covers all retail trade excluding sales of motor vehicles and motorcycles, and except repairs. New passenger car registrations covers registrations of both private and commercial passenger cars.

Qualitative business and consumer survey data (Table 5 in Section 5.2) draw on the European Commission Business and Consumer Surveys.

Unemployment rates (Table 2 in Section 5.3) conform to International Labour Organisation (ILO) guidelines. They refer to persons actively seeking work as a share of the labour force, using harmonised criteria and definitions. The labour force estimates underlying the unemployment rate are different from the sum of the employment and unemployment levels published in Section 5.3.

## GOVERNMENT FINANCE

Sections 6.1 to 6.4 show the general government fiscal position in the euro area. The data are mainly consolidated and are based on the ESA 95 methodology. The annual euro area aggregates in Sections 6.1 to 6.3 are compiled by the ECB from harmonised data provided by the NCBs, which are regularly updated. The deficit and debt data for the euro area countries may therefore differ from those used by the European Commission within the excessive deficit procedure. The quarterly euro area aggregates in Section 6.4 are compiled by the ECB on the basis of Eurostat and national data.

Section 6.1 presents annual figures on general government revenue and expenditure on the basis of definitions laid down in Commission Regulation (EC) No 1500/2000 of 10 July 2000<sup>8</sup>

<sup>5</sup> OJ L 86, 27.3.2001, p. 11.

<sup>6</sup> OJ L 69, 13.3.2003, p. 1.

<sup>7</sup> OJ L 169, 8.7.2003, p. 37.

<sup>8</sup> OJ L 172, 12.7.2000, p. 3.

amending the ESA 95. Section 6.2 shows details of general government gross consolidated debt at nominal value in line with the Treaty provisions on the excessive deficit procedure. Sections 6.1 and 6.2 include summary data for the individual euro area countries owing to their importance in the framework of the Stability and Growth Pact. The deficits/surpluses presented for the individual euro area countries correspond to EDP B.9 as defined by Commission Regulation (EC) No 351/2002 of 25 February 2002 amending Council Regulation (EC) No 3605/93 as regards references to the ESA 95. Section 6.3 presents changes in general government debt. The difference between the change in the government debt and the government deficit – the deficit-debt adjustment – is mainly explained by government transactions in financial assets and by foreign exchange valuation effects. Section 6.4 presents quarterly figures on general government revenue and expenditure on the basis of definitions laid down in the Regulation (EC) No 1221/2002 of the European Parliament and of the Council of 10 June 2002<sup>9</sup> on quarterly non-financial accounts for general government.

## EXTERNAL TRANSACTIONS AND POSITIONS

The concepts and definitions used in balance of payments (b.o.p.) and international investment position (i.i.p.) statistics (Sections 7.1 to 7.4) are generally in line with the IMF Balance of Payments Manual (fifth edition, October 1993), the ECB Guideline of 16 July 2004 on the statistical reporting requirements of the ECB (ECB/2004/15)<sup>10</sup>, and Eurostat documents. Additional references about the methodologies and sources used in the euro area b.o.p. and i.i.p. statistics can be found in the ECB publication entitled “European Union balance of payments/international investment position statistical methods” (November 2004), and in the following task force reports: “Portfolio investment collection systems” (June 2002), “Portfolio investment income” (August 2003) and “Foreign direct investment” (March 2004),

which can be downloaded from the ECB’s website. In addition, the report of the ECB/Commission (Eurostat) Task Force on Quality of balance of payments and international investment position statistics (June 2004) is available on the website of the Committee on Monetary, Financial and Balance of Payments Statistics ([www.cmfb.org](http://www.cmfb.org)). The first annual quality report on the euro area b.o.p./i.i.p. (January 2005), which is based on the Task Force’s recommendations, is available on the ECB’s website.

The presentation of net transactions in the financial account follows the sign convention of the IMF Balance of Payments Manual: an increase of assets appears with a minus sign, while an increase of liabilities appears with a plus sign. In the current account and capital account, both credit and debit transactions are presented with a plus sign.

The euro area b.o.p. is compiled by the ECB. The recent monthly figures should be regarded as provisional. Data are revised when figures for the following month and/or the detailed quarterly b.o.p. are published. Earlier data are revised periodically or as a result of methodological changes in the compilation of the source data.

In Section 7.1, Table 2 contains seasonally adjusted data for the current account. Where appropriate, the adjustment covers also working-day, leap year and/or Easter effects. Table 5 provides a sectoral breakdown of euro area purchasers of securities issued by non-residents of the euro area. It is not yet possible to show a sectoral breakdown of euro area issuers of securities acquired by non-residents. In Tables 6 and 7 the breakdown between “loans” and “currency and deposits” is based on the sector of the non-resident counterpart, i.e. assets vis-à-vis non-resident banks are classified as deposits, whereas assets vis-à-vis other non-resident sectors are classified as

<sup>9</sup> OJ L 179, 9.7.2002, p. 1.

<sup>10</sup> OJ L 354, 30.11.2004, p. 34.

loans. This breakdown follows the distinction made in other statistics, such as the MFI consolidated balance sheet, and conforms to the IMF Balance of Payments Manual.

Section 7.2 contains a monetary presentation of the b.o.p.: the b.o.p. transactions mirroring the transactions in the external counterpart of M3. The data follow the sign conventions of the b.o.p., except for the transactions in the external counterpart of M3 taken from money and banking statistics (column 12), where a positive sign denotes an increase of assets or a decrease of liabilities. In portfolio investment liabilities (columns 5 and 6), the b.o.p. transactions include sales and purchases of equity and debt securities issued by MFIs in the euro area, apart from shares of money market funds and debt securities with a maturity of up to two years. A methodological note on the monetary presentation of the euro area b.o.p. is available in the “Statistics” section of the ECB’s website. See also Box 1 in the June 2003 issue of the Monthly Bulletin.

Section 7.3 presents a geographical breakdown of the euro area b.o.p. (Tables 1 to 4) and i.i.p. (Table 5) vis-à-vis main partner countries individually or as a group, distinguishing between EU Member States outside the euro area and countries or areas outside the European Union. The breakdown also shows transactions and positions vis-à-vis EU institutions (which, apart from the ECB, are treated statistically as outside the euro area, regardless of their physical location) and for some purposes also offshore centres and international organisations. Tables 1 to 4 show cumulative b.o.p. transactions in the latest four quarters; Table 5 shows a geographical breakdown of the i.i.p. for the latest end-year. The breakdown does not cover transactions or positions in portfolio investment liabilities, financial derivatives and international reserves. The geographical breakdown is described in the article entitled “Euro area balance of payments and international investment position vis-à-vis main counterparts” in the February 2005 issue of the Monthly Bulletin.

The data on the euro area i.i.p. in Section 7.4 are based on positions vis-à-vis non-residents of the euro area, considering the euro area as a single economic entity (see also Box 9 in the December 2002 issue of the Monthly Bulletin). The i.i.p. is valued at current market prices, with the exception of direct investment, where book values are used to a large extent. The quarterly i.i.p. is compiled on the basis of the same methodological framework as the annual i.i.p. As some data sources are not available on a quarterly basis (or are available with a delay), the quarterly i.i.p. is partly estimated on the basis of financial transactions and asset prices and foreign exchange developments.

The outstanding amounts of the Eurosystem’s international reserves and related assets and liabilities are shown in Section 7.4, Table 5, together with the part held by the ECB. These figures are not fully comparable with those of the Eurosystem’s weekly financial statement owing to differences in coverage and valuation. The data in Table 5 are in line with the recommendations for the IMF/BIS template on international reserves and foreign currency liquidity. Changes in the gold holdings of the Eurosystem (column 3) are due to transactions in gold within the terms of the Central Bank Gold Agreement of 26 September 1999, updated on 8 March 2004. More information on the statistical treatment of the Eurosystem’s international reserves can be found in a publication entitled “Statistical treatment of the Eurosystem’s international reserves” (October 2000), which can be downloaded from the ECB’s website. The website also contains more comprehensive data in accordance with the template on international reserves and foreign currency liquidity.

Section 7.5 shows data on euro area external trade in goods. The main source is Eurostat. The ECB derives volume indices from Eurostat value and unit value indices, and performs seasonal adjustment of unit value indices, while value data are seasonally and working-day adjusted by Eurostat.



The breakdown by product group in columns 4 to 6 and 9 to 11 of Table 1 in Section 7.5 is in line with the classification by Broad Economic Categories. Manufactured goods (columns 7 and 12) and oil (column 13) are in line with the SITC Rev. 3 definition. The geographical breakdown (Table 2 in Section 7.5) shows main trading partners individually or in regional groups. Mainland China excludes Hong Kong.

Owing to differences in definitions, classification, coverage and time of recording, external trade data, in particular for imports, are not fully comparable with the goods item in the balance of payments statistics (Sections 7.1 to 7.3). The difference for imports has been around 5% in recent years (ECB estimate), a significant part of which relates to the inclusion of insurance and freight services in the external trade data (c.i.f. basis).

## EXCHANGE RATES

Section 8.1 shows nominal and real effective exchange rate (EER) indices for the euro calculated by the ECB on the basis of weighted averages of bilateral exchange rates of the euro against the currencies of the euro area's trading partners. A positive change denotes an appreciation of the euro. Weights are based on trade in manufactured goods with the trading partners in the periods 1995-1997 and 1999-2001, and are calculated to account for third-market effects. The EER indices result from the linking at the beginning of 1999 of the indices based on 1995-1997 weights to those based on 1999-2001 weights. The EER-23 group of trading partners is composed of the 13 non-euro area EU Member States, Australia, Canada, China, Hong Kong, Japan, Norway, Singapore, South Korea, Switzerland and the United States. The EER-42 group includes, in addition to the EER-23, the following countries: Algeria, Argentina, Brazil, Bulgaria, Croatia, India, Indonesia, Israel, Malaysia, Mexico, Morocco, New Zealand, the Philippines, Romania, Russia, South Africa, Taiwan, Thailand and Turkey. Real EERs are calculated using

consumer price indices, producer price indices, gross domestic product deflators, unit labour costs in manufacturing and unit labour costs in the total economy.

For more detailed information on the calculation of the EERs, see Box 10 entitled "Update of the overall trade weights for the effective exchange rates of the euro and computation of a new set of euro indicators" in the September 2004 issue of the Monthly Bulletin and the ECB's Occasional Paper No 2 ("The effective exchange rates of the euro" by Luca Buldorini, Stelios Makrydakis and Christian Thimann, February 2002), which can be downloaded from the ECB's website.

The bilateral rates shown in Section 8.2 are monthly averages of those published daily as reference rates for these currencies.

## DEVELOPMENTS OUTSIDE THE EURO AREA

Statistics on other EU Member States (Section 9.1) follow the same principles as those for data relating to the euro area. Data for the United States and Japan contained in Section 9.2 are obtained from national sources.

## ANNEXES

# CHRONOLOGY OF MONETARY POLICY MEASURES OF THE EUROSYSTEM<sup>1</sup>



### 9 JANUARY 2003

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 2.75%, 3.75% and 1.75% respectively.

### 23 JANUARY 2003

The Governing Council of the ECB decides to implement the following two measures to improve the operational framework for monetary policy:

First, the timing of the reserve maintenance period will be changed so that it will always start on the settlement day of the main refinancing operation (MRO) following the Governing Council meeting at which the monthly assessment of the monetary policy stance is pre-scheduled. Furthermore, as a rule, the implementation of changes to the standing facility rates will be aligned with the start of the new reserve maintenance period.

Second, the maturity of the MROs will be shortened from two weeks to one week.

These measures are scheduled to come into effect during the first quarter of 2004.

Further to the press release of 10 July 2002, the Governing Council also decides to maintain at €15 billion the allotment amount for each of the longer-term refinancing operations to be conducted in the year 2003. This amount takes into consideration the expected liquidity needs of the euro area banking system in 2003 and reflects the desire of the Eurosystem to continue to provide the bulk of liquidity through its main refinancing operations.

### 6 FEBRUARY 2003

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 2.75%, 3.75% and 1.75% respectively.

### 6 MARCH 2003

The Governing Council of the ECB decides to lower the minimum bid rate on the main refinancing operations by 0.25 percentage point to 2.50%, starting from the operation to be settled on 12 March 2003. It also decides to lower the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 3.50% and 1.50% respectively, both with effect from 7 March 2003.

### 3 APRIL 2003

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 2.50%, 3.50% and 1.50% respectively.

### 8 MAY 2003

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 2.50%, 3.50% and 1.50% respectively.

<sup>1</sup> The chronology of monetary policy measures of the Eurosystem taken between 1999 and 2002 can be found on pages 176 to 180 of the ECB's Annual Report 1999, on pages 205 to 208 of the ECB's Annual Report 2000, on pages 219 to 220 of the ECB's Annual Report 2001 and on pages 234 to 235 of the ECB's Annual Report 2002 respectively.

It also announces the results of its evaluation of the ECB's monetary policy strategy. This strategy, which was announced on 13 October 1998, consists of three main elements: a quantitative definition of price stability, a prominent role for money in the assessment of risks to price stability, and a broadly based assessment of the outlook for price developments.

The Governing Council confirms the definition of price stability formulated in October 1998, namely that "price stability is defined as a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2%. Price stability is to be maintained over the medium term". At the same time, the Governing Council agrees that in the pursuit of price stability it will aim to maintain inflation rates close to 2% over the medium term.

The Governing Council confirms that its monetary policy decisions will continue to be based on a comprehensive analysis of the risks to price stability. At the same time, the Governing Council decides to clarify in its communication the respective roles played by economic and monetary analysis in the process of coming to the Council's overall assessment of risks to price stability.

To underscore the longer-term nature of the reference value for monetary growth as a benchmark for the assessment of monetary developments, the Governing Council also decides that it will no longer conduct a review of the reference value on an annual basis. However, it will continue to assess the underlying conditions and assumptions.

### **5 JUNE 2003**

The Governing Council of the ECB decides to lower the minimum bid rate on the main refinancing operations by 0.50 percentage

point to 2.0%, starting from the operation to be settled on 9 June 2003. It also decides to lower the interest rates on both the marginal lending facility and the deposit facility by 0.50 percentage point, to 3.0% and 1.0% respectively, both with effect from 6 June 2003.

### **10 JULY, 31 JULY, 4 SEPTEMBER, 2 OCTOBER, 6 NOVEMBER, 4 DECEMBER 2003 AND 8 JANUARY 2004**

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 2.0%, 3.0% and 1.0% respectively.

### **12 JANUARY 2004**

The Governing Council of the ECB decides to increase the allotment amount for each of the longer-term refinancing operations to be conducted in the year 2004 from €15 billion to €25 billion. This increased amount takes into consideration the higher liquidity needs of the euro area banking system anticipated for the year 2004. The Eurosystem will, however, continue to provide the bulk of liquidity through its main refinancing operations. The Governing Council may decide to adjust the allotment amount again at the beginning of 2005.

### **5 FEBRUARY, 4 MARCH 2004**

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 2.0%, 3.0% and 1.0% respectively.

**10 MARCH 2004**

In accordance with the Governing Council's decision of 23 January 2003, the maturity of the Eurosystem's main refinancing operations is reduced from two weeks to one week and the maintenance period for the Eurosystem's required reserve system is redefined to start on the settlement day of the main refinancing operation following the Governing Council meeting at which the monthly assessment of the monetary policy stance is pre-scheduled, rather than on the 24th day of the month.

**1 APRIL, 6 MAY, 3 JUNE, 1 JULY,  
5 AUGUST, 2 SEPTEMBER, 7 OCTOBER,  
4 NOVEMBER, 2 DECEMBER 2004 AND  
13 JANUARY 2005**

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 2.0%, 3.0% and 1.0% respectively.

**14 JANUARY 2005**

The Governing Council of the ECB decides to increase the allotment amount for each of the longer-term refinancing operations to be conducted in the year 2005 from €25 billion to €30 billion. This increased amount takes into consideration the higher liquidity needs of the euro area banking system anticipated in 2005. The Eurosystem will however continue to provide the bulk of liquidity through its main refinancing operations. The Governing Council may decide to adjust the allotment amount again at the beginning of 2006.

**3 FEBRUARY, 3 MARCH, 7 APRIL,  
4 MAY, 2 JUNE, 7 JULY, 4 AUGUST,  
1 SEPTEMBER AND 6 OCTOBER 2005**

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 2.0%, 3.0% and 1.0% respectively.







## DOCUMENTS PUBLISHED BY THE EUROPEAN CENTRAL BANK SINCE 2004

This list is designed to inform readers about selected documents published by the European Central Bank since January 2004. For Working Papers, the list only refers to publications released between July and September 2005. The publications are available to interested parties free of charge from the Press and Information Division. Please submit orders in writing to the postal address given on the back of the title page.

For a complete list of documents published by the European Central Bank and by the European Monetary Institute, please visit the ECB's website (<http://www.ecb.int>).

### ANNUAL REPORT

“Annual Report 2003”, April 2004.

“Annual Report 2004”, April 2005.

### CONVERGENCE REPORT

“Convergence Report 2004”, October 2004.

### MONTHLY BULLETIN ARTICLES

“EMU and the conduct of fiscal policies”, January 2004.

“Opinion survey on activity, prices and labour market developments in the euro area: features and uses”, January 2004.

“Measuring and analysing profit developments in the euro area”, January 2004.

“The acceding countries' economies on the threshold of the European Union”, February 2004.

“Developments in private sector balance sheets in the euro area and the United States”, February 2004.

“The impact of fair value accounting on the European banking sector – a financial stability perspective”, February 2004.

“Fiscal policy influences on macroeconomic stability and prices”, April 2004.

“Future developments in the TARGET system”, April 2004.

“The Barcelona partner countries and their relations with the euro area”, April 2004.

“The EU economy following the accession of the new Member States”, May 2004.

“The natural real interest rate in the euro area”, May 2004.

“Risk mitigation methods in Eurosystem credit operations”, May 2004.

“Labour productivity developments in the euro area: aggregate trends and sectoral patterns”, July 2004.

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“The European Constitution and the ECB”, August 2004.

“Properties and use of general government quarterly accounts”, August 2004.

“Euro banknotes: first years of experience”, August 2004.

“Monetary analysis in real time”, October 2004.

“Economic integration in selected regions outside the European Union”, October 2004.

“Oil prices and the euro area economy”, November 2004.

“Extracting information from financial asset prices”, November 2004.

“Developments in the EU framework for financial regulation, supervision and stability”, November 2004.

“The new Basel Capital Accord: main features and implications”, January 2005.

“Financial flows to emerging market economies: changing patterns and recent developments”, January 2005.

- “Bank market discipline”, February 2005.
- “Initial experience with the changes to the Eurosystem’s operational framework for monetary policy implementation”, February 2005.
- “Euro area balance of payments and international investment position vis-à-vis main counterparts”, February 2005.
- “Asset price bubbles and monetary policy”, April 2005.
- “Comparability of statistics for the euro area, the United States and Japan”, April 2005.
- “The ESCB-CESR standards for securities clearing and settlement in the European Union”, April 2005.
- “Monetary policy and inflation differentials in a heterogeneous currency area”, May 2005.
- “Consolidation and diversification in the euro area banking sector”, May 2005.
- “The evolving framework for corporate governance”, May 2005.
- “The Harmonised Index of Consumer Prices: concept, properties and experience to date”, July 2005.
- “The Lisbon strategy – five years on”, July 2005
- “The use of harmonised MFI interest rate statistics”, July 2005.
- “The reform of the Stability and Growth Pact”, August 2005.
- “The role of ‘Emerging Asia’ in the global economy”, August 2005.
- “The euro banknotes: developments and future challenges”, August 2005.
- “Money demand and uncertainty”, October 2005.
- “Assessing the performance of financial systems”, October 2005.

#### **STATISTICS POCKET BOOK**

Available monthly since August 2003.

#### **OCCASIONAL PAPER SERIES**

- 9 “Fiscal adjustment in 1991-2002: stylised facts and policy implications” by M. G. Briotti, February 2004.
- 10 “The acceding countries’ strategies towards ERM II and the adoption of the euro: an analytical review” by a staff team led by P. Backé and C. Thimann and including O. Arratibel, O. Calvo-Gonzalez, A. Mehl and C. Nerlich, February 2004.
- 11 “Official dollarisation/euroisation: motives, features and policy implications of current cases” by A. Winkler, F. Mazzaferro, C. Nerlich and C. Thimann, February 2004.
- 12 “Understanding the impact of the external dimension on the euro area: trade, capital flows and other international macroeconomic linkages” by R. Anderton, F. di Mauro and F. Moneta, April 2004.
- 13 “Fair value accounting and financial stability” by a staff team led by A. Enria and including L. Cappiello, F. Dierick, S. Grittini, A. Maddaloni, P. Molitor, F. Pires and P. Poloni, April 2004.
- 14 “Measuring financial integration in the euro area” by L. Baele, A. Ferrando, P. Hördahl, E. Krylova, C. Monnet, April 2004.
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- 18 “The international role of the euro: evidence from bonds issued by non-euro area residents” by A. Geis, A. Mehl and S. Wredenburg, July 2004.
- 19 “Sectoral specialisation in the EU: a macroeconomic perspective” by MPC task force of the ESCB, July 2004.
- 20 “The supervision of mixed financial services groups in Europe” by F. Dierick, August 2004.
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## GLOSSARY

This glossary contains selected items that are frequently used in the Monthly Bulletin. A more comprehensive and detailed glossary can be found on the ECB's website ([www.ecb.int/home/glossary/html/index.en.html](http://www.ecb.int/home/glossary/html/index.en.html)).

**Autonomous liquidity factors:** liquidity factors that do not normally stem from the use of monetary policy instruments. Such factors are, for example, banknotes in circulation, government deposits with the central bank and the net foreign assets of the central bank.

**Bank lending survey:** a quarterly survey on lending policies that has been conducted by the Eurosystem since January 2003. It addresses qualitative questions on developments in credit standards, terms and conditions of loans and loan demand for both enterprises and households to a predefined sample group of banks in the euro area.

**Central parity:** the exchange rate of each ERM II member currency vis-à-vis the euro, around which the ERM II fluctuation margins are defined.

**Compensation per employee:** the total remuneration, in cash or in kind, that is payable by employers to employees, i.e. gross wages and salaries, as well as bonuses, overtime payments and employers' social security contributions, divided by the total number of employees.

**Consolidated balance sheet of the MFI sector:** a balance sheet obtained by netting out inter-MFI positions (e.g. inter-MFI loans and deposits) in the aggregated MFI balance sheet. It provides statistical information on the MFI sector's assets and liabilities vis-à-vis residents of the euro area not belonging to this sector (i.e. general government and other euro area residents) and vis-à-vis non-euro area residents. It is the main statistical source for the calculation of monetary aggregates, and it provides the basis for the regular analysis of the counterparts of M3.

**Debt (financial accounts):** loans, deposit liabilities, debt securities issued and pension fund reserves of non-financial corporations (resulting from employers' direct pension commitments on behalf of their employees), valued at market value at the end of the period. However, due to data limitations, the debt given in the quarterly financial accounts does not include loans granted by non-financial sectors (e.g. inter-company loans) or by banks outside the euro area, whereas these components are included in the annual financial accounts.

**Debt (general government):** the total gross debt at nominal value outstanding at the end of the year and consolidated between and within the sectors of general government.

**Debt security:** a promise on the part of the issuer (i.e. the borrower) to make one or more payment(s) to the holder (the lender) at a specified future date or dates. Such securities usually carry a specific rate of interest (the coupon) and/or are sold at a discount to the amount that will be repaid at maturity. Debt securities issued with an original maturity of more than one year are classified as long-term.

**Debt-to-GDP ratio (general government):** the ratio of general government debt to GDP at current market prices. It is the subject of one of the fiscal criteria laid down in Article 104 (2) of the Treaty establishing the European Community to define the existence of an excessive deficit.

**Deficit (general government):** the general government's net borrowing, i.e. the difference between total government revenue and total government expenditure.

**Deficit ratio (general government):** the ratio of the general government deficit to GDP at current market prices. It is the subject of one of the fiscal criteria laid down in Article 104 (2) of the Treaty establishing the European Community to define the existence of an excessive deficit. It is also referred to as the budget deficit ratio or the fiscal deficit ratio.

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

**Direct investment:** cross-border investment for the purpose of obtaining a lasting interest in an enterprise resident in another economy (assumed, in practice, for ownership of at least 10% of the ordinary shares or voting power). Included are equity capital, reinvested earnings and other capital associated with inter-company operations. The direct investment account records net transactions/positions in assets abroad by euro area residents (as "direct investment abroad") and net transactions/positions in euro area assets by non-residents (as "direct investment in the euro area").

**Effective exchange rates (EERs) of the euro (nominal/real):** weighted averages of bilateral euro exchange rates against the currencies of the euro area's main trading partners. The ECB publishes nominal EER indices for the euro against two groups of trading partners: the EER-23 (comprising the 13 non-euro area EU Member States and the 10 main trading partners outside the EU) and the EER-42 (composed of the EER-23 and 19 additional countries). The weights used reflect the share of each partner country in euro area trade and account for competition in third markets. Real EERs are nominal EERs deflated by a weighted average of foreign, relative to domestic, prices or costs. They are thus measures of price and cost competitiveness.

**EONIA (euro overnight index average):** a measure of the effective interest rate prevailing in the euro interbank overnight market. It is calculated as a weighted average of the interest rates on unsecured overnight lending transactions denominated in euro, as reported by a panel of contributing banks.

**Equities:** securities representing ownership of a stake in a corporation. They comprise shares traded on stock exchanges (quoted shares), unquoted shares and other forms of equity. Equities usually produce income in the form of dividends.

**ERM II (exchange rate mechanism II):** the exchange rate arrangement that provides the framework for exchange rate policy cooperation between the euro area countries and the EU Member States not participating in Stage Three of EMU.

**EURIBOR (euro interbank offered rate):** the rate at which a prime bank is willing to lend funds in euro to another prime bank, computed daily for interbank deposits with different maturities of up to 12 months.

**European Commission surveys:** harmonised surveys of business and/or consumer sentiment conducted on behalf of the European Commission in each of the EU Member States. Such questionnaire-based surveys are addressed to managers in the manufacturing, construction,

retail and services sectors, as well as to consumers. From each monthly survey, composite indicators are calculated that summarise the replies to a number of different questions in a single indicator (confidence indicators).

**Eurozone Purchasing Managers' Surveys:** surveys of business conditions in manufacturing and in services industries conducted for a number of countries in the euro area and used to compile indices. The Eurozone Manufacturing Purchasing Managers' Index (PMI) is a weighted indicator calculated from indices of output, new orders, employment, suppliers' delivery times and stocks of purchases. The services sector survey asks questions on business activity, expectations of future business activity, the amount of business outstanding, incoming new business, employment, input prices and prices charged. The Eurozone Composite Index is calculated by combining the results from the manufacturing and services sector surveys.

**External trade in goods:** exports and imports of goods with countries outside the euro area, measured in terms of value and as indices of volume and unit value. External trade statistics are not comparable with the exports and imports recorded in the national accounts, as the latter include both intra-euro area and extra-euro area transactions, and also combine goods and services. Nor are they fully comparable with the goods item in b.o.p. statistics. Besides methodological adjustments, the main difference is to be found in the fact that imports in external trade statistics are recorded including insurance and freight services, whereas they are recorded free on board in the goods item in the b.o.p. statistics.

**Fixed rate tender:** a tender procedure in which the interest rate is specified in advance by the central bank and in which participating counterparties bid the amount of money they wish to transact at the fixed interest rate.

**General government:** a sector defined in the ESA 95 as comprising resident entities that are engaged primarily in the production of non-market goods and services intended for individual and collective consumption and/or in the redistribution of national income and wealth. Included are central, regional and local government authorities as well as social security funds. Excluded are government-owned entities that conduct commercial operations, such as public enterprises.

**Gross domestic product (GDP):** the value of an economy's total output of goods and services less intermediate consumption, plus net taxes on products and imports. GDP can be broken down by output, expenditure or income components. The main expenditure aggregates that make up GDP are household final consumption, government final consumption, gross fixed capital formation, changes in inventories, and imports and exports of goods and services (including intra-euro area trade).

**Gross monthly earnings:** gross monthly wages and salaries of employees, including employees' social security contributions.

**Harmonised Index of Consumer Prices (HICP):** a measure of consumer prices that is compiled by Eurostat and harmonised for all EU Member States.



**Hourly labour cost index:** a measure of labour costs, including gross wages and salaries (as well as bonuses of all kinds), employers' social security contributions and other labour costs (such as vocational training costs, recruitment costs and employment-related taxes), net of subsidies, per hour actually worked. Hourly costs are obtained by dividing the sum total of these costs for all employees by the sum total of all hours worked by them (including overtime).

**Implied volatility:** a measure of expected volatility (standard deviation in terms of annualised percentage changes) in the prices of, for example, bonds and stocks (or of corresponding futures contracts), which can be extracted from option prices.

**Index of negotiated wages:** a measure of the direct outcome of collective bargaining in terms of basic pay (i.e. excluding bonuses) at the euro area level. It refers to the implied average change in monthly wages and salaries.

**Industrial producer prices:** factory-gate prices (transportation costs are not included) of all products sold by industry excluding construction on the domestic markets of the euro area countries, excluding imports.

**Industrial production:** the gross value added created by industry at constant prices.

**Inflation-indexed government bonds:** debt securities issued by the general government, the coupon payments and principal of which are linked to a specific consumer price index.

**International investment position (i.i.p.):** the value and composition of an economy's outstanding net financial claims on (or financial liabilities to) the rest of the world.

**Job vacancies:** a collective term covering newly created jobs, unoccupied jobs or jobs about to become vacant in the near future, for which the employer has taken recent active steps to find a suitable candidate.

**Key ECB interest rates:** the interest rates, set by the Governing Council, which reflect the monetary policy stance of the ECB. They are the minimum bid rate on the main refinancing operations, the interest rate on the marginal lending facility and the interest rate on the deposit facility.

**Labour force:** the sum total of persons in employment and the number of unemployed.

**Labour productivity:** the output that can be produced with a given input of labour. It can be measured in several ways, but is commonly measured as GDP at constant prices divided by either total employment or total hours worked.

**Longer-term refinancing operation:** a regular open market operation executed by the Eurosystem in the form of reverse transactions. Such operations are carried out through a monthly standard tender and normally have a maturity of three months.

**M1:** a narrow monetary aggregate that comprises currency in circulation plus overnight deposits held with MFIs and central government (e.g. at the post office or treasury).

**M2:** an intermediate monetary aggregate that comprises M1 plus deposits redeemable at a period of notice of up to and including three months (i.e. short-term savings deposits) and deposits with an agreed maturity of up to and including two years (i.e. short-term time deposits) held with MFIs and central government.

**M3:** a broad monetary aggregate that comprises M2 plus marketable instruments, in particular repurchase agreements, money market fund shares and units, and debt securities with a maturity of up to and including two years issued by MFIs.

**Main refinancing operation:** a regular open market operation executed by the Eurosystem in the form of reverse transactions. Such operations are carried out through a weekly standard tender and normally have a maturity of one week.

**Marginal lending facility:** a standing facility of the Eurosystem which counterparties may use to receive overnight credit from a national central bank at a pre-specified interest rate against eligible assets.

**MFI credit to euro area residents:** MFI loans granted to non-MFI euro area residents (including the general government and the private sector) and MFI holdings of securities (shares, other equity and debt securities) issued by non-MFI euro area residents.

**MFI interest rates:** the interest rates that are applied by resident credit institutions and other MFIs, excluding central banks and money market funds, to euro-denominated deposits and loans vis-à-vis households and non-financial corporations resident in the euro area.

**MFI longer-term financial liabilities:** deposits with an agreed maturity of over two years, deposits redeemable at a period of notice of over three months, debt securities issued by euro area MFIs with an original maturity of more than two years and the capital and reserves of the euro area MFI sector.

**MFI net external assets:** the external assets of the euro area MFI sector (such as gold, foreign currency banknotes and coins, securities issued by non-euro area residents and loans granted to non-euro area residents) minus the external liabilities of the euro area MFI sector (such as non-euro area residents' deposits and repurchase agreements, as well as their holdings of money market fund shares/units and debt securities issued by MFIs with a maturity of up to and including two years).

**MFIs (monetary financial institutions):** financial institutions which together form the money-issuing sector of the euro area. These include the Eurosystem, resident credit institutions (as defined in Community law) and all other resident financial institutions whose business is to receive deposits and/or close substitutes for deposits from entities other than MFIs and, for their own account (at least in economic terms), to grant credit and/or invest in securities. The latter group consists predominantly of money market funds.

**Portfolio investment:** euro area residents' net transactions and/or positions in securities issued by non-residents of the euro area ("assets") and non-residents' net transactions and/or positions in securities issued by euro area residents ("liabilities"). Included are equity securities and debt securities (bonds and notes, and money market instruments). Transactions are recorded at the effective price paid or received, less commissions and expenses. To be regarded as a portfolio asset, ownership in an enterprise must be equivalent to less than 10% of the ordinary shares or voting power.

**Price stability:** the maintenance of price stability is the primary objective of the Eurosystem. The Governing Council defines price stability as a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2%. The Governing Council has also made it clear that, in the pursuit of price stability, it aims to maintain inflation rates below, but close to, 2% over the medium term.

**Reference value for M3 growth:** the annual growth rate of M3 over the medium term that is consistent with the maintenance of price stability. At present, the reference value for annual M3 growth is 4½%.

**Reserve requirement:** the minimum amount of reserves a credit institution is required to hold with the Eurosystem. Compliance is determined on the basis of the average of the daily balances over a maintenance period of around one month.

**Survey of Professional Forecasters (SPF):** a quarterly survey that has been conducted by the ECB since 1999 to collect macroeconomic forecasts on euro area inflation, real GDP growth and unemployment from a panel of experts affiliated to financial and non-financial organisations based in the EU.

**Unit labour costs:** a measure of total labour costs per unit of output calculated for the euro area as the ratio of total compensation per employee to GDP at constant prices per person employed.

**Variable rate tender:** a tender procedure where the counterparties bid both the amount of money they wish to transact with the central bank and the interest rate at which they wish to enter into the transaction.

**Yield curve:** a curve describing the relationship between the interest rate or yield and the maturity at a given point in time for debt securities with the same credit risk but different maturity dates. The slope of the yield curve can be measured as the difference between the interest rates at two selected maturities.

