EUROPEAN CENTRAL BANK

EUROSYSTEM

01 | 2006

02 | 2006

03 | 2006

04 | 2006

BCE ECB EZB EKT EKP

05 | 2006

06 | 2006

07 | 2006

08 | 2006

09 | 2006

10 | 2006

11 | 2006

12 | 2006

MONTHLY BULLETIN

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NOVEMBER

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In 2006 all ECB publications feature a motif taken from the €5 banknote.

MONTHLY BULLETIN

NOVEMBER 2006

CONTENTS

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 2 November 2006, the Governing Council decided to leave the key ECB interest rates unchanged. The information that had become available since the Governing Council's decision of 5 October to increase interest rates further underpinned the reasoning behind that decision. It also confirmed that strong vigilance remains of the essence so as to ensure that medium to longer-term inflation expectations in the euro area remain solidly anchored at levels consistent with price stability. With the key ECB interest rates at still low levels, money and credit growth dynamic, and liquidity ample by all plausible measures, the ECB's monetary policy continues to be accommodative. If the Governing Council's assumptions and baseline scenario continue to be confirmed, it will remain warranted to further withdraw monetary accommodation. Indeed, acting in a firm and timely manner remains essential to ensuring price stability over the medium term. As emphasised repeatedly, this is a prerequisite for monetary policy to make an ongoing contribution towards supporting sustainable economic growth and job creation in the euro area.

Turning first to the economic analysis, Eurostat's second estimate confirmed that real GDP growth in the euro area was 0.9% quarter on quarter in the second quarter of 2006, after 0.8% in the first quarter. Looking through the usual volatility of quarterly growth rates, economic activity grew at an average quarter-on-quarter rate of 0.7% over the four quarters to mid-2006, and thus faster than generally expected a year ago. On the basis of various monthly indicators of economic activity and confidence surveys, available up to October, the momentum of the economic expansion is expected to have continued in the second half of this year. In addition, the unemployment rate has been declining, employment growth has recovered and employment expectations remain favourable. All in all, the assessment of a more broadly based and more self-sustaining recovery continues to be confirmed by the incoming data, notwithstanding some possibility of a somewhat slower pace of quarter-on-quarter

real GDP growth in the second half of this year than in the first.

Looking further ahead, the conditions remain in place for the euro area economy to grow at solid rates around potential, although some volatility in the quarterly growth rates is likely to emerge around the turn of the year, mainly reflecting the impact of an increase in indirect taxes in a large euro area country in January 2007. Global economic activity has become more balanced across regions and remains robust, thereby providing ongoing support for euro area exports. Investment is expected to remain dynamic, benefiting from an extended period of very favourable financing conditions, balance sheet restructuring, accumulated and ongoing strong earnings, and gains in business efficiency. Consumption growth in the euro area should also strengthen further over time, in line with developments in real disposable income, as employment conditions continue to improve.

Risks to the outlook for economic growth are broadly balanced over the shorter term, taking into account, in particular, the recent slowing down in the US economy on the one hand and the recent fall in oil prices on the other. The oil price decline – if it were to prove lasting – has the potential to lead to somewhat stronger demand and output growth than embodied in the Governing Council's current baseline scenario for activity in the coming quarters. Over the longer term, risks to growth continue to lie on the downside, relating mainly to the possibility of a renewed increase in oil prices, fears of a rise in protectionist pressures, especially after the suspension of the Doha round of trade talks, and possible disorderly developments owing to global imbalances.

As regards price developments, according to Eurostat's flash estimate annual HICP inflation was 1.6% in October, after having declined to 1.7% in September from 2.3% in August. The recent decline in inflation is the combined result of favourable base effects, given in particular the strong rise in oil prices a year ago, and the recent significant fall in oil prices.

While the outlook for energy prices remains uncertain, on the basis of current energy prices and the higher quotations on futures markets, inflation rates are likely to increase again in the next few months and early 2007. As a consequence, the Governing Council expects a high degree of short-term volatility in the annual HICP inflation rate. Looking through this volatility, however, HICP inflation will remain elevated at a level above 2% on average in 2006 and is likely to remain so in 2007.

Risks to the outlook for price stability remain clearly on the upside. They continue to include a stronger pass-through of past oil price rises into consumer prices than currently anticipated and additional increases in administered prices and indirect taxes beyond those announced thus far. Furthermore, renewed increases in oil prices cannot be excluded. More fundamentally, given the favourable momentum of real GDP growth observed over the past few quarters and the ongoing improvement in labour markets, stronger than currently expected wage developments pose substantial upward risks to price stability. Against this background, it is crucial that the social partners continue to meet their responsibilities, particularly in the context of a more favourable environment for economic activity and employment.

The monetary analysis continues to point to upside risks to price stability at medium to longer horizons. Annual M3 growth rose again to 8.5% in September, after having increased to 8.2% in August. Although the annual growth rate of M1 has moderated somewhat in recent months, reflecting shifts into instruments with more market-related returns in a context of rising interest rates, this has been more than compensated by the stronger expansion of the other components of M3.

More generally, the rate of monetary and credit expansion remains rapid, reflecting the still low level of interest rates in the euro area and the strengthening of economic activity. In particular, loans to the private sector continue to grow at double-digit rates on an annual basis, their

dynamism remaining broadly based across the household and corporate sectors. While the growth of household borrowing shows some signs of stabilisation, albeit at very high rates, the growth of borrowing by non-financial corporations continues to trend upwards and has now reached rates of over 12% on an annual basis, the highest seen since the early 1990s. Thus, when the counterparts of M3 are considered, the main driver of strong monetary growth remains the expansion of credit to the private sector.

Taking the appropriate medium-term perspective, the latest developments are consistent with a continuation of the persistent upward trend in the underlying rate of monetary expansion, identified by the ECB's monetary analysis since mid-2004. Furthermore, following several years of robust monetary growth, the liquidity situation in the euro area is ample by all plausible measures. Continued strong monetary and credit growth in an environment of ample liquidity point to upside risks to price stability over the medium to longer term. Monetary developments therefore continue to require very careful monitoring, particularly against the background of improved economic conditions and strong property market developments in many parts of the euro area.

To sum up, annual inflation rates are projected to remain elevated in 2006 and 2007, with risks to this outlook remaining clearly on the upside. Given the ongoing marked dynamism of monetary growth in an environment of ample liquidity, a cross-check of the outcome of the economic analysis with that of the monetary analysis supports the assessment that upside risks to price stability prevail over the medium to longer term. It is essential that inflation expectations remain firmly anchored at levels consistent with price stability. If the Governing Council's assumptions and baseline scenario continue to be confirmed, it will remain warranted to further withdraw monetary accommodation. Acting in a firm and timely manner remains essential to ensuring price stability over the medium term. The Governing

Council will therefore exercise strong vigilance.

As regards fiscal policy, euro area countries have recently notified their deficit and debt figures for 2005 to the European Commission, and most have reported on developments in 2006 and budget plans for 2007. While, on average, this information points to further, albeit slow, improvements in budget balances, this should not give rise to complacency. It is important that commitments under the revised Stability and Growth Pact are met in all euro area countries. It is essential that budgetary consolidation is strengthened in the current economic upswing and that pro-cyclical policies are avoided. This would boost confidence among market participants and the public. To that effect, any revenue windfalls from faster than expected growth should be pre-committed and used in full to speed up deficit reduction or to increase surpluses in good times. The prospects for attaining sound budgetary positions improve when consolidation plans are based on credible commitments to reduce expenditure ratios and better expenditure control mechanisms. Finally, the Governing Council reiterated previous calls for high-quality statistical data and sound statistical reporting, which are key for the prevention and correction of budgetary imbalances.

As regards structural reforms, the Governing Council stressed the importance of creating a fully operational Single Market and flexible product and labour markets in order to enhance the adjustment capacity of the euro area economy and its resilience to external shocks. Liberalising product markets to allow more competition would raise incentives for firms to invest and innovate, thereby raising productivity growth. Removing labour market rigidities and distortions in wage and price formation are key conditions for promoting more homogeneous cost and price competitiveness trends among euro area countries and for generating sustained output growth and job creation. In particular, wage increases should be guided, in general, by the trend in labour productivity growth, while taking full account of the present level of unit labour costs, in order to preserve or restore price competitiveness. Moreover, it is desirable that wage settlements move away from automatic, backward-looking indexation mechanisms. The successful implementation of reforms aimed at removing rigidities and inefficiencies in euro area countries would raise potential growth and employment prospects.

This issue of the Monthly Bulletin contains three articles. The first article reviews the notion of monetary policy "activism". The second article examines the Eurosystem's experience with fine-tuning operations at the end of the reserve maintenance period since autumn 2004. The third article reviews the main factors behind financial developments in central, eastern and south-eastern Europe.

**ECONOMIC
AND MONETARY
DEVELOPMENTS**

The external
environment
of the euro area

ECONOMIC AND MONETARY DEVELOPMENTS

I THE EXTERNAL ENVIRONMENT OF THE EURO AREA

The global economy is continuing to expand at a robust pace, despite evidence of some gradual moderation in growth momentum. Consumer price inflation has declined somewhat in several countries, mainly reflecting the fall in oil prices. Risks to the global economic outlook continue to be tilted somewhat to the downside.

1.1 DEVELOPMENTS IN THE WORLD ECONOMY

The global economy is continuing to expand at a robust pace, despite evidence of a gradual moderation in growth momentum. Although industrial production in the OECD countries (excluding the euro area) continued to grow at a rather robust pace in July (see Chart 1), survey evidence and available country data suggest that global manufacturing activity may have moderated somewhat subsequently. This appears to have been accompanied by a more pronounced slowdown in the global services sector.

With regard to price developments, the significant decrease in oil prices since early August has translated into some decline in annual consumer price inflation in a number of countries. Producer prices and survey evidence on input prices also suggest that inflationary pressures may have eased recently at the global level.

Chart I Industrial production in OECD countries

(annual percentage changes; monthly data)

— OECD excluding euro area
····· United States
-- Japan

Sources: OECD and ECB calculations.
Note: Last observation refers to August 2006 except for the OECD excluding euro area (July 2006).

UNITED STATES

In the United States, advance estimates of real GDP growth in the third quarter of 2006 show that the pace of economic expansion moderated to 0.4% on a quarterly basis from 0.6% in the previous quarter. The decline in real GDP growth in the third quarter reflected primarily a drop in residential investment, while a moderation in the consumption of services, weak inventory investment and an acceleration of imports also played a role. Household consumption was nevertheless surprisingly resilient in the face of the housing slowdown, while investment outlays in non-residential structures and equipment and software remained robust.

The rate of expansion in the US economy is expected to remain below trend in the near future. In line with a slowdown in the housing market, the associated impact on household wealth is likely to restrain consumer spending. At the same time, the inventory overhang in the housing market may imply a further decline in residential investment. Solid gains in labour income and the recent decline in the price of oil may, however, offset the negative effects on consumption emanating from the housing sector. Non-residential business investment spending is likely to be supported by sound corporate balance sheets and strong profitability.

In August, the trade deficit in goods and services widened to a record USD 70 billion. Compared with the previous month, import growth outpaced export growth in nominal terms. Following the fall in oil prices, some decline in the trade deficit may be expected in the coming months. Box 1 reviews recent developments in global imbalances.

Consumer price inflation eased considerably in September as a result of the decline in energy prices, in combination with a much smaller, but fairly broad-based moderation in the non-energy components. Looking ahead, price pressures should gradually abate in the context of the ongoing moderation of economic activity, lower oil prices and contained inflation expectations. However, given the tightness of the labour market as well as the uncertainty regarding the lags and degree to which easing economic activity translates into decelerating prices, some upside risks to inflation remain.

On 25 October 2006 the US Federal Open Market Committee decided to keep its target for the federal funds rate unchanged at 5.25%.

JAPAN
In Japan, economic activity is continuing to recover steadily, while consumer prices continue to increase at a moderate pace. Output is being driven by strong exports and steady domestic demand, the latter being supported notably by strong business investment. The results of the Bank of Japan's latest Tankan survey indicated a further improvement in business conditions for large manufacturers in the third quarter of 2006. Large non-manufacturers continued to report favourable business sentiment. Moreover, the companies questioned reported higher expected sales, profits and fixed investment plans for the current fiscal year ending in March 2007.

As regards price developments, consumer price inflation continued to increase in September, to 0.6% on an annual basis (0.2% excluding fresh food). Producer price inflation remains high by historical standards, edging up further in September to 3.6%, reflecting high commodity and basic materials prices as well as strong final demand.

UNITED KINGDOM
In the United Kingdom, according to preliminary estimates, GDP growth continued to expand at the steady quarterly pace of 0.7% in the third quarter. Output in services and manufacturing weakened marginally compared with the previous quarter, although this was compensated by a better performance in the remaining sectors. On the expenditure side, weaker retail sales data for the third quarter point to some moderation in private consumption growth. Business survey data suggest slightly stronger

Chart 2 Main developments in major industrialised economies

euro area ·········· United States ▬ ▬ ▬ Japan ▬ United Kingdom

Output growth [1]
(quarter-on-quarter percentage changes; quarterly data)

Inflation rates [2]
(consumer prices; annual percentage changes; monthly data)
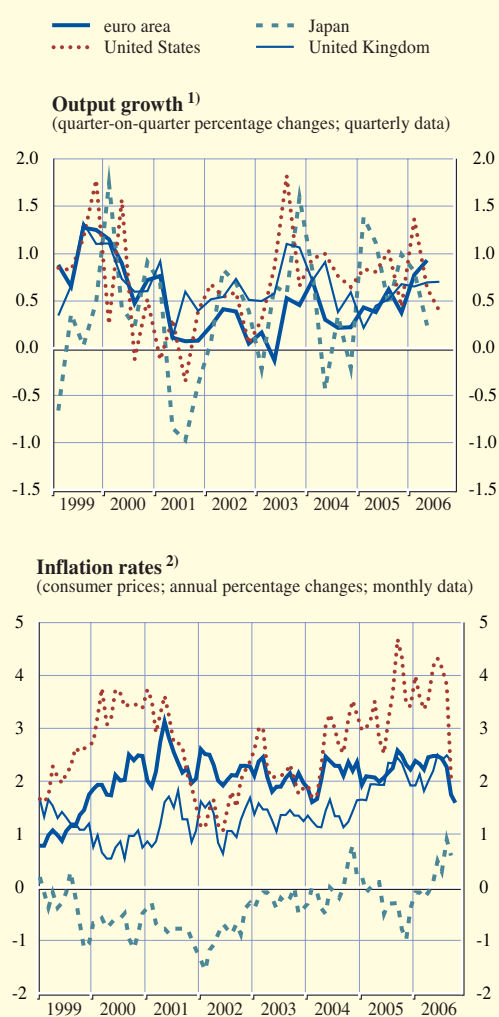
Sources: National data, BIS, Eurostat and ECB calculations.
1) Eurostat data are used for the euro area and the United Kingdom; national data are used for the United States and Japan. GDP figures have been seasonally adjusted.
2) HICP for the euro area and the United Kingdom; CPI for the United States and Japan.

**ECONOMIC
AND MONETARY
DEVELOPMENTS**

The external
environment
of the euro area

export growth and higher investment intentions in the coming months. Against this background, the growth momentum in the fourth quarter of this year is expected to remain broadly unchanged.

Annual HICP inflation in September was 2.4%, equalling its average value in the third quarter. The considerable drop in prices of fuels and lubricants offset the negative impact of higher gas prices and university tuition fees. On the basis of data up to August, wage growth has remained subdued, while annual growth in house prices seems to have stabilised at around 8%.

OTHER EUROPEAN COUNTRIES
In most other EU countries outside the euro area, output growth remained strong in the second quarter of 2006, with domestic demand being the main driver. In many new EU Member States, growth has also been supported by strong exports, largely related to past foreign direct investment inflows. In most countries, annual HICP inflation decreased in September, mainly on account of a decrease in the energy component due to a base effect and favourable developments in oil prices. At the same time HICP excluding energy increased in most countries.

In Denmark, the quarterly rate of real GDP growth picked up strongly, to 1.6%, in the second quarter of 2006, while in Sweden it remained high at 1.3%, albeit slightly lower than in the previous quarter. In both countries, economic activity has been sustained by rather robust domestic demand. Annual HICP inflation eased further in September in both countries, to 1.5% in Denmark and 1.2% in Sweden. On 5 October Danmarks Nationalbank decided to raise its main policy rate by 25 basis points in line with the ECB's decision. Sveriges Riksbank also decided to increase its main policy rate by 25 basis points on 26 October.

In the three largest central European economies, the Czech Republic, Hungary and Poland, quarterly output growth remained robust in the second quarter of 2006, at between 0.9 and 1.2%. In the Czech Republic and Poland, output growth was driven mainly by domestic demand, whereas in Hungary it was by net exports. In September, annual HICP inflation declined in the Czech Republic and Poland to 2.2% and 1.4% respectively. By contrast, it rose significantly in Hungary to 5.9%, reflecting the impact of administered price rises and indirect and direct tax increases. HICP inflation excluding the energy component increased in all three countries in September. On 24 October Magyar Nemzeti Bank decided to increase its main policy rate by 25 basis points, citing growing inflationary concerns.

In the other EU Member States, economic activity has remained robust. Moreover, inflation decreased in most countries in September. Overall, prospects for economic growth in the region remain favourable.

EMERGING ASIA
In emerging Asia, economic activity moderated somewhat in the third quarter, following its strong performance in the first half of the year. Domestic activity slowed in most major economies in the region, whereas trade, and more particularly intra-regional trade, maintained the strong momentum seen in the first half of the year. The smaller economies in the region, where domestic demand was relatively more sluggish in the first half of the year, have benefited the most from the robust growth in intra-regional trade. Overall, the external sector has remained an important driver of growth across the region. Inflation changed little in September vis-à-vis August.

In China, GDP growth slowed to 10.4% year on year in the third quarter, down from 11.3% in the previous quarter. While official statistics on the expenditure components of Chinese GDP are not available on a quarterly basis, monthly indicators of economic activity suggest that investment softened in the third quarter and that the sources of growth have shifted somewhat towards consumption and, increasingly, foreign trade. While the slowdown in investment can be largely attributed to the tightening measures introduced by the authorities earlier in the year, the economy has continued to display strong dynamism, in particular retail sales and external trade. As regards price developments, inflationary pressures have increased slightly in recent months, with annual CPI inflation rising to 1.5% in September from 1.3% in August.

Overall economic prospects remain favourable for emerging Asia, underpinned by steady growth in domestic demand and the robust momentum of foreign trade. Steady, albeit slightly moderating growth in China is likely to support exports and activity in the region. Excess capacity in some sectors of China's economy is still the main downside risk to this outlook.

LATIN AMERICA

In Latin America, available indicators suggest a continuation of the growth momentum in the third quarter. In Mexico, industrial production expanded at an annual rate of 5.8% in August while headline inflation increased somewhat. In Argentina, economic activity indicators point towards some acceleration in economic activity as shown by robust industrial production growth in August. Annual CPI inflation remained high at slightly above 10% in September. Finally, in Brazil, while retail sales and industrial production data point towards a slight recovery in the third quarter, annual inflation continued its gradual decline, reaching 3.7% in September. Looking ahead, the prospects for the region remain favourable insofar as the downside risk of weaker than expected external demand does not materialise.

Box I

GLOBAL IMBALANCES: RECENT DEVELOPMENTS AND POLICY REQUIREMENTS

The diverging pattern of current account positions that have been observed at the global level for a number of years raises two important questions. First, while it can be expected that some countries may run deficits for a considerable period of time, the fact that the world's largest economy is recording increasingly large deficits – currently absorbing around 75% of world net savings – has a material effect on global trade and financial patterns (Chart A). Indeed, the continuing accumulation of large deficits, even if they can be easily financed in the short to medium term, will eventually lead to the accumulation of large and likely unsustainable levels of net foreign liabilities, which needs to be addressed. Second, the fact that most emerging markets run current account surpluses and the United States a deficit is, in many respects, puzzling, since it implies that spending by one of the world's richest economies is financed by economies with far lower income levels.[1] While there is no agreed benchmark to assess the optimality of private agents' investment decisions, the fact that the public sector plays an important role in the current pattern of global imbalances – through the stance of macroeconomic

1 According to standard neoclassical macroeconomic theory, capital should actually flow from rich countries to poor countries, where returns are higher. Several explanations have been provided, highlighting the possibility that emerging market economies may have reduced capacity to absorb foreign savings. See, for instance, E. Prasad, R. Rajan and A. Subramaniam (2006), "Patterns of international capital flows and their implications for economic development", IMF Research Department.

**ECONOMIC
AND MONETARY
DEVELOPMENTS**

The external
environment
of the euro area

policies or the large accumulation of foreign exchange reserves – calls for a careful assessment of the factors behind these imbalances.

The resolution of current account imbalances is complicated by the complex nature of the balance of payments. While the saving-investment perspective of the current account highlights the role of domestic factors in the adjustment, the financial account perspective emphasises the role of foreign residents, including central banks. Against this background, this box first reviews the current account developments in the world's main economic regions and then turns to selected cross-border issues, focusing in particular on the structure of US net foreign liabilities and on recent exchange rate developments.

Chart A Current account positions for selected regions

(USD billions)

China
Japan
oil exporters
United States
euro area
central and eastern Europe

Source: IMF's World Economic Outlook (estimates for 2006).

Current account developments in the world's main economic regions

In the United States, the current account deficit has recorded a substantial increase in recent years, from less than 4% of GDP in 2001 to nearly 7% in 2006. This rise was mostly accounted for by a fall in net domestic saving, from 4% to almost 0%, which stemmed mostly from the household and public sectors. Meanwhile, investment decreased markedly in the early 2000s, but has partially recovered over the last three years. Although an increase in government net saving is likely to result partly in a decrease in private saving (the so-called Ricardian effect), on the whole it is expected to lower the current account deficit.

By contrast, China has been running high and increasing current account surpluses due, in particular, to its very robust export performance and, more recently, to a deceleration in imports. Between 2000 and 2005 China's import share in all large foreign markets increased, rising from around 5% to 10% in the euro area, from below 9% to 15% in the United States and from 14.5% to 21% in Japan. These gains can be related to the price competitiveness of Chinese exports and the economy's role in processing trade from components imported from the rest of Asia. This also raises the question of the undervaluation of the renminbi, which is by now documented in several studies (even if they tend to report very heterogeneous estimates).[2] The noticeable increase in China's current account surplus can be associated, in particular, with a rapid increase in domestic saving, which has risen from 35% of GDP in 2000 to currently above 50%. Domestic investment has also risen over this period, albeit at a slower pace.

The current account position of the euro area has remained broadly balanced in recent years (see Chart 30 in Section 5). As of August 2006, the 12-month cumulated euro area current
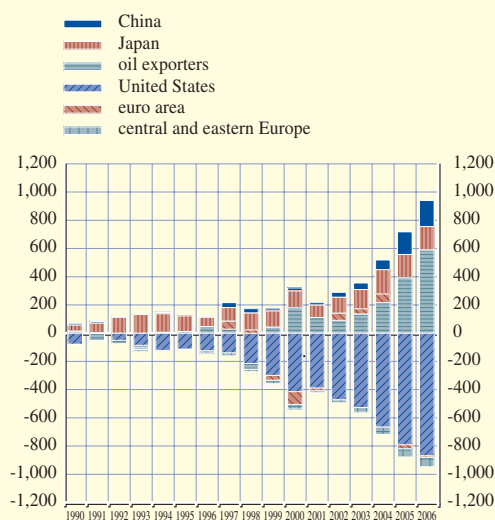
2 Such estimates can be found, for instance, in G. Chang, and Q. Shao, "How much is the Chinese currency undervalued? A quantitative estimation", *China Economic Review,* 15, 2004, 366-371; S. Dunaway et al., "How Robust are Estimates of Equilibrium Real Exchange Rates: The Case of China", IMF WP 06/220 and J. Frankel, "On the renminbi", CESifo Forum 3/2005.

account deficit vis-à-vis the rest of the world reached around 0.5% of GDP. However, this does not imply that the euro area has no role in the resolution of global imbalances. The euro area being a large and open economy (it is the world's largest exporter, accounting for 17.5% of total exports, and the world's second largest importer after the United States), it can, through higher potential growth, participate in the global rebalancing process.

Japan, whose current account surplus increased from 2.1% of GDP in 2001 to 3.8% in 2004 and 3.6% in 2005, also has a role to play in the unwinding of global imbalances. The rise in Japan's current account surplus can be attributed to a fall in investment in the early 2000s, while savings started to increase in 2003. The gross domestic saving rate in Japan – currently 27% of GDP – is significantly above that of other large advanced economies (e.g. 13% in the United States, 20% in the euro area).

Finally, oil-exporting countries account for an increasing share of global imbalances. Since the early 2000s they have registered rising current account surpluses and account, with a surplus of nearly USD 600 billion in 2006, for the highest share of these surpluses. The large increase in the trade balance corresponds very closely to the rise in oil prices recorded over the period. The associated windfall revenues have resulted in an increase in savings, which now represent over 35% of GDP, whereas aggregate investment has remained broadly stable at around 20% of GDP over this period.

Global financing patterns underlying imbalances

Cross-border financial issues are another essential dimension of global imbalances. From the perspective of cross-border capital flows, the financing of the US current account deficit has been facilitated by three factors. First, the US economy has been very dynamic in recent years

Chart B Equity and debt home bias

(percentage)

- rest of the world equity home bias [1]
- rest of the world debt home bias [1]
- US equity home bias
- US debt home bias
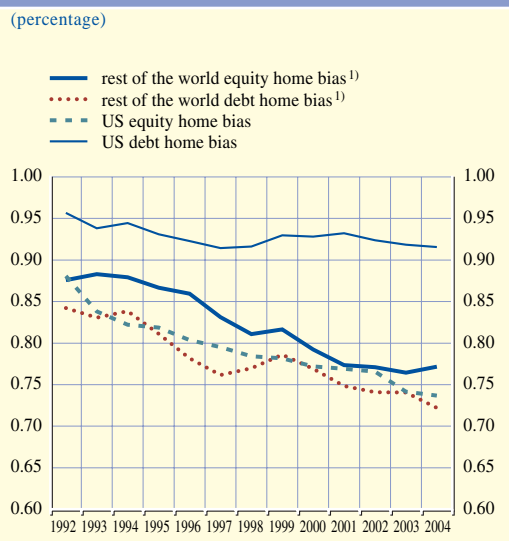
Source: ECB calculations based on IMF's International Financial Statistics and Standard and Poor's Global Stock Markets Factbook.
1) Rest of the world relates to the world excluding the United States.

Chart C US dollar nominal effective exchange rate

(January 2002 = 100)

- broad index against 26 countries
- against 7 currencies of industrialised countries and regions: euro, GBP, JPY, AUS, CAD, SEK and CHF
- against 19 emerging market economies and other countries
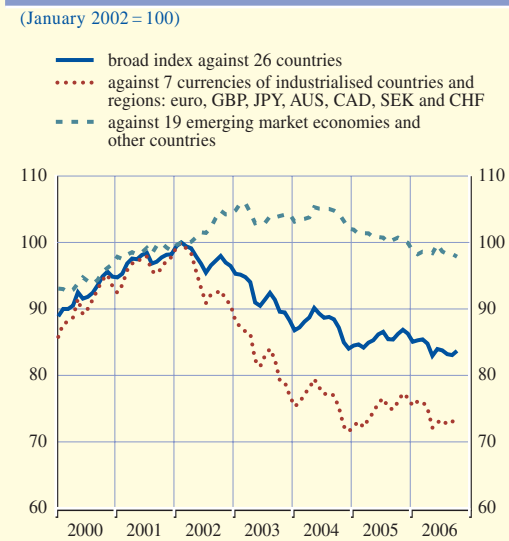
Source: Federal Reserve System and ECB staff calculations.

**ECONOMIC
AND MONETARY
DEVELOPMENTS**

The external
environment
of the euro area

and has registered productivity gains above 2% per year since 1996. A second potential factor is related to the evolution of portfolio home bias[3] in the United States and abroad (some ECB staff estimates are reported in Chart B). Since 1992, the aggregate home bias of countries other than the United States has continuously declined both for equity (by around 10%) and for debt securities (by around 12%). This is consistent with the fact that non-US residents have been willing to purchase US debt securities, although the returns on US debt assets have been low for most of the period under consideration. Taking a US perspective, home bias has also decreased, albeit significantly more for equity (by around 14%) than for debt, for which it remains above 90%. The decrease in US home bias for equity is consistent with the fact that US purchases of foreign equities have generally strengthened, while interest from US investors in debt issued abroad has remained lacklustre.[4] Third, asymmetries in the portfolio holdings of US and foreign residents are key to capturing another important feature of US debt dynamics. Indeed, for the United States, the stock of net foreign liabilities (around 22% of GDP) is substantially lower than accumulated past current account positions (above 40%), although over the long run the two should, in theory, correspond. A significant part of this difference relates to substantial valuation gains, stemming from return differentials on investment in the United States and abroad, and to exchange rate changes.

One of the counterparts of the financing of the US current account deficit has been the accumulation of foreign reserves by other countries, which in the recent period mostly comprise the oil-exporting countries and China.[5] In the case of the oil exporters, the accumulation of low interest-bearing reserves partly reflects limited domestic investment opportunities. However, progress has been made in recent years with the development of oil and heritage funds and local stock exchange markets. In the case of China, the large accumulation of international reserves since the early 2000s (increasing from around USD 150 billion at the beginning of 2000 to nearly USD 1 trillion today) raises several issues concerning the conduct of monetary policy. Indeed, the People's Bank of China has had to increasingly sterilise the domestic monetary expansion resulting from foreign exchange intervention. In addition to the risk of valuation losses in the balance sheet of the monetary authorities, the current arrangement limits the extent to which monetary policy can address domestic issues, in particular those related to the risk of overheating in the Chinese economy.

Turning to exchange rate developments, the US dollar has depreciated by around 16% in nominal effective terms – as measured against the currencies of 26 trading partners – since 2002 (see Chart C). This reflects very different changes across groups of countries: against the currencies of seven major industrialised countries and regions together, the US dollar has depreciated by as much as 26%, whereas it has remained broadly stable against the currencies of most emerging market economies. This pattern reflects the fact that many of the countries in the latter group maintain de facto pegged or tightly managed exchange rates with the US dollar. This observation has led to greater calls for actual exchange rate flexibility in emerging economies, which nowadays account for roughly 45% of trade with the United States.

3 The concept of home bias refers to the fact that investors worldwide seem to be excessively investing in their home country. For a given country, having no home bias would imply that the share of foreign financial assets in its portfolio is equal to the share of the rest of the world's financial market capitalisation in world market capitalisation.
4 See Federal Reserve Bulletin "Understanding U.S. Cross-Border Securities Data", May 2006.
5 Note: the figures on international reserves of oil exporters may not be directly comparable, as different countries follow different practices regarding their investments, including through oil stabilisation funds.

1.2 COMMODITY MARKETS

Oil prices have declined sharply in recent months, retreating significantly from the all-time high reached in early August. A noticeable decline in geopolitical tensions, the receding threat from hurricanes in the Gulf of Mexico and the easing of recent petrol market tightness have prompted the recent fall in oil prices. Brent crude oil prices reached their lowest level since mid-February at the beginning of October, slipping below USD 59 per barrel, approximately 25% below their August record highs. The downside momentum was, however, halted as rumours of possible OPEC output cuts emerged. At the Consultative Meeting on 19-20 October, OPEC ministers agreed to cut current production levels by a larger than expected 1.2 million barrels per day effective from 1 November. On 31 October Brent crude oil prices stood at USD 59.6 per barrel. Looking ahead, limited spare capacity along the oil supply chain and therefore high sensitivity to unanticipated changes in the supply-demand balance are likely to keep oil

Chart 3 Main developments in commodity markets

— Brent crude oil (USD/barrel; left-hand scale)
····· non-energy commodities (USD; index: 2000 = 100; right-hand scale)

Sources: Bloomberg and HWWA.

prices high and volatile. Market participants currently expect oil prices to remain at elevated levels in the medium term as well, with the December 2008 oil futures contract currently trading at USD 67.2.

Prices of non-energy commodities continued to increase in October. Expressed in US dollar terms, total non-energy commodity prices were approximately 35% higher towards the end of October than a year earlier, supported mainly by higher food and metals prices. Prices of metals have risen

**ECONOMIC
AND MONETARY
DEVELOPMENTS**

The external
environment
of the euro area

considerably in recent weeks, following concerns about possible supply disruptions and low inventory levels. Food prices, notably those of cereals as well as oilseed and oils, have also increased substantially in recent weeks.

1.3 OUTLOOK FOR THE EXTERNAL ENVIRONMENT

Overall, the outlook for the external environment, and thus for foreign demand for euro area goods and services, remains favourable. However, the latest composite leading indicators suggest that activity in the OECD countries as a whole may show some further moderation in the coming months. The growth outlook for the major emerging market economies appears to remain strong, with some growth slowdown likely in China. Despite this anticipated moderation, world growth is expected to remain fairly robust and above historical averages for the rest of the year.

The risks to this outlook remain tilted somewhat to the downside. The recent decline in oil prices has mitigated some of these risks, although futures markets indicate market expectations of a renewed increase in oil prices, despite remaining below the peak reached in early August. Risks related to a disorderly unwinding of global economic imbalances and to increased protectionist pressures also persist.

2 MONETARY AND FINANCIAL DEVELOPMENTS

2.1 MONEY AND MFI CREDIT

In September 2006 the annual growth rate of M3 increased further and, after moderation in June and July, almost returned to the peak observed in May. The continued strength of M3 growth is likely to reflect the still low level of interest rates and the improvement in economic conditions in the euro area. On the counterparts side, the impact of these factors is particularly visible in the continued vigorous growth of loans to the private sector. At the same time, the September data provide additional evidence that the recent rises in the key ECB interest rates have started to affect monetary developments, although – at present – mainly by causing shifts among deposit categories within M3. Overall, monetary and credit developments continue to point to upside risks to price stability at medium to longer-term horizons, particularly in an environment of improved economic conditions.

THE BROAD MONETARY AGGREGATE M3

In September 2006 the annual growth rate of the broad monetary aggregate M3 increased further to 8.5%. Following moderation in June and July, annual M3 growth has thus almost returned to the peak observed in May. The annualised six-month rate of growth rose to 9.8% in September, from 9.5% in the previous month (see Chart 4). This renewed strengthening of monetary dynamics reflects a strong month-on-month growth rate of 1.2% in September, after a similarly high growth rate in August.

From a medium-term perspective, current M3 developments do not show any signs of a reversal of the upward trend in the underlying rate of monetary expansion recorded since mid-2004. The latest monetary data also support the assessment that the high rate of monetary growth continues to be largely due to the still low level of interest rates and, as visible in the dynamic loan growth, to the strengthening of economic activity in the euro area. At the same time, the September data provide additional evidence that the recent interest rate increases have started to impact on monetary developments, although thus far mainly by inducing changes in preferred deposit categories within M3, such as shifts from overnight deposits into more highly remunerated instruments, in particular short-term time deposits (i.e. deposits with an agreed maturity of up to two years). Furthermore, in an environment characterised by expectations of increases in short-term interest rates, the strong demand for certain monetary assets such as short-term debt securities may reflect the increasing attractiveness of these assets relative

Chart 4 M3 growth and the reference value

(percentage changes; adjusted for seasonal and calendar effects)

— M3 (three-month centred moving average of the annual growth rate)
····· M3 (annual growth rate)
- - - M3 (annualised six-month growth rate)
— reference value ($4^{1}/_{2}$%)

Source: ECB.

**ECONOMIC
AND MONETARY
DEVELOPMENTS**

Monetary and
financial
developments
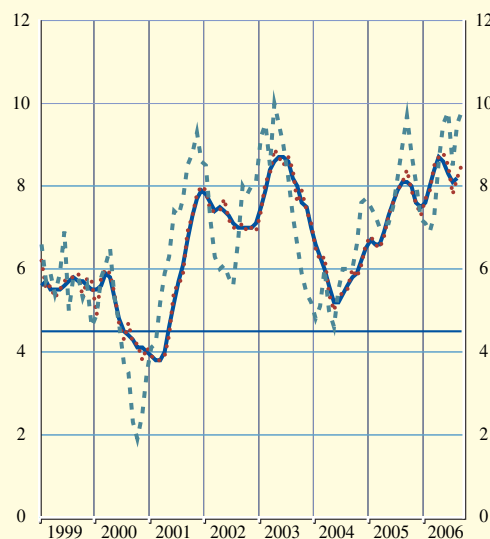
to the returns on alternative longer-term financial assets, given that the differential in returns is currently relatively low.

Overall, money and credit growth remained at a high level. Continued strong money and credit growth in a context of already ample liquidity points to risks to price stability over the medium to longer term, particularly in an environment of improved economic activity and sentiment.

MAIN COMPONENTS OF M3

The September increase in annual M3 growth reflects the higher annual growth rates both of short-term deposits other than overnight deposits and of marketable instruments (see Table 1). At the same time, on account of lower growth rates of both currency in circulation and overnight deposits, the annual growth rate of M1 declined further to 7.1% in September, from 7.2% in August.

The annual rate of growth of short-term deposits other than overnight deposits increased to 10.0% in September, from 9.8% in the previous month. This development mainly reflects a further increase in the demand for short-term time deposits, while the annual growth rate of short-term savings deposits (deposits redeemable at notice of up to three months) continued to decline. The strong demand for short-term time deposits can be explained by an increasing difference between the interest rate offered on these deposits and that available on other short-term instruments in the context of recent interest rate increases.

In September the annual growth rate of marketable instruments included in M3 rose to 9.6%, from 7.0% in August. Among the components of marketable instruments, the already elevated level of demand for debt securities with a maturity of up to two years continued to rise. Demand for such instruments may result from a characteristic feature of some short-term debt instruments, the linkage of the return to the short-term interest rate, which may be attractive in a period of rising interest rates. Furthermore, the annual growth rates of repurchase agreements and money market

Table 1 Summary table of monetary variables

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

	Outstanding amount as a percentage of M3[1]	Annual growth rates					
		2005 Q4	2006 Q1	2006 Q2	2006 Q3	2006 Aug.	2006 Sep.
M1	**47.5**	**10.9**	**10.3**	**9.9**	**7.6**	**7.2**	**7.1**
Currency in circulation	7.4	14.8	13.4	11.9	11.3	11.4	11.0
Overnight deposits	40.0	10.2	9.8	9.5	7.0	6.5	6.4
M2 - M1 (= other short-term deposits)	38.1	5.9	6.8	8.4	9.5	9.8	10.0
Deposits with an agreed maturity of up to two years	17.4	6.5	9.7	15.2	19.8	20.9	21.6
Deposits redeemable at notice of up to three months	20.7	5.3	4.6	3.7	2.4	2.2	1.8
M2	**85.6**	**8.5**	**8.6**	**9.2**	**8.4**	**8.4**	**8.4**
M3 - M2 (= marketable instruments)	14.4	3.7	3.3	5.7	6.5	7.0	9.6
M3	**100.0**	**7.8**	**7.8**	**8.7**	**8.2**	**8.2**	**8.5**
Credit to euro area residents		**7.9**	**8.7**	**9.4**	**9.2**	**9.2**	**9.4**
Credit to general government		2.5	2.3	0.8	-1.0	-1.5	-1.6
Loans to general government		0.0	0.8	0.3	-0.6	-0.8	-0.8
Credit to the private sector		9.4	10.4	11.7	11.9	11.9	12.2
Loans to the private sector		9.0	10.1	11.2	11.2	11.3	11.4
Longer-term financial liabilities (excluding capital and reserves)		**9.5**	**8.8**	**8.8**	**8.6**	**8.6**	**8.7**

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

fund shares/units rose, although – viewed on a monthly basis – the volatility of these series can be relatively high.

The annual growth rate of short-term deposits and repurchase agreements held with MFIs − which represent the broadest aggregation of M3 components for which information is available by holding sector − increased in September. This pick-up was broadly based across all holding sectors, but reflected, in particular, a higher contribution from non-financial corporations and non-monetary financial intermediaries.

MAIN COUNTERPARTS OF M3

On the counterparts side, the annual growth rate of MFI loans to the private sector increased to 11.4% in September, from 11.3% in August, reaching the highest level since January 1999. The ongoing strong demand for loans reflects both the improvement in economic conditions in the euro area and the still low level of interest rates. At the same time, the strengthening of aggregate loan dynamics in September masks divergent sectoral developments.

The annual rate of growth of loans to households declined further, albeit only slightly, to 9.1% in September, from 9.2% in August. Despite the moderation seen in recent months, growth in loans to households remained strong. The overwhelming share of household borrowing continued to be explained by loans for house purchase, which grew at an annual rate of 11.0% in September, after 11.1% in the previous month (see Table 2). Strong borrowing for house purchases reflects the continued low level of mortgage lending rates in the euro area as a whole and the robust housing market dynamics observed in many regions. However, in the bank lending survey of October 2006, banks – on balance – reported signs of demand for loans for house purchase slowing down. On the supply side, the bank lending survey pointed to rising concerns about housing market prospects, which had a tightening impact on the credit standards applied to loans to households (see Box 2 entitled "The results of the October 2006 bank lending survey for the euro area"). The annual growth rate of consumer credit declined to 8.3% in September (from 8.4% in the previous

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 [1]	Annual growth rates					
		2005 Q4	2006 Q1	2006 Q2	2006 Q3	2006 Aug.	2006 Sep.
Non-financial corporations	**41.5**	**7.7**	**9.2**	**11.0**	**11.9**	**12.0**	**12.7**
Up to one year	29.7	5.2	6.7	8.4	9.2	9.2	10.5
Over one and up to five years	18.3	8.5	11.5	15.8	19.0	19.5	20.6
Over five years	52.0	8.9	10.0	11.0	11.2	11.2	11.4
Households [2]	**49.7**	**9.0**	**9.6**	**9.8**	**9.3**	**9.2**	**9.1**
Consumer credit [3]	13.1	7.8	8.2	8.2	8.5	8.4	8.3
Lending for house purchase [3]	70.6	11.1	11.8	12.1	11.3	11.1	11.0
Other lending	16.3	2.3	2.1	2.1	2.3	2.3	2.5
Insurance corporations and pension funds	**1.0**	**29.3**	**32.9**	**41.2**	**36.7**	**34.3**	**37.1**
Other non-monetary financial intermediaries	**7.8**	**14.1**	**16.2**	**19.0**	**17.2**	**19.3**	**17.2**

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.

**ECONOMIC
AND MONETARY
DEVELOPMENTS**

Monetary and
financial
developments

Chart 5 Counterparts of M3

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

- credit to the private sector (1)
- credit to general government (2)
- net external assets (3)
- longer-term financial liabilities (excluding capital
  and reserves) (4)
- other counterparts (including capital and reserves) (5)
- M3
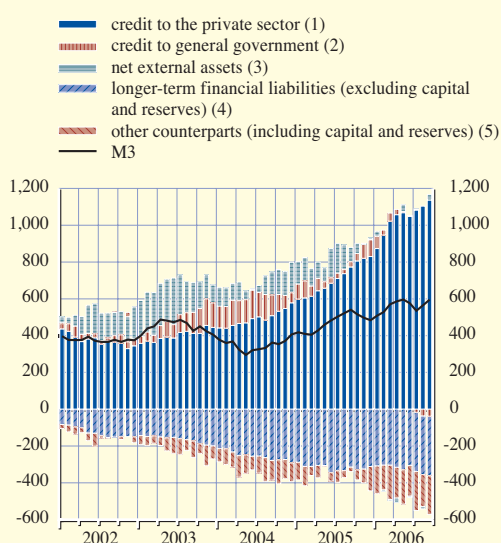
Source: ECB.
Notes: M3 is shown for reference only (M3 = 1+2+3-4+5).
Longer-term financial liabilities (excluding capital and
reserves) are shown with an inverted sign, since they are
liabilities of the MFI sector.

month), but it is still close to its peak of 8.7% in July, the highest level observed since late 1999.

By contrast with loans to households, the annual growth rate of MFI loans to non-financial corporations continued to rise in September, reaching 12.7%. The upward trend observed since early 2004 has thus persisted. This further strengthening was broadly based across loan maturities, which is likely to reflect the general impact of improved economic conditions and favourable conditions for external financing, despite some increase in the cost of debt financing in the past few months. The October 2006 bank lending survey suggests that the factors driving the strong demand for loans by non-financial corporations are the strengthening of fixed investment growth, the increase in inventories and, albeit to a lesser extent than in previous survey rounds, merger and acquisition (M&A) activities.

Looking at developments in overall MFI credit granted to euro area residents, the annual growth rate in September increased somewhat in comparison with the previous month. This conceals a further moderation in the annual growth rate of credit granted to government, and a further strengthening in the growth of credit granted to the private sector. The increase in the exposure of MFIs to the private sector is thus reflected not only in stronger lending to the private sector, but also in MFIs' higher acquisitions of securities issued by the private sector.

Among the other counterparts of M3, the annual growth rate of MFIs' longer-term financial liabilities (excluding capital and reserves) remained broadly unchanged at 8.7% in September. In the 12 months to September, the net external asset position of MFIs increased by €30 billion, after decreasing by €11 billion in the year to end-August (see Chart 5). Therefore, the annual flow in the net external asset position of MFIs remained low, although the change compared with August implied a slightly larger external contribution to annual M3 growth.

Summing up the information from the counterparts, the low level of interest rates and the improved economic conditions continued to be the main driving forces behind the strength of MFI loans to the private sector. At the same time, the external contribution to the annual growth rate of M3 was marginal, as reflected in the broadly balanced net external asset position of the MFI sector. This confirms the assessment that the strength of the monetary expansion is currently being underpinned mainly by domestic factors.

Box 3 entitled "Worldwide trends in monetary aggregates: some conceptual issues" looks into issues related to the construction of global monetary aggregates used to analyse developments at the global level.

THE RESULTS OF THE OCTOBER 2006 BANK LENDING SURVEY FOR THE EURO AREA

This box describes the main results of the October 2006 bank lending survey for the euro area, which has been conducted by the Eurosystem.[1] During the third quarter of 2006, respondent banks reported broadly unchanged net credit standards for loans to enterprises,[2] continuing the pattern from the previous quarter. At the same time, banks also reported strong positive net demand for loans to enterprises[3] in the third quarter, although this was slightly below the level reported for the previous quarter. For the fourth quarter of 2006, banks expect net demand for loans to corporations to remain very robust and even to increase amid unchanged credit standards. According to respondent banks, financing needs more closely related to the level of economic activity have become the major factors contributing to positive net loan demand.

As regards households, banks also reported almost unchanged credit standards applied to loans to households for housing purposes during the third quarter of 2006. This development, which follows the net easing reported in the previous two quarters, partly reflects a more cautious assessment of housing market prospects. During the same period, net demand for housing loans to households, as perceived by banks, continued to decline and reached a negative value for the first time since the start of the bank lending survey in April 2003. This negative net demand is expected to persist through the last quarter of 2006, during which banks also plan to keep credit standards for housing loans to households mostly unchanged.

Credit standards on consumer credit and other lending to households registered a net easing in the third quarter of 2006 which was similar in magnitude to that of the previous quarter and which is expected to continue through the last quarter of 2006. Net demand for consumer credit declined slightly from the second to the third quarter of 2006, but continued to be very robust. It is expected to increase in the last quarter of 2006.

Loans or credit lines to enterprises

Credit standards: For the third quarter of 2006, banks reported that net credit standards for loans or credit lines to enterprises were largely unchanged at 1%, compared with 2% in the previous quarter (see Chart A, panel a). The results for the last two quarters confirm that credit conditions have remained broadly unchanged over the last few quarters, despite some short-term volatility. Banks also plan to leave corporate credit standards unchanged for the next quarter.

Underlying this development, pressures from competition weighed towards an easing of credit standards, as has been the case in previous quarters (see Chart A, panel e). On the other hand, the industry or firm-specific outlook, as well as higher costs related to banks' capital, continued to contribute to a net tightening of credit standards (see Chart A, panels b and d). Regarding

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1 A comprehensive assessment of the results of the October 2006 bank lending survey for the euro area was published on 3 November 2006 on the ECB's website.

2 The net percentage refers to the difference between the proportion of banks reporting that credit standards have been tightened and the proportion of banks reporting that they have eased. A positive net percentage would indicate that banks have tended to tighten credit standards ("net tightening"), whereas a negative net percentage would indicate that banks have tended to ease credit standards ("net easing").

3 The term "net demand" refers to the difference between the proportion of banks reporting an increase in loan demand and the proportion of banks reporting a decline.

**ECONOMIC
AND MONETARY
DEVELOPMENTS**

Monetary and
financial
developments

Chart A Changes in credit standards applied to the approval of loans or credit lines to enterprises

(net percentages)

Notes: The net percentages refer to the difference between the sum of the percentages for "tightened considerably" and "tightened somewhat" and the sum of the percentages for "eased somewhat" and "eased considerably". The net percentages for the questions related to the factors are defined as the difference between the percentage of banks reporting that the given factor contributed to tightening and the percentage reporting that it contributed to easing. "Realised" values refer to the period in which the survey was conducted. "Expected" values are the net percentages calculated from the responses given by the banks in the previous survey. For instance, "expected" values for the fourth quarter of 2006 were reported by banks in the October 2006 survey.

the terms and conditions of credit, banks eased credit standards partly by means of lower collateral requirements, but mainly through a narrowing of margins on average loans, although the latter was less intense than in the previous quarter. As in earlier quarters, a net widening of the margins on riskier loans was observed, possibly corresponding to the perceived higher risks concerning the industry or firm-specific outlook.

In terms of the borrower's size, net credit standards applied to large enterprises remained almost unchanged, whereas standards applied to small and medium-sized enterprises eased somewhat. As regards maturity, net credit standards, both for short and long-term loans, remained largely unchanged from the previous quarter.

Loan demand: In line with the previous four surveys, net demand for loans to enterprises continued to be very strong in the third quarter of 2006, although it was slightly weaker than in the July 2006 survey (16% in October, compared with 20% in July 2006; see Chart B, panel a). Net loan demand is expected to increase further in the fourth quarter of this year. In terms of the borrower's size, net loan demand continues to be stronger for small and medium-sized enterprises (21%) than for large corporations (15%) and is at a similar level to the previous quarter for both size classes.

According to respondent banks, financing needs more closely related to the level of economic activity – namely inventories, working capital and fixed capital investments – have become the major factors contributing to positive net loan demand (see Chart B, panels b and c). This is a continuation of a trend that started in the third quarter of 2005. In parallel, other factors of a more financial nature – for example, financing needs for M&A and debt restructuring activity – have also continued to contribute to net loan demand, although the importance of such factors has been decreasing compared with previous quarters (see Chart B, panel d). At the same time,

Chart B Changes in demand for loans or credit lines to enterprises

(net percentages)

— realised
····· expected

Factors contributing to increasing demand

Notes: The net percentage refers to the difference between the sum of the percentages for "increased considerably" and "increased somewhat" and the sum of the percentages for "decreased somewhat" and "decreased considerably". "Realised" values refer to the period in which the survey was conducted. "Expected" values are the net percentages calculated from the responses given by the banks in the previous survey. For instance, "expected" values for the fourth quarter of 2006 were reported by banks in the October 2006 survey.

increased use of alternative – mostly internal – sources of finance has helped to moderate net demand developments (see Chart B, panel e).

Loans to households for house purchase

Credit standards: Banks left credit standards for loans to households for house purchase broadly unchanged in the third quarter of 2006 and do not envisage altering them for the last quarter of the year. This contrasts with the net easing implemented in the first two quarters of 2006 (see Chart C, panel a). As in previous quarters, competition from other banks was the main factor supporting looser credit standards (see Chart C, panel d). At the same time, housing market prospects became a net contributor to tighter credit standards (see Chart C, panel c). Margins on average loans were eased in net terms (albeit to a lesser extent than in previous quarters). Loan-to-value ratios and lengthened loan maturities also contributed to easing. By contrast, margins on riskier loans were tightened in net terms.

Loan demand: Net demand for loans to households for house purchase continued to decline, reaching a negative value in the third quarter of 2006 (decreasing from 4% in July to -6% in October). Respondent banks also expect net demand to remain at -6% for the fourth quarter of 2006 (see Chart D, panel a). A deterioration in housing market prospects, as well as loans from other banks and a decline in the contribution of non-housing-related consumption expenditure, contributed to this net decrease in loan demand. This is the first time since the launch of the bank lending survey that housing market prospects have not contributed positively to net loan demand. On the other hand, consumer confidence and household savings contributed, to some extent, to positive net loan demand.

Chart C Changes in credit standards applied to the approval of loans to households for house purchase

(net percentages)

— realised
····· expected

Factors contributing to tightening credit standards

Notes: The net percentages refer to the difference between the sum of the percentages for "tightened considerably" and "tightened somewhat" and the sum of the percentages for "eased somewhat" and "eased considerably". The net percentages for the questions related to the factors are defined as the difference between the percentage of banks reporting that the given factor contributed to tightening and the percentage reporting that it contributed to easing. "Realised" values refer to the period in which the survey was conducted. "Expected" values are the net percentages calculated from the responses given by the banks in the previous survey. For instance, "expected" values for the fourth quarter of 2006 were reported by banks in the October 2006 survey.

Chart D Changes in demand for loans to households for house purchase and consumer credit

(net percentages)

— realised
····· expected

Notes: The net percentage refers to the difference between the sum of the percentages for "increased considerably" and "increased somewhat" and the sum of the percentages for "decreased somewhat" and "decreased considerably". "Realised" values refer to the period in which the survey was conducted. "Expected" values are the net percentages calculated from the responses given by the banks in the previous survey. For instance, "expected" values for the fourth quarter of 2006 were reported by banks in the October 2006 survey.

Loans for consumer credit and other lending to households

Credit standards: In the third quarter of 2006, the credit standards applied to the approval of consumer credit and other lending to households eased on a net basis at -6%, as in the previous quarter (see Chart E, panel a). Those standards are expected to remain at that level in the next quarter. Among the factors contributing to the net easing of credit standards were competitive pressures from other banks and non-banks, as well as slightly more favourable expectations regarding general economic activity (see Chart E, panels b and c). The net contributions of these factors were, however, less intense than in the previous quarter. With regard to terms and conditions, the easing of credit standards for consumer credit and other lending to households was mainly implemented by acting on margins on average loans. In particular, margins on average loans eased significantly, whereas margins on riskier loans continued to tighten in net terms. All other terms and conditions remained basically unchanged compared with the previous quarter, except for loan maturity conditions, which contributed somewhat to the net easing.

Loan demand: Banks reported that net demand for consumer credit remained strongly positive, despite decreasing somewhat in the third quarter of 2006 (to 20 %, from 28% in July; see Chart D, panel b). The main drivers behind the strong positive net demand for consumer credit continued to be consumer confidence, household savings and consumer spending on durable goods, although the contribution of that last factor declined significantly, from 30% in the second quarter to 13% in October.

Chart E Changes in credit standards applied to the approval of consumer credit and other lending to households

(net percentages)

Notes: The net percentages refer to the difference between the sum of the percentages for "tightened considerably" and "tightened somewhat" and the sum of the percentages for "eased somewhat" and "eased considerably". The net percentages for the questions related to the factors are defined as the difference between the percentage of banks reporting that the given factor contributed to tightening and the percentage reporting that it contributed to easing. "Realised" values refer to the period in which the survey was conducted. "Expected" values are the net percentages calculated from the responses given by the banks in the previous survey. For instance, "expected" values for the fourth quarter of 2006 were reported by banks in the October 2006 survey.

ECONOMIC
AND MONETARY
DEVELOPMENTS

Monetary and
financial
developments

Box 3

WORLDWIDE TRENDS IN MONETARY AGGREGATES: SOME CONCEPTUAL ISSUES

In the period of heightened financial, economic and geopolitical uncertainty between 2001 and mid-2003, strong money growth was observed throughout the world as investors sought the safe haven of monetary assets at a time of volatility in financial markets. Thereafter, once the uncertainty had subsided, monetary growth moderated worldwide. In the box entitled "Worldwide trends in monetary aggregates over recent years" in the January 2004 issue of the Monthly Bulletin, the analysis of global money growth was based on a measure constructed from the broad money stock of five large industrialised economies (the euro area, the United States, Japan, the United Kingdom and Canada), converted into euro on the basis of purchasing power parity (PPP) exchange rates. The construction of a global monetary aggregate raises several questions regarding the underlying methodology: Should the focus be on broad or narrow monetary aggregates? Which economies should be included? Should PPP or market exchange rates be used for the conversion into a common currency? This box compares different concepts for constructing measures of global money.

What is the effect of using narrow rather than broad monetary aggregates?

A measure of global money can be constructed on the basis of narrow monetary aggregates, which generally comprise banknotes and coins plus highly liquid deposits such as overnight deposits, or on the basis of broad monetary aggregates that also include less liquid deposits and marketable instruments. Broad monetary aggregates typically provide a less volatile and perhaps more accurate picture of monetary growth in the individual economies, as they capture important substitution processes between different monetary assets. At the same time, a focus on narrow monetary aggregates may have the advantage that the components are typically more homogenous across the economies and thus make global measures more clearly interpretable.

Growth of global broad money, as shown in the box of the January 2004 issue of the Monthly Bulletin, rose rapidly in the late 1980s before falling to an annual rate of below 4% in the mid-1990s (see Chart A). A gradual strengthening was visible in the context of strong economic growth in the second half of the 1990s, followed by a further sharp increase in the period of heightened economic and financial uncertainty between 2001 and mid-2003. Since 2003, the growth of global broad money has returned to levels similar to those observed in the late 1990s.

Chart A Global broad and narrow money growth

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

— broad money
···· narrow money
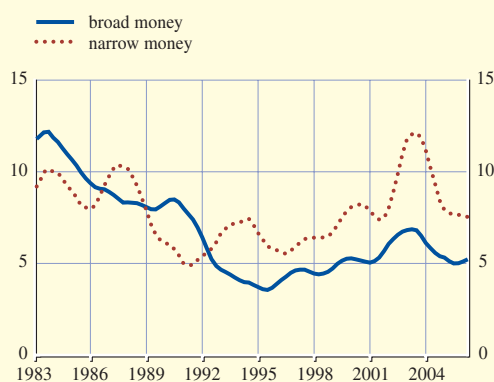
Sources: ECB, Eurostat, BIS and OECD.
Note: The series are the simple sum of the respective monetary aggregates in the United States, the euro area, Japan, the United Kingdom and Canada, converted into euro using purchasing power parity exchange rates.

A corresponding measure of global money constructed on the basis of narrow monetary aggregates displays a growth pattern that is broadly similar to that of the measure based on broad aggregates, in particular since the mid-1990s. The more pronounced hump in the growth pattern of the narrow measure between 2001 and 2004 reflects, inter alia, the impact of the Bank of Japan's zero interest rate and "quantitative easing" policy, which had a strong impact on Japan's contribution to global narrow money growth.

What is the effect of extending the coverage to include emerging market economies?

In order to ensure a meaningful coverage of global monetary developments, the three largest currency areas (the euro area, the United States and Japan) must be included in any global measure, while the inclusion of other countries is, to a certain extent, arbitrary. In particular, monetary dynamics at the global level may currently be heavily influenced by developments in large emerging market economies, such as the so-called BRIC countries (Brazil, Russia, India and China). However, while the inclusion of such economies improves the global measure with respect to more recent developments, the lack of meaningful historical time series for some of these countries typically hampers the comparability of the global measure across time, and thus reduces its overall information content. This would be the case, for example, if the monetary assets of Russia or China were to be included for periods when these economies were still planned economies.

Chart B Global broad money growth

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

— world (164 countries)
····· G5
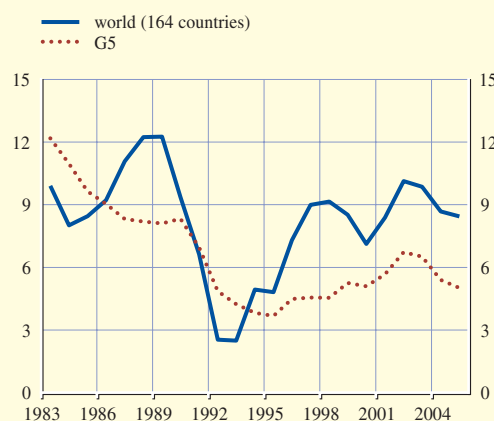
Sources: ECB, Eurostat, IMF, BIS and OECD.
Note: G5 is the simple sum of the broad monetary aggregates in the United States, the euro area, Japan, the United Kingdom and Canada, converted into euro using purchasing power parity exchange rates. World is the simple sum of the broad monetary aggregates in 164 countries, converted into euro using purchasing power parity exchange rates.

Comparing the measure of global broad money growth that is based on the five aforementioned large industrialised (G5) economies with a measure based on 164 economies displays clear differences in the level of the growth rates (see Chart B). At the same time, the longer-term pattern of developments is broadly similar, in particular for the period since the late 1990s.

What is the effect of using market rather than PPP exchange rates for conversion into a common currency?

Money stocks denominated in different national currencies can be converted into a common currency by using either PPP or market exchange rates.[1] Using the latter presupposes that all monetary assets could be converted into a single currency at the spot exchange rate through the foreign exchange market. However, this neglects the differences in the purchasing power of

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1 For the period prior to 1999, the euro area time series is based on irrevocably fixed exchange rates. Conceivably an aggregate at the global level could be constructed using fixed exchange rates between the included economies.

**ECONOMIC
AND MONETARY
DEVELOPMENTS**

Monetary and
financial
developments

these monies across countries and suggests some advantage of using PPP exchange rates, which explicitly take into account differences in price levels across economies.[2] The use of PPP exchange rates is typically thought to yield less volatile contributions to a global aggregate than market exchange rates if the set of economies under consideration has experienced broadly similar monetary conditions.[3] In this respect, the reason for constructing global money measures on the basis of PPP exchange rates, especially when coverage is limited to the G5 countries, is to mitigate the strong impact of the exchange rate on the dynamics of the aggregate.

Chart C presents the annual growth rates of measures constructed on the basis of market exchange rates and PPP exchange rates. It shows that the growth rate of the monetary aggregate constructed on the basis of market exchange rates displays notably higher volatility than the growth rate of the measure based on PPP exchange rates, while the average level of growth is broadly similar.

Chart C Global broad money growth based on different exchange rates

(annual percentage changes; two-year moving average; quarterly data)
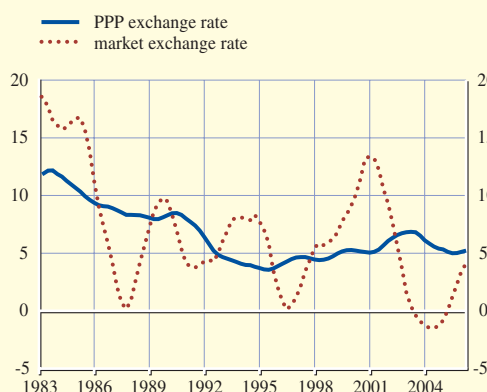
Sources: ECB, Eurostat, BIS and OECD.
Note: Global monetary aggregates are the simple sum of the broad monetary aggregates in the United States, the euro area, Japan, the United Kingdom and Canada, converted into euro using either purchasing power parity exchanges rates or market exchange rates.

Concluding remarks

Measures of global money growth can be constructed on the basis of alternative concepts for the geographical coverage, the broadness of the monetary aggregate and/or the exchange rates used to convert the monetary figures into a single currency. This box shows that using narrow rather than broad measures of money, or including emerging market economies in addition to industrialised economies, implies differences in the level of global monetary growth, while the pattern of growth remains broadly similar. At the same time, using market exchange rates rather than purchasing power exchange rates implies a higher volatility in global money developments, while the average level of growth remains broadly unchanged. Overall, therefore, when analysing the general direction of global monetary expansion, the broad monetary aggregate constructed on the basis of the G5 economies and PPP exchange rates can be seen as a robust proxy measure.

2 See also the box entitled "Measuring world growth: do weights matter?" in the June 2006 issue of the Monthly Bulletin.
3 A counterexample would be the case where economies have been subject to periods of strong inflation, or even hyperinflation, and have in this context experienced a sharp depreciation of their currency, while having large outstanding stocks of money. A conversion using market exchange rates of this large stock of money would automatically reduce the contribution to global monetary developments, while a conversion on the basis of PPP exchange rates would exaggerate the impact on global developments.

2.2 SECURITIES ISSUANCE

In August 2006 the annual growth rate of debt securities issued by euro area residents continued to be robust. Underlying this development was the relatively strong annual growth of debt securities issued by non-monetary financial institutions and, to a lesser extent, MFIs. At the same time, the annual growth rate of debt securities issued by non-financial corporations remained at the relatively low levels observed in previous months. The annual rate of growth of quoted shares issued by euro area residents remained stable at a subdued level.

DEBT SECURITIES

The annual growth rate of debt securities issued by euro area residents increased to 7.3% in August 2006, from 7.1% in July (see Table 3). The annual growth rate of variable rate long-term debt securities, standing at 15.6% in August, continued to strongly outpace the annual growth rate of fixed rate debt securities (3.9%). Looking back over a somewhat longer period, the annual growth rate of variable rate long-term debt securities has, however, fallen from its peak of 22.1% in June 2005. Over the same period, the annual growth rate of short-term debt securities has tended to increase – from a very low level – and stood at 5.4% in August 2006. Overall, these developments indicate that short and long-term issues at variable rates, taken together, have somewhat increased their share in the net issuance of debt securities, accounting for 16% and 36% of such issuance respectively over the period between January and August 2006, compared with long-term issues at fixed rates, the share of which stood at 41% over the same period.

Looking at issuance activity by sector, the annual growth rate of debt securities issued by non-financial corporations decreased to 3.9% in August (see Chart 7). The relatively modest growth observed over recent periods – in particular compared with the robust growth in MFI loans to non-financial corporations – may in part reflect substitution between external sources of funding related to an increase in the supply of bank loans. This may be due, in particular, to the fact that merger and acquisition activity is being financed more by syndicated bank loans, rather than through the issuance of corporate bonds, as was the case in the earlier wave of M&A activities

Table 3 Securities issued by euro area residents

	Amount outstanding (EUR billions)	Annual growth rates [1]					
Issuing sector	2006 Aug.	2005 Q3	2005 Q4	2006 Q1	2006 Q2	2006 July	2006 Aug.
Debt securities:	**10,817**	**7.6**	**7.5**	**7.5**	**7.4**	**7.1**	**7.3**
MFIs	4,396	10.0	9.2	8.9	9.2	8.3	8.5
Non-monetary financial corporations	1,058	19.4	21.7	25.6	26.7	26.6	28.2
Non-financial corporations	630	2.3	3.5	3.4	3.7	5.1	3.9
General government	4,733	4.5	4.3	3.7	3.0	2.7	3.1
of which:							
Central government	4,434	4.0	3.8	3.2	2.5	2.2	2.5
Other general government	300	12.2	12.3	11.8	11.4	11.6	12.0
Quoted shares:	**5,536**	**1.1**	**1.2**	**1.2**	**1.1**	**1.2**	**1.2**
MFIs	959	2.7	2.2	1.2	1.5	1.9	1.6
Non-monetary financial corporations	594	2.5	3.1	3.4	2.2	1.5	1.5
Non-financial corporations	3,983	0.6	0.7	0.9	0.9	1.0	1.1

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

**ECONOMIC
AND MONETARY
DEVELOPMENTS**

Monetary and
financial
developments

around the turn of the century. In August the annual rate of growth of short-term debt securities issuance by non-financial corporations was -4.5%, while the annual growth rate of long-term debt securities issuance by such corporations decreased to 5.5%.

In August 2006 the annual growth rate of debt securities issued by MFIs increased further, to 8.5%, from 8.3% in July. Looking back over a longer period, growth in fixed rate issuance has tended to strengthen somewhat since mid-2005, while the dynamics of floating rate issuance have weakened. The annual growth rate of fixed rate issuance remains, however, below that of floating rate issuance. The annual growth rate of short-term debt securities, while continuing to decrease, remains relatively high at 13.7%. Overall, the strong growth of debt issuance by the MFI sector is likely to reflect considerable demand for funds as a result of the robust growth of MFI loans to households and non-financial corporations.

In August 2006 the annual growth rate of debt securities issued by non-monetary financial corporations remained very strong at 28.2%. This high level of growth is to a large extent related to non-financial corporations, MFIs and other intermediaries securing external debt financing indirectly via non-monetary financial corporations through financial subsidiaries and special purpose vehicles. In this respect, the high level of issuance activity by non-monetary financial corporations may also be related to leveraged buyout activity, which has been very strong in the course of 2006.

Chart 6 Sectoral breakdown of debt securities issued by euro area residents

(annual growth rates)

- total
- monetary financial institutions
- non-monetary financial corporations
- non-financial corporations
- general government
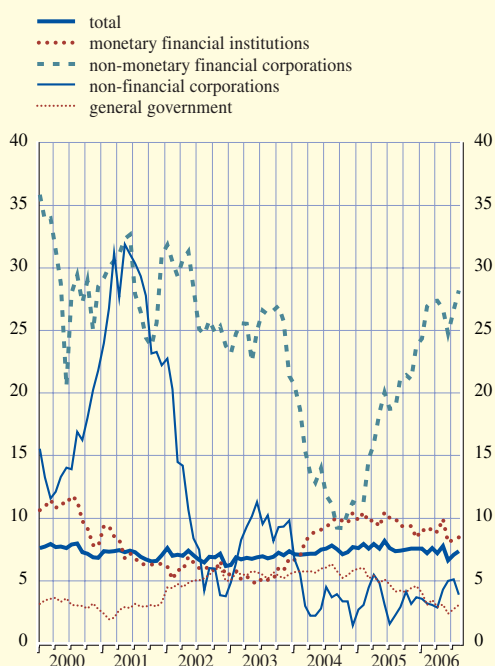
Source: ECB.
Note: Growth rates are calculated on the basis of financial transactions.

Chart 7 Sectoral breakdown of quoted shares issued by euro area residents

(annual growth rates)

- total
- monetary financial institutions
- non-monetary financial corporations
- non-financial corporations
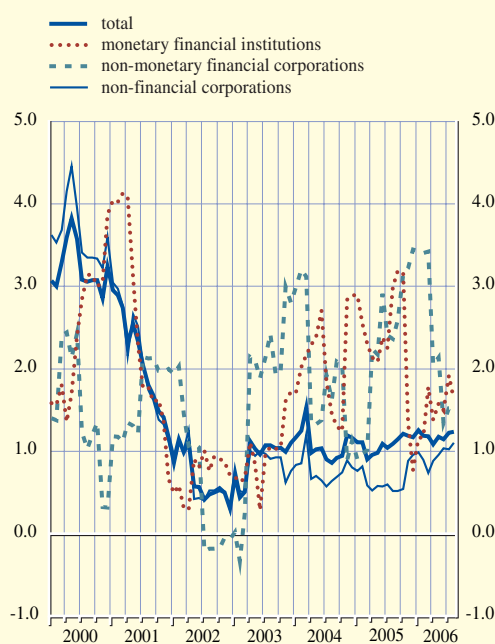
Source: ECB.
Note: Growth rates are calculated on the basis of financial transactions.

The annual growth rate of debt securities issued by the general government sector, which increased slightly to 3.1% in August 2006 (from 2.7% in July), appears to have halted its downward trend at a level relatively close to the historically low levels observed at the beginning of 2001. These movements essentially reflect developments in the annual growth rate of debt securities issued by the central government sector (which stood at 2.5% in August). Growth in the issuance activity of the other general government sector continues to be significantly stronger, standing at an annual rate of 12.0% in August 2006.

QUOTED SHARES

The annual growth rate of quoted shares issued by euro area residents remained stable at 1.2% in August. In terms of sectoral issuance, the annual growth rate of quoted shares issued by non-financial corporations, which account for around three-quarters of outstanding quoted shares, remained broadly unchanged from the previous month, at 1.1% in August (see Chart 7). The annual growth rate of quoted shares issued by MFIs decreased to 1.6% in August, from 1.9% in July.

2.3 MONEY MARKET INTEREST RATES

In October 2006 money market interest rates rose across the whole maturity spectrum, with the greatest increases being observed for longer-term rates. As a result, the slope of the money market yield curve steepened slightly over the month.

Over the period from the end of September to 31 October 2006, money market interest rates at one, three, six and twelve-month maturities all rose, with the most marked increase being observed at the long end of the maturity spectrum. Compared with end-September, rates increased by 11, 15, 14 and 14 basis points respectively to stand at 3.38%, 3.56%, 3.70% and 3.86% on 31 October. As a result, the slope of the money market yield curve steepened slightly over the period under review. The spread between the twelve-month and the one-month EURIBOR rose from 44 basis points at the end of September to 48 basis points on 31 October (see Chart 8).

The interest rates implied by the prices of three-month EURIBOR futures contracts maturing in December 2006, March 2007 and June 2007 stood at 3.71%, 3.85% and 3.88% respectively on 31 October. Compared with the levels observed at the end of August, these rates increased by 3, 6 and 8 basis points respectively.

At the beginning of the maintenance period starting on 6 September, the EONIA stood at 3.06%, i.e. 6 basis points above the minimum bid rate. At the beginning of the second week of that period, however, the EONIA started to decline and reached a level only 1 basis point above the minimum bid rate on 22 September. Given the results achieved in reducing the spread between the EONIA and the minimum bid rate over the past few months and in order to reduce the risk of underbidding at the Eurosystem's main refinancing operations, the ECB decided to return to allotments aligned with the benchmark amount as of the weekly operation conducted on 26 September. The EONIA rose in the following days, reaching a peak of 3.25% on 6 October. On 10 October, i.e. the last day of the maintenance period, the EONIA declined to 3.09% after the ECB's decision to conduct a fine-tuning operation which provided an amount of €9.5 billion in order to restore more balanced liquidity conditions in the money market. At the beginning of the following maintenance period, the EONIA rose to 3.31%, which implied a spread of 6 basis points over the new level of the minimum bid rate following the Governing Council's decision to increase the key ECB interest

**ECONOMIC
AND MONETARY
DEVELOPMENTS**

Monetary and
financial
developments

Chart 8 Money market interest rates

(percentages per annum; daily data)

- one-month EURIBOR (left-hand scale)
- three-month EURIBOR (left-hand scale)
- twelve-month EURIBOR (left-hand scale)
- spread between twelve-month and one-month EURIBOR (right-hand scale)
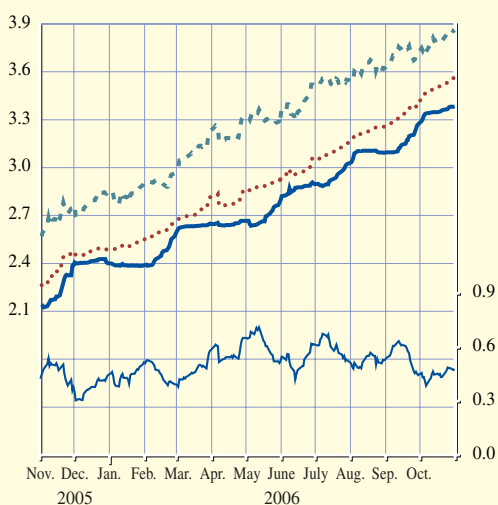
Sources: ECB and Reuters.

Chart 9 ECB interest rates and the overnight interest rate

(percentages per annum; daily data)

- minimum bid rate in the main refinancing operations
- marginal lending rate
- deposit rate
- overnight interest rate (EONIA)
- marginal rate in the main refinancing operations
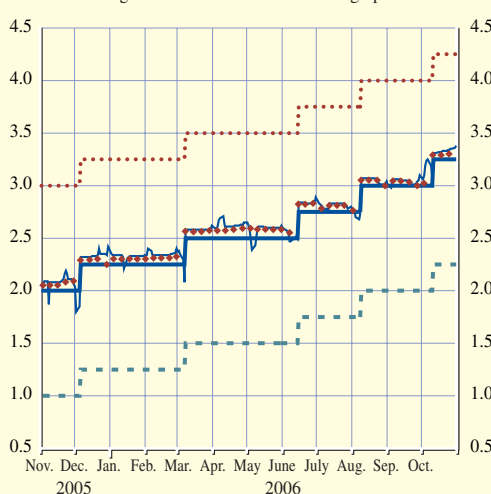
Sources: ECB and Reuters.

rates. As from the second week, the EONIA started to rise, reaching 3.38% on 31 October as a result of the end-of-month effect.

In the first two of the Eurosystem's main refinancing operations in the maintenance period starting on 11 October, the marginal and weighted average rates stood at 3.29% and 3.30% respectively, i.e. 4 and 5 basis points above the minimum bid rate. Both these rates rose by 1 basis point in the operation conducted on 25 October. In the main refinancing operation conducted on 31 October, i.e. the last of the maintenance period, these rates increased by another basis point to reach 3.31% and 3.32% respectively.

In the Eurosystem's longer-term refinancing operation conducted on 25 October, the marginal and weighted average rates stood at 3.48% and 3.50% respectively. Those tender rates were 6 and 4 basis points lower respectively than the three-month EURIBOR prevailing on that date.

2.4 BOND MARKETS

Long-term government bond yields remained broadly unchanged in the euro area and the United States in October, despite relatively large fluctuations in the course of the month. At the same time, inflation expectations and related risk premia, as measured by long-term break-even inflation rates, changed little. Recent bond yield developments in the United States, which seem to have been driven mainly by changes in market participants' views about future economic activity, also affected bond yields in the euro area.

Despite relatively large fluctuations in the course of the month, long-term government bond yields remained broadly unchanged on both sides of the Atlantic in October, discontinuing the trend of declining nominal and real long-term bond yields seen since the beginning of July (see Chart 10). As regards the United States, investors' concerns about a slowdown in economic activity seemed to ease in the first few weeks of October, possibly in response to a substantial upward revision of past US employment figures. However, towards the end of the month, the release of figures for economic growth which failed to meet market participants' expectations caused investors' concerns to surface anew. In the euro area, market participants' slightly more optimistic views about future economic activity seemed to be supported by robust survey indicators and industrial production figures in the largest euro area countries.

Overall, ten-year government bond yields in the euro area increased by around 5 basis points between end-September and 31 October, standing at 3.8% on the latter date. Long-term bond yields in the United States decreased by around 5 basis points over the same period, with ten-year government bond yields standing at around 4.7% on 31 October. In Japan, ten-year government bond yields rose slightly compared with their end-September levels, standing at around 1.7% at the end of October. Developments in implied bond market volatility suggest that market participants' uncertainty regarding the short-term bond market outlook has declined in both the euro area and the United States.

In the United States, the increases in long-term government bond yields observed in the first few weeks of October were attributable to higher real yields, which rose more than nominal yields. A considerable part of the increase in both real and nominal yields probably relates, in turn, to a data release at the beginning of October showing a substantial upward revision of past US employment figures. In line with market expectations, the Federal Open Market Committee decided on 25 October to leave its target rate unchanged, while the accompanying press release

Chart 10 Long-term government bond yields

(percentages per annum; daily data)

- euro area (left-hand scale)
- United States (left-hand scale)
- Japan (right-hand scale)
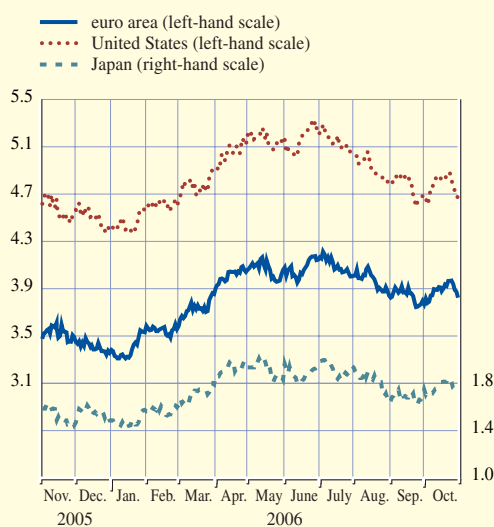
Sources: Bloomberg and Reuters.
Note: Long-term government bond yields refer to ten-year bonds or to the closest available bond maturity.

Chart 11 Zero-coupon spot and forward break-even inflation rates

(percentages per annum; five-day moving averages of daily data)

- five-year forward break-even inflation rate five-years ahead
- five-year spot break-even inflation rate
- ten-year spot break-even inflation rate

Sources: Reuters and ECB calculations.

**ECONOMIC
AND MONETARY
DEVELOPMENTS**
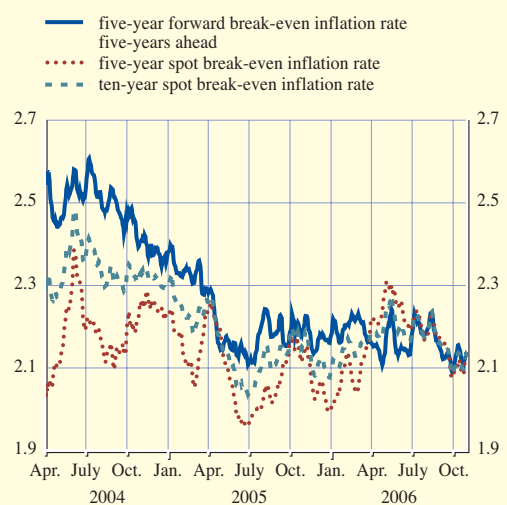
Monetary and
financial
developments

led to slight decreases in bond yields at all maturities. A data release on 27 October showing GDP growth for the third quarter which failed to meet market expectations also contributed to a reversal of the earlier increases in bond yields. Market participants' inflation expectations and related risk premia in the United States – as measured by break-even inflation rates – decreased slightly in October, particularly at medium-term horizons, while, overall, yields on index-linked bonds increased slightly.

In the euro area, government bond yields rose slightly, resulting in a moderate narrowing of the differential between US and euro area ten-year bond yields. The initial increase in nominal bond yields in the euro area mainly reflected an increase in real yields, against a background of solid figures for industrial production in the largest euro area economies. Survey-based business and consumer confidence indicators, being somewhat stronger than had been expected by market participants, also supported the increase in bond yields. In addition, moderate increases in market expectations for future short-term rates contributed to the upward pressure on long-term bond yields. However, following developments in the United States, the earlier increases in bond yields were almost entirely neutralised during the last week of October.

Chart 12 Implied forward euro area overnight interest rates

(percentages per annum; daily data)

Sources: ECB estimates and Reuters.
Notes: The implied forward yield curve, which is derived from the term structure of interest rates observed in the market, reflects market expectations of future levels for short-term interest rates. The method used to calculate these implied forward yield curves was outlined in Box 4 of the January 1999 issue of the Monthly Bulletin. The data used in the estimate are zero coupon swap rates.

The five-year forward break-even inflation rate five years ahead, a measure of longer-term inflation expectations and related risk premia, remained broadly unchanged and continued to fluctuate within the narrow 2-2.25% range (see Chart 11). Despite the recent decline in euro area HICP inflation, the five-year spot break-even inflation rate also remained broadly unchanged.

The generally favourable data releases on economic activity and the business climate in the euro area are likely to have contributed to the upward shift observed in the implied forward overnight curve over short to medium-term maturities (see Chart 12). By contrast, the Governing Council's decision on 5 October to raise the key ECB interest rates by 25 basis points, which had been well anticipated by market participants, had only a muted effect on the term structure of interest rates.

2.5 INTEREST RATES ON LOANS AND DEPOSITS

In August 2006 most MFI interest rates continued their upward trend, while remaining at a relatively low level.

In August 2006 short-term MFI interest rates generally increased as compared with the previous month. In most cases, these increases were of broadly the same order of magnitude as those

Table 4 MFI interest rates on new business

(percentages per annum; basis points; weight-adjusted[1])

	2005 Q3	2005 Q4	2006 Q1	2006 Q2	2006 July	2006 Aug.	Change in basis points up to Aug. 2006 [2]		
							2006 Jan.	2006 Apr.	2006 July
MFI interest rates on deposits									
Deposits from households									
with an agreed maturity of up to one year	1.96	2.14	2.36	2.56	2.69	2.79	59	39	10
with an agreed maturity of over two years	2.02	2.18	2.43	2.57	2.79	2.82	39	35	3
redeemable at notice of up to three months	1.98	1.97	1.98	2.03	2.08	2.23	24	23	15
redeemable at notice of over three months	2.29	2.30	2.37	2.52	2.57	2.63	32	21	6
Overnight deposits from non-financial corporations	0.97	1.03	1.15	1.23	1.25	1.32	27	16	7
Deposits from non-financial corporations									
with an agreed maturity of up to one year	2.04	2.26	2.48	2.70	2.78	2.91	64	39	13
with an agreed maturity of over two years	2.98	3.55	3.34	3.23	3.90	3.56	14	-14	-34
MFI interest rates on loans									
Loans to households for consumption									
with a floating rate and an initial rate fixation of up to one year	6.97	6.73	6.77	7.15	7.32	7.91	84	76	59
Loans to households for house purchase									
with a floating rate and an initial rate fixation of up to one year	3.32	3.48	3.74	4.02	4.11	4.23	66	41	12
with an initial rate fixation of over five and up to ten years	4.00	4.03	4.23	4.51	4.55	4.62	50	27	7
Bank overdrafts to non-financial corporations	5.13	5.14	5.30	5.46	5.52	5.58	35	17	6
Loans to non-financial corporations of up to €1 million									
with a floating rate and an initial rate fixation of up to one year	3.81	3.99	4.23	4.47	4.58	4.67	59	33	9
with an initial rate fixation of over five years	4.06	4.10	4.19	4.40	4.45	4.52	39	33	7
Loans to non-financial corporations of over €1 million									
with a floating rate and an initial rate fixation of up to one year	2.97	3.24	3.50	3.74	3.84	3.96	75	45	12
with an initial rate fixation of over five years	3.88	3.98	4.22	4.26	4.48	4.45	49	23	-3
Memo items									
Three-month money market interest rate	2.14	2.47	2.72	2.99	3.10	3.23	72	44	13
Two-year government bond yield	2.21	2.80	3.22	3.47	3.58	3.59	73	22	1
Five-year government bond yield	2.60	3.07	3.47	3.78	3.84	3.75	65	4	-9

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. Quarterly data refer to the end of the quarter.
2) Figures may not add up due to rounding.

observed for comparable money market rates (see Table 4 and Chart 13). One exception was MFI interest rates for loans to households for consumption, which increased strongly in August. At the same time, changes in MFI interest rates on bank overdrafts and overnight deposits were, as is normally the case, less pronounced.

From a longer-term perspective, most short-term MFI interest rates have risen in recent months, following movements in money market rates, which have been increasing since September 2005. Short-term MFI interest rates have, however, tended to increase by less than their money market equivalents. The three-month market rate, for instance, rose by around 110 basis points in the period between September 2005 and August 2006. By comparison, MFI interest rates on deposits by households with an agreed maturity of up to one year rose by around 85 basis points. MFI interest rates on loans with floating rates and an initial rate fixation of up to one year rose by between 85 and 100 basis points.

**ECONOMIC
AND MONETARY
DEVELOPMENTS**

Monetary and
financial
developments

Chart 13 Short-term MFI interest rates and a short-term market rate

(percentages per annum; rates on new business; weight-adjusted[1])

- three-month money market rate
- ····· loans to non-financial corporations of over €1 million with a floating rate and an initial rate fixation of up to one year
- – – – loans to households for consumption with a floating rate and an initial rate fixation of up to one year
- overnight deposits from non-financial corporations
- ·········· deposits from households redeemable at notice of up to three months
- – – – deposits from households with an agreed maturity of up to one year
- –·–·– loans to households for house purchase with a floating rate and an initial rate fixation of up to one year

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 14 Long-term MFI interest rates and a long-term market rate

(percentages per annum; rates on new business; weight-adjusted[1])

- five-year government bond yield
- ····· loans to non-financial corporations of over €1 million with an initial rate fixation of over five years
- – – – loans to households for house purchase with an initial rate fixation of over five and up to ten years
- deposits from non-financial corporations with an agreed maturity of over two years
- ·········· deposits from households with an agreed maturity of over two years
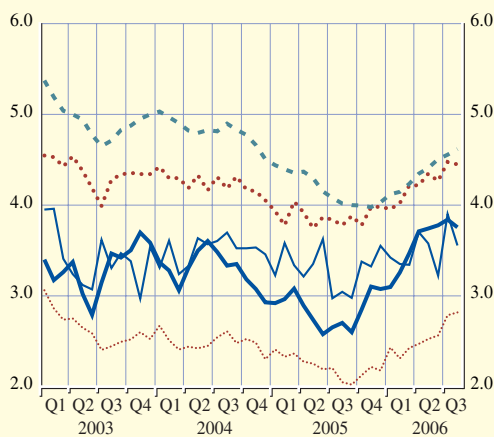
Source: ECB.
1) For the period from December 2003 onwards, the weight-adjusted MFI interest rates are calculated using country weights constructed from a 12-month moving average of new business volumes. For the preceding period, from January to November 2003, the weight-adjusted MFI interest rates are 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 August 2006 most long-term MFI interest rates increased (see Table 4 and Chart 14). In the period up to August 2006, increases in these rates were generally smaller than those observed in market interest rates with a comparable maturity. This is likely to reflect the fact that there are typically some lags in the adjustment of retail banking rates to changes in market interest rates. At the same time, it should also be noted that MFI interest rates on deposits from non-financial corporations with an agreed maturity of over two years have fluctuated considerably in recent months, reaching a level comparable to that witnessed in the fourth quarter of 2005.

Looking back over a somewhat longer period, the majority of long-term MFI interest rates have followed the upward movements observed in equivalent market interest rates since September 2005. These increases – in the range of around 50 to 60 basis points – have, however, remained significantly smaller than those recorded for long-term market interest rates, thereby reducing bank spreads. The five-year euro area government bond yield, for instance, rose by 115 basis points between September 2005 and August 2006. By comparison, MFI interest rates on loans to households for house purchase with an initial rate fixation of over five and up to ten years increased by only around 65 basis points over that period. In the case of loans to non-financial corporations

with an initial rate fixation of over five years, MFI interest rates on loans of over €1 million increased by more than those on loans of up to €1 million between September 2005 and August 2006 (with those rates increasing by around 60 and 50 basis points respectively). This implies that there is currently no longer a significant interest rate differential between long-term loans of different sizes. The increases in most long-term deposit rates between September 2005 and August 2006 were significantly smaller than those for long-term loan rates. The only exception was MFI interest rates on deposits by households with an agreed maturity of over two years, which increased by 80 basis points over the same period.

2.6 EQUITY MARKETS

Stock prices in major markets continued to rise in October. Recent earnings announcements and ongoing merger and acquisition activity appear to have supported stock prices and a further decline in market participants' uncertainty as measured by implied stock market volatility. Towards the end of October, data releases suggesting weaker economic growth in the United States appeared to act as a countervailing force, exerting downward pressure on stock prices.

Broad-based stock price indices continued to rise in major markets in October (see Chart 15). Continued robust earnings growth, ongoing merger and acquisition activity and further decreases in energy prices all contributed to these developments. Euro area and US stock prices, as measured

Chart 15 Stock price indices

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

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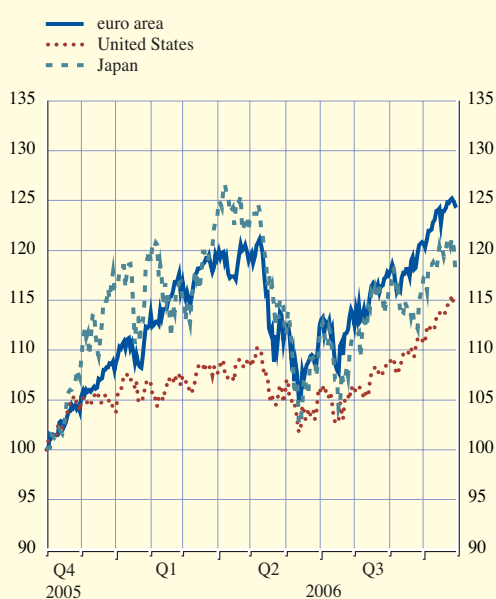
Sources: Reuters and Thomson Financial Datastream.
Note: The indices used are the Dow Jones EURO STOXX broad index for the euro area, the Standard & Poor's 500 index for the United States and the Nikkei 225 index for Japan.

Chart 16 Implied stock market volatility

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

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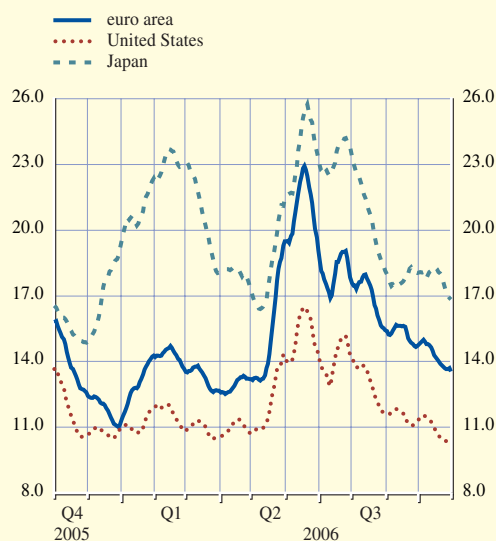
Source: Bloomberg.
Note: The implied volatility series reflects the expected standard deviation of percentage changes in stock prices over a period of up to three months, as implied in the prices of options on stock price indices. The equity indices to which the implied volatilities refer are the Dow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

**ECONOMIC
AND MONETARY
DEVELOPMENTS**

Monetary and
financial
developments

by the Dow Jones EURO STOXX index and the Standard & Poor's 500 index, both increased by around 3% between the end of September and 31 October. Stock prices in Japan, as measured by the Nikkei 225 index, also rose moderately. At the same time, stock market uncertainty, as measured by the implied volatility extracted from stock options, declined somewhat further from the peaks witnessed in June to stand at relatively low levels in the major markets (see Chart 16).

Stock prices in the United States continued to rise in October. As evidenced by the third quarter earnings figures released to date for large US corporations, earnings growth remains solid and has generally exceeded analysts' expectations. Growth in earnings per share is still in the double-digit range, although at a lower level than a year ago. In addition, generally benign energy price developments have supported stock prices. At the same time, the dampening of market expectations of an easing of US monetary policy in the near future acted as a countervailing factor in October, temporarily exerting downward pressure on stock prices.

Euro area stock prices also continued to increase over the review period and, by 31 October, stood well above the levels recorded prior to the episode of market turmoil in May and June. Data releases suggesting ongoing robust economic growth in the third quarter, along with strong ongoing merger and acquisition activity, have supported stock prices. In October stock market analysts expected annual growth of earnings per share for companies included in the Dow Jones EURO STOXX index to remain robust at a rate of around 10% over the next 12 months and around 8% for the next three to five years. At the same time, implied volatility declined further, indicating lower uncertainty about future stock price moves, which may well have resulted in somewhat lower risk premia being requested by investors. Partly driven by the same factors, euro area BBB-rated spreads and credit default swap spreads have tightened in recent months (see Box 4, entitled "The outlook for corporate credit spreads in the euro area"), after the spike observed in May and June.

Box 4

THE OUTLOOK FOR CORPORATE CREDIT SPREADS IN THE EURO AREA

Credit spreads are a measure of the risk premium corporations pay investors to compensate them for a number of risks associated with corporate debt. Default risk, which materialises when issuers are unable to make interest and principal payments on time, features prominently among these risks. The ability of corporations to honour their obligations hinges essentially on their net worth and earnings prospects, which are affected by the current stage of the business cycle and by investors' expectations about the future strength of the economy. Information derived from credit spreads may therefore contribute to an understanding of the view of the market regarding the economic situation of firms. At the same time, several financial factors contribute to the level of credit risk, as signalled by credit spreads.

In particular, firms with greater asset volatility are more likely to default. Bond investors will then require additional compensation in the form of a larger yield spread over the risk-free rate. Thus, a strong and positive relationship between credit spreads and implied stock market volatility should be expected. Spreads of BBB-rated corporate bond yields over comparable

government bond yields and the implied volatility extracted from the EURO STOXX 50 index seem to share common trends (see Chart A). When implied volatility decreases, credit spreads narrow, and vice versa.[1]

In May 2006 there was a reversal in investors' appetite for risk and, as implied equity market volatility increased markedly, corporate debt markets became the most vulnerable to a re-pricing of risk. The widening of spreads was significant for corporate bonds and credit default swaps. However, after end-June, credit spreads started to narrow again and, in tandem, stock market volatility dropped significantly.

Another factor that provides support for tighter credit spreads is the strong earnings growth which has seen profitability rising to repeated highs across all major markets. Indeed, September data suggest annual growth of around 10% in earnings per share for companies on the Dow Jones EURO STOXX index over the next 12 months. This, together with low levels of stock market volatility, can be seen as the main factor currently causing credit spreads to remain at relatively subdued levels. Developments in expected default frequencies[2] suggest that the credit outlook remains favourable, although those for less creditworthy firms (as indicated by the probability of default of the 75th percentile) have picked up slightly over the last four months (see Chart B).

Chart A Corporate bond spreads and implied stock market volatility

(credit spreads in basis points and implied volatility in percentages)

— BBB-rated corporate bond spread (left-hand scale)
····· implied volatility (right-hand scale)
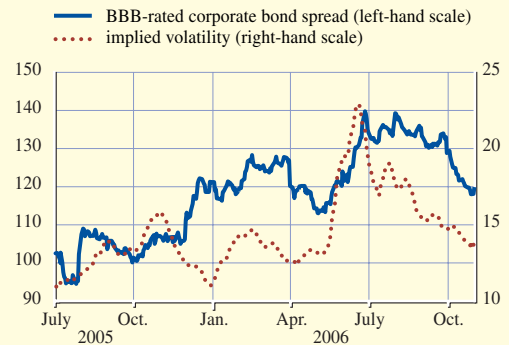
Sources: Thomson Financial Datastream and ECB calculations.

1 See also Box 2, entitled "Determinants of the fall of corporate bond spreads in recent years", in the January 2005 issue of the Monthly Bulletin.
2 Expected default frequencies are defined as the conditional probability that a firm will default within a given time horizon (typically one year) by failing to make an interest or principal payment on its outstanding debt.

Chart B Expected default frequency of non-financial corporations in the euro area

(percentage probability of defaulting within the next 12 months)

— 75th percentile (left-hand scale)
····· 25th percentile (right-hand scale)
– – median (right-hand scale)
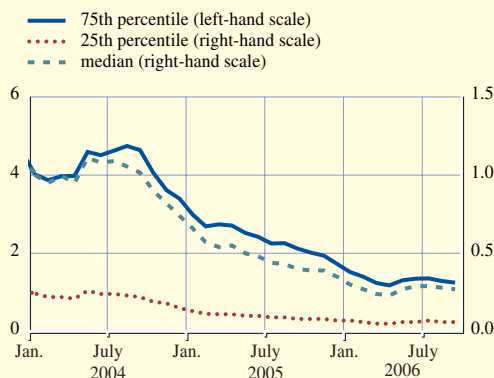
Source: Moody's KMV.

Chart C Non-financial sector rating changes

(number of up- and downgrades)

— balance[1])
▦ upgrades
▥ downgrades
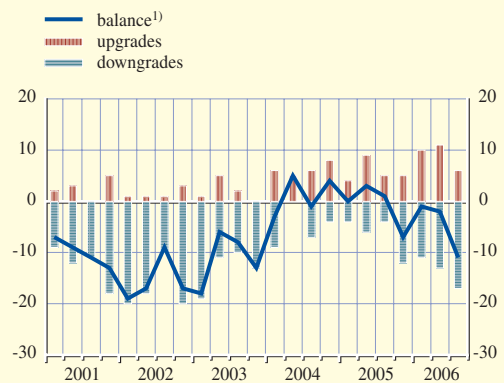
Source: Moody's Credit Trends.
1) Balance refers to the difference between upgrades and downgrades of credit ratings.

However, despite the relatively benign performance over the past three months and the low level of spreads, the general corporate and credit market environment could point to a slight deterioration of the situation. The balance between upgrades and downgrades of credit ratings of non-financial corporations has been negative in the last four quarters, thereby reversing the upward trend observed until the third quarter of 2005 (see Chart C). The possibility cannot be ruled out that credit quality may be deteriorating somewhat in the wake of the increasing number of debt-financed merger and acquisition activities and leveraged buyouts, share buybacks and special dividend payouts, which often have an adverse effect on the leveraging positions of the firms involved. Increasing leverage by corporations is also evident in the rise in demand for loans by non-financial corporations recorded over the past few quarters, as also revealed by the October 2006 bank lending survey.

Overall, the low level of implied stock market volatility, together with a continuation of strong profitability, provides evidence that credit spreads could remain at low levels in the near future. Even though the outlook for corporate credit quality remains benign, there are some indications that, over time, some adjustment may occur as a result of increased indebtedness.

3 PRICES AND COSTS

Euro area HICP inflation fell below 2% in September, due mainly to base effects and a decline in oil prices, and is estimated to have remained below 2% also in October. Excluding energy, consumer prices have evolved broadly in line with the baseline projections contained in the latest ECB staff macroeconomic projections for the euro area (September 2006). Looking ahead, on the basis of current oil price futures, euro area HICP inflation is likely to increase again over the coming months, owing to base effects and increases in indirect taxes. In addition, although domestic price pressures have remained moderate, in particular those from labour costs, the lagged impact of past increases in the prices of oil and other commodities is expected to exert further upward pressure on consumer prices. Producer price developments, particularly for intermediate goods, indicate that price pressures remain in the pipeline. Overall, the risks to price stability remain clearly on the upside.

3.1 CONSUMER PRICES

FLASH ESTIMATE FOR OCTOBER 2006

According to Eurostat's flash estimate, overall HICP inflation was 1.6% in October, after 1.7% in September (see Table 5). Although a detailed breakdown of the HICP components will not be released until mid-November, the information available at the moment from the European Commission's weekly Oil Bulletin suggests some further easing in the annual rate of change in oil energy prices.

HICP INFLATION UP TO SEPTEMBER 2006

Euro area HICP inflation fell significantly in September 2006, to 1.7%, from 2.3% the previous month (see Chart 17). This sharp drop, and the smaller declines in the preceding two months, were mainly due to developments in energy prices. The annual rate of change of the HICP excluding unprocessed food and energy was unchanged in September, at 1.5%.

The annual rate of change in HICP energy prices declined in September by 6.6 percentage points, to 1.5%. Approximately half of this decline was due to a base effect from the strong increase in oil prices last year (following hurricanes Katrina and Rita), while the other half was due to a month-on-month fall in energy prices of 3.2% in September. The sharp increase last year and the

Table 5 Price developments

(annual percentage changes, unless otherwise indicated)

	2004	2005	2006 May	2006 June	2006 July	2006 Aug.	2006 Sep.	2006 Oct.
HICP and its components								
Overall index [1]	2.1	2.2	2.5	2.5	2.4	2.3	1.7	*1.6*
Energy	4.5	10.1	12.9	11.0	9.5	8.1	1.5	.
Unprocessed food	0.6	0.8	1.5	2.1	3.2	3.9	4.6	.
Processed food	3.4	2.0	2.2	2.2	2.3	2.2	1.8	.
Non-energy industrial goods	0.8	0.3	0.7	0.7	0.6	0.6	0.8	.
Services	2.6	2.3	1.8	2.0	2.1	1.9	2.0	.
Other price indicators								
Industrial producer prices	2.3	4.1	6.0	5.8	6.0	5.7	.	.
Oil prices (EUR per barrel)	30.5	44.6	55.7	55.4	58.8	57.8	50.3	47.7
Non-energy commodity prices	10.8	9.4	31.5	22.0	26.7	26.8	26.4	28.7

Sources: Eurostat, HWWA and ECB calculations based on Thomson Financial Datastream.

1) HICP inflation in October 2006 refers to Eurostat's flash estimate.

substantial decrease this year are partly related to differences in the developments of crude oil and petrol prices (see Box 5).

The annual rate of change in unprocessed food prices increased further in September, to 4.6%, up significantly from rates observed at the beginning of the year (the lowest annual rate of change in unprocessed food prices this year, at 0.6%, was observed in March). This increase has been driven mainly by vegetable and fruit prices – most likely due to the hot and dry weather conditions which prevailed for most of this summer – and, to some extent, by an increase in meat prices. The current annual rate of change is slightly higher than that observed in September 2003, when the increase in the annual rate of change in unprocessed food prices peaked following the extreme weather conditions that summer.

As highlighted above, the annual rate of change in the HICP excluding unprocessed food and energy was unchanged in September. This, however, conceals counterbalancing movements in processed food prices and in non-energy industrial goods and services prices. The annual rate of change in processed food prices fell in September, owing mainly to a base effect from the impact of the increase of tobacco taxes in Germany in September 2005. The annual rate of change in non-energy industrial goods prices rose by 0.2 percentage point in September, to 0.8%. This increase was mainly due to developments in clothing and footwear prices, which were affected by statistical factors in Italy and Portugal. The annual rate of change in services prices edged up to 2.0% in September, from 1.9% in August. This was mainly due to developments in telecommunications and education prices.

Chart 17 Breakdown of HICP inflation: main components

(annual percentage changes; monthly data)
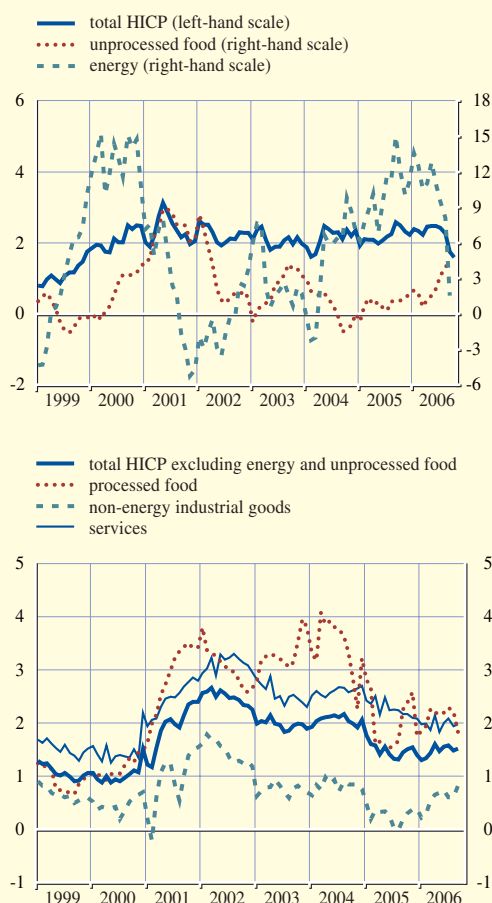
Source: Eurostat.

RECENT DEVELOPMENTS IN OIL AND PETROL PRICES

Since mid-August crude oil prices have declined significantly, with the price of Brent crude oil falling from above USD 78 to below USD 60 per barrel by the end of October. This decline has been accompanied by a fall in oil-related energy prices at the consumer level. However, although crude oil prices are a major factor driving consumer oil-energy prices, it appears that

falls in the refining margin have also had a significant impact in recent months. This box provides further background to these developments.[1]

Crude oil prices have retreated significantly in recent months from the all-time high reached in early August and are now approximately 25% lower than the August peak (see Chart A). The decline in petrol prices has been even stronger, decreasing by approximately 35% over the same period. As a result, the difference between the price of Brent crude oil and that of petrol (the refining margin) declined significantly from a level of around USD 20 per barrel in early-August to close to zero in mid-October (see Chart B). The narrowing of the spread reflects primarily an easing of recent petrol market tightness in the United States, which has allowed petrol prices to fall more rapidly than crude prices. As indicated in the box last year (see footnote 1), significant developments in the US market can impact on global prices. Some key factors behind the recent decline in petrol prices were a relatively benign tropical storm season in the Gulf of Mexico and a smooth transition to new product specifications (e.g. ethanol-blended products) in the United States, which enabled the US driving season – a period of traditionally strong demand for petrol – to end without major refining disruptions. Moreover, unusually high petrol inventories for this time of the year in the United States contributed to additional downward pressure on petrol prices. The decline in the refining margin contrasts particularly with the situation that prevailed in August and September 2005, when damages to the energy infrastructure in the Gulf of Mexico following hurricanes Katrina and Rita pushed up refined petrol prices and led to a strong increase in the difference between crude oil and petrol prices.

On average over the period 2004-06, fluctuations in the refining margin have been generally more volatile than in the earlier period since 1990. As a result, movements in the refining margin have had an important bearing on developments in oil-related energy prices[2] at the consumer level in the euro area (see Chart C). This may be seen most clearly in September

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1 For a previous discussion of the relationship between the prices of crude oil and petrol, see the box entitled "Recent oil and petrol price developments" in the October 2005 issue of the Monthly Bulletin.
2 Oil-related energy prices refer to HICP liquid fuels and fuels and lubricants for personal transport equipment.

Chart A Oil prices

(USD/barrel; daily data)
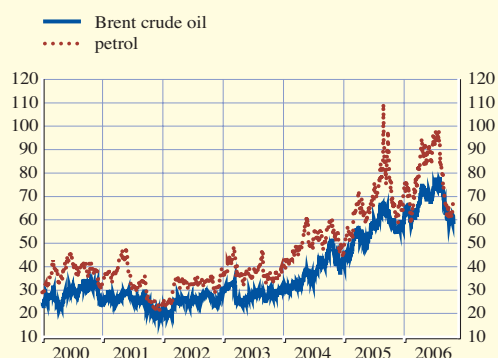
- Brent crude oil
- ····· petrol

Source: Bloomberg.
Note: The figure shows the price of Brent crude oil traded at the Intercontinental Exchange and unleaded petrol traded at the New York Mercantile Exchange, delivered free on board in New York Harbour. The latest value refers to 31 October 2006.

Chart B Spread between petrol and Brent crude oil prices

(USD/barrel; daily data)
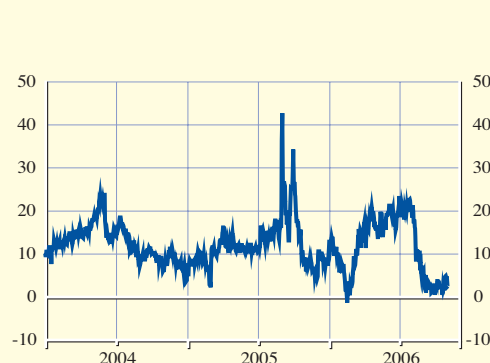
Source: Bloomberg.
Note: The figure shows the spread between the price of Brent crude oil traded at the Intercontinental Exchange and unleaded petrol traded at the New York Mercantile Exchange, delivered free on board in New York Harbour. The latest value refers to 31 October 2006.

2005, when the annual rate of change in crude oil prices declined, whereas the annual rates of change in petrol and HICP oil energy rose. Similarly, in September 2006, the annual rates of change in petrol and HICP oil energy declined more sharply than that of crude oil.

Considering the forward-looking implications, it should be noted that, when viewed over a longer time perspective, the current gap between petrol and crude oil prices appears relatively low. Since 1990 the average difference between petrol and crude oil prices has been USD 7.7. Considering only the period since the beginning of 2004, the average difference has been higher, at USD 12.2. Since it cannot be ruled out that the level of this margin, which is currently low, may increase, this would imply a risk of possible upward pressure on oil-related energy prices at the consumer level.

Chart C Oil and consumer oil energy prices

(annual percentage changes; monthly data)

— Brent crude oil (left-hand scale)
····· petrol (left-hand scale)
– – – euro area HICP oil energy (right-hand scale)
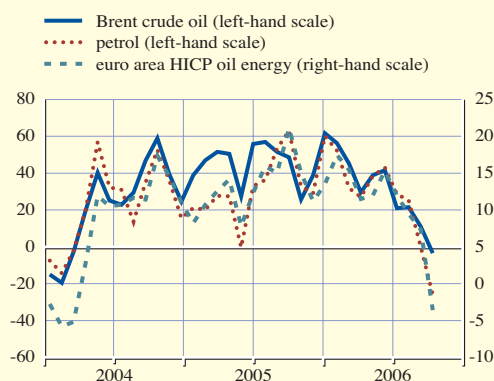
Sources: Bloomberg, Eurostat and ECB calculations.
Note: The figure shows the price of Brent crude oil traded at the Intercontinental Exchange and unleaded petrol traded at the New York Mercantile Exchange, delivered free on board in New York Harbour; both in euro terms. Euro area HICP oil energy refers to HICP liquid fuels and fuels and lubricants for personal transport equipment.

3.2 INDUSTRIAL PRODUCER PRICES

No new data on euro area industrial producer prices have become available since the last issue of the Monthly Bulletin. Although the annual rate of change in industrial producer prices (excluding construction) declined in August, by 0.3 percentage point, to 5.7% (see Chart 18), the momentum in producer prices excluding energy remained upward. This was driven primarily by intermediate goods prices, which reached their highest annual rate of change for over a decade. Furthermore, the annual rate of change in consumer goods producer prices has been rising over the past 12 months, albeit at a more moderate level.

Available country information on producer prices in September suggests a broadly similar picture to that which prevailed in August. That is, the rate of change in overall producer prices may decline further, owing to energy price developments, but the annual rate of change in producer price inflation excluding energy is expected to remain broadly unchanged at an elevated level.

Chart 18 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)
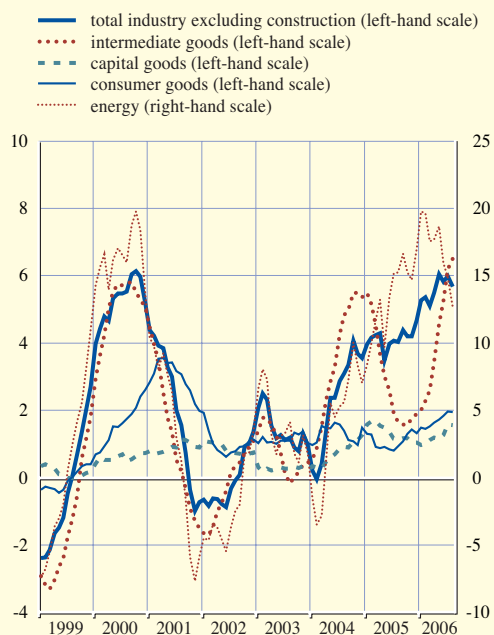
Sources: Eurostat and ECB calculations.

Price-related survey indicators available for September (data for October were not available at the time of writing) pointed to strong input price pressures in both the manufacturing and services sectors, although some easing was reported in the latter sector (see Chart 19). Similarly, the indicator of prices charged remained at high levels in both the manufacturing and services sectors, suggesting that firms had been able to partly pass on higher input costs to customers.

3.3 LABOUR COST INDICATORS

With the release of compensation per employee data for the second quarter of 2006, data on the three main indicators of euro area labour costs (also negotiated wages and hourly labour costs) are now available for that quarter. Each of these indicators shows an upward movement from the average rates that prevailed in 2005 (see Table 6 and Chart 20). In the second quarter

Chart 19 Producer input and output price surveys

(diffusion indices; monthly data)

— manufacturing; input prices
···· manufacturing; prices charged
- - - services; input prices
— services; prices charged
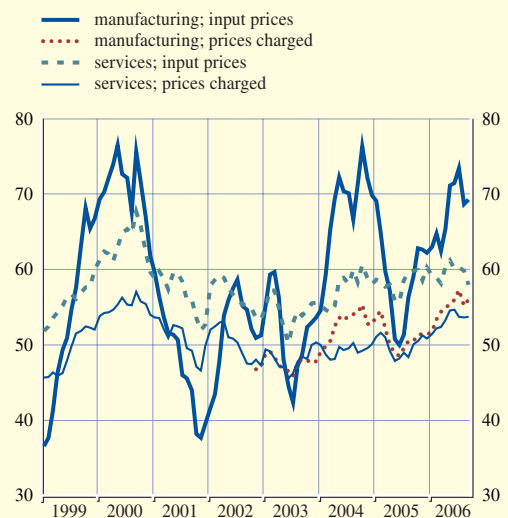
Source: NTC Economics.
Note: An index value above 50 indicates an increase in prices, whereas a value below 50 indicates a decrease.

of 2006 the annual rate of change in euro area compensation per employee stood at 2.1%, up from 1.9% in the previous quarter. However, despite the generalised pick-up in the labour cost indicators, it should be noted that each of them has been affected to some extent by country-specific temporary factors relating to one-off payments. Thus, despite the recent pick-up, and provided that no further acceleration takes place, euro area labour cost developments are judged to have remained relatively moderate during the first half of 2006.

This view is confirmed by considering developments in unit labour costs, where the cyclical increase in labour productivity growth in line with economic activity has helped, in conjunction with moderate wage developments, to keep annual growth rates subdued, at 0.6% in the second quarter.

Table 6 Labour cost indicators

(annual percentage changes, unless otherwise indicated)

	2004	2005	2005 Q2	2005 Q3	2005 Q4	2006 Q1	2006 Q2
Negotiated wages	2.1	2.1	2.1	2.1	2.0	2.1	2.4
Total hourly labour costs	2.3	2.2	2.3	1.8	2.0	2.2	2.4
Compensation per employee	2.1	1.6	1.4	1.5	1.9	1.9	2.1
Memo items:							
Labour productivity	1.0	0.7	0.5	0.9	1.0	1.2	1.4
Unit labour costs	1.1	0.9	0.9	0.5	0.8	0.8	0.6

Sources: Eurostat, national data and ECB calculations.

When considering labour cost developments at the sectoral level, it should be borne in mind that these need to be interpreted with caution owing to their volatility and the scope for revisions. As regards developments in industry, there has been a steady increase in compensation per employee growth since the beginning of 2005 (see Chart 21). However, some of this increase may be due to the cyclical increase in average hours worked in industry. This view is supported by underlying developments in hourly labour costs in industry. This latter series exhibits a strong but volatile seasonal pattern and special one-off payments most likely explain the upward spike in the second quarter of 2006. Turning to labour cost developments in market services, compensation per employee annual growth has been more stable, at slightly below 2% over the last three years. This picture is broadly confirmed by the hourly labour cost index data for market services.

Chart 20 Selected labour cost indicators

(annual percentage changes; quarterly data)

— compensation per employee
···· negotiated wages
- - - hourly labour costs
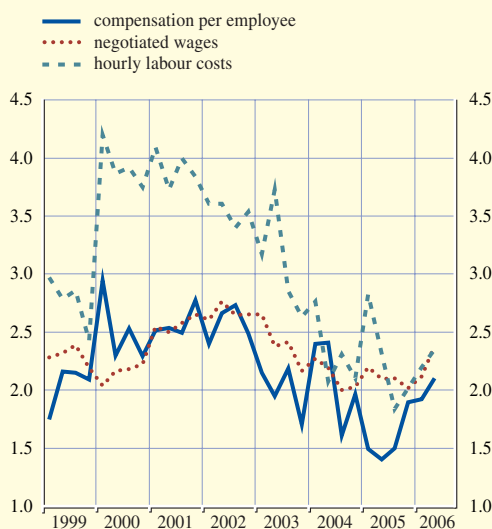
Sources: Eurostat, national data and ECB calculations.

Overall, inflationary pressures from the labour market are judged to have remained subdued, despite the general pick-up in labour cost growth in the second quarter. However, developments in the third quarter need to be monitored closely with a view to assessing whether the second quarter pick-up was indeed of a transitory nature.

Chart 21 Sectoral labour cost developments

(annual percentage changes; quarterly data)

— industry excluding construction CPE
···· construction CPE
- - - market services CPE
— services CPE

— industry excluding construction LCI
···· construction LCI
- - - market services LCI
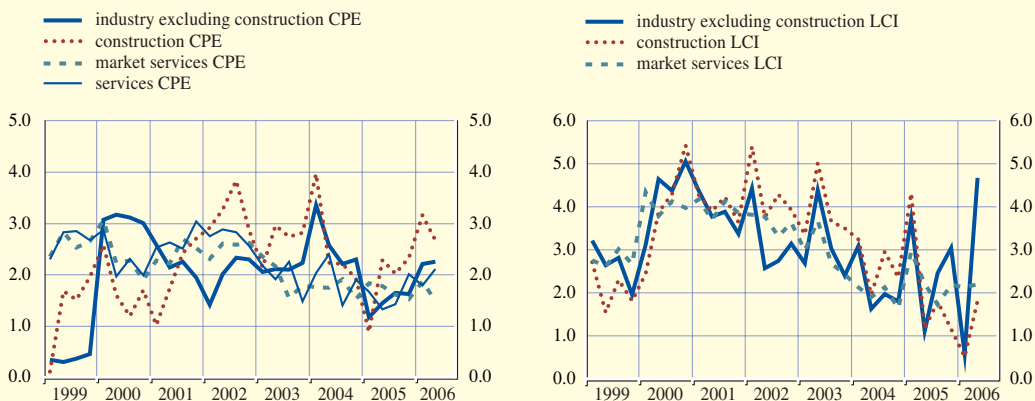
Sources: Eurostat and ECB calculations.
Note: CPE is compensation per employee and LCI is hourly labour cost index.

3.4 THE OUTLOOK FOR INFLATION

The decline in oil prices since August has resulted in a significant decline in euro area HICP inflation to levels that are below 2%. Looking ahead, on the basis of current oil price futures, base effects from oil price declines in late-2005, and the likely impact of the VAT increase in Germany in January 2007, are expected to result in a renewed increase in euro area HICP inflation over the coming months. This assessment is generally shared by private sector forecasters, who see expected inflation in 2007 of 2.1% (see Box 6).

As regards underlying inflationary pressures, the recent decline in oil prices is likely to have only a small moderating effect, given the long lags before indirect effects pass through the production chain. Moreover, at both the producer and consumer levels, there is evidence of upward pressure due to the indirect effects of past increases in oil and non-oil commodity prices. Other underlying domestic inflationary pressures, in particular those from labour costs, are expected to rise only slowly, owing to the expectation of continued wage moderation.

This outlook is subject to a number of risks, which remain clearly on the upside. They continue to include a stronger pass-through of past oil price rises into consumer prices than currently anticipated. In addition, developments in administered prices and indirect taxes remain a source of upward risk. Furthermore, renewed increases in oil prices cannot be excluded. More fundamentally, given favourable growth developments and an improving labour market situation, stronger than currently expected wage developments would pose significant upward risks to price developments.

Box 6

RESULTS OF THE ECB SURVEY OF PROFESSIONAL FORECASTERS FOR THE FOURTH QUARTER OF 2006

This box reports the results of the ECB Survey of Professional Forecasters (SPF) for the fourth quarter of 2006, which was conducted between 17 and 23 October 2006. The SPF gathers information on expectations for euro area inflation, GDP growth and unemployment from experts affiliated to financial or non-financial institutions based in the EU. The forecast was requested for the euro area as a whole, including Slovenia from 2007. It is important to bear in mind that, given the diversity of the panel of participants, aggregate SPF results can reflect a relatively heterogeneous set of subjective views and assumptions.

Inflation expectations for 2006, 2007 and 2008

Overall, SPF participants slightly lowered their inflation expectations for 2006. HICP inflation is now expected to stand at 2.2% in 2006, 0.1 percentage point lower than in the SPF round for the third quarter of 2006 (see table).[1] The main reason for this revision is the strong fall in oil prices in August and September, which has also led to lower than expected inflation over the past few months. Despite the recent decline in oil prices, average SPF inflation expectations for 2007 remained unchanged at 2.1%, which seems to reflect higher expectations for economic growth but also previously lower inflation expectations compared with other available forecasts.

1 Additional data are available on the ECB's website at www.ecb.int/stats/prices/indic/forecast/html/index.en.html.

Results from the SPF, Consensus Economics and the Euro Zone Barometer

(annual percentage changes, unless otherwise indicated)

			Survey horizon			
HICP inflation	**2006**	**Sep. 2007**	**2007**	**Sep. 2008**	**2008**	**Longer-term** [2]
SPF Q4 2006	2.2	2.1	2.1	1.9	1.9	1.9
Previous SPF (Q3 2006)	*2.3*	*-*	*2.1*	*-*	*1.9*	*1.9*
Consensus Economics (October 2006)	2.3	-	2.2	-	1.9	1.9
Euro Zone Barometer (October 2006)	2.2	-	2.2	-	1.9	1.9
Real GDP growth	**2006**	**Q2 2007**	**2007**	**Q2 2008**	**2008**	**Longer-term** [2]
SPF Q4 2006	2.6	2.0	2.0	2.0	2.0	2.0
Previous SPF (Q3 2006)	*2.2*	*-*	*1.8*	*-*	*2.0*	*2.1*
Consensus Economics (October 2006)	2.6	-	1.9	-	1.9	1.9
Euro Zone Barometer (October 2006)	2.5	-	1.8	-	1.9	1.9
Unemployment rate [1]	**2006**	**Aug. 2007**	**2007**	**Aug. 2008**	**2008**	**Longer-term** [2]
SPF Q4 2006	7.9	7.6	7.6	7.4	7.4	7.0
Previous SPF (Q3 2006)	*7.9*	*-*	*7.7*	*-*	*7.5*	*7.0*
Consensus Economics (October 2006)	7.9	-	7.6	-	-	-
Euro Zone Barometer (October 2006)	7.9	-	7.7	-	7.6	7.1

1) As a percentage of the labour force.
2) Longer-term expectations refer to 2011 in the SPF, 2010 in the Euro Zone Barometer and to the period 2012-16 in Consensus Economics.

The SPF forecast for 2007 remains 0.1 percentage point below the forecasts recently released by Consensus Economics and the Euro Zone Barometer. SPF participants expect inflation to decline on average in 2008 to 1.9%, unchanged from the previous round, and in line with the figures from the latest Consensus Economics and the Euro Zone Barometer. As in 2007, upward pressure from robust domestic demand is expected, but this could be counteracted by a slowdown of the world economy.

SPF participants were also asked to assign a probability distribution to their forecasts. This distribution provides information on the probability of the future outcome being within a specific interval. The probability distribution resulting from the aggregation of responses also helps to assess how, on average, survey participants gauge the risk of the actual outcome being above or below the most likely range. Chart A, which shows the aggregate probability distribution for average annual rates of HICP inflation in 2007 in the last three rounds of the survey, indicates a slight shift in the probability distribution towards lower outcomes compared with the previous round. There also appear to be some downside risks given that a larger part of the distribution falls in a range below the most likely range. However, when SPF participants reveal their explicit risk assessment, they mostly point to

Chart A Probability distribution for average inflation in 2007 in the last three rounds of the SPF [1]

(percentages)
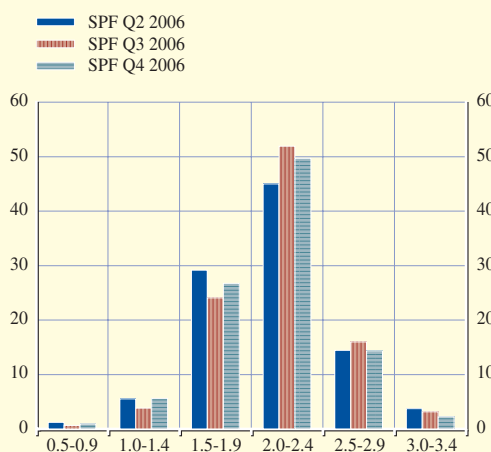
Source: ECB.
1) Corresponds to the aggregation of each individual probability distribution provided by SPF forecasters.

Source: ECB.
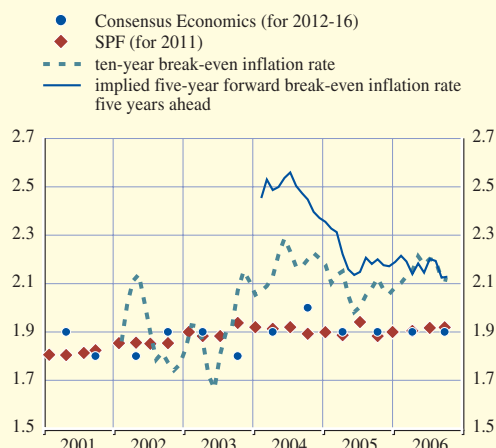
Sources: Consensus Economics, ECB, Reuters and ECB calculations.
Note: Ten-year break-even inflation rate derived from 2012-maturity bonds until March 2005 and from 2015-maturity bonds thereafter.

upward risks, particularly related to future oil price developments and government measures impacting on inflation. Wage developments are mainly expected to remain in check, since globalisation is seen to help contain wage growth. However, in the context of robust growth, some forecasters see a risk of higher wages due to second-round effects. Risks to the inflation outlook in 2008 are assessed to be clearly on the upside.

Indicators of longer-term inflation expectations

Longer-term inflation expectations (five years ahead) remained at 1.9% for the 20th consecutive survey. They are also in line with inflation expectations provided earlier in October by Consensus Economics for six to ten years ahead and by the Euro Zone Barometer regarding expectations for 2010. However, as Chart B shows, the probability that longer-term inflation may stand at 2.0% or above rose again somewhat, pointing to a slight increase in the perception of upward risks to price stability. Nevertheless, this probability remained below the peak observed in the second quarter of 2006.

SPF survey results can also be compared with the break-even inflation rate, an indicator of longer-term inflation expectations among market participants calculated as the yield spread between nominal and inflation-linked bonds.[2] The ten-year break-even inflation rate derived from the French government inflation-linked bonds (linked to the euro area HICP excluding tobacco) maturing in 2015 has declined since August 2006 (see Chart C). Similarly, the implied five-year forward break-even inflation rate five years ahead has been on an overall downward path since mid-2006. However, break-even inflation rates should not be interpreted as direct measures of inflation expectations as they may also incorporate various risk premia (e.g. inflation uncertainty and liquidity premia). Consequently, developments in break-even inflation

2   See also the article entitled "Measures of inflation expectations in the euro area" in the July 2006 issue of the Monthly Bulletin.

rates may partly reflect more uncertainty among investors about future inflation and a resulting willingness to pay a premium for a hedge.

Real GDP growth expectations

Expectations for real GDP growth have been revised upwards by 0.4 percentage point for 2006 compared with the previous SPF round, and now point to real GDP growth of 2.6%. This upward revision mainly reflects the stronger than expected strengthening in growth in the first half of 2006 as well as higher expectations for growth in domestic demand (particularly in private consumption and investment). In addition, expectations for external demand have also been revised upwards, largely reflecting the continued strong expansion of the world economy. In 2007 and 2008, real GDP growth is then expected to decline to around 2.0%, mainly reflecting a slowdown in the global economy. In all three calendar years, the balance of risks to the growth outlook is assessed to be on the downside. SPF growth expectations for 2006, 2007 and 2008 are broadly in line with those from Consensus Economics and the Euro Zone Barometer. Longer-term growth expectations (for 2011) have been revised downwards by 0.1 percentage point and now stand at 2.0%. According to most forecasters, longer-term growth prospects depend mainly on further structural reforms in the labour market and social security systems. Forecasters generally stress that more flexible and efficient markets will lead to higher labour productivity and output growth.

Expectations for the euro area unemployment rate

Unemployment rate expectations for 2006 remained unchanged at 7.9%, while expectations for 2007 and 2008 have been revised down by 0.1 percentage point and now stand at 7.6% and 7.4%, respectively. According to SPF forecasters, over the survey horizon, unemployment should benefit from the strong economic recovery and an improvement in the labour market. The balance of risks is assessed by participants to be on the downside in 2006 but more on the upside in 2007 and 2008. According to respondents' qualitative explanations, the upward risks surrounding the unemployment rate forecasts for 2007 and 2008 are mainly related to downside risks to the pace of economic growth and the possibility that the process of delocalisation of euro area firms to lower-cost countries could be intensified. The expected rate of unemployment in 2011 stands at 7.0%, unchanged from the previous round. The balance of risks derived from the aggregate probability distribution is assessed to be significantly on the upside. Respondents emphasise that the decline in the unemployment rate over the longer-term horizon is largely dependent on further labour market reforms and demographic factors.

4 OUTPUT, DEMAND AND THE LABOUR MARKET

Eurostat's second estimate of euro area real GDP growth in the second quarter of 2006 confirmed that the euro area economy expanded at a strong pace in the first half of the year. Furthermore, the sectoral breakdown of employment and activity shows that the momentum in economic activity has been broadly based. The expansion is mainly driven by domestic demand, in particular investment, and supported by improving labour market conditions. The latest available short-term indicators, including industrial production and survey data, suggest that growth remained robust in the third quarter of the year, although probably slightly below the growth rates observed in the first half of the year, sustained by both external and domestic factors. Risks to the outlook remain broadly balanced in the short term. Over longer horizons, downside risks relate to a disorderly unwinding of global imbalances, protectionist pressures and the possibility of renewed increases in oil prices.

4.1 OUTPUT AND DEMAND DEVELOPMENTS

REAL GDP AND EXPENDITURE COMPONENTS

Eurostat's second release of national accounts data confirmed that euro area real GDP expanded by 0.9% quarter on quarter in the second quarter of 2006, following quarterly growth of 0.8% in the first quarter (see Chart 22). Compared with one year before, euro area GDP grew by 2.7% in the second quarter, revised upwards by 0.1 percentage point since the first estimate. Whereas the second release entails some small revisions to the expenditure components, it confirms that the main driving force behind economic activity in the second quarter was domestic demand excluding inventories. This contributed 0.7 percentage point to GDP growth, unchanged as compared with the first estimate.

Investment showed significant dynamism in the second quarter, reaching a quarter-on-quarter growth rate of 2.1%. As discussed in Box 7, the sectoral breakdown of investment shows that the strength of investment was broadly based in the euro area as a whole. Meanwhile, growth in private consumption and government consumption decreased, to 0.3% and 0.5% respectively quarter on quarter. The figures for government consumption were revised upwards slightly with the second estimate, by 0.1 percentage point, for both the first and second quarters of 2006.

The contribution of net exports to GDP growth was almost neutral in the second quarter, after being positive at 0.4 percentage point in the first quarter. This development resulted from a stronger deceleration in exports than in imports. The contribution of net exports was revised downwards from the first estimate by 0.1 percentage point in the second quarter, while the contribution of inventories was revised upwards by the same amount.

Chart 22 Real GDP growth and contributions

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

- domestic demand (excluding inventories)
- changes in inventories
- net exports
- total GDP growth (%)

Sources: Eurostat and ECB calculations.

**ECONOMIC
AND MONETARY
DEVELOPMENTS**

Output,
demand and the
labour market
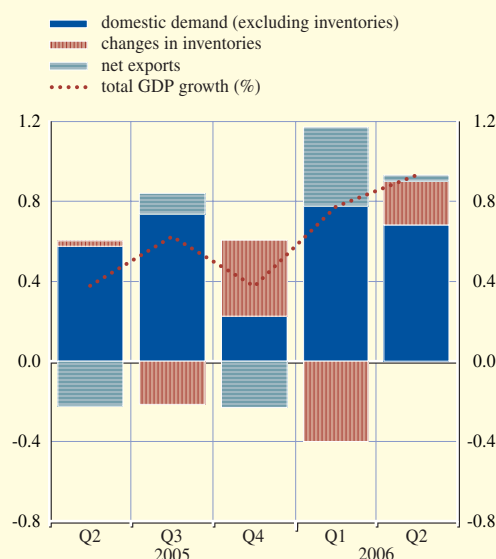
Box 7

RECENT DEVELOPMENTS IN EURO AREA INVESTMENT

In the first half of 2006 investment in the euro area increased by 2.2% relative to the second half of the previous year, following a semi-annual increase of 2.0% in the second half of 2005. This is the highest semi-annual investment growth rate recorded since the second half of 2000, when investment rose by 3.0%. Investment was thus one of the main driving forces behind the favourable overall developments in economic activity in the euro area in the first half of 2006. This box reviews in further detail developments in investment in the euro area up to the second quarter of this year.

The increase in investment growth in the first half of 2006 was broadly based. It reflected strong growth rates for both construction and non-construction investment, each of which accounts for roughly half of total investment (see Chart A). The semi-annual growth rates in these sectors stood at 2.5% and 2.0% respectively. For the construction sector this represented a 1.0 percentage point increase in the semi-annual growth rate as compared with the second half of 2005, whereas for the non-construction sector this represented a decline of 0.5 percentage point. The strong investment performance in the first half of 2006 was also broadly based across countries.

Non-construction investment

The moderate fall in non-construction investment growth in the first half of this year largely reflects the decrease, by 1.2 percentage points to 1.7% , in the semi-annual growth of investment in metal products and machinery (accounting for 60% of non-construction investment) and in the semi-annual growth of investment in "other products" (representing a further 20% of total non-construction investment), by 1.3 percentage points to 0.8%. On the other hand, investment in transport equipment (which also accounts for 20% of non-construction investment) rose by

Chart A Total construction and non-construction investment

(quarter-on-quarter changes; seasonally adjusted)

- non-construction
- construction
- total
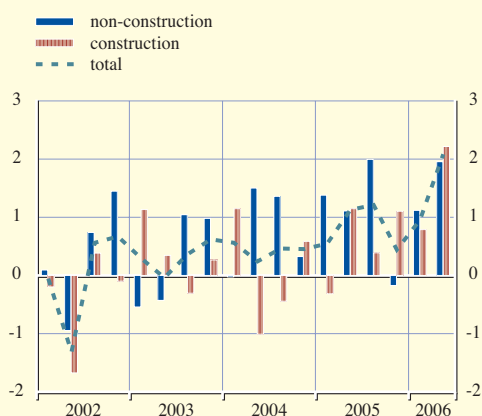
Source: Eurostat.

Chart B Breakdown of non-construction investment

(quarter-on-quarter changes; seasonally adjusted)

- metal and machinery
- transport
- other products [1]
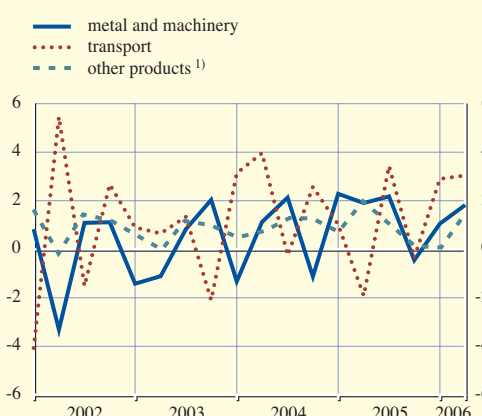
Source: Eurostat.
1) Includes agriculture.

a substantial 4.3%, which is 2.1 percentage points higher than in the second half of 2005. All three components of non-construction investment were strongly affected by positive developments in Germany, where a negative trend in the period up to 2004 was reversed.

Investment in construction

The increase in euro area construction investment growth to 2.5% in the first half of 2006 represents the highest growth rate for around five years. The developments in the first half of 2006 as a whole were broadly similar for both housing and non-housing construction investment (each representing half of total construction investment), which grew by 2.1% and 2.9% respectively. The two countries contributing most to construction investment growth in the first half of 2006 were Spain, at around 0.6 percentage point, and France, at around 0.4 percentage point. Developments in Germany are also worth mentioning, where construction investment decreased by 2.9% in the first quarter of 2006, but increased by 4.6% in the second quarter, leading to a relatively small positive contribution to the semi-annual construction investment growth of 0.1 percentage point.

In the case of housing investment, the ongoing growth is in line with the generally dynamic conditions in several euro area housing markets, including house price increases. In addition, both construction and non-construction investment have benefited from buoyant corporate profits, favourable financing conditions and high expectations of future economic growth and demand. Gross operating surplus, an indicator of corporate profit growth in the euro area and an important source of internal funding for corporate investment, increased by 1.3% and 1.8% respectively on a quarter-on-quarter basis in the first and second quarters of 2006 (see Chart C). These are the two highest consecutive quarterly growth rates in this indicator since the second half of 2001. Profit growth, which moved closely in line with real investment in 2005 and the first half of 2006, is supported by moderate wage developments and the continued pick-up in demand. Notwithstanding strong external price and cost pressures, this combination of factors, together with very favourable financing conditions, has enabled euro area firms to invest. Looking ahead, such factors are expected to continue to support overall euro area investment.

For the third quarter of 2006, as shown by the bank lending survey, banks report a strong positive net demand for loans by enterprises, behind which fixed investment was one of the main driving forces. This demand for loans may provide a further positive signal for investment growth in the second half of 2006.[1] In addition, the EC industrial sector surveys on the current level of capacity utilisation and the assessment of current production capacity, which have a high degree of correlation with year-on-year investment growth, point to a further strengthening of investment growth in the third quarter of 2006.

Chart C Total investment and gross operating surplus

(quarter-on-quarter changes; seasonally adjusted)
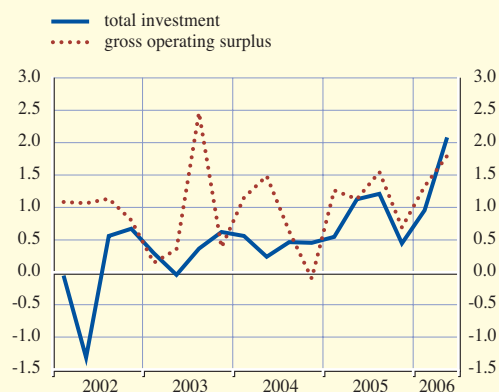
Source: Eurostat.
Note: Gross operating surplus is defined as GDP less compensation of employees less taxes (minus subsidies) on production.

1 See Box 2 in this issue of the ECB's Monthly Bulletin for a detailed analysis of the results of the bank lending survey for the euro area.

**ECONOMIC
AND MONETARY
DEVELOPMENTS**

Output,
demand and the
labour market

SECTORAL OUTPUT AND INDUSTRIAL PRODUCTION

The sectoral composition of economic activity reveals that growth in the first half of this year was broadly based across sectors. Value-added growth in the services sector increased further in the second quarter, owing largely to the strong performance recorded in market services. Moreover, value-added growth in industry excluding construction remained strong, showing growth rates that have not been recorded in this sector since mid-2000. Finally, value added in construction expanded vigorously in the second quarter, partly reflecting a rebound from the subdued developments in the first quarter which resulted from the unusually cold weather conditions.

Industrial production excluding construction grew by 1.8% in August, after falling by 0.5% in July. On a three-month moving average basis, between June and August, while decelerating slightly, it rose by 1.4% compared with the previous period (see Chart 23). The increase in production in August was broadly based across sectors, with the exception of the energy sector, where production fell. The largest increase was recorded in the production of intermediate goods, followed by capital goods and consumer goods. The latter reflected a significant increase for durables and, to a lesser extent, non-durables.

Industrial new orders also point to positive developments in the industrial sector. Industrial new orders of manufacturing goods increased by 2.0% in August on a three-month moving average basis, following a 1.4% increase in July. This increase is confirmed even leaving aside other transport equipment – including ships, railway and aerospace equipment – which is a particularly volatile component of the new order data.

Overall, developments in August tend to support the assessment that activity in the industrial sector in the third quarter continued to be robust.

SURVEY DATA FOR THE INDUSTRIAL AND SERVICES SECTORS

The European Commission's industrial confidence indicator showed a slight increase in October 2006, while the Purchasing Managers' Index (PMI) for the manufacturing sector, which is only available up to September, remained unchanged (see Chart 24). Both indicators remained, on average, broadly unchanged in the third quarter as compared with the historically high levels recorded in the second quarter. The rise in the European Commission's industrial confidence indicator in October reflected improvements in the assessment of order books and in the assessment of production expectations. Meanwhile, the assessment of stocks remained unchanged as compared with the previous month.

Chart 23 Industrial production growth and contributions

(growth rate and percentage point contributions; monthly data; seasonally adjusted)

■ capital goods
▦ consumer goods
▬ intermediate goods
— total excluding construction and energy (%)
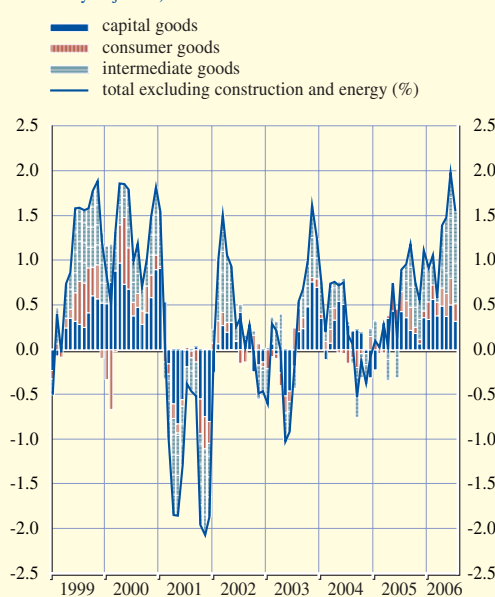
Sources: Eurostat and ECB calculations.
Note: Data shown are calculated as three-month centred moving averages against the corresponding average three months earlier.

Chart 24 Industrial production, industrial confidence and the PMI

(monthly data; seasonally adjusted)

— industrial production [1] (left-hand scale)
•••• industrial confidence [2] (right-hand scale)
– – PMI [3] (right-hand scale)
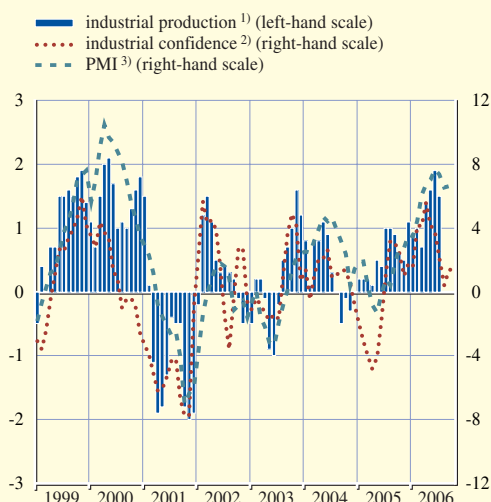
Sources: Eurostat, European Commission Business and Consumer Surveys, NTC Economics and ECB calculations.
1) Manufacturing; three-month-on-three-month percentage changes.
2) Percentage balances; changes compared with three months earlier.
3) Purchasing Managers' Index; deviations from an index value of 50.

Chart 25 Retail sales and confidence in the retail trade and household sectors

(monthly data)

— total retail sales [1] (left-hand scale)
•••• consumer confidence [2] (right-hand scale)
– – retail confidence [2] (right-hand scale)
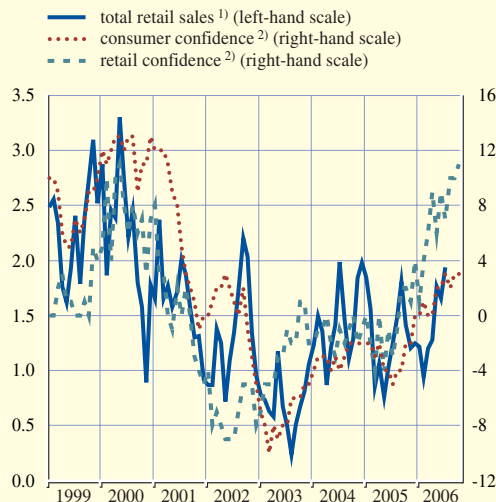
Sources: European Commission Business and Consumer Surveys and Eurostat.
1) Annual percentage changes; three-month centred moving averages; working day-adjusted.
2) Percentage balances; seasonally and mean-adjusted. For consumer confidence, euro area results from January 2004 onwards are not fully comparable with previous figures owing to changes in the questionnaire used for the French survey.

Turning to the services sector, the European Commission's confidence indicator increased in October, thereby fully reversing the fall seen in September. In the third quarter as a whole, confidence in the services sector rose as compared with the previous quarter. The latest increase was reflected in all three components, with improvements in the assessment of recent and expected demand as well as in the assessment of the business climate. The activity index of the PMI for the services sector declined further in September and also for the third quarter as a whole, albeit from a very high level. Recent developments in the index still support the view of ongoing robust growth in the euro area services sector.

INDICATORS OF HOUSEHOLD SPENDING

In the second quarter, private consumption rose by 0.3% quarter on quarter, after 0.7% in the first quarter, reflecting a lower contribution from non-retail sales components. The volume of retail sales rose by 0.7% month on month in August 2006, following an increase of 0.3% in July. Thus, the three-month centred moving average of retail sales growth increased to 1.0% in July. New passenger car registrations increased in August and September, following a marked decline in July. In the third quarter as a whole, new car registrations declined by 2.3%, following a rise of 1.2% in the previous quarter.

Consumer confidence remained unchanged in October following a slight rise in September (see Chart 25). Improvements in the assessments relating to the future general economic situation and unemployment were offset by a decline in savings expectations. The assessment of the expected financial situation remained unchanged.

ECONOMIC
AND MONETARY
DEVELOPMENTS

Output,
demand and the
labour market

Overall, the latest data on retail sales, together with new car registrations and other surveys on consumer confidence, provide positive signals with regard to growth in private consumption in the third quarter of 2006.

4.2 LABOUR MARKET

The latest available information confirms an improvement in euro area labour markets over the course of 2006. In particular, employment growth strengthened in the second quarter on a broad sectoral basis. Employment expectations, despite recently showing mixed signals, also support the picture of ongoing employment growth in the short term.

UNEMPLOYMENT

The standardised unemployment rate for the euro area increased slightly in August 2006 to 7.9%, compared with 7.8% in July (see Chart 26). While the unemployment rate remains below the figures recorded in the first half of the year, the monthly decrease in the number of persons unemployed has levelled off progressively over recent months.

Chart 26 Unemployment

(monthly data; seasonally adjusted)

— monthly change in thousands (left-hand scale)
····· percentage of the labour force (right-hand scale)

Source: Eurostat.

EMPLOYMENT

The latest available data have confirmed the gradual strengthening of employment developments recorded since the start of 2005, from growth of 0.1% quarter on quarter in the first quarter of 2005 to 0.4% in the second quarter of this year (see Table 7). The sectoral breakdown made available in the course of October shows that the increase in employment in the second quarter was broadly based. Employment increased in the services sector, with the strongest growth rate

Table 7 Employment growth

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

	Annual rates		Quarterly rates				
	2004	2005	2005 Q2	2005 Q3	2005 Q4	2006 Q1	2006 Q2
Whole economy	0.7	0.8	0.1	0.2	0.3	0.3	0.4
of which:							
Agriculture and fishing	-1.7	-1.7	0.1	0.0	0.1	-0.6	0.9
Industry	-0.6	-0.1	-0.1	-0.1	0.2	0.0	0.2
Excluding construction	-1.4	-1.2	-0.4	-0.1	-0.2	-0.2	0.0
Construction	1.4	2.5	0.6	0.0	1.1	0.6	0.7
Services	1.4	1.2	0.2	0.3	0.4	0.5	0.5
Trade and transport	0.9	0.8	-0.1	0.0	0.4	0.3	0.4
Finance and business	1.9	2.1	0.4	0.7	1.1	0.6	1.0
Public administration	1.5	1.2	0.4	0.4	0.1	0.6	0.2

Sources: Eurostat and ECB calculations.

being observed in financial and business services, as was the case in the previous quarters (see Box 8 for a review of the determinants of the services sector employment share in the euro area). Employment also grew in the construction sector and remained stable in industry excluding construction, a sector in which it had previously been declining since the middle of 2001.

Annual labour productivity growth rose further in the second quarter of 2006, from 1.2% in the first quarter to 1.4%, a rate higher than its average since 1992. This resulted from a rise in productivity growth in industry excluding construction, construction and agriculture, and a decline in services.

In the third quarter, employment expectations from the EC business surveys increased in industry, but declined somewhat in services, whereas employment expectations from the PMI recorded small declines for both the manufacturing and the services sector. In October, employment expectations from the EC business surveys remained unchanged in industry, while rising slightly in services. Overall, employment expectations remain at high levels and are consistent with the assessment that euro area labour market conditions are gradually improving in line with stronger economic activity.

Box 8

DETERMINANTS OF THE SERVICES SECTOR EMPLOYMENT SHARE IN THE EURO AREA

Over the last 20 years euro area countries have experienced a significant change in their employment structure, namely an increase in the size of the services sector relative to manufacturing.[1] The share of the workforce employed in services increased by around 14 percentage points in the euro area between 1980 and 2003,[2] to reach 69%. Over the same period, the corresponding share in the United States was consistently higher than in the euro area, increasing by 10 percentage points to 81% (see the chart).

The rise in the services sector's share in euro area employment was mainly driven by increases in finance, insurance, real estate and business services, as well as in community, social and personal services (see the table). The share exhibits a large heterogeneity across euro area countries, ranging from 60% in Portugal to 78% in the Netherlands for total services in 2003. Understanding the main factors behind both the gap in the euro area services sector employment share relative to the United States and differences across euro area countries is an important step towards identifying the key policy adjustments needed to achieve higher employment levels in the euro area.

Services sector employment shares

(% of total employment)

■ euro area
▦ United States
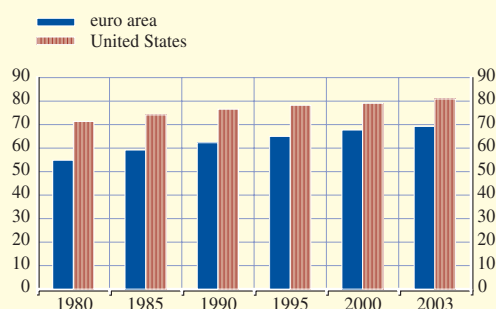
Source: OECD Structural Analysis Database (STAN).

1 See also "Competition, productivity and prices in the euro area services sector", ECB Occasional Paper No 44, April 2006 and the box entitled "Labour productivity and price developments in the euro area services sector: the role of competition" in the April 2006 issue of the Monthly Bulletin.
2 Data in the OECD's Structural Analysis Database are currently only available to 2003.

ECONOMIC
AND MONETARY
DEVELOPMENTS

Output,
demand and the
labour market

Services sector employment share: total services and sub-sectors

(% of total employment)

	Total services		Wholesale and retail trade; restaurants and hotels		Transport, storage and communication		Finance, insurance, real estate and business services		Community, social and personal services	
	1980	2003	1980	2003	1980	2003	1980	2003	1980	2003
Belgium	64	77	19	18	7	6	10	17	28	35
Germany[1]	54	70	18	20	6	5	8	16	22	29
Greece[2]	56	61	20	22	7	7	7	9	22	23
Spain	49	65	18	21	6	6	6	10	19	28
France[3]	58	74	16	17	6	6	10	17	26	34
Ireland	50	66	16	21	6	6	6	13	21	26
Italy	49	67	17	20	5	5	5	14	21	28
Luxembourg[4]	63	77	22	19	7	8	12	28	22	22
Netherlands	66	78	18	20	6	6	11	19	31	33
Austria	49	64	17	20	6	6	7	14	18	25
Portugal	43	60	17	21	4	3	4	9	18	27
Finland	53	69	16	16	7	7	6	12	24	34
euro area	55	69	17	20	6	6	8	14	24	29
United States	71	81	22	22	5	5	13	18	32	35

Source: ECB calculations on the basis of the OECD's Structural Analysis Database (STAN).
1) Germany: data up to 1990 refer to Western Germany only
2) Greece: "1980" data refer to 1995
3) France: "2003" data refer to 2002
4) Luxembourg: "1980" data refer to 1985

A number of explanations for the upward trend in the services sector employment share have been put forward in academic analyses. These include: a rise in the demand for services as per capita income levels increase and the structure of expenditure switches away from basic material needs towards services; an increase in the proportion of the labour force channelled into service activities on account of slower labour productivity growth in the services sector relative to manufacturing; a rise in the female participation rate (leading, for example, to the substitution of unpaid by paid household services) and in the employment of women in the services sector; a rising demand for services in line with demographic shifts (since older people tend to consume proportionally more services than younger cohorts); and, finally, increased demand for services associated with the process of urbanisation (since urban populations tend to consume more services than rural populations in relative terms).[3]

At the same time it has been argued that differences in the services sector employment share across countries at a similar stage of economic development may also result from differences in the institutional framework affecting the degree of flexibility of labour and product markets. Research exploring this hypothesis for a sample of OECD countries found that the strictness of employment protection legislation, the degree of unionisation and centralisation of wage bargaining, and the administrative burden on the creation of new firms significantly affected the employment share of services.[4]

More recent work finds evidence to support the hypothesis that barriers to labour market adjustment in the EU may have hindered the ongoing process of sectoral reallocation of the

3 For references and a summary of this literature, see R. Schettkat and L. Yocarini, "The Shift to services, a review of the literature", IZA discussion paper No 964, 2003.
4 "Employment in the service economy: a reassessment", OECD Employment Outlook 2000, Chapter 3, 2000; J Messina, "Institutions and service employment: a panel study for OECD countries", ECB Working Paper No 320, 2004.

workforce from manufacturing to services.[5] On the basis of a panel dataset of 13 EU countries for the period 1970 to 2001, the analysis reveals that a set of indicators capturing different dimensions of labour market flexibility explains the employment share in services. In particular, a higher level of structural rigidity is associated with a lower employment share in services. The results also support the hypothesis that the EU countries' relatively low ability to match the skills of their workforce – in terms of skill levels and educational attainment – to changing labour requirements has hampered the shift to services and may have prevented a further reduction in the gap between the European and US services sector employment shares.

Education and labour market policies implemented in individual countries within the context of the European Employment Strategy over the last decade have contributed to increasing both aggregate and services sector employment in the euro area. However, despite these efforts, reaching even higher levels of labour utilisation and enhancing the degree of labour market flexibility are important prerequisites for euro area countries to prepare for the challenges of technological change, population ageing and globalisation. In addition, further structural reforms to address these issues should help euro area labour markets to adjust to local shocks, match workers and job vacancies more efficiently and reabsorb workers seeking employment as a result of sectoral adjustment.

5 A. D'Agostino, R. Serafini and M. Ward-Warmedinger, "Sectoral explanations of employment in Europe: the role of services", ECB Working Paper No 625, 2006.

4.3 THE OUTLOOK FOR ECONOMIC ACTIVITY

The latest indicators on recent developments in euro area activity provide further evidence that economic growth has become more domestic demand-based and more widely spread across sectors. Overall, the latest data and surveys available suggest that economic growth should remain robust in the second half of 2006, although slightly below the growth rates observed in the first half of the year. This analysis is also confirmed by the results of the ECB Survey of Professional Forecasters for real GDP growth, which points to improved expectations for domestic demand (see Box 6). On the domestic side, a continued improvement in business confidence and the strong dynamics of loans to non-financial corporations indicate that short-term prospects for investment remain strong. In addition, consumption is anticipated to gain in dynamism in the coming quarters in line with improvements in the labour market and the rise in consumer confidence. The risks to this outlook are considered to be balanced over the short term. Over the longer term, downside risks are mainly related to a disorderly unwinding of global imbalances, protectionist pressures and renewed increases in oil prices.

**ECONOMIC
AND MONETARY
DEVELOPMENTS**

Exchange rate
and balance
of payments
developments

5 EXCHANGE RATE AND BALANCE OF PAYMENTS DEVELOPMENTS

5.1 EXCHANGE RATES

After a period of relative stability, the euro showed some tendency to weaken, in nominal effective terms, in October 2006, trading slightly more than half a percentage point below its end-July level. Over the past three months it has lost some ground against most major currencies, with the notable exception of the Japanese yen, which continued to be subject to a broad-based weakening.

US DOLLAR/EURO

After reaching a peak of USD 1.29 on 21 August 2006, the euro underwent a period of gradual depreciation against the US dollar that was only partly reversed at the end of October (see Chart 27). The easing of oil prices in September is likely to have been a factor behind the strengthening of the US dollar against the euro by possibly helping to alleviate market participants' concerns about the US economic outlook. The strength of the dollar may have been reinforced in October by a series of positive economic data releases in the United States that led market participants to revise downwards their assessment of the probability of a sharp slowdown in US economic activity materialising in 2007. However, the publication of lower than expected US GDP growth data for the third quarter of 2006 towards the end of the month may have subsequently weighed on the US currency. On 31 October 2006 the euro traded at USD 1.27, 0.6% below its end-July level and 2.1% above its 2005 average (see Chart 27).

JAPANESE YEN/EURO

The euro appreciated relatively significantly vis-à-vis the Japanese yen in the last three months, against the background of persistent broad-based weakness in the Japanese currency. The rise of the euro against the yen was particularly pronounced in August 2006, leading to a historical high of JPY 150.6 on 1 September. Thereafter, the euro appears to have stabilised at levels slightly below its September peak. The weakening of the yen against the euro in August might have been associated with market perceptions that the tightening of monetary policy in Japan may occur at a slower pace than expected. The subsequent phase of stabilisation of the exchange rate seems consistent with the absence of significant changes

Chart 27 Patterns in exchange rates

(daily data)

Source: ECB.

in the short-term growth outlook in both economic areas. On 31 October the euro traded at JPY 150, 2.6% above its end-July level and 9.3% above its 2005 average (see Chart 27).

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

- CYP/EUR
- EEK/EUR
- DKK/EUR
- SKK/EUR

- LTL/EUR
- SIT/EUR
- MTL/EUR
- LVL/EUR
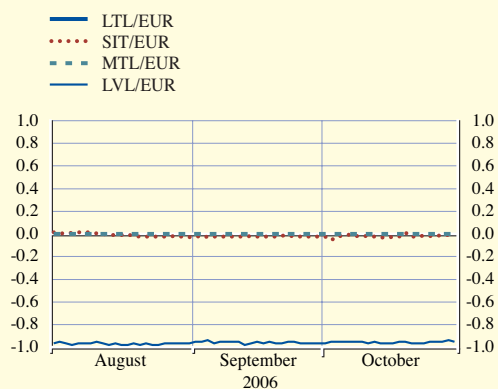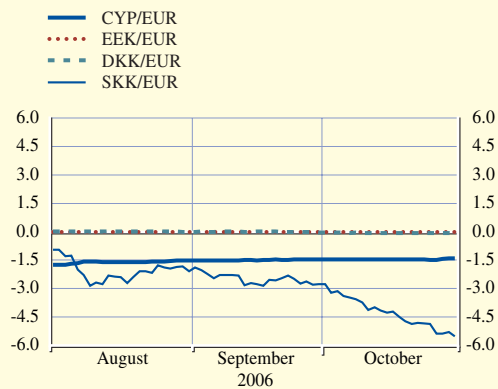
Source: ECB.
Note: A positive (negative) deviation from the central parity against the euro implies that the currency is on the weak (strong) side of the band. For the Danish krone, the fluctuation band is ±2.25%; for all other currencies, the standard fluctuation band of ±15% applies.

(daily data)

Index: Q1 1999 = 100
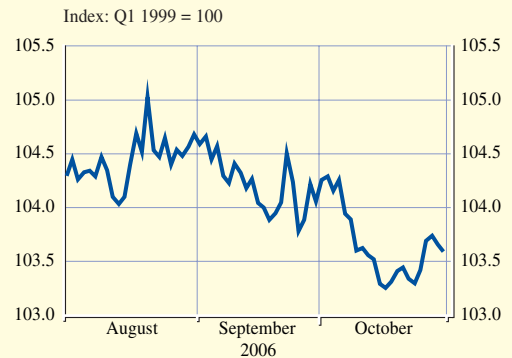
Contributions to EER changes [2]
From 31 July to 31 October 2006
(in percentage points)
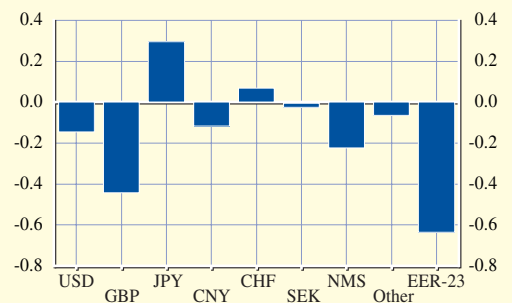
Source: ECB.
1) An upward movement of the index represents an appreciation of the euro against the currencies of the most important trading partners of the euro area and all non-euro area EU Member States.
2) Contributions to EER-23 changes are displayed individually for the currencies of the six main trading partners of the euro area. The category ''NMS'' refers to the aggregate contribution of the currencies of the ten new Member States that 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.

EU MEMBER STATES' CURRENCIES

Since the end of July 2006 most currencies participating in ERM II have been stable and traded at or close to their respective central rates (see Chart 28). In October the Slovak koruna strengthened, following a period of weakness in July, trading on 31 October 5.5% stronger than its ERM II central parity. With regard to the currencies of other EU Member States, the euro depreciated against the pound sterling – being quoted on 31 October at GBP 0.67, 2.3% below its end-July level and 2.2% below its 2005 average – while it remained largely stable against the Swedish krona. The weakness of the euro against the pound sterling may have stemmed from the reaction of market participants to strong economic and survey data in the United Kingdom, which led them to reassess upwards their assessment of the economic outlook in that country. The euro also depreciated against the Czech koruna (by 1.1%) and the Polish zloty (by 1.6%) and more significantly against the Hungarian forint (by 4.4%), despite political tensions and the negative outlook assigned to Hungary by a rating agency in September. A number of the currencies of the new EU Member States may have gained support from a tightening of monetary policy in the respective countries.

**ECONOMIC
AND MONETARY
DEVELOPMENTS**

Exchange rate
and balance
of payments
developments

OTHER CURRENCIES

Between end-July and 31 October 2006 the euro depreciated against the Chinese renminbi (by 1.7%) and against most Asian currencies linked to the US dollar, and remained stable against the Canadian dollar. By contrast, it appreciated slightly against the Swiss franc (by 1.1%) and more sharply against the Norwegian krone (by 6%), the latter possibly having been negatively affected by declining oil prices.

EFFECTIVE EXCHANGE RATE OF THE EURO

In view of the developments in the bilateral exchange rates of the euro, on 31 October 2006 the nominal effective exchange rate – as measured against the currencies of 23 of the euro area's important trading partners – stood just above half a percentage point below its level at the end of July and close to its average in 2005 (see Chart 29).

5.2 BALANCE OF PAYMENTS

The latest balance of payments data, up to August 2006, show that exports have continued to increase at a moderate rate in recent months, while imports have picked up. Meanwhile, the 12-month cumulated current account registered a deficit of 0.5% of GDP in August 2006, after a surplus in the previous year, mainly as a result of higher import prices for oil and other commodities. In the 12-month period up to August 2006, the net inflow in combined direct and portfolio investment fell by €84 billion compared with the previous year, primarily owing to a shift from net inflows to net outflows in debt securities.

TRADE AND THE CURRENT ACCOUNT

The latest balance of payments data show that exports have continued to increase at a moderate rate in recent months, while imports have picked up. In August 2006 the three-month moving average of the value of exports and imports of goods and services grew by 1.5% and 3.3% respectively, while the corresponding growth rates for trade in goods were 1.8% and 3.6% respectively (see Table 8 and Chart 30).

The breakdown of trade in goods by volume and price, available up to July 2006, shows a moderation in the growth of both export prices and volumes compared with the robust growth in the first quarter of 2006. The evolution of export volumes may be partly explained by the growth of foreign demand, which seems to have moderated somewhat after the high levels recorded earlier in the year.

The increase in the value of imports in July and August seems to be partly due to upward pressure on import prices from higher oil and

Chart 30 The euro area current account and trade balances

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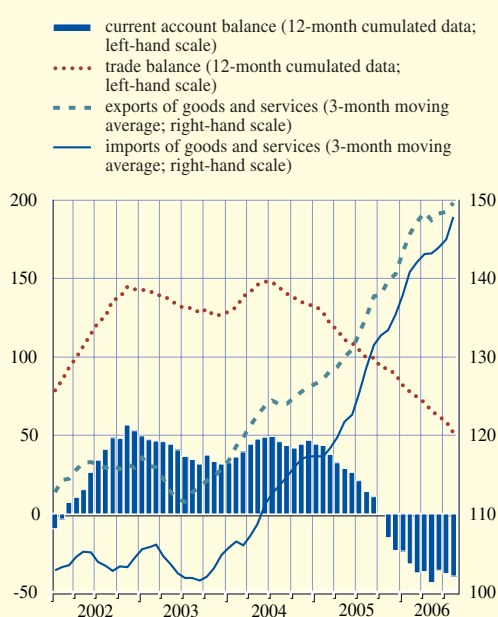
- current account balance (12-month cumulated data; left-hand scale)
- trade balance (12-month cumulated data; left-hand scale)
- exports of goods and services (3-month moving average; right-hand scale)
- imports of goods and services (3-month moving average; right-hand scale)

Source: ECB.

(seasonally adjusted, unless otherwise indicated)

	2006 July	2006 Aug.	Three-month moving average figures ending				12-month cumulated figures ending	
			2005 Nov.	2006 Feb.	2006 May	2006 Aug.	2005 Aug.	2006 Aug.
EUR billions								
Current account	-3.9	-6.9	-6.8	-2.3	-3.5	-0.6	14.3	-39.6
Goods balance	-1.6	-3.5	2.9	1.2	1.5	-0.6	69.1	15.0
Exports	114.2	115.2	105.1	110.3	112.5	114.5	1,172.8	1,327.2
Imports	115.9	118.7	102.2	109.0	111.0	115.1	1,103.7	1,312.2
Services balance	3.7	0.5	3.4	3.7	2.8	2.4	30.6	36.7
Exports	35.0	34.8	34.6	35.4	34.9	35.2	380.9	420.5
Imports	31.3	34.2	31.2	31.8	32.2	32.8	350.3	383.7
Income balance	0.3	2.4	-7.2	-1.3	-1.5	2.6	-25.7	-22.2
Current transfers balance	-6.2	-6.4	-5.9	-5.9	-6.2	-5.1	-59.7	-69.1
Financial account [1]	12.3	-3.9	7.5	1.0	35.5	0.8	73.7	134.6
Combined net direct and portfolio investment	-8.4	-18.3	-10.6	-19.6	26.8	6.0	91.6	7.5
Net direct investment	-9.4	-2.8	-4.1	-13.4	1.3	-9.4	-156.6	-76.6
Net portfolio investment	1.0	-15.5	-6.5	-6.2	25.4	15.3	248.1	84.2
Equities	39.6	-12.6	-6.4	10.9	5.7	29.3	206.4	118.7
Debt instruments	-38.6	-2.9	-0.2	-17.1	19.7	-13.9	41.8	-34.5
Bonds and notes	-13.6	-9.5	-6.7	-16.7	25.5	-3.1	21.0	-3.0
Money market instruments	-24.9	6.7	6.5	-0.4	-5.8	-10.8	20.8	-31.5
Percentage changes over previous period								
Goods and services								
Exports	-0.5	0.5	3.4	4.3	1.2	1.5	7.9	12.5
Imports	2.5	4.0	3.7	5.6	1.7	3.3	12.3	16.6
Goods								
Exports	0.2	0.9	3.1	4.9	2.0	1.8	7.6	13.2
Imports	4.7	2.5	4.2	6.7	1.8	3.6	13.5	18.9
Services								
Exports	-2.5	-0.7	4.2	2.5	-1.5	0.8	8.9	10.4
Imports	-4.9	9.5	2.2	1.9	1.3	1.9	8.5	9.5

Source: ECB.
Note: 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.

non-oil commodity prices. However, looking ahead, these upward pressures may turn out to be transitory, given the significant declines in oil prices in subsequent months. Meanwhile, the growth in import volumes seems to be picking up in response to the continued robust domestic activity in the euro area, while the appreciation of the euro in the first half of 2006 may have stimulated import demand. Imports from low-cost countries continue to grow strongly, particularly those from China, other emerging Asian economies and the new EU Member States.

Taking a longer-term view, the 12-month cumulated current account registered a deficit of €39.6 billion, i.e. 0.5% of GDP, in August 2006, compared with a surplus of €14.3 billion in August 2005. The shift from a surplus to a deficit was the result of a considerable decline in the surplus of trade in goods, which fell by €54.1 billion compared with the previous year, primarily driven by the increase in the prices of imported energy products and other commodities. The crucial role of increased energy import costs in shaping euro area current account developments is confirmed by the latest information on the geographical breakdown of the euro area current account, available up to the second quarter of 2006. By comparison with the previous year, the

ECONOMIC
AND MONETARY
DEVELOPMENTS

Exchange rate
and balance
of payments
developments

euro area registered a €59.5 billion increase in its 12-month cumulated current account deficit vis-à-vis the group of "other countries", which includes the oil-exporting economies.[1]

FINANCIAL ACCOUNT

In the three-month period up to August 2006, euro area combined direct and portfolio investment recorded monthly average net inflows of €6.0 billion (see Table 8). Net inflows in portfolio investment (€15.3 billion), which were mainly due to net purchases of euro area equity securities by non-residents, were partly compensated for by net outflows in direct investment (€9.4 billion).

In the 12-month period up to August 2006, net inflows in combined direct and portfolio investment fell by €84 billion in comparison with a year earlier (see Chart 31). This resulted

Chart 31 Euro area combined direct and portfolio investment

(EUR billions; monthly data; 12-month cumulated flows)

net direct and portfolio investment
net foreign direct investment
net debt instruments
net equity flows

Source: ECB.

from a decline in net inflows in portfolio investment (from €248 billion to €84 billion) that was only partly offset by a fall in net outflows in direct investment (from €157 billion to €77 billion). These declines include significant decreases of equal size, owing to the effects of an exceptionally large transaction that boosted these flows in the previous year, for both net inflows in equity portfolio investment and net outflows in direct investment. Accordingly, the fall in combined portfolio and direct investment in the 12 months up to August 2006 is primarily due to the fall in portfolio investment resulting from a shift from net inflows (€41.8 billion) to net outflows (€34.5 billion) in debt securities, mainly as a result of a decline in the net purchases of euro area debt instruments by non-residents. Meanwhile, net inflows in equity securities remained robust (€118.7 billion), largely in line with the steady improvement in the earnings growth performance of euro area companies over that of US companies during the course of 2006.

The geographical breakdown shows that the 12-month cumulated net outflows in direct investment up to the second quarter of 2006 were mainly driven by euro area direct investment in the United Kingdom, the ten new EU Member States, the United States and "other countries".[2] On the asset side of portfolio investment, the largest net purchases of foreign assets by euro area residents were vis-à-vis the United Kingdom, the United States, offshore financial centres and "other countries". Meanwhile, the international investment position of the euro area recorded net liabilities of €955.0 billion (about 12% of GDP) at the end of the second quarter of 2006, marginally down from the €960.3 billion net liability position at the end of the first quarter. This was principally due to revaluations as a result of exchange rate and asset price changes, which mainly affected portfolio equity and other investments.

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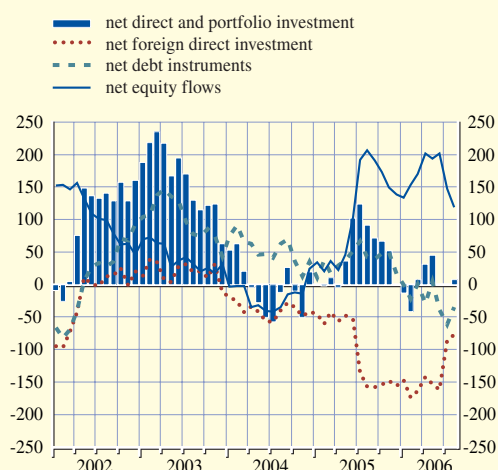
1   "Other countries" covers all euro area trade partners that do not belong to either the EU or the G7, and excludes Switzerland.
2   It should be noted that the 12-month direct and portfolio equity investment figures of the euro area vis-à-vis the United Kingdom up to June 2006 are affected by an exceptional financial operation which took place in June 2005. The combined direct and portfolio investment figures were unaffected by this transaction. For more information, see page 47 of the October 2006 issue of the Monthly Bulletin.

ARTICLES

MONETARY POLICY "ACTIVISM"

Although there is no commonly accepted notion of monetary policy "activism", any meaningful assessment of "activism" should take into consideration both the determination with which a central bank tries to enact its statutory policy objective in the day-to-day conduct of monetary policy and the features of the macroeconomic environment in which the central bank operates. Indeed, the complexity of the macroeconomy and the uncertainty surrounding the economic outlook interact with the policy mandate and with the central bank's determination to fulfil it. Therefore, central banks which share the same degree of commitment to their objective and determination in pursuing it might nevertheless be observed to behave differently through the business cycle. In line with this view, this article argues that the strong anchoring of inflation expectations in the euro area and the degree of rigidity in the economy as well as the unfavourable mix of macroeconomic shocks that have hit the euro area are key to understanding the ECB's monetary policy conduct over the last eight years.

I INTRODUCTION

Central banks constantly need to calibrate their monetary policy decisions to their assessment of the state of the economy, including the expected impact of their past policy impulses. Similarly, outside observers continuously make judgements about the appropriateness of the monetary authority's policy course and, in particular, the timeliness of its decisions. In this context, the vigour and timeliness, i.e. determination, with which the central bank takes action and with which it is perceived to do so, are related to but not fully dependant – at least as far as perceptions are concerned – on its success in achieving its policy objective. For example, despite the ECB's overall success in keeping inflation broadly aligned with its objective over the medium term, the degree of "activism" displayed in its monetary policy has been questioned at times, notably over the extended period of stable policy rates from June 2003 to December 2005.

This debate is partly a reflection of divergences in the assessment of the state of the economy and the appropriate monetary policy actions, but it also seems to have emerged from the lack of a common understanding of the meaning of "activism" and the overly simplistic notions that have sometimes been adopted for its assessment. This article reviews some notions of "activism" and argues that any meaningful assessment of the degree of "activism" should, as a minimum, make reference to both the

determination with which a central bank tries to enact its statutory objective and the features of the macroeconomic environment in which the central bank operates.

The next section discusses some notions of "activism" and explains how the simplest definitions, based on the frequency and magnitude of policy changes over a given period, fail to account for the nature of economic shocks and structure of the economy. The third section discusses some problems associated with assessments of central bank "activism" based on empirical estimates of "monetary policy rules" or reaction functions. Section 4 illustrates how price flexibility or stickiness and inflation persistence may combine and interact with the credibility of central banks and the actual conduct of monetary policy, thereby also influencing its pattern. The fifth section provides evidence on the euro area: the anchoring of inflation expectations, price rigidity and the unfavourable mix of shocks that have hit the euro area are crucial elements for understanding the monetary policy behaviour of the ECB. The contribution of the ECB's monetary policy to the maintenance of price stability under these conditions is then discussed in the final part of Section 5. The final section concludes.

2 NOTIONS OF "ACTIVISM"

There is no common notion of "activism", and this is especially evident when comparing monetary policy patterns across central banks. One often referred to, but overly simplistic way of measuring "activism" is to compare the frequency and amplitude of policy moves over a period of time, as captured for instance by the volatility of the policy rate. According to such measures, the more frequent and larger the changes in the policy instrument are, the more "activist" a central bank is considered to be. For instance, the ECB has changed its policy rate (the rate on its main refinancing operations) 22 times since 1999. The easing cycle that started in 2001 saw a cumulative reduction in the policy rate of 275 basis points, accomplished in a sequence of seven moves. The ECB started to reverse that cycle in December 2005 and has since changed its policy rate in a sequence of five steps. Other economic areas, such as the United States, have recorded stronger policy actions over the same period in terms of the frequency and size of policy moves in both the easing and the tightening cycles (see Chart 1).

Does this evidence suggest that the ECB has not been sufficiently "active", in the sense of effective or efficient in pursuing its mandate, compared with other central banks? The answer to this question is in the negative. Any meaningful assessment of monetary policy "activism" should encompass at least the following two elements.

First of all, the assessment should be based on the vigour and timeliness of the decisions with which a central bank tries to enact its statutory policy objective in the day-to-day design of the monetary policy course. The legal authority, clarity and comprehensiveness of central bank statutes and the monetary policy strategy are principal determinants of the degree to which it is committed to achieving its objective.

Over the last few decades there has been a convergence of the statutes and objectives of central banks in a number of countries.

Chart 1 Monetary policy rates in the euro area and the United States

(percentages per annum)
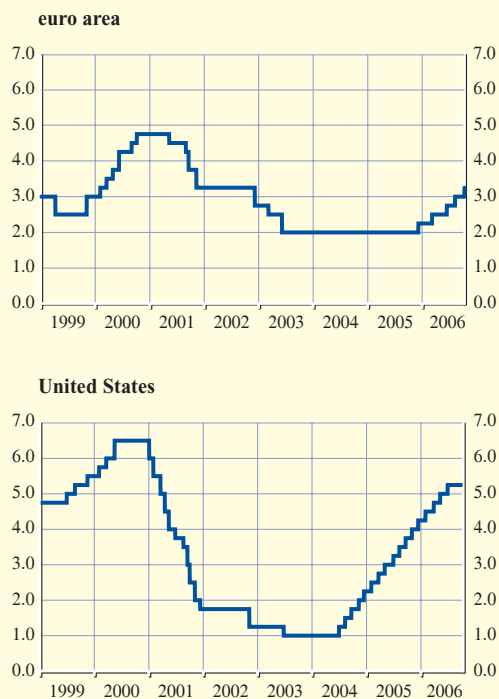
Sources: ECB and the Federal Reserve System.
Note: For the euro area the policy rate refers to the rate on main refinancing operations until 28 June 2000 and to the minimum bid rate thereafter. For the United States the Federal Funds rate is shown. The latest observation is 11 October 2006.

Following a global wave of institutional reforms, monetary authorities in many countries have been made independent and are assigned a clear responsibility for providing a nominal anchor to the economy by maintaining low and stable inflation. Moreover, the central bank objective is more often articulated in a well-defined monetary policy strategy explicitly announced by the central bank. For these reasons, the determinants of monetary policy provided by central bank mandates and strategies tend to show broad similarities in many countries. But despite this convergence, central banks continue to follow rather different policy paths and there is not necessarily similarity in the conduct of monetary policy over the cycle. What are the reasons behind continued differences in policy patterns?

To answer this question, it is necessary to make reference to a second element: the features of the macroeconomic environment. The frequency of movements in policy rates is not a sufficient statistic for assessing the appropriateness of the degree of a central bank's "activism" when exogenous forces change the macroeconomic outlook. All other things being equal, an economy where inflation and economic activity move fast, i.e. because exogenous shocks are more potent and are propagated more swiftly, could require more action on the part of the central bank.

More refined measures of "activism" go at least one step further than a mere comparison of policy paths based on the frequency and size of interest rate changes. The simplest ones do so by estimating the strength of the statistical correlation between the policy instrument and a given set of key macroeconomic variables. The basis used by outside observers to assess the degree of policy "activism" in this context is then often the size of the response parameters in estimated monetary policy reaction functions.[1]

A conventional formulation of such a reaction function is the "Taylor-type" rule[2] of the following form:

$$i_t = \rho\, i_{t-1} + (1-\rho)\{r^* + \pi^* + \beta\, E_t(\pi_{t+h} - \pi^*) + \gamma(y_t - y_t^*)\} + \varepsilon_t \qquad (1)$$

where i_t is the current short-term nominal interest rate. The time evolution of the interest rate is explained on the basis of three terms:

- The first is an inertial term, whereby the current interest rate is postulated to be influenced by its lagged value i_{t-1} with parameter ρ governing the degree to which the current rate depends on its past values. The possible explanations for the substantial degree of inertia which is often encountered in empirical estimates of central bank reaction functions are discussed in more detail in the box.

- The second term is given by the elements contained in the curly brackets and represents the level of the short-term interest rate to which the central bank – according to equation 1 – will bring the actual rate in the long run in response to the current economic conditions. This composite term features the sum of the long-run equilibrium value of the short-term real interest rate, r^*, the central bank's long-term inflation objective, π^*, and the indicators of inflationary pressure $(\pi_{t+h}-\pi^*)$ and $(y_t-y_t^*)$. In the absence of shocks with implications for inflation and output, $r^*+\pi^*$ gives the equilibrium nominal rate to which the central bank's policy rate will converge through time. In the face of shocks, however, the short-term rate will need to be targeted at a level which would be higher or lower than $r^*+\pi^*$ according to the central bank's reaction to deviations of expected inflation several periods in the future π_{t+h} from the central bank's objective π^* and to the deviation of current output y_t from its potential level y_t^*. Parameters β and γ, respectively, measure the strength of those reactions.

- Finally, the third term is given by ε_t, which represents the difference between the actual short-term interest rate and the systematic pattern of monetary policy conduct as captured by the other two terms of the rule.

According to those who view such reaction functions as a fair representation of a central bank's policy orientation in pursuing its objective and hence see the term ε_t as always negligible or simply "white noise", a central bank would qualify as relatively more "active" if a reaction function estimated upon its past policy conduct featured: (1) relatively larger reaction coefficients attached to $(\pi_{t+h}-\pi^*)$ and

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1 For a more detailed discussion of monetary policy rules, including such reaction functions, see the article entitled "Issues related to monetary policy rules" in the October 2001 issue of the Monthly Bulletin.
2 This term derives from the seminal paper of John Taylor (1993), "Discretion versus policy rules in practice", Carnegie-Rochester Conference Series on Public Policy 39, pp. 195-214.

$(y_t - y_t^*)$; and (2) a relatively smaller inertial coefficient attached to the lagged interest rate, which translates into a more expeditious process of adjustment of the actual nominal rate i_t towards its desired longer-run level.

While such a conclusion may be premature for the reasons detailed below, a "reaction function" approach to the analysis of monetary policy "activism" can usefully expose the fallacies to which simpler comparisons across central banks based on the frequency and amplitude of interest rate variations may lead. This is best illustrated by the hypothetical case of two central banks which have identical reaction functions in economies with similar economic structures, but which face very different economic shocks. The policy reaction function would prescribe frequent and forceful changes to the policy rate if the central bank in the first economy were to face predominantly "demand shocks", i.e. shocks resulting in persistent departures from trend growth and symmetric and enduring effects on output and inflation moving in the same direction. By contrast, the same reaction function would prescribe a different pattern in the second economy if it were to experience frequent "supply shocks", i.e. shocks that lead

to sharp transitory movements in inflation followed – in the absence of countervailing monetary policy action – by smaller "second-round" effects and concomitant movements in real activity in the opposite direction to inflation. In such cases, due to the transitory nature of the initial inflation response, the central bank would "look through" the immediate disturbance and change policy only to the extent needed to offset the anticipated lasting effects of the shock on inflation in subsequent quarters.

In conclusion, while systematically inclined to respond to the same macroeconomic conditions in the same fashion – thus equally "active" – the two hypothetical central banks of this stylised example would be observed to change policy rates at different speeds and over different ranges. Notably, provided that inflation expectations are well anchored, the policy path chosen by the central bank facing predominantly "supply-side" shocks would be smoother and less volatile. The underlying reason would be unrelated to their strategies and the vigour and timeliness with which policy decisions are taken, and would depend instead on the different macroeconomic environments.

Box

THEORETICAL ARGUMENTS FOR INTEREST RATE SMOOTHING BY CENTRAL BANKS

Central banks are constantly receiving new information which affects their assessment of the state of the economy and the outlook. For many central banks, however, this does not lead to a policy rate pattern involving large jumps or frequent reversals. Policy rates are often moved in small steps and empirical studies find considerable evidence for inertial elements in the adjustment process. Economists have sought to find theoretical arguments to rationalise this apparent willingness on the part of central banks to smooth the path of the policy rate. This box provides an overview of the best-known explanations.

1. Learning processes

Brainard's (1967) classical result established that uncertainty about the true values of the parameters of the model economy should have the effect of attenuating the response of the policy instrument to shocks, as the central bank tries to minimise the variance of macroeconomic outcomes. The link between macroeconomic uncertainty and optimal monetary policy was also

explored by Sack (1998), along the lines of the Brainard attenuation result. In his model of the economy, the monetary policy-maker faces uncertainty regarding the effects of monetary policy actions, constraining optimal policy rate adjustments to the vicinity of the rate level at which the central bank is more confident about the outcome of its decisions. Policy rate movements provide new information on the parameters of the model, leading to further rate adjustments and thereby generating inertial monetary policy.[1]

2. Credibility losses

Closely related to the preceding argument, this traditional rationale for observed inertia in monetary policy was formalised by Ellis and Lowe (1997) in the context of asymmetric information between the central bank and the public. If the central bank has imperfect knowledge about the details of the model governing the economy and/or the public thinks that the central bank is not perfectly informed about current economic developments, frequent alterations in the path of policy rates could possibly cast some doubt on the central bank's ability to understand how the economy works. This point was also made by Williams (2003), who referred to the fact that the monetary authority may be willing to avoid policy rate "reversals" out of concerns that they may be misinterpreted as policy "mistakes" and, eventually, undermine the central bank's reputation for professionalism.[2]

3. Disruptions in the capital markets

Cukierman (1989) observed that standard loan contracts extended by commercial banks are characterised by long maturities and predetermined interest rates. However, standard deposit contracts habitually exhibit short-term maturities and, therefore, react quickly to nominal interest rate changes and unanticipated credit or money demand shocks. For this reason, interest rate inertia protects the banking system to some extent against negative shocks to cash flows on the banks' liability side. This mechanism could limit the risk of widespread bank insolvencies and it would help to prevent undue stress in financial markets resulting from monetary policy decisions.[3]

4. Overcoming the stabilisation bias

This argument has been developed by Woodford (2003). In a forward-looking environment, the monetary authority may be more successful in stabilising the economy by committing itself to adjusting the policy rate in an inertial manner. This commitment would strengthen the ability of the central bank to affect expectations of future interest rates and thereby to stabilise inflation and output more effectively. For example, let us assume that the economy is adversely affected by an inflationary shock. If agents anticipate a protracted policy rate increase as part of the central bank's reaction, expectations of persistently higher short-term rates in the future would boost the market rates on long-term securities, as these can be roughly thought of as averages

1 Brainard, W., (1967), "Uncertainty and the effectiveness of policy", American Economic Review, Papers and Proceedings 57, pp. 411-425. Sack, B., (1998), "Uncertainty, learning and gradual monetary policy", FEDS Working Paper 1998-34. Board of Governors of the Federal Reserve System.
2 Ellis, L., and P. Lowe (1997), "The smoothing of official interest rates", in P. Lowe (ed.) *Monetary and inflation targeting*, Reserve Bank of Australia. Williams, J. C., (2003), "Simple rules for monetary policy", Federal Reserve Bank of San Francisco Economic Review, pp. 1-12.
3 Cukierman, A., (1989), "Why does the Fed smooth interest rates?", Economic Policy Conference 14, pp. 111-157. See also Blinder, A. S., (2000), "Critical issues for modern major central bankers", in European Central Bank and Center for Financial Studies (eds.) *Modern monetary policy-making under uncertainty*, pp. 64-74.

of the short-term rates that are expected to prevail until these securities reach maturity. Since medium and long-term rates are regarded as more important determinants of the conditions at which the private sector can borrow to finance spending (Goodfriend, 1991; Tinsley, 1999), higher rates on instruments with longer maturities can be expected to exert a dampening impact on aggregate demand. As a consequence, inflation expectations would also be dampened and the inflationary effects of the initial perturbation would be mitigated by the absence of second-round effects. In other words, the inertial rule suppresses a temporary increase in inflation via two channels: an increase in the current policy rate and lower inflation expectations due to the rise in expected future policy rates. Consequently, a monetary policy able to implement an "optimal degree" of inertia would achieve a better trade-off between inflation stabilisation and output-gap stabilisation, as the need to make large adjustments in the policy rate would be reduced.[4]

5. The zero lower bound on nominal interest rates

Rotemberg and Woodford (1999) pointed out that, in a forward-looking framework, the zero bound on nominal rates generates additional incentives to keep the variance of policy rates low, especially in a low inflation environment. Nominal interest rate inertia would make it easier to deal with the zero bound problem because, as mentioned above, an inertial monetary policy would make relatively large shifts in the policy rate unnecessary in environments in which agents were sufficiently forward-looking. Reifschneider and Williams (2000) and Wolman (2005) built on this concept and found that, once the policy rate had reached its lower bound, a protracted inertial monetary policy could be counted upon to exert downward pressure on longer-term rates via the expectations theory of the term structure and could thus decisively mitigate the adverse effects of the zero lower bound of the short-term nominal rate.[5]

4 Woodford, M., (2003), "Interest and prices: Foundations of a theory of monetary policy", Princeton University Press. Goodfriend, M. S., (1991), "Interest rates and the conduct of monetary policy", Carnegie-Rochester Conference Series on Public Policy 34, pp. 7-30. Tinsley, P. A., (1999), "Short rate expectations, term premiums, and central bank use of derivatives to reduce policy uncertainty", FEDS Working Paper 1999-14. Board of Governors of the Federal Reserve System.

5 Rotemberg, J. J., and M. Woodford (1999), "Interest-rate rules in an estimated sticky price model", in J. B. Taylor (ed.) *Monetary policy rules*, pp. 57-119. University of Chicago Press. Reifschneider, D., and J. C. Williams (2000), "Three lessons for monetary policy in a low inflation era", Journal of Money, Credit and Banking 32, pp. 936-966. Wolman, A. L., (2005), "Real implications of the zero bound on nominal interest rates", Journal of Money, Credit and Banking 37, pp. 273-296.

3 LIMITATIONS OF REACTION FUNCTIONS AS EMPIRICAL MEASURES OF "ACTIVISM"

As mentioned in the previous section, estimated reaction functions are, in principle, a more sophisticated approach to uncovering the degree of "activism" with which a central bank reacts to the actual or expected deviation of economic developments from its objective. However, they suffer from three main shortcomings.

First, and most importantly, the determination and timeliness with which a central bank takes action to pursue its policy objective cannot generally be quantified in isolation from knowledge of the key structural forces and economic relationships that govern the functioning of the economy in which the central bank operates (see also Section 4). Central banks calibrate their policy decisions to the structural features that determine the transmission mechanism of exogenous disturbances and of monetary policy itself over time. As a consequence, the reaction coefficients estimated on past policy regularities reflect a complex convolution of the central bank's desired degree of "activism" and the structural conditions that prevail in the economy in which the central bank operates.

Second, and concomitantly, any stereotypical monetary policy reaction function – while sufficiently concise to be used as a pedagogical device to track monetary policy patterns and for modelling purposes – is an incomplete and unsatisfactory description of central banks' policy behaviour. In the case of the ECB, such empirical tools do not capture the core of its two-pillar strategy. This strategy is grounded on a comprehensive and state-contingent reconciliation of a host of indicators organised in a two-pronged assessment of the risks to price stability within different time frames. The economic analysis concentrates on the assessment of inflation developments over the short to medium run. Monetary analysis cross-checks the indications obtained from economic analysis on the basis of information extracted from low-frequency movements in monetary indicators. This cross-checking is instrumental in protecting policy from the risk that it might become dominated by the short-term influences exerted by excessively volatile and insufficiently reliable indicators. It is a key strategic element that underpins the ECB's medium-term orientation. This complex and thorough cross-checking cannot be compressed into a stable and mechanistic functional relationship linking the policy rate and a handful of macroeconomic indicators. As the ECB has repeatedly made clear in its real-time explanations of policy decisions, monetary policy emerges from a process of synthetic judgement which takes into account the economic contingencies of the euro area and the evolving nature of the structural economic relationships.

Third, estimates of the coefficients of conventional reaction functions are surrounded by a high degree of statistical uncertainty. Empirical estimates of reaction functions yield very different coefficient values depending on the exact specification of the equation. For example, the literature reports coefficients attached to inflationary pressure ranging from negative values or values close to zero to rather high estimates.[3] This uncertainty is further compounded by that surrounding the measurement of the macroeconomic indicators

Chart 2 Monetary policy rates in the euro area prescribed by the Taylor rule

(percentages per annum)
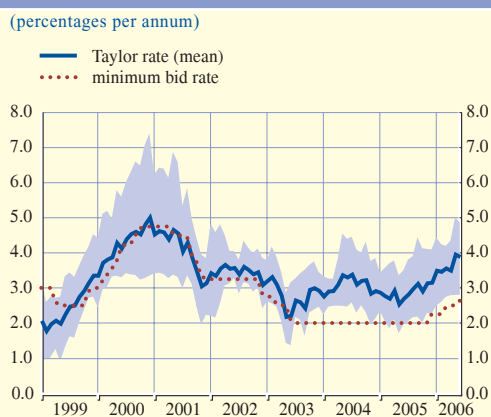
Source: ECB.
Note: The shaded area presents the maximum and minimum values of the nominal interest rate implied by the Taylor rule using different statistical measures of the output gap and inflation. The solid line is the arithmetic mean of the rates. The computations use the standard parameter values of 1.5 for deviations of inflation from the central bank's objective and 0.5 for the output gap, as proposed in Taylor's original formulation. A constant term for the monetary policy rate, equal to the average value derived from a set of estimated Taylor-type rules for the period from January 1999 to March 2006, has been included. As discussed in the main text, this measure has conceptual limits due to the reduced-form estimation of the rule. Data are on a monthly frequency. Quarterly data are interpolated using a cubic spline. The latest observation is March 2006.

which feature in the reaction function. By way of illustration, Chart 2 provides a visual representation of the uncertainty surrounding the monetary policy prescriptions which one could derive from a standard calibration of a "Taylor rule" that attributes a weight of 1.5 to deviations of inflation from the central bank's objective and 0.5 to the deviation of output from potential. It does so by varying the statistical measure used for the output gap and inflation in the Taylor rule, and displays the resulting values for the short-term nominal

3   For such estimates, see among others Carstensen, K. (2006), "Estimating the ECB policy reaction function", German Economic Review 7, No 1, pp. 1-34; Gerdesmeier, D. and B. Roffia (2004), "Empirical estimates of reaction functions for the euro area", Swiss Journal of Economics and Statistics 140, No 1, pp. 37-66; Hayo, B. and B. Hofmann (2006), "Comparing monetary policy reaction functions: ECB vs. Bundesbank", Empirical Economics (forthcoming); Heinemann, F. and F. Hüfner (2004), "Is the view from the Eurotower purely European? - National Divergence and ECB Interest Rate Policy", Scottish Journal of Political Economy 51, No 4, pp. 544-558; Sauer, S. and J.-E. Sturm (2006), "Using Taylor rules to understand ECB monetary policy", German Economic Review (forthcoming).

interest rate in the form of a shaded range of values. The alternative measures used in the analysis comprise four different output gap indicators and three measures for inflation or inflation expectations often utilised in the economics literature.[4] From the graph it is evident that the choice of indicator to which monetary policy is postulated to react in the context of a Taylor-type rule affects the implied interest rate substantially. The maximum range of the predicted short-term nominal rates over the sample period is as wide as 400 basis points. Given this wide range, it is not surprising that the various specifications vary vastly in their ability to track actual monetary policy. In particular, some specifications imply interest rate prescriptions that are reasonably close to the actual policy rate of the ECB until mid-2003. However, the ECB's monetary policy then became more accommodative than would have been implied by the standard of most interest rates derived from a simple Taylor rule. This suggests that simple Taylor rules are generally an inadequate description of policy, i.e. the term ε_t in equation 1 cannot always be considered as negligible or simply "white noise" and may also reflect, for instance, deliberate intent on the part of the central bank.

The uncertainty surrounding these estimation results is not specific to the euro area. Numerous studies, based on longer sample periods, exist for the US Federal Reserve System. Point estimates of the parameters of the response to inflation and output are nevertheless found to vary substantially depending on the sample period and the underlying economic measures. For instance, the use of real-time or ex post measures of the output gap leads to substantially different interpretations of US monetary history.[5]

4 ECONOMIC STRUCTURES AND MONETARY POLICY

One key structural dimension which is rather consequential for the extent of central bank "activism" is the degree of flexibility or stickiness with which prices and wages react to shocks. Price-setters and wage negotiators, due to various frictions, may be more or less sluggish in processing economic news, including changes in the monetary policy stance, and in incorporating such news into actual prices and wages.

There are two major consequences of a slow price and wage adjustment mechanism. First, prices and wages reflect changes in fundamentals with considerable lags in economies where nominal frictions are significant. This increases the likelihood that the burden of the adjustment to the imbalances created by economic disturbances will induce undesirable fluctuations in output and employment. A more flexible economy could instead foster overall medium to long-term resilience to exogenous disturbances by transferring the larger share of the adjustment to re-equilibrating changes in prices and wages. Second, and consequently, nominal rigidity can affect the degree of inflation persistence, all other things being equal. Changes in cost conditions tend to be spread out over an extended period of time, as prices in a rigid economy catch up only slowly with changes in the underlying circumstances. Therefore, nominal rigidities tend to both soften and perpetuate the impact of a shock.

As a result of these two effects, stickiness in price adjustments strongly affects the transmission mechanism of monetary policy and the appropriate policy response to economic

4 Output gap measures include deviations of industrial production from a linear-quadratic trend and an HP-filtered trend, the deviation of GDP from an HP-filtered trend and the OECD output gap. Inflation measures are actual inflation and one-year ahead inflation expectations obtained from the Survey of Professional Forecasters and Consensus Economics. Interest rates are computed for all 12 combinations of these output gap and inflation measures.

5 See, among others, English, W. B., W. R. Nelson and B. P. Sack (2003), "Interpreting the significance of the lagged interest rate in estimated monetary policy rules", Contributions to Macroeconomics 3, article 5; Kozicki, S. (1999), "How useful are Taylor rules for monetary policy?", Federal Reserve Bank of Kansas City Economic Review 2, pp. 5-33; Orphanides, A. (2001), "Monetary policy rules based on real-time data", American Economic Review 91, pp. 964-985; Rudebusch, G. D. (2001), "Is the Fed too timid? Monetary policy in an uncertain world", Review of Economics and Statistics 83, pp. 203-217.

disturbances. As regards the transmission mechanism, greater price stickiness implies that a change in the nominal policy rate of a given size will have a stronger impact on the real rate, which ultimately is among the determinants of aggregate demand. For instance, in this environment, a given cut in the nominal policy rate – engineered in such a way as not to jeopardise the maintenance of price stability over the medium term – will at the same time provide a substantially higher degree of support to real economic activity than in a more flexible economy.

As regards the appropriate response to economic disturbances, provided that a central bank is highly credible and inflation expectations are well anchored around the central bank's quantitative definition of price stability – a caveat that will be addressed below – monetary policy may be better advised to adopt a steady posture and look through the short-term developments in inflation. The reason for this is that, in an economy characterised by significant nominal frictions, inflation would tend to be less reactive to a shock as price-setters would be slower in bringing economic news to bear on their decision-making. Furthermore, high central bank credibility implies that price-setters would anticipate that the central bank will ultimately drive inflation back to its pre-shock level. So, in spite of the presence of significant frictions, which would tend to slow down the process by which shocks drive inflation over time, inflation may tend overall to be less persistent and the shocks themselves may dissipate more quickly.

Under these circumstances, exceedingly aggressive reactions to short-term developments would risk introducing unnecessary volatility in the markets and in the economy. However, the seeming "patience", i.e. lower variance of policy rates and the associated divergence from prescriptions suggested by simple reaction functions, would not signal unjustified policy inertia, "passivity" or neglect of macroeconomic conditions. It would reflect careful calibration of the policy course to the structural peculiarities

of the underlying economy, leading to a more moderate policy response.

However, this simple description of the features that monetary policy would display in response to shocks in a more rigid economy is insufficient to capture the challenges faced by a central bank in real-life situations. First, the central bank's response to shocks needs to take into consideration the presence of uncertainty regarding the functioning of the economy, in particular regarding the degree of nominal rigidities and inflation persistence. This requires the central bank to favour robustness in its actions, whereby monetary policy eschews any attempt to fine-tune economic developments and rather pursues the medium-term objective of maintaining price stability.

Second, the central bank would adopt a patient pattern of response to cost pull or push shocks only if it can be reasonably sure that inflation expectations will remain well anchored in the face of short-run variations of inflation. One could easily imagine scenarios where agents learn slowly and/or gradually about macroeconomic conditions, including the central bank's determination and timeliness in taking action to maintain price stability. In these instances, inflation expectations might become sensitive to transitory disturbances, as agents would tend to extrapolate current and recent developments into the future. In such a situation, price and wage rigidities might start interacting with dislodged inflation expectations to make the inflationary shock very persistent. If this were the case, then even a central bank operating in an environment with significant nominal frictions would have to react more – rather than less – vigorously to developments to defuse the risk that current and recent shocks might become entrenched in agents' inflation expectations.[6]

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6 See Orphanides, A. and J. C. Williams (2002), "Imperfect knowledge, inflation expectations and monetary policy", in *The Inflation Targeting Debate*, B. Bernanke and M. Woodford (eds.), University of Chicago Press; Gaspar, V., F. Smets and D. Vestin (2006), "Adaptive learning, persistence and optimal monetary policy", Journal of the European Economic Association 4, pp. 376-385.

5 MACROECONOMIC ENVIRONMENT AND MONETARY POLICY IN THE EURO AREA

The discussion above has pointed out that monetary policy actions have to be carefully calibrated to the prevailing state of the economy and the outlook, as determined by the exogenous shocks that hit the economy from time to time and the structural channels through which those shocks are propagated, with a view to maintaining price stability over the medium term. Therefore, to understand monetary policy in the euro area, it is necessary to analyse the underlying macroeconomic disturbances that have affected the euro area in the recent past and the propagation mechanism of such disturbances through the economy over time. The degree of nominal rigidity and the anchoring of expectations deserve particular attention in this respect.

MACROECONOMIC SHOCKS

The euro area macroeconomic landscape has been mainly characterised by an unfavourable mix of shocks: notably, it has been predominantly hit by negative developments on the supply side. This unfavourable mix of shocks has been a distinct feature of the euro area rather than a global phenomenon. In the last ten years, this disparity seems to have grown even more pronounced, despite globalisation and a general shift towards closer international economic integration.[7] This is especially evident when comparing supply-side developments in the euro area and the United States over the stock market boom and bust spanning the past ten years.

In the euro area the stock market boom and bust went hand in hand with a steady decline in the trend growth of labour productivity, as measured by the growth rate of the ratio of GDP to hours worked. In turn, this has negatively affected the euro area's sustainable level of potential output. Despite significant uncertainty about the measurements, from a growth accounting perspective, the sharp decline in labour productivity that has occurred in the euro area

may have been induced in broadly equal proportions by a reduction in capital deepening (i.e. the amount of capital endowed to each worker) and total factor productivity (i.e. the degree of efficiency in combining factors of production). In the United States, however, the strength in business investment that the stock market appreciation entailed – comparable in size to that experienced in the euro area – has brought about significant benefits for the supply side of the economy. The contribution to labour productivity growth arising from capital deepening doubled in the United States in the course of the 1990s. Subsequently – and despite the extraordinary drop in business investment that followed the market collapse in 2000 – it stabilised at the elevated levels it had reached at the turn of the millennium. Since then, capital deepening has been replaced as the main engine of output per hour growth by substantial advances in total factor productivity.[8]

These opposite supply-side developments in the two economic areas have had significant implications for overall macroeconomic performance. In the euro area, the slowdown in total factor productivity has been an important determinant of the weak economic performance and has reinforced the impact of the shocks responsible for the downturn that occurred at the beginning of the new millennium, which

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7 See, for instance, Stock, J., and M. Watson, "Has the business cycle changed? Evidence and explanations", paper presented at the Federal Reserve Bank of Kansas City symposium "Monetary Policy and Uncertainty", Jackson Hole, Wyoming, 28-30 August 2003.

8 Observed labour productivity growth in the euro area was on average 2.3% per year in the first half of the 1990s, 1.7% in the second half of the decade and 0.7% in the first few years of the new millennium (2001-2005). The contribution of capital deepening over these same periods was 1.0%, 0.5% and 0.5% respectively, and the contribution of total factor productivity was 1.2%, 1.2% and 0.3%, respectively. In the United States the dynamics were conversely positive: the contribution of capital deepening over these same periods was 0.6%, 1.1% and 1.1%, respectively and the contribution of total factor productivity was 0.5%, 1.0% and 1.9%, respectively. See G. Gomez-Salvador, A. Musso, M. Stocker and J. Turunen, "Labour productivity developments in the euro area", ECB Occasional Paper (forthcoming). See also Box 9 entitled "Developments in euro area productivity" in the March 2005 issue of the Monthly Bulletin and Box 6 entitled "A comparison of employment developments in the euro area and the United States since 1995" in the April issue of the Monthly Bulletin.

Chart 3 Consumer price inflation in the euro area and the United States

(annual percentage changes; monthly data)

- euro area
- United States
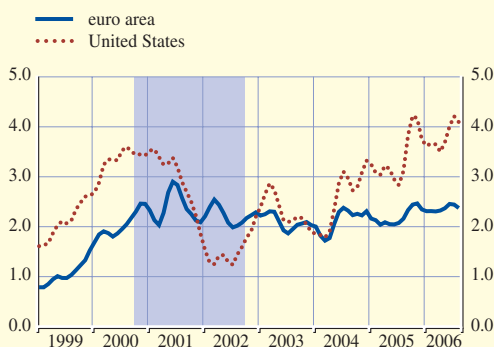
Sources: ECB and BIS.
Note: The shaded area covers a two-year period marked by the decline of the S&P 500.

were largely of the same nature across the two currency areas. In the United States, by contrast, the favourable supply-side developments have partly compensated for these adverse forces.

The impact of the shocks at the beginning of the new millennium – which mainly related to the bursting of the equity bubble, with its negative implications for investment, and to weak consumer confidence – operated on the demand side and thus typically exerted downward pressure on both output and inflation. The unfavourable productivity developments in the euro area aggravated the downward movement in real activity while at the same time preventing inflation from falling. By depressing income growth prospects and reducing the prospective return on capital, these developments brought about further retrenchment of consumption spending and business investment. The adverse underlying developments in total factor productivity have also made it more difficult for firms to smooth through the volatility of the many non-wage cost disturbances that they have encountered since 1999. Inflation has thus remained more vulnerable to unexpected shocks in the euro area, such as the increases in oil prices in 1999-2000 and in 2004, the increases in unprocessed food prices associated with the

outbreak of BSE and foot-and-mouth disease in 2001 and rises in administered prices and tobacco taxes announced in late 2004. Although inflation may have become more resilient to these shocks more recently, it edged higher in the downturn that started in 2001 and remained at elevated levels thereafter, at a time when the accumulating margin of slack in the economy could in fact have been expected to reduce price pressures (see Chart 3). By contrast, in the United States inflation sharply declined during the early years of the new millennium when the slack in the economy was rapidly increasing.

This evidence leads to two observations. First, although full capacity of either labour or other production factors cannot be directly observed and the strength of the relationship that links factor utilisation and inflation is difficult to measure, this latter connection is seemingly weak in the euro area. Therefore, decreases in capacity utilisation do not necessarily translate into lower inflation and may lead to an asynchronous fluctuation of output and prices. Second, the stronger role in the euro area of adverse disturbances that can be generally characterised as "supply shocks" – a finding confirmed by comparative analyses of the euro area and the US economy on the basis of structural models[9] – has important implications for monetary policy. Given that unfavourable supply shocks tend to move inflation counter-cyclically at times of weak economic activity, the mix of shocks that have hit the euro area over the last few years implies that the macroeconomic environment has been particularly challenging for monetary policy.

STRUCTURAL FEATURES OF THE ECONOMY

The structural features of the euro area economy, primarily the degree of products and labour

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9   Comparative exercises based on structural models indicate that the euro area, compared with the United States, is subject to demand shocks of smaller magnitude but is more frequently hit by supply shocks. See, for example, Smets, F. and R. Wouters (2005), "Comparing shocks and frictions in US and euro area business cycles: a Bayesian DSGE approach", *Journal of Applied Econometrics* 20, No 1, pp. 161-183.

Measures of price stickiness for the euro area and the United States			
Index	Statistics	euro area	United States
CPI	Frequency[1]	15.1	24.8
	Average duration *(months)*	13.0	6.7
	Median duration *(months)*	10.6	4.6
PPI	Frequency[1]	20.0	n.a.
PPI (survey evidence)	Frequency[1]	15.9	20.8
	Average duration *(months)*	10.8	8.3
New Keynesian Phillips Curve	Average duration *(months)*	13.5-19.2	7.2-8.4

Sources: CPI: Dhyne et al. (2005) for the euro area and Bils and Klenow (2004) for the United States. PPI: Vermeulen et al. (2005). Survey evidence: Fabiani et al. (2005) for the euro area and Blinder et al. (1998) for the United States. New Keynesian Phillips Curve: estimates in Galí et al. (2001, 2003) referring to the GDP deflator are converted from original quarterly figures. Detailed references are given in footnote 11.
1) Frequency refers to the average percentage of prices changed each month.

market rigidity and the way in which the private sector forms its expectations, strongly affect the transmission mechanism of any given disturbance that hits the economy.

The large body of research recently produced within the Inflation Persistence Network – a joint effort by staff at the ECB and the Eurosystem NCBs – has confirmed the widely held view that the price adjustment process in response to changing economic conditions is rather slow in the euro area.[10] This is particularly evident when a comparison is made with the United States. The average duration of consumer price spells in the euro area – a measure of the time that it takes for retailers to re-price their products – is 13 months (see the table). According to surveys, the average duration of a producer price is 11 months. Corresponding measures for the United States show that durations are much shorter than in the euro area, namely less than seven months for consumer prices and slightly more than eight months for producer prices.[11]

This evidence does not in itself rule out the possibility that euro area prices are stickier because shocks themselves are less potent and less volatile in the euro area, thus reducing the need to change prices in the first place. However, the evidence summarised above and estimates obtained from structural models, which take into account the volatility of the fundamental forces driving inflation, suggest that long price durations in the euro area are indeed a reflection

of a more sluggish adjustment of prices and wages to economic news.

Further structural elements that determine the transmission mechanism of macroeconomic disturbances are related to the way in which the private sector forms its expectations – first of all the degree to which price and wage-setters are forward-looking – and the interactions between the actions and communication of the central bank on the one hand and the way they are perceived by the private sector on the other hand. Although there is still much to be learnt about expectation formation, the evidence available suggests that the ECB's quantitative definition of price stability has provided strong guidance to inflation expectations in the euro

10 See the article entitled "Price-setting behaviour in the euro area" in the November 2005 issue of the Monthly Bulletin.
11 For the euro area, see Dhyne, E., L. Alvarez, H. Le Bihan, G. Veronese, D. Dias, J. Hoffmann, N. Jonker, P. Lünnemann, F. Rumler and J. Vilmunen (2005), "Price-setting in the euro area: some stylised facts from individual consumer price data", ECB Working Paper No 524; Vermeulen, P., D. Dias, I. Hernando, R. Sabbatini, P. Sevestre and H. Stahl (2005), "Price setting in the euro area: some stylised facts from individual producer price data and producer surveys"; Fabiani, S., M. Druant, I. Hernando, C. Kwapil, B. Landau, C. Loupias, F. Martins, T. Mathä, R. Sabbatini, H. Stahl and A. Stokman (2005), "The pricing behaviour of firms in the euro area: new survey evidence", ECB Working Paper No 535; Gali, J., M. Gertler and D. Lopez-Salido (2001), "European inflation dynamics", European Economic Review 45, No 7, pp. 1237-1270; Gali, J., M. Gertler and D. Lopez-Salido (2003), "Erratum", European Economic Review 47, No 4, pp. 759-760. For the United States, see Bils, M. and P. Klenow (2004), "Some evidence on the importance of sticky prices", Journal of Political Economy 112, pp. 947-985; Blinder, A. S., E. Canetti, D. E. Lebow and J. B. Rudd (1998), "Asking about prices: a new approach to understanding price stickiness", Russel Sage Foundation.

area, irrespective of the fact that euro area HICP inflation has remained at or above 2% since late 2000. First, survey-based measures of inflation expectations have remained below and close to 2% and have shown that the central bank's leverage on expectations has become stronger since the launch of the euro.[12] Second, measures of the predictability of the ECB's policy moves show that the markets have correctly understood how developments in the state of the economy are mapped into policy decisions with the aim of maintaining price stability, as defined quantitatively, over the medium term.[13] Third, there is some evidence from structural macroeconomic models showing that price and wage-setters in the euro area form their expectations focusing strongly on the central bank's quantitative objective.[14] This implies that the influence of the ECB's quantitative definition of price stability on the time evolution of inflation can outweigh the influence of past shocks. An inflationary shock dissipates quickly in the euro area despite the high degree of price rigidities, and inflation has a tendency to return to its long-run norm reasonably quickly.

These findings also help to explain why, despite sluggish price-setting mechanisms, inflation persistence in the euro area is similar to levels seen in other economic areas. The half-life of the effect of a shock to inflation is considerably less than one year,[15] which is close to the figure obtained, for example, for the United States. This similarity is interesting, given the size of the differences in price-adjustment practices across the two areas. This suggests that some of the persistence of the inflation process generated by price sluggishness – which in itself tends to perpetuate past inflation pressures into the future – can be balanced by the strong anchoring of expectations of price and wage-setters to the objective of the central bank, thereby partly compensating for the added inertia resulting from a more rigid economic structure.

MONETARY POLICY IMPLICATIONS

In taking action, the central bank would ideally need accurate and contemporaneous readings of the state of the economy and the outlook, in particular detailed knowledge of the structural features of the economy, any disturbances affecting it and their potential to destabilise inflation expectations. However, the central bank has at its disposal only very imprecise estimates and, even in hindsight, different estimation methods yield quite different figures. This state of pervasive uncertainty suggests that the central bank must pay due attention to all relevant information, broadening the analysis of the risks to price stability and enacting a policy course that is "robust", i.e. yields satisfactory outcomes even under unexpected and very unfavourable circumstances. This is the essence of the ECB's two-pillar strategy.

With the benefit of hindsight, the ECB's monetary policy strategy has worked well in providing it with a compass that has firmly pointed to the objective of maintaining price stability over the medium term. In particular, it has continuously helped the ECB to carefully calibrate its policy actions to the structural characteristics of the euro area and, most importantly, to anchor long-term inflation expectations.

Maintaining inflation expectations strongly anchored and closely in line with the ECB's definition of price stability, as well as preventing second-round effects from materialising, are of the essence for the ECB. First, in a relatively

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12 A broadly similar picture emerges from long-term inflation expectations derived from financial instruments when taking into account inflation risk premia. See the article entitled "Measures of inflation expectations in the euro area" in the July 2006 issue of the Monthly Bulletin.

13 See the article entitled "The predictability of the ECB's monetary policy" in the January 2006 issue of the Monthly Bulletin.

14 See Christiano, L., R. Motto and M. Rostagno (2006) "Shocks, Structures or Policies? A Comparison of the Euro Area and the US", *Journal of Economic Dynamics and Control* (forthcoming).

15 See Altissimo, F., M. Ehrmann and F. Smets, "Inflation persistence and price-setting behaviour in the euro area", ECB Occasional Paper No 46, June 2006.

rigid economy, as is the euro area, it might well be that temporary imbalances between demand and potential supply are slow to show through convincingly to inflation. But if and when they finally do, they would be more costly to correct in terms of macroeconomic disruption. Monetary policy should therefore remain constantly "alert" to any threats to the outlook for price stability, so that it does not find itself acting belatedly – and thus with less chance of success – to trends that have long been under way. Second, the expectation that inflation will not come loose from its anchor affords some short-term flexibility to respond to economic disturbances, with a view to ensuring more balanced macroeconomic conditions in the longer term. However, such flexibility can only last as long as the anchoring of inflation expectations is not endangered.

Certainly, the ECB would not have brought the nominal and real policy rates to the very low levels which they reached in the first half of 2003 – despite actual HICP inflation having been at or above 2% for more than two years – and would not have maintained them at such levels without consistent signs that expectations were well-anchored and inflationary shocks were being quickly reabsorbed. During most of this period, inflation expectations effectively remained aligned with the ECB's quantitative definition of price stability without explicit policy action. At times when expectations displayed signs of overreacting to events – such as surging oil prices – the renewed emphasis in the ECB's communication regarding the price stability objective on its vigilance and determination to enforce it and on its steady "alertness", provided effective resistance to inordinate developments.

In view of the prevalence of unfavourable "supply-side" shocks that have hit the euro area, and the understanding that a central bank operating in a relatively rigid economy is able to deliver the same quantum of support to macroeconomic conditions by adjusting its policy instrument in more moderate steps than in a more flexible economy, the monetary policy

stimulus put in place by the ECB in the early years of the new millennium has been sizeable.

Since December 2005, the ECB has begun to withdraw such monetary accommodation in order to avoid the materialisation of upside risks to price stability that have been identified in both the economic and monetary analyses.

This process has been and will continue to be guided by the principle – which is well established in the ECB's monetary policy strategy – that the most effective contribution that a central bank can make to promoting growth prospects and standards of living in the medium to long term is by maintaining price stability and a stable and reliable currency.

6 CONCLUSION

From the start of the single currency, monetary policy has prevented disorderly movements in medium and long-term inflation expectations in the euro area. Moreover, it has achieved a level of predictability comparable to the monetary policy of other major central banks. This would not have been possible without both a credible monetary policy showing characteristics of persistence and regularities in interest rate-setting and an understanding of the rationale driving monetary policy on the part of financial markets and the public at large. Within this context, there has nevertheless been a challenging debate on the ECB's conduct of monetary policy, questioning whether the ECB has been sufficiently "active".

This article argues that any meaningful assessment of monetary policy "activism" cannot be performed in the abstract, but should instead take into account the determination and timeliness of the decisions with which a central bank tries to enact its statutory policy objective against the concrete features of the macroeconomic environment which it faces. In this respect, assessments based purely on the frequency and amplitude of policy moves over a given period may be highly misleading.

The appropriate degree of central bank "activism" depends on the adjustment to outside disturbances required by the central bank's objective. The associated monetary policy pattern hinges upon the structural characteristics of the economy and the sequence, nature and size of the shocks to which the central bank has to respond.

The pattern of policy rates observable in the euro area in comparison with those of other central banks, rather than reflecting an inappropriate lack of commitment on the part of the ECB in the pursuit of its objective, has to be understood against a background of stable long-term inflation expectations, which in turn reflect and interact with the credibility of monetary policy, an unfavourable mix of shocks that have hit the euro area, notably disappointing supply-side developments, and the high degree of nominal rigidity displayed by the economy.

The ECB's determination in maintaining price stability over the medium term and ensuring the anchoring of long-term inflation expectations has as a consequence created an environment more favourable to output growth and job creation in the euro area.

Looking ahead, a challenge for the euro area is to accelerate the implementation of the structural reforms that are needed to enhance competition and flexibility in products and labour markets, thereby fostering productivity growth and improving supply-side developments. Such reforms would not only prepare the ground for solid growth in economic activity but would also improve the macroeconomic environment faced by monetary policy.

THE EUROSYSTEM'S EXPERIENCE WITH FINE-TUNING OPERATIONS AT THE END OF THE RESERVE MAINTENANCE PERIOD

Following the changes to the Eurosystem's operational framework for the implementation of monetary policy in March 2004, the average time span between the last main refinancing operation of a reserve maintenance period and the last day of that period has increased. A side effect of this measure was the occasional occurrence of large liquidity imbalances at the end of maintenance periods. Since autumn 2004, the ECB has been counteracting these imbalances more actively by conducting fine-tuning operations at the end of maintenance periods. This article describes the aim and functioning of these fine-tuning operations and gives a first assessment of their stabilising effect on short-term money market interest rates. It also provides evidence that conducting fine-tuning operations at the end of the reserve maintenance period has led to lower fluctuations in short-term interest rates and, at the same time, to less use of standing facilities on the last day of the maintenance period. Furthermore, it analyses the factors behind counterparties' individual bidding behaviour by studying their decision to participate in the end-of-period fine-tuning operations. Finally, the role of fine-tuning operations in the reduction of spreads between short-term money market rates and the minimum bid rate is discussed.

I INTRODUCTION

Fine-tuning operations are one type of open market operation available to the Eurosystem in its operational framework, but they are not a regular tool for the provision or absorption of liquidity to the market. They are conducted when needed. While main refinancing operations (MROs) and, to a lesser extent, longer-term refinancing operations (LTROs) are used for the systematic provision of liquidity to the banking sector, fine-tuning operations are used for different purposes and in a more flexible way. Under very specific circumstances, the aim of fine-tuning operations is to "manage the liquidity situation in the market and to steer interest rates, in particular in order to smooth the effects on interest rates caused by unexpected liquidity fluctuations in the market".[1] In order to allow for a rapid reaction, the maturity and the frequency of the fine-tuning operations are not standardised, but can be adapted in a flexible manner to any particular situation. Usually, they are conducted via a quick tender, which is executed within 90 minutes from the announcement of the operation. Given that these tenders need to be executed quickly, only a limited number of banks can participate in fine-tuning operations. National central banks (NCBs) select the counterparties on the basis of a number of quantitative criteria and an assessment of their participation in the money market. Currently, 129 counterparties are eligible for fine-tuning operations.

Between January 1999 and September 2006, 29 fine-tuning operations were conducted, of which seven before autumn 2004 were on an irregular basis. These were mostly related to specific events and aimed, for example, to mitigate disturbances in the money market in the aftermath of the terrorist attacks in September 2001, or to prevent potential tensions in liquidity conditions related to the cash changeover in January 2002. Since autumn 2004, fine-tuning operations have been more frequently conducted on the last day of a maintenance period. This article focuses on the latter type of operation. Section 2 explains the rationale for conducting fine-tuning operations at the end of reserve maintenance periods, while Section 3 analyses counterparties' participation in these operations. An assessment based on the experience gained in the last one and a half years is given in Section 4, and Section 5 contains some concluding remarks.

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1 ECB: "The implementation of monetary policy in the euro area: General documentation on Eurosystem monetary policy instruments and procedures", September 2006.

2 FINE-TUNING OPERATIONS CONDUCTED AT THE END OF A RESERVE MAINTENANCE PERIOD

In March 2004 the operational framework of the Eurosystem underwent a number of changes. One modification concerned the timing of events during a reserve maintenance period: prior to the reform, the reserve maintenance period ended always on the 23rd of each calendar month, i.e., on varying days of the week. At the same time, MROs were conducted on a weekly basis, usually on Tuesdays. As a consequence, the number of days between the last MRO allotment and the last day of a maintenance period varied between one and six business days. Within the new framework, MROs are still conducted on Tuesdays, but the maintenance period now ends in the week following a meeting of the Governing Council, usually on a Tuesday.

This change implies that the time span between the last allotment and the end of the maintenance period has increased from four business days on average to six business days. As a result, during this longer period, larger liquidity imbalances, resulting mainly from errors in the Eurosystem's forecast of the autonomous liquidity factors, can build up in the banking sector (see box). If anticipated by the market, such imbalances – whether they are on the loose or on the tight side – may lead to strong reactions in market interest rates, especially on the last days of the reserve maintenance period, when banks need to manage their reserve holdings carefully in order to fulfil reserve requirements. Indeed, in the months after the changes to the framework, occasional large spikes in market rates on the last days of the maintenance period were observed. At the same time, these spikes may have led to an increase in the spreads observed between the marginal tender rate and the minimum bid rate, and the EONIA (euro overnight index average) and the minimum bid rate, respectively. For instance, while the marginal tender rate had been equal to the minimum bid rate in the first months after the changes to the framework were implemented, it slowly increased during the second half of 2004 before temporarily stabilising at around 5 basis points above the minimum bid rate in early 2005.

With the changes to the operational framework in March 2004, the occasional spikes in short-term money market rates, which had previously largely been limited to the last day of the maintenance period, began to affect earlier days in the last week of the maintenance period. This broadening of the spike at the end of the maintenance period led the ECB to consider conducting fine-tuning operations on the last day of maintenance periods. Alternative measures, such as improving the quality of liquidity forecasts, were not considered feasible at that point in time. Consequently, since late 2004, the ECB has been conducting fine-tuning operations more often with the aim of establishing balanced liquidity conditions on the last day of the reserve maintenance period.

Fine-tuning operations can either be liquidity-providing or liquidity-absorbing. Liquidity-providing operations are usually conducted via variable rate tenders with a minimum bid rate equal to the one applied in the main refinancing operations. Liquidity-absorbing operations, on the other hand, are usually conducted as a fixed rate tender in which counterparties can bid to deposit money with the Eurosystem. The money deposited is then remunerated at the minimum bid rate. The maturity of both liquidity-providing and liquidity-absorbing operations has, in all cases, been one day: the last day of the reserve maintenance period.

Given an unbiased forecast for the evolution of autonomous factors, the resulting balanced liquidity conditions should lead to an overnight interest rate close to the middle of the corridor set by the ECB's standing facility rates, which, for a symmetric corridor, would be equal to the minimum bid rate.[2] Moreover, the conduct of fine-tuning operations, if anticipated by market participants, should not only affect market rates on the date of the operations, but should be able

2 See, for instance, G. Pérez Quirós and H. Rodríguez Mendizábal, "The Daily Market for Funds in Europe: What Has Changed with the EMU?", Journal of Money, Credit and Banking 38(1), 91-118, 2006.

ARTICLES

The Eurosystem's
experience with
fine-tuning operations
at the end of the
reserve maintenance
period

to stabilise rates throughout the preceding week: when market participants trust the ECB to re-establish balanced liquidity conditions on the last day of the maintenance period, they can expect an EONIA close to the middle of the corridor set by the two standing facilities on that day. With this confidence, one can expect interest rates to be already at this level on the days prior to the operation. Thus, the conduct of fine-tuning operations should help to avoid

large swings in market rates also on the days preceding the end of the maintenance period and indeed throughout the entire maintenance period.

3 PARTICIPATION IN FINE-TUNING OPERATIONS

Of the 20 fine-tuning operations conducted at the end of a maintenance period between

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Box

LIQUIDITY SUPPLY AND FORECAST ERRORS

The ECB regularly satisfies the bulk of the banking sector's liquidity needs via its main refinancing operations. These tenders, which are conducted once a week, have a maturity of one week and currently a size of around €300 billion.[1]

On the allotment day, the ECB calculates and publishes the benchmark allotment based on a forecast of the average liquidity needs of the banking sector. The benchmark allotment is defined as the amount of liquidity that is expected to allow banks to smoothly fulfil their reserve requirements[2] until the settlement of the next MRO, assuming an aggregate zero net recourse to the standing facilities. Banks' liquidity demand can be broken down into autonomous factors (e.g. banknotes in circulation and government deposits with the central bank), reserve requirements and excess reserves (current account holdings in excess of reserve requirements).[3] While reserve requirements normally remain unchanged until the end of a maintenance period, developments in autonomous factors and excess reserves prior to the next MRO allotment need to be forecast.

In the days following the MRO allotment, autonomous factors and excess reserves may indeed develop differently from their forecast values. The most common reasons for forecast revisions are unforeseen developments in banknotes in circulation and government deposits with the central bank. As a result, liquidity imbalances can build up in the banking sector, leading to either loose or tight liquidity conditions.

The increase in the number of days between the last MRO allotment and the end of the maintenance period that resulted from the revision of the Eurosystem's operational framework in March 2004 inevitably led to an increase in the accumulation of forecast errors. The standard deviation of accumulated errors increased from €5.5 billion for a forecast horizon of four business days to €9.2 billion for six business days (see chart). Consequently, the probability of ending the maintenance period with sizeable liquidity imbalances – and therefore possibly

1 Additionally, LTROs currently for a total amount of €120 billion with a maturity of three months are conducted on a monthly basis.
2 The Eurosystem's minimum reserve system enables counterparties to make use of averaging provisions, as compliance with reserve requirements is determined on the basis of the average of the end-of-calendar day balances on counterparties' reserve accounts over a maintenance period. The averaging provision gives institutions the possibility to adjust to liquidity shocks within the maintenance period, thereby stabilising money market interest rates.
3 See also Box 3 entitled "Excess reserves and the ECB's implementation of monetary policy" in the October 2005 issue of the Monthly Bulletin.

spikes in short-term money market interest rates – increased.

A fine-tuning operation conducted on the last day of the period is able to correct, at least to a large extent, the liquidity imbalances. The fine-tuning operation is based on updated figures for the evolution of autonomous factors and excess reserves that the ECB receives just prior to the operation.[3] These figures are usually quite accurate, since the uncertainty about their evolution only concerns one day. Indeed, the standard deviation for one-day forecast errors of autonomous liquidity factors is only €0.7 billion (see chart).

Chart Standard deviation of accumulated forecast errors for autonomous factors

x-axis: number of business days
y-axis: EUR billions
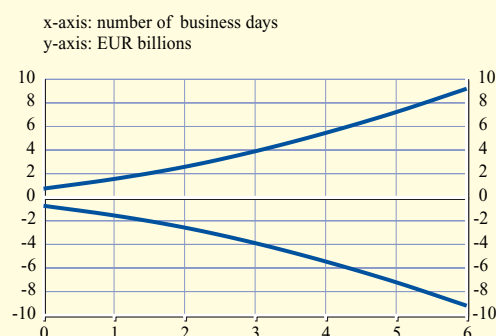
Source: ECB.

November 2004 and September 2006, seven were liquidity-providing and thirteen were liquidity-absorbing (see Table 1). Only three maintenance periods ended without a fine-tuning operation.

On average, 31 counterparties submitted bids in liquidity-providing operations. The average size of each liquidity-providing operation was €9.43 billion and the ECB was successful in allotting the intended amount. The bid-to-cover ratio in these operations, i.e. the ratio between submitted bids and allotted volumes, was 4.5. This is much higher than the bid-to-cover ratio observed in the ECB's main refinancing operations, which on average was only 1.27 in the same period. The marginal and weighted

average tender rates were on average 5 and 6 basis points respectively above the minimum bid rate. These tender rates often diverged from the tender rates observed in the preceding MRO allotments, however, on average they were of the same magnitude as the MRO tender rates.

In the liquidity-absorbing operations, the bid rate equalled the minimum bid rate, which ranged from 2% to 3% in the relevant period. On average, the ECB intended to drain €9.08 billion. In eight of these operations, the ECB was able to drain the intended amount. In the other five operations, there was some underbidding, i.e. the total bid amount submitted by counterparties, and thus the drained amount, was lower than the volume that the ECB had

Table 1 Summary of end-of-period fine-tuning operations

Operation type	Tender type	Number of operations	Average intended volume[1]	Average total bid amount[1]	Average allotted amount[1]	Average bid-to-cover ratio	Average proportion of bids allotted	Average number of participating counterparties
Liquidity-providing	Variable rate	7	9.43	33.67	9.43	4.49	26.00%	31
Liquidity-absorbing	Fixed rate	13	-9.08	-11.33	-8.10	1.22	82.80%	12

Source: ECB.
Note: Data refer to the period November 2004-September 2006. Negative signs refer to liquidity drains.
1) In EUR billions.

been intending to drain (see also Chart 1). Three cases of more severe underbidding were observed in June 2005, August 2005 and March 2006. The more subdued bidding in liquidity-absorbing operations is also reflected in a rather low bid-to-cover ratio of 1.22 and a low number of bidders (12), both of which are significantly lower than in liquidity-providing operations.

UNDERBIDDING

It is not a coincidence that all cases of underbidding occurred in liquidity-absorbing operations. The fixed rate applied in these tenders – the minimum bid rate – lies in the middle of the corridor set by the two standing facilities and thus coincides with the hypothetical value of liquidity when the probability of having recourse to either facility is 50% and is equally costly. Counterparties may, however, value the possibility of ending the maintenance period with a liquidity surplus or deficit slightly differently, for instance because they face different costs in the two cases. On the one hand, a liquidity surplus will induce them to deposit the excess liquidity at the deposit facility. On the other hand, a liquidity deficit leads to a use of the marginal lending facility, or to non-compliance with reserve requirements, which incurs a penalty. In this case, the market's valuation of liquidity may exceed the minimum bid rate and counterparties may decide not to deposit the entire amount of excess liquidity with the Eurosystem.

At the same time, market conditions play an important part in a counterparty's decision to participate in liquidity-absorbing fine-tuning operations. When the market perceives liquidity conditions to be ample, there is pressure for the overnight rate to drop to levels below the minimum bid rate. In this case, it is worthwhile for market participants to deposit their excess liquidity with the Eurosystem via the fine-tuning operation, because the remuneration at the minimum bid rate is better than the one they can obtain in the money market. This is not the case when market rates are at the same level as,

Chart 1 Allotment in fine-tuning operations and the use of standing facilities

(EUR billions)

- ▬ intended allotment volume
- ▦ underbidding
- ▬ net recourse to standing facilities

Source: ECB.
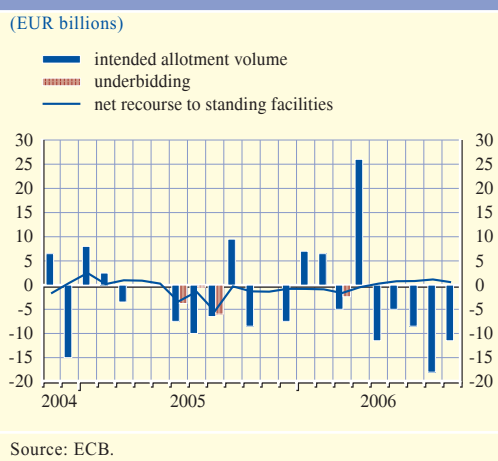
or even exceed, the minimum bid rate. Indeed, the bid-to-cover ratio tends to be higher for lower levels of the spread between the overnight rate and the minimum bid rate on the morning of the fine-tuning operation.

Underbidding may also occur when market participants have a perception of tighter liquidity conditions than were estimated by the ECB. This can happen, for instance, when the ECB expects a reduction in liquidity-absorbing autonomous factors on the last day of the maintenance period (such an expectation is not directly visible to the market and is reflected only in the published average value for the entire week). Similarly, a wrong perception of tight liquidity conditions could arise when liquidity is distributed unevenly across market participants. If that were the case, a liquidity absorption of the full amount in the fine-tuning operation would lead to a net recourse to the marginal lending facility on the last day. If, however, liquidity were evenly distributed, the amount of liquidity that was not absorbed because of underbidding would be reflected in a net use of the deposit facility. Indeed, the positive relationship between the use of standing facilities and the amount of underbidding is quite strong; on average, these two variables differ only by €200 million. Chart 1 indicates that in fact any net recourse to the deposit

facility (indicated by a negative net recourse to standing facilities) of more than €1 billion was related to an episode of underbidding.

DRIVERS OF PARTICIPATION IN FINE-TUNING OPERATIONS

While 129 counterparties are currently eligible to participate in the ECB's fine-tuning operations, on average only 19 banks participated in the end-of-period fine-tuning operations. Almost half of all the institutions that were eligible during the period under review never participated in a fine-tuning operation conducted during that period. On average, eligible counterparties participated less than twice.

Generally, the participation of banks is positively correlated with their size in both types of operations, indicating that larger banks tend to bid more often than smaller ones. Indeed, 20% of the largest banks bid, on average, more than three times as often as 50% of the smallest counterparties. This finding reflects the fact that larger banks tend to be more active in the interbank market.

Another possible reason for participating in fine-tuning operations is a counterparty's

individual reserve deficit on the penultimate day of the maintenance period. However, somewhat surprisingly, the percentage of reserve fulfilment does not seem to play a role in the decision to bid in the tender.

Of all the participating counterparties, on average the three largest bidders accounted for 72% of the volume allotted in the operations, the six largest bidders for 88%, and the 12 largest bidders for 96%. Chart 2 shows that the concentration of bids was especially high whenever the allotment volume – be it liquidity-absorbing or providing – was low. This could indicate that counterparties decided to take the initiative to bid only when they expected to receive an allotment above a certain size, possibly because of costs related to the submission of bids.

Overall, the main factor behind participation in the end-of-period fine-tuning operations seems to be the counterparties' role in the interbank market rather than their individual liquidity position at the moment of the operation.

4   INITIAL ASSESSMENT

USE OF STANDING FACILITIES

As discussed in Section 2, the aim of end-of-period fine-tuning operations is to establish balanced liquidity conditions and to stabilise short-term interest rates at the end of the maintenance period. By definition, when liquidity conditions are balanced, there should be no shortage or surplus of liquidity in the markets. Any surplus or shortage of liquidity at the level of the aggregate banking sector should be reflected in the use of one of the ECB's standing facilities on the last day of the reserve maintenance period. Table 2 shows how, since November 2004, the use of standing facilities on this day has fallen: the net recourse to the facilities in absolute terms has decreased from €4.2 billion to €1.2 billion. While the use of the deposit facility has remained rather stable, the overall reduction has mainly been caused by the

Chart 2 Largest bidders' share of the allotments

- intended allotment volume (EUR billions; left-hand scale)
- 3 largest bidders (percentages; right-hand scale)
- 6 largest bidders (percentages; right-hand scale)
- 12 largest bidders (percentages; right-hand scale)
- ◆ indicates a liquidity-providing operation

Source: ECB.

ARTICLES

The Eurosystem's
experience with
fine-tuning operations
at the end of the
reserve maintenance
period
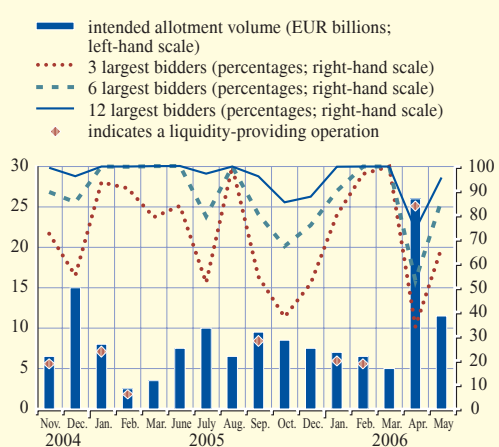
Table 2 Average use of standing facilities on the last day of the maintenance period

(EUR billions)

Period	Marginal lending facility (A)	Deposit facility (B)	Net recourse to standing facilities[1]	Net recourse in absolute terms[2]
Apr.-Oct. 2004	3.5	1.6	1.9	4.2
Nov. 2004-Sep. 2006	1.0	1.4	-0.4	1.2

Source: ECB.
1) Average of [(A)-(B)].
2) Average of absolute value of [(A)-(B)].

lower recourse to the marginal lending facility, which used to be, on average, more than twice the average use of the deposit facility.

IMPACT ON SHORT-TERM MONEY MARKET INTEREST RATES

The impact on rates of having more numerous end-of-period fine-tuning operations is noteworthy. The occasional large spikes in the EONIA spread that occurred on the last day of a maintenance period have been reduced substantially. Chart 3 plots the time-series of the minimum bid rate and the EONIA since March 2004 using data for the last day of each maintenance period only. The difference in absolute terms between the two – the EONIA spread – is also displayed. This sequence illustrates the success, so far, of conducting fine-tuning operations at the end of maintenance

Chart 3 Fluctuations of the EONIA around the minimum bid rate (MBR) on the last day of the maintenance period

• EONIA (percentages per annum; left-hand scale)
····· MBR (percentages per annum; left-hand scale)
▪ deviation from MBR in absolute terms (basis points; right-hand scale)

Source: ECB.

periods. On the left-hand side of the vertical line, the occasional large spikes in the EONIA spread, which occurred on the last day of a maintenance period before fine-tuning operations were conducted, are displayed. On four occasions the deviations from the minimum bid rate were larger than 25 basis points, and on three of these occasions they were even above 50 basis points. Since November 2004, the frequency of these spikes has been substantially reduced: only on one occasion did the EONIA spread exceed 25 basis points. This was one of the days on which underbidding in a liquidity-absorbing operation was rather severe and the EONIA fell because of the large liquidity surplus that was left in the market.

The evolution of the standard deviation of daily changes in the EONIA gives a similar picture. Chart 4 illustrates how the more frequent conduct of end-of-maintenance period fine-tuning operations had a striking effect on the day-to-day volatility of the EONIA: the average standard deviation for the days after the last MRO (measured on a day-to-day basis) was reduced from more than 12 to 3.2 basis points. Even though there was a slight increase in the standard deviation for all other weeks (from 1 to 1.4 basis points), the overall effect on the volatility of the entire maintenance period was reflected in a reduction in the standard deviation from 4 to 3.2 basis points.

Chart 5 shows the average evolution of the EONIA spread, i.e. the difference between the EONIA and the minimum bid rate, over the course of the last seven calendar days of each maintenance period. Conducting fine-tuning
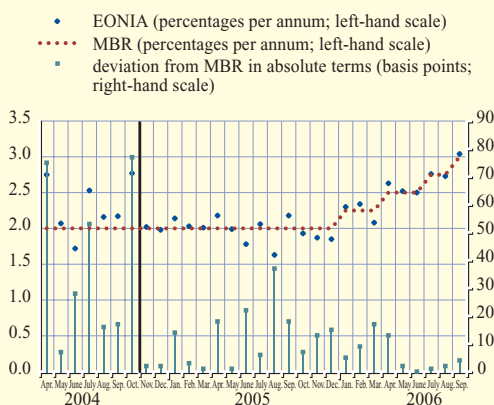
Chart 4 EONIA standard deviation per maintenance period

(basis points; on a day-to-day basis)

— entire maintenance period
···· days before last MRO
- - days after last MRO

Source: ECB.

Chart 5 Average EONIA spread during the last week of a maintenance period

(percentage points)

— average EONIA spread (since Nov. 2004)
···· average EONIA spread (Mar.-Nov. 2004)

Calendar days until the end of the maintenance period

Source: ECB.

operations had a strong effect on the very last day of the maintenance period, reducing the EONIA's average deviation from the minimum bid rate from 31 basis points to 1 basis point. There is also a small reduction in the spread on the penultimate day, although no stabilising effect can be seen for more than two calendar days ahead of the end of the maintenance period.

EVOLUTION OF INTEREST RATE SPREADS

During the first half of 2005, the spreads between short-term money market rates and the minimum bid rate stabilised. This situation most likely reflected both the more frequent fine-tuning operations and the ECB's liquidity policy of allotting more than the benchmark amount in the MROs in the period October 2004-February 2005. This is illustrated by Chart 6, which displays the time series of the EONIA spread, as well as the spread between the one-week repo rate and the minimum bid rate. Since the beginning of 2005, the upward trend in both spreads has halted. However, towards the end of 2005 the spreads widened again, even though spikes in interest rates were largely avoided. The causes of the widening spreads at that point in time thus seemed to be unrelated to the liquidity situation at the end of maintenance periods and, consequently, the

ECB resorted to additional measures for countering the spreads. In the period May-September 2006, the ECB alloted more than the published benchmark amount in all MROs, including the last one in each maintenance period. This measure has indeed led to continued progress in countering the elevated spread between money market rates and the minimum bid rate.

Moreover, this measure temporarily changed the role of fine-tuning operations. Allotting more than the benchmark amount in the last MRO of a maintenance period implied a targeted liquidity surplus during the last week of the period. Given that the ECB still aimed to achieve balanced liquidity conditions on the last day, it implied with a high likelihood a liquidity-absorbing fine-tuning operation on the last day of the maintenance period. Indeed, from May to September 2006, all of the fine-tuning operations were liquidity-absorbing (see also Chart 1).

5   CONCLUSION

Since autumn 2004, the ECB has been conducting fine-tuning operations more frequently in order to establish balanced liquidity conditions at the end of reserve maintenance periods.

ARTICLES

The Eurosystem's
experience with
fine-tuning operations
at the end of the
reserve maintenance
period

Chart 6 Weekly averages of EONIA spread and one-week repo rate spread[1]

(percentage points)

— repo spread
···· EONIA spread
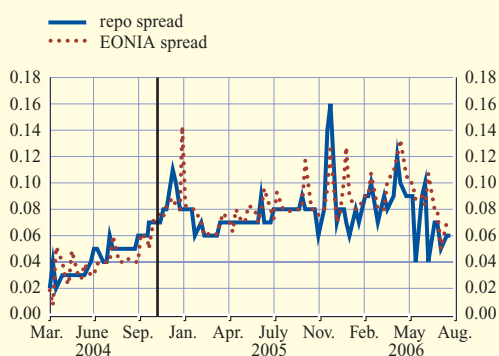
Sources: Reuters and ECB.
1) Data excludes figures for the last week of the maintenance period.

The analysis indicates that this measure was generally successful in stabilising interest rates on the last days of maintenance periods. In fact, large spikes in market overnight rates towards the end of the maintenance period were largely avoided. Moreover, the day-to-day volatility of the EONIA was visibly reduced. The more frequent conduct of fine-tuning operations had its main stabilising effect on the last two days of a period; this effect was only very small on preceding days. Therefore, the aim of stabilising short-term money market rates towards the end of maintenance periods was clearly achieved.

At the same time, the spreads between short-term money market rates and the minimum bid rate temporarily stabilised. Nevertheless, when other factors contributed to an increase in spreads at the end of 2005, the ECB had to take further measures to reduce them.

FINANCIAL DEVELOPMENT IN CENTRAL, EASTERN AND SOUTH-EASTERN EUROPE

A number of countries in central, eastern and south-eastern Europe have seen their financial sectors grow rapidly in recent years, including a rapid expansion of credit to the private sector. This article reviews the main factors behind financial development in the region, including the process of transition from a centrally planned to a market economy, macroeconomic and financial sector policies and cyclical developments. It provides an overview of the key characteristics of the financial sectors, reviews recent patterns of growth in domestic bank credit and looks at the macroeconomic and financial stability implications. The latter may become of considerable importance, given the increasing level of financial integration between the euro area and central, eastern and south-eastern Europe. Financial development and credit growth in the region call for continued close monitoring. At the same time, the development of financial systems can be expected to promote more productive investment and economic growth in the region.

1 INTRODUCTION

Financial development in central, eastern and south-eastern Europe has progressed at a rapid pace in recent years, driven by profound changes in the ownership structure and the lending environment of the banking sector, by financial sector and macroeconomic policies, and by cyclical factors.[1] As a result, businesses and consumers have gained increased access to a wide range of products, most importantly in the fields of consumer and mortgage lending. Foreign-owned banks continue to increase their presence in the region, and non-bank financial institutions, such as investment and pension funds, are being established for the first time. To a great extent, these developments are the result of the progress made in the transition from centrally planned to market economies in the region. In the case of Turkey, the only non-transition economy in the region, its financial sector has also seen a major transformation following the crisis in 2000-01 and the measures taken to restructure the financial sector in its wake.

As will be discussed in this article, since the 1990s and in parallel with the overall progress made in transforming their economic structures, countries in this region have seen substantial changes in the structure of their financial markets and in their regulatory and supervisory institutions. The main factors behind these changes are discussed in more detail in Section 2. Thereafter, Section 3 provides a snapshot of the state of financial development

in the region. Section 4 takes a closer look at the evolution of the financial sectors in the region over time, in particular with regard to the growth of credit to the private sector. Section 5 puts the analysis in context by reviewing the macroeconomic and financial stability implications of financial development, while Section 6 concludes.

2 MAIN FACTORS BEHIND FINANCIAL DEVELOPMENT IN THE REGION

Financial sectors in the region have been influenced by a mixture of structural factors, mainly related to the transition from a centrally planned to a market economy, macroeconomic and financial sector policies and cyclical developments. As the impact of these determinants has partially overlapped, they should be considered jointly when assessing financial development in the region.

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[1] For the purposes of this article, the region of central, eastern and south-eastern Europe is seen as comprising the following countries: the former planned economies that joined the European Union in 2004, i.e. the Czech Republic (CZ), Estonia (EE), Latvia (LV), Lithuania (LT), Hungary (HU), Poland (PL), Slovakia (SK) and Slovenia (SI); the acceding countries, i.e. Bulgaria (BG) and Romania (RO); the countries formally recognised by the European Council to be candidates for EU entry, i.e. Croatia (HR), the Former Yugoslav Republic of Macedonia (MK) and Turkey (TR); and potential EU candidate countries, i.e. Albania (AL), Bosnia and Herzegovina (BA) and Serbia and Montenegro (CS). Montenegro was recognised as a sovereign state by the European Union in June 2006. Malta and Cyprus are not included, as they have not experienced the same phenomenon; their financial markets are more developed, with credit-to-GDP ratios close to that of the euro area and more moderate credit growth.

Financial development in the region – with the exception of Turkey – has gone through a number of stages in recent years. In the early phase of transition, a thorough restructuring of the financial sector was necessary, as state-owned banks had to be restructured and directed lending ended. This was followed, in some cases, by a rapid privatisation of the banking sector and an expansion of financial markets, often set up from scratch. However, the institutional and legal environment was often inadequate, leading to cases of connected lending and the setting-up of so-called "pocket banks", which often acted as agents of a single firm or conglomerate. The immature banking system often suffered from inadequate regulation, malpractice and a lack of experience on the part of the agents involved.[2] All of these factors resulted in a number of lending booms during these early years of the transition. Owing to the low quality of such lending, periods of credit expansion were often followed by a credit crunch. As a result, a number of countries in the region faced outright banking crises during the 1990s.

More recently, the entry of foreign banks, mainly from the EU, has been the main structural factor shaping financial sector development in the region. It has led to a substantial increase in the supply of credit and the range of financial products available in the economies of the region, reflecting an import of capital, reputation, knowledge and expertise. While the internationalisation of the region's financial sector, i.e. its integration with EU financial markets, has facilitated access to foreign funding, mainly from parent banks, domestic deposit mobilisation has benefited from an increase in confidence in the domestic banking sector. In addition, favourable income prospects have also increased the demand for credit by both firms and households. Finally, competition in the banking sectors has intensified, as foreign banks have been looking for shares in markets offering higher returns on equity than in the home country. This has been accompanied by a consolidation of banking sectors in a number of countries in the region.

Improvement of the legal system has been another important structural factor fostering financial development. In that respect, the adoption of standards and regulations in line with the EU supervisory framework has been essential.

In addition to the factors affecting supply and demand for credit described above, several policy-related factors have shaped credit dynamics in the region. This relates first and foremost to financial sector policies, i.e. the authorities' approach to deregulation, privatisation and liberalisation of the financial sector. Moreover, macroeconomic policies have also played a role. Both monetary policy, which has a direct impact on financial development by changing the cost of borrowing through changes in policy interest rates or reserve requirements, and exchange rate policy may have had an impact. For example, it has been observed that countries pursuing more fixed exchange rate regimes have generally experienced faster credit growth. As this has often been associated with a high share of foreign currency borrowing, the perception of lower exchange rate risk in countries with a fixed exchange rate regime, or even currency board arrangements, might have been a stimulating factor. Financial development has also been influenced by fiscal policy in several countries of the region, most directly via measures related to the housing market, such as the tax deductibility of mortgage repayments and mortgage loan subsidies. Moreover, privatisation and public finance consolidation efforts in several countries of the

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2 For a discussion of these issues in the academic literature, see E. Berglöf and P. Bolton (2002), "The great divide and beyond: Financial architecture in transition", *Journal of Economic Perspectives* 16 (1), pp. 77-100. The interested reader is also referred to the following ECB publications covering the banking and financial sectors in some of the countries of the region covered in this article: "Banking structures in the new EU Member States" (January 2005), "EU Banking Structures" (October 2006) and "EU Banking Sector Stability" (November 2006). In addition, the ECB Occasional Paper No 48 by the International Relations Committee Task Force on Enlargement deals with "Macroeconomic and financial stability challenges for acceding and candidate countries" (July 2006).

region have provided room for further credit expansion.[3]

Finally, cyclical factors have been an important determinant of financial development in recent years, as most countries in the region have experienced strong real GDP growth. Demand for credit has been further stimulated by decreasing borrowing costs, reflecting progress in domestic macroeconomic stabilisation and low interest rates in global financial markets, as well as rising asset prices (in particular of housing) in an environment of ample global liquidity. These cyclical effects have been amplified by transition-related factors, namely the emergence of new firms with a strong demand for credit and the entry of households into the consumer loan and mortgage credit markets in the light of current and expected future income gains. The predominance of foreign ownership in the respective banking sectors also implies that, in addition to domestic considerations, the cyclical position in home countries as well as the financial situation of the parent bank matter for financial development. In general, local bank subsidiaries may be expected to ease lending conditions when economic conditions in the home country of the parent bank are subdued, while the exposures in host markets are likely to be curtailed in the event of rising financial fragility of the respective parent banks.[4]

Besides the previously discussed mechanisms which increase credit demand and supply, a natural catch-up effect should be taken into account, as these countries have undergone a financial deepening process starting from relatively low levels of private sector credit-to-GDP ratios and economic development (GDP per capita). Hence, as the literature on the growth-finance nexus suggests, credit expansion will accompany economic expansion as these countries catch up with more developed economies. This is presented in more detail in the following section.

Chart I Ratio of domestic bank credit to the private sector to GDP and per capita GDP (2004)

(118 countries)

x-axis: per capita GDP (USD in PPP)
y-axis: private sector credit to GDP (%)

$y = 0.0031x + 11.35$
$R^2 = 0.5548$

Source: IMF.
Note: Red dots refer to countries in central, eastern and south-eastern Europe for which data are available.
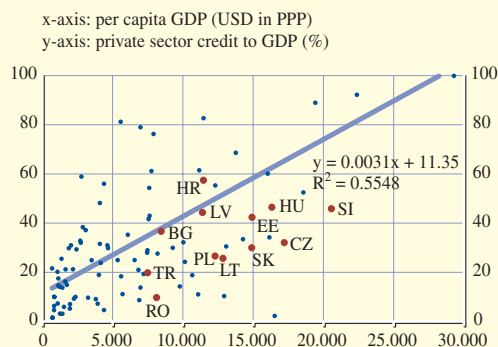
3 THE STATE OF FINANCIAL DEVELOPMENT IN THE REGION

Most of the countries in the region still exhibit lower levels of financial development compared not only with developed economies but also with countries with a similar level of per capita income. As shown in Chart 1, in 2004, with the exception of Croatia, all countries in the region (for which data were available) stood below a regression line fitted for the correlation between the ratio of bank credit to the private sector to GDP and per capita income across 118 countries for which data were available. This relatively low level of financial intermediation relative to per capita income is a reflection of the often turbulent early stages of transition described in the introduction. As a result, the banking sectors in the region were not only small but also had an asset structure in which credit to the private sector was not heavily weighted.

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3 See P. Backé and T. Zumer (2005), "Developments in credit to the private sector in central and eastern European EU Member States: Emerging from financial repression – a comparative overview", Focus on European Economic Integration, 2/05, Oesterreichische Nationalbank, October.

4 R. de Haas and I. Naaborg (2005), "Internal Capital Markets in Multinational Banks: Implications for European Transition Countries", De Nederlandsche Bank Working Paper No 51, and R. De Haas and I. van Lelyveld (2005), "Internal Capital Markets and Lending by Multinational Bank Subsidiaries", De Nederlandsche Bank Working Paper No 101.

Table 1 Assets held by banks and non-bank financial institutions in central, eastern and south-eastern European countries (2005)			
	Total assets (EUR billions)	Share of total assets in GDP (%)	Share of bank assets in total assets (%)
EU countries			
Czech Republic	119.3	121.2	88.0
Estonia	13.2	125.5	89.5
Latvia	16.0	125.1	97.3
Lithuania	13.9	67.3	94.6
Hungary	96.1	109.4	77.7
Poland	212.9	87.5	71.4
Slovenia	35.7	130.5	84.2
Slovakia	43.3	113.5	84.1
Acceding countries			
Bulgaria	19.6	91.3	85.8
Romania	42.1	53.2	84.1
Candidate countries			
Croatia	44.5	144.0	81.0
Former Yugoslav Republic of Macedonia	2.5	62.5	92.0
Turkey	294.9	102.7	86.8
Potential candidate countries			
Albania	4.2	62.3	78.6
Bosnia and Herzegovina	7.5	98.4	81.3
Serbia	10.5	57.9	88.6
Memo item			
Euro area	28,550.7	371.0	71.5

Sources: ECB (for EU countries' banking sector data), EBRD, IMF and national sources.
Notes: Non-harmonised data for non-EU countries.

Another key characteristic of financial sectors in the region is that they remain largely bank-based. While non-bank financial institutions have been growing in a number of countries, they still only account for a relatively small share of total financial assets, as shown in Table 1.

The progress made in the transition process differs, however, across countries in the region. One way of gauging such progress is to look at the indicator for banking sector reform regularly compiled by the European Bank for Reconstruction and Development (EBRD), as reported, among other selected indicators for the banking sector, in Table 2. The EBRD transition indicator ranges from 1 to 4.3, with 1 defined as little progress in banking sector reform and 4.3 representing full convergence of banking laws and regulations with Bank for International Settlements (BIS) standards and the availability of a full set of banking services. For the countries in the region, the EBRD

indicator suggests that banking sector reform is almost complete in the EU countries of the region, as well as in Bulgaria and Croatia.

Other countries in the region, however, need to go further to complete the transition. In Turkey, for which such a transition indicator from the EBRD is not available, a bank restructuring process was launched with the support of the International Monetary Fund and the World Bank after the 2001 banking crisis.

With the exception of Turkey, the privatisation of state-owned banks has been largely completed. Among the new EU Member States, only in Poland and Slovenia do state-owned banks still account for more than 10% of total banking assets, according to the latest data compiled by the EBRD. Progress has also been made in privatisation among non-EU countries in the region. Only in Serbia do state-owned banks still hold more than 10% of the total assets of the banking sector.

Table 2 Selected banking sector indicators for central, eastern and south-eastern European countries (2005)

	Number of credit institutions (CIs)[1]	Branches per 100,000 inhabitants	State-owned banks[2] (% of total banking sector assets)	Foreign-owned banks[3] (% of total banking sector assets)	Five largest CIs[4] (% of total banking sector assets)	Return on assets	Return on equity (%)	EBRD index of banking sector reform[6]
EU countries								
Czech Republic	56	18	3	96	65	1.3	17.7	4.0
Estonia	11	17	0	99	98	2.6	8.6	4.0
Latvia	23	25	4	48	67	1.9	27.2	3.7
Lithuania	78	24	0	92	81	0.8	12.3	3.7
Hungary	215	31	7	63	53	2.7	35.4	4.0
Poland	739	13	19	67	49	1.4	18.7	3.7
Slovenia	25	35	13	19	63	0.8	16.2	3.3
Slovakia	23	21	1	93	68	1.4	9.5	3.7
Acceding countries								
Bulgaria	34	9	2	80	51	2.0	21.6	3.7
Romania	33	14	6	62	60	1.7	12.9	3.0
Candidate countries								
Croatia	34	24	3	91	74	1.7	15.6	4.0
Former Yugoslav Republic of Macedonia	20	14	2	53	68	1.3	8.1	2.7
Turkey	47	9	35	6	63	1.1	8.6	n.a.
Potential candidate countries								
Albania	16	3	3	94	83	1.3	21.1	2.7
Bosnia and Herzegovina	33	18[5]	4	81	64	0.7	6.4	2.7
Serbia	40	4	24	66	50	0.9	5.8	2.7
Memo item								
Euro area	6,403	54	n.a.	16	41	0.5	13.9	n.a.

Sources: ECB (for EU countries' banking sector data), EBRD, IMF and national sources.
Notes: Non-harmonised data for non-EU countries.
1) Refers to banks in non-EU countries.
2) 2004 data from the EBRD.
3) 2004 data from ECB, "EU Banking Sector Stability", October 2005.
4) Refers to the four largest banks in Croatia and to the three largest banks in the Former Yugoslav Republic of Macedonia.
5) Refers to the Federation of Bosnia and Herzegovina only.
6) The index ranges from 1 to 4.3, with 4.3 representing full convergence of banking laws and regulations with BIS standards and the availability of a full set of banking services.

In many cases privatisation has been accompanied by an increased participation of foreign banks in the region. Subsidiaries or branches of foreign banks account for more than 90% of banking sector assets in the Czech Republic, Estonia, Lithuania, Slovakia, Croatia and Albania, while the figure is above 80% in both Bulgaria and Bosnia and Herzegovina. In addition, the recent sale to a foreign buyer of a large bank in Romania – announced at the end of 2005 but not completed until August 2006 – is estimated to have increased the asset share of foreign-owned banks in that country to close to 90%. In Turkey, foreign bank ownership remains relatively limited. However, foreign banks have recently acquired majority stakes in some Turkish banks.

While the banking systems of the countries in the region have a number of common characteristics, they also display a number of distinct features. The degree of concentration, as measured by the share of assets held by the five largest banks, varies widely. Such variation is partly due to differences in the size of the banking markets. Thus, the degree of concentration tends to be higher in some of the countries with smaller banking sectors, such as Estonia, Lithuania, Albania and the Former Yugoslav Republic of Macedonia. Among the EU countries in the region, only the Czech Republic, Hungary and Poland have banking sectors that hold assets above €50 billion. Of the non-EU countries, this is only the case for

the Turkish banking sector, which is by far the largest banking market in the region.

The wide variation in the depth of financial intermediation, as shown in Chart 1 above, also helps to explain the differences observed in terms of branch networks in the region. Except for Croatia, the candidate and potential candidate countries have fewer branches per 100,000 inhabitants and lower assets per bank employee than the EU countries in the region.

All of these country-specific features must also be borne in mind when interpreting the data on profitability. For example, there is some empirical evidence pointing to a positive relationship between foreign ownership and profitability, at least in the case of the new EU countries. In addition, the interplay between concentration and interest rate margins is a complex one, as there is some evidence – again, at least in the case of the EU countries – that margins are among the lowest in highly concentrated markets and are the highest in markets with a lower degree of concentration.[5] As the banking sector matures, consolidation takes place and, hence, concentration increases. At the same time, the high margins observed during the early and volatile period of the transition come down to levels closer to those observed in more developed banking sectors.

4 GROWTH OF DOMESTIC BANK CREDIT TO THE PRIVATE SECTOR IN THE REGION

The process of transition has implied a number of distinct phases in the evolution of the financial sectors of the region. However, not all countries under review have gone through all of those phases or gone through them at the same pace.[6] In addition, not all of the countries have dealt in the same way with the legacy of the early phases of transition, when much of the lending that took place was of poor quality. All of this implies that cross-country comparisons are inherently difficult and that any analysis of recent developments will necessarily be

Chart 2: Credit to the private sector as a percentage of GDP

Legend:
- 1999
- 2002
- 2005

(Top panel countries: CZ, EE, LV, LT, HU, PL, SI, SK)
(Bottom panel countries: BG, RO, HR, MK, TR, AL, BA, CS*, Euro area)
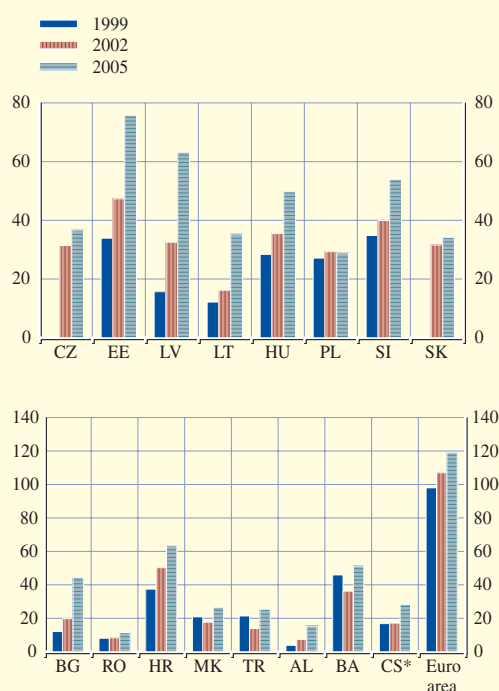
Source: ECB for EU countries and the euro area, IMF (for non-EU countries except Serbia, for which national sources are reported).
Notes: * Refers to Serbia. Data for non-EU countries refer to claims on private sector as reported in the monetary survey of the IFS.

influenced by the choice of the initial period of observation.

In general, however, there has been a rapid acceleration in the process of financial deepening over the last three to four years, in particular with regard to bank credit to the private sector. From 2002 to 2005 the ratio of private sector loans to GDP increased by 25 percentage points or more in Estonia, Latvia

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5 For a discussion of these issues regarding the relationship between ownership, concentration and profitability, see ECB, "Banking structures in the new EU Member States" (January 2005).

6 See C. Cottarelli, G. Dell'Ariccia and I. Vladkova-Hollar (2005), "Early birds, late risers, and sleeping beauties: Bank credit growth to the private sector in Central and Eastern Europe and in the Balkans", *Journal of Banking and Finance*, 29 (1), pp. 83-104.

Table 3 Real growth of bank credit[1]

(annual percentage changes (unless otherwise stated); nominal growth adjusted for consumer price inflation)

	Memo item Credit to the private sector in 2003 (% of GDP)	To the private sector			Memo item Credit to the household sector in 2003 (% of GDP)[3]	To households		
		2003	2004	2005		2003	2004	2005
EU countries								
Czech Republic	32	-2	9	23	9	28	38	37
Estonia	55	24	24	30	15	46	48	62
Latvia	40	23	30	38	11	56	59	77
Lithuania	23	45	54	37	8	n.a.	n.a.	83
Hungary	43	13	19	14	12	37	29	17
Poland	30	-9	0	16	12	-4	24	24
Slovenia	43	1	15	19	13	n.a.	n.a.	28
Slovakia	32	5	10	19	10	n.a.	n.a.	41
Acceding countries								
Bulgaria	28	40	43	25	7	78	51	40
Romania	14	118	15	72	4	215	45	66
Candidate countries								
Croatia	71	13	11	16	40	26	16	17
Former Yugoslav Republic of Macedonia	18	13	8	20	4	58	63	41
Turkey	15	29	43	33	10[2]	56	87	56
Potential candidate countries								
Albania	7	28	34	70	2	69	70	75
Bosnia and Herzegovina	31	31	32	28	16	34	33	28
Serbia	16	9	47	50	3	74	118	85
Memo item								
Euro area	109	3	4	6	47	4	6	8

Sources: ECB (for EU countries' banking sector data), IMF and national sources (for non-EU countries).
Note: Non-harmonised data for non-EU countries.
1) For the euro area and the EU countries, Table 3 shows credit (i.e. loans plus securities) to the private sector and loans to households by monetary financial institutions. For non-EU countries, the table shows credit to the private sector and credit to households by banks, excluding non-bank financial institutions, for which data availability is limited.
2) Refers to total household liabilities as a percentage of GDP in 2005.
3) 2004 data for Lithuania, Slovenia and Slovakia.

and Bulgaria and by more than 10 percentage points in Lithuania, Hungary, Slovenia, Bosnia and Herzegovina, Croatia, Serbia and Turkey (see Chart 2).

Table 3 provides a more detailed picture of the evolution of the growth of bank credit to the private sector, adjusted for inflation, during the last three years. It also provides the comparable growth rates for credit to households, a component of private sector credit that has seen particularly fast growth, providing further evidence on the main driving forces behind credit growth in the region.

In real terms, credit to the private sector has grown at double-digit rates in most countries in the region over the last three years. This is to

some extent the result of base effects, as in many countries the initial starting level of credit to the private sector was very low or shrank after crisis situations such as that in Turkey. Thus, it is not surprising that growth has been particularly fast in some of the countries with less developed financial sectors, such as Albania or Serbia. A similar caveat must be borne in mind when examining the growth of credit to households, as reported in the right-hand panel of Table 3.

At the same time, real credit growth has also been rapid in countries where the starting levels of financial intermediation were relatively high. For example, in Croatia growth rates of credit to the private sector were close to 30% in real terms in 2003 and triggered a series of measures

Chart 3 International claims of euro area banks on the banking sectors of countries in central, eastern and south-eastern Europe

(as a percentage of each country's total banking sector liabilities)

- 1999
- 2002
- 2005
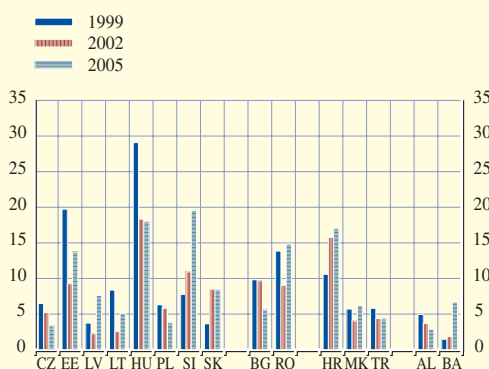
Sources: BIS, IMF and ECB calculations.
Note: Data not available for Serbia and Montenegro.

on the part of the authorities to contain such developments.

In many countries, the asset structure of the banking sector still has a significant component of holdings of securities such as Treasury bills and other liquid assets. In this regard, the rapid increase of private sector credit reflects, in part, a move towards more traditional lending activity by the banking sector. In some cases, however, the increase in lending to the private sector has been funded not via a reduction of other assets, but through an increasingly negative net foreign asset position. Banks in the region have engaged in substantial borrowing from abroad, often from their parent banks, in order to finance the expansion of credit.

Table 4 Breakdown of the stock of domestic bank loans to the private sector by type of borrower, currency and maturity

(as at end-2005)

	Domestic bank loans to the private sector[1] (% of GDP)	Share of domestic bank loans to the private sector by type of borrower			Foreign currency loans (% of total loans to households and NFCs)	Short-term loans (% of total loans to households and NFCs)
		Non-financial corporations (NFCs)	Households	Other financial institutions		
EU countries						
Czech Republic	37	51	40	9	10	26
Estonia	72	42	41	17	79	9
Latvia	69	49	40	11	70	13
Lithuania	41	55	32	13	65	16
Hungary	49	52	35	13	46	25
Poland	29	44	51	4	26	28
Slovenia	56	67	28	5	56	29
Slovakia	35	54	36	11	23	30
Acceding countries						
Bulgaria	45	50	29	21	47	23
Romania	12	62	32	6	58	36
Candidate countries						
Croatia	62	40	57	3	76[2]	20
Former Yugoslav Republic of Macedonia	27	63	29	8	25	45
Turkey	28	n.a.	n.a.	0	31	50
Potential candidate countries						
Albania	15	68	32	1	74	28
Bosnia and Herzegovina	47	48	51	1	69[2]	24
Serbia	28	69	30	0	14	45
Memo item						
Euro area	104	41	51	8	3	18

Sources: ECB (for the euro area and the EU countries), IMF and national sources (for the non-EU countries).
Note: Non-harmonised data for the non-EU countries.
1) Refers to loans to private non-financial corporations, households, other financial institutions and non-profit institutions serving households. Excludes loans to the government or to public enterprises.
2) Including loans in local currency for which payments of interest and repayments of principal are indexed to foreign currency.

As shown in Chart 3, which captures only loans from euro area banks to banks in the region, the importance of this source of financing has been increasing in a number of countries. Given that banks are required to maintain a net open foreign exchange position within certain limits, the rise in banks' foreign liabilities has typically been matched with domestic loans that are denominated in foreign currency, thus helping to explain the relatively high share of foreign currency lending observed in the region (see Table 4). In half of the countries in the region, loans denominated in foreign currency account for more than half of total loans to households and non-financial corporations. The increased participation of foreign banks in the region may have contributed to the phenomenon of foreign currency lending observed there.

Table 4 also shows how domestic bank loans to the private sector are split among different agents of the private sector (non-financial corporations, households and other financial institutions). The relatively low share of total loans to the private sector accounted for by households reflects the effects of the transition and catching-up processes, as well as the still limited development of some lending areas, such as mortgage lending. This helps to explain the still high share of short-term loans in total loans to households and non-financial corporations.

5 MACROECONOMIC AND FINANCIAL STABILITY IMPLICATIONS

Experiences with former episodes of rapid financial sector development in mature and emerging market economies suggest a number of implications for both macroeconomic and financial stability. Starting with the macroeconomic implications, credit expansion has typically been found to be positively linked with economic growth. A broad consensus in the literature suggests that financial development is linked to growth by promoting capital accumulation and/or by exerting a positive impact on the pace of productivity growth. In

this regard, it is noteworthy that financial development in the region has gone hand in hand with strong output growth.

While financial development has been found to generally be positively linked with growth, historical evidence and academic research also suggest that episodes of strong credit growth have at times been associated with substantial macroeconomic risks. In particular, these risks relate to an overheating economy and, related to this, a worsening of the current account. Overheating generally results from a surge in domestic demand, consumption and investment which is not accompanied by an equally large supply response and therefore leads to inflationary pressures. Rising current account imbalances may be caused by stronger import demand and a loss of competitiveness due to higher inflation. Together with an increasing level of external debt, this could make the economy vulnerable to sudden stop phenomena and balance of payments crises.

Besides its impact on macroeconomic developments, rapid credit expansion can have important implications for financial stability.[7] Many banking crises have been preceded by episodes of rapid or excessive credit growth, especially in emerging economies.[8] Several theoretical explanations exist as to why credit booms are associated with a higher probability of banking distress. According to one main strand of the literature, this relationship may be attributed to the pro-cyclicality of bank lending behaviour. Risks may be underestimated during expansionary phases of the business cycle, thereby resulting in loosening credit standards and a lower average quality of borrowers. This may lead to higher credit losses when the next

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[7] Empirical research has established that high credit growth is one of the main predictors of macroeconomic and financial turbulence. See IMF (2004), "Are Credit Booms in Emerging Markets a Concern?", *World Economic Outlook* (April).

[8] See, for example, G. Kaminsky and C. Reinhart (1999), "Twin Crises: The Causes of Banking and Balance-of-Payments Problems," *American Economic Review*, vol. 89(3), pp. 473-500, and D. Ottens, E. Lambregts and S. Poelhelke (2005), "Credit Booms in Emerging Market Economies: A Recipe for Banking Crises?", De Nederlandsche Bank Working Paper No 46.

economic downturn occurs. Risks may also be undervalued as a consequence of the "financial accelerator" mechanism.[9] Over-optimism about future returns, triggered by, for instance, a positive productivity shock, could boost asset valuations and thus firms' net worth, which then feeds back into higher investment and credit demand and a further increase in asset prices. A negative change in expectations could then precipitate a reverse process with falling asset prices and a credit crunch, which may significantly increase repayment difficulties for borrowers and may ultimately lead to higher loan losses for banks. Another factor leading to loose lending policies is high competition among banks trying to stabilise market shares in an expanding market.

Given the specific characteristics associated with the transition process, it is intrinsically difficult to establish whether such a rapid pace of financial deepening represents only a catching-up process to a much higher equilibrium level of the credit-to-GDP ratio or whether it also gives reason for macroeconomic and financial stability concerns. Thus, as will be discussed hereafter, these developments call for continued close monitoring.[10]

Although credit booms can increase the likelihood of banking crises, it is important to stress that rapid credit expansion may not necessarily be harmful for financial sector health. There is empirical evidence that many episodes of rapid credit growth have not been followed by banking crises.[11] This, coupled with the positive role of financial deepening in economic growth, poses important dilemmas for policy-makers. As it is difficult to distinguish ex ante between benign and harmful episodes of fast credit growth, closely monitoring the evolution of credit remains a key task for policy-makers from a financial stability perspective.

In particular, the speed of credit growth may put a strain on banks' risk assessment and risk management capacities, which, coupled with over-optimism about future prospects, may lead to a misallocation of credit. Given the lack of long credit histories of borrowers, this challenge may be all the more significant in the case of banks in central, eastern and south-eastern Europe. The problem may be particularly pronounced in the case of relatively new, previously under-serviced, market segments, such as households and small and medium-sized enterprises. In this regard, some of the standard measures of asset quality, such as the share of non-performing loans in total loans, may prove to be relatively uninformative, since new loans (which are large in a period of rapid credit growth) are unlikely to fall into arrears immediately after being granted. In a context in which floating interest rates are increasingly common for mortgages and other long-term lending, interest rate risk can have a potential impact on the quality of the loan portfolio.

Moreover, foreign currency lending also has distinct implications from a financial stability perspective. Banks are generally required to keep net open foreign exchange positions close to balance, so that they do not face potential currency mismatches. However, end-borrowers typically either lack access to hedging instruments, which are often unavailable or too costly, or do not have natural hedges such as foreign exchange revenues. As a result, currency mismatches may still arise, borne not by banks but by the real sector of the economy, while

9   The role of credit market imperfections in amplifying initial shocks was discussed in B. Bernanke and M. Gertler (1989), "Agency Costs, Net Worth and Business Fluctuations", *American Economic Review*, vol. 79(1), pp. 14-31; N. Kiyotaki and J. Moore (1997), "Credit Cycles", *Journal of Political Economy*, vol. 105(2), pp. 211-48; and B. Bernanke, M. Gertler and S. Gilchrist (1998), "The Financial Accelerator in a Quantitative Business Cycle Framework", BIS Working Paper No 125.

10 On the stability implications of rapid credit growth in the region, see the box entitled "Credit developments in the new non-euro area EU Member States" in the December 2005 issue of the ECB's Financial Stability Review; L. Papademos (2005), "Financial structures, credit growth and house prices in the new EU Member States: Policy challenges on the road to the euro", speech delivered at the conference held by Latvijas Banka, Riga, 19 September, available on the ECB's website (www.ecb. int); and "Macroeconomic and financial stability challenges for acceding and candidate countries", ECB Occasional Paper No 48, July 2006.

11 See, for example, A. Tornell and F. Westermann (2002), "Boom-Bust Cycles: Facts and Explanation", IMF Staff Papers, 49 (special issue), pp. 111-55.

banks may face a credit risk stemming from the fact that, in the event of exchange rate changes, borrowers' ability to service their debt could be affected. Indeed, in many countries, borrowers appear to underestimate the risk of exchange rate changes between the domestic currency and the currency in which they borrow.[12] In this context it should be noted that the exchange rate risk with respect to the euro persists in all countries before they adopt the euro, irrespective of the currency regime in place.

Despite these potential implications for financial stability, it needs to be emphasised that banking sectors in the region are generally well capitalised and, as shown in Table 2, profitable. Although lending-deposit spreads have been reduced in recent years, banking in the countries of this region generally remains a more profitable activity than in more mature markets, such as the euro area, which explains the interest from foreign banks in the region. The presence of foreign-owned banks also implies that the latest techniques and practices regarding risk assessment are being spread throughout the region. In addition, the fact that part of the credit growth in the region has resulted from the expansion of mortgage lending attenuates the potential risks to financial stability, as these loans are collateralised. At the same time, competition for market share in banking markets that are still relatively profitable and are expected to grow considerably in the future may provide an incentive for local bank managers to rapidly expand their lending activity. The presence of foreign-owned banks also calls for a strong emphasis on effective coordination between supervisors in both home and host countries. In particular, supervisory authorities often have to deal with the fact that the banking activities in the region of a particular foreign-owned banking group may account for a relatively small share of the total assets of that foreign banking group, while at the same time being of systemic importance for the host country.

Financial sectors throughout the region are also subject to some surveillance under the Financial Sector Assessment Program (FSAP) carried out by the International Monetary Fund and the World Bank. The FSAP not only provides a framework for stress-testing the resilience of financial sectors under different scenarios, but also provides an agenda for improvements in the institutional and regulatory frameworks.

The recent episodes of rapid credit growth have also elicited a policy response. Authorities in a number of countries in the region have tightened prudential regulations and implemented other policy measures to contain credit growth, e.g. raising minimum reserve requirements and introducing limits on bank lending (or increasing interest rates). While a detailed discussion of such measures falls outside the scope of this article, many of them have tended to be circumvented over time, either by direct borrowing from abroad or through increased activities of non-bank financial intermediaries. Thus, efforts to improve the supervision of non-bank financial institutions are an important part of the policy response to avoid the potential weakening of prudential standards that could result if credit were instead channelled via less regulated non-bank financial institutions.

6 CONCLUSION

The countries in central, eastern and south-eastern Europe have seen a marked increase in the pace at which their financial sectors have been developing in recent years. A key factor behind this financial development has been the progress made in the process of transition from a centrally planned to a market economy. In addition, macroeconomic and financial sector policies and cyclical factors may also have played a role in contributing to the rapid development of the financial sectors in the region in recent years. At the same time, recent developments in these sectors have to be put in the context of the low starting levels for many credit activities such as mortgage lending.

12 While most of the foreign currency borrowing is in euro, other currencies such as the Swiss franc have increasingly been gaining share.

Despite the recent growth, the financial sectors in the region still remain relatively small when compared with those of the euro area.

The rapid growth of credit to the private sector observed in a number of countries in the region could pose risks to both macroeconomic and financial stability. Macroeconomic risks relate, in particular, to an overheating economy and an associated worsening of the current account. With regard to financial stability risks, it should be noted that the speed of credit growth may put a strain on banks' risk assessment and risk management capacities which, coupled with over-optimism about future prospects, may lead to a misallocation of credit. The problem could become particularly pronounced in the case of relatively new, but rapidly growing, market segments, such as households and small and medium-sized enterprises. In addition, foreign currency lending can also have distinct implications for financial stability. At the same time, it needs to be emphasised that banking sectors in the region are generally well capitalised and profitable and that the presence of foreign-owned banks implies that the latest techniques and practices regarding risk assessment are being spread throughout the region. Overall, financial development and credit growth in the region call for continued close monitoring. However, the development of financial systems can be expected to promote more productive investment and economic growth in the region.

EURO AREA STATISTICS

CONTENTS[1]

1) For further information, please contact us at: statistics@ecb.int. See the ECB Statistical Data Warehouse on the Statistics section of the ECB website (http://sdw.ecb.int) for longer runs and more detailed data.

Conventions used in the tables

"-"   data do not exist/data are not applicable

"."   data are not yet available

"…"   nil or negligible

"billion" 10^9

(p)   provisional

s.a.   seasonally adjusted

n.s.a.   non-seasonally adjusted

EURO AREA OVERVIEW

1. Monetary developments and interest rates

	M1 [1]	M2 [1]	M3 [1,2]	M3 [1,2] 3-month moving average (centred)	MFI loans to euro area residents excluding MFIs and general government [1]	Securities other than shares issued in euro by non-financial and non-monetary financial corporations [1]	3-month interest rate (EURIBOR, % per annum, period averages)	10-year government bond yield (% per annum, period averages)
	1	2	3	4	5	6	7	8
2004	10.0	6.3	5.9	-	6.1	10.0	2.11	4.14
2005	10.4	7.9	7.4	-	8.1	12.7	2.18	3.44
2005 Q4	10.9	8.5	7.8	-	9.0	14.8	2.34	3.42
2006 Q1	10.3	8.6	7.8	-	10.1	16.3	2.61	3.56
Q2	9.9	9.2	8.7	-	11.2	16.2	2.90	4.05
Q3	7.6	8.4	8.2	-	11.2	.	3.22	3.97
2006 May	10.2	9.1	8.8	8.6	11.4	16.4	2.89	4.06
June	9.3	9.1	8.5	8.3	11.0	15.2	2.99	4.07
July	7.4	8.2	7.8	8.1	11.1	15.9	3.10	4.10
Aug.	7.2	8.4	8.2	8.2	11.3	15.9	3.23	3.97
Sep.	7.1	8.4	8.5	.	11.4	.	3.34	3.84
Oct.	.	.	.	.	.	.	3.50	3.88

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
2004	2.1	2.3	2.3	1.9	2.0	81.5	0.7	8.9
2005	2.2	4.1	2.2	1.4	1.2	81.2	0.8	8.6
2005 Q4	2.3	4.4	2.0	1.8	2.1	81.5	0.7	8.4
2006 Q1	2.3	5.2	2.2	2.2	3.4	82.2	1.0	8.1
Q2	2.5	5.8	2.4	2.7	3.8	83.0	1.2	7.9
Q3	2.1	.	.	.	.	83.8	.	.
2006 May	2.5	6.0	-	-	5.2	-	-	7.9
June	2.5	5.8	-	-	4.5	-	-	7.9
July	2.4	6.0	-	-	3.0	83.6	-	7.8
Aug.	2.3	5.7	-	-	5.4	-	-	7.9
Sep.	1.7	.	-	-	.	-	-	.
Oct.	1.6	.	-	-	.	83.9	-	.

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 [3] (index, 1999 Q1 = 100)		USD/EUR exchange rate
	Current and capital accounts	Goods	Direct investment	Portfolio investment		Nominal	Real (CPI)	
	1	2	3	4	5	6	7	8
2004	67.3	105.3	-41.2	60.3	280.7	103.8	105.9	1.2439
2005	-10.6	54.1	-156.3	155.4	320.3	103.0	105.2	1.2441
2005 Q4	-8.1	4.9	-20.2	-49.1	320.3	100.9	103.1	1.1884
2006 Q1	-10.8	-2.8	-31.5	22.9	327.1	101.2	103.5	1.2023
Q2	-6.6	6.3	-12.1	98.9	323.8	103.5	105.8	1.2582
Q3	.	.	.	.	325.0	104.3	106.6	1.2743
2006 May	-10.7	0.6	-4.6	44.4	333.2	103.8	106.1	1.2770
June	11.4	5.2	-15.9	60.5	323.8	103.9	106.2	1.2650
July	3.2	5.6	-9.4	1.0	330.1	104.3	106.6	1.2684
Aug.	-2.8	-3.8	-2.8	-15.5	326.4	104.4	106.7	1.2811
Sep.	.	.	.	.	325.0	104.2	106.5	1.2727
Oct.	.	.	.	.	.	103.7	105.9	1.2611

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.
1) 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.
2) 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.
3) 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

	2006 6 October	2006 13 October	2006 20 October	2006 27 October
Gold and gold receivables	175,333	175,318	175,206	175,141
Claims on non-euro area residents in foreign currency	142,991	141,593	142,008	142,403
Claims on euro area residents in foreign currency	24,393	23,765	22,958	22,094
Claims on non-euro area residents in euro	10,482	9,925	10,793	10,232
Lending to euro area credit institutions in euro	432,008	428,005	438,503	434,045
Main refinancing operations	311,999	308,002	318,500	314,000
Longer-term refinancing operations	120,001	120,001	120,001	120,002
Fine-tuning reverse operations	0	0	0	0
Structural reverse operations	0	0	0	0
Marginal lending facility	8	2	0	43
Credits related to margin calls	0	0	2	0
Other claims on euro area credit institutions in euro	9,379	9,059	8,907	10,083
Securities of euro area residents in euro	81,590	81,391	80,953	80,856
General government debt in euro	40,021	40,022	40,022	40,022
Other assets	198,406	201,088	201,931	203,860
Total assets	1,114,603	1,110,166	1,121,281	1,118,736

2. Liabilities

	2006 6 October	2006 13 October	2006 20 October	2006 27 October
Banknotes in circulation	592,940	592,914	591,005	591,960
Liabilities to euro area credit institutions in euro	165,847	165,993	168,199	165,545
Current accounts (covering the minimum reserve system)	165,788	165,958	168,188	165,437
Deposit facility	59	35	10	42
Fixed-term deposits	0	0	0	0
Fine-tuning reverse operations	0	0	0	0
Deposits related to margin calls	0	0	1	66
Other liabilities to euro area credit institutions in euro	122	122	121	121
Debt certificates issued	0	0	0	0
Liabilities to other euro area residents in euro	68,549	65,026	75,338	73,924
Liabilities to non-euro area residents in euro	15,948	16,082	15,921	16,104
Liabilities to euro area residents in foreign currency	196	97	99	112
Liabilities to non-euro area residents in foreign currency	8,270	6,843	7,142	6,658
Counterpart of special drawing rights allocated by the IMF	5,701	5,701	5,701	5,701
Other liabilities	68,735	69,092	69,458	70,313
Revaluation accounts	123,721	123,721	123,721	123,721
Capital and reserves	64,574	64,575	64,576	64,577
Total liabilities	1,114,603	1,110,166	1,121,281	1,118,736

Source: ECB.

1.2 Key ECB interest rates
(levels in percentages per annum; changes in percentage points)

With effect from [1]	Deposit facility		Main refinancing operations			Marginal lending facility	
			Fixed rate tenders	Variable rate tenders			
			Fixed rate	Minimum bid rate			
	Level	Change	Level	Level	Change	Level	Change
	1	2	3	4	5	6	7
1999 1 Jan.	2.00	-	3.00	-	-	4.50	-
4 [2]	2.75	0.75	3.00	-	...	3.25	-1.25
22	2.00	-0.75	3.00	-	...	4.50	1.25
9 Apr.	1.50	-0.50	2.50	-	-0.50	3.50	-1.00
5 Nov.	2.00	0.50	3.00	-	0.50	4.00	0.50
2000 4 Feb.	2.25	0.25	3.25	-	0.25	4.25	0.25
17 Mar.	2.50	0.25	3.50	-	0.25	4.50	0.25
28 Apr.	2.75	0.25	3.75	-	0.25	4.75	0.25
9 June	3.25	0.50	4.25	-	0.50	5.25	0.50
28 [3]	3.25	...	-	4.25	...	5.25	...
1 Sep.	3.50	0.25	-	4.50	0.25	5.50	0.25
6 Oct.	3.75	0.25	-	4.75	0.25	5.75	0.25
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
2005 6 Dec.	1.25	0.25	-	2.25	0.25	3.25	0.25
2006 8 Mar.	1.50	0.25	-	2.50	0.25	3.50	0.25
15 June	1.75	0.25	-	2.75	0.25	3.75	0.25
9 Aug.	2.00	0.25	-	3.00	0.25	4.00	0.25
11 Oct.	2.25	0.25	-	3.25	0.25	4.25	0.25

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. Main and longer-term refinancing operations [3)]

Date of settlement	Bids (amount)	Number of participants	Allotment (amount)	Variable rate tenders			Running for (...) days
				Minimum bid rate	Marginal rate [4)]	Weighted average rate	
	1	2	3	4	5	6	7
Main refinancing operations							
2006 5 July	376,624	381	326,000	2.75	2.78	2.81	7
12	367,223	377	321,500	2.75	2.81	2.82	7
19	388,712	399	335,000	2.75	2.81	2.82	6
25	359,208	335	338,000	2.75	2.81	2.82	8
2 Aug.	357,627	364	324,000	2.75	2.76	2.79	7
9	359,131	353	318,000	3.00	3.05	3.06	6
15	367,386	349	311,000	3.00	3.05	3.06	8
23	376,014	388	317,500	3.00	3.05	3.06	7
30	323,482	343	310,500	3.00	3.00	3.02	7
6 Sep.	350,124	346	307,000	3.00	3.04	3.05	7
13	356,118	369	300,500	3.00	3.04	3.04	7
20	346,764	394	311,000	3.00	3.03	3.04	7
27	313,570	354	313,000	3.00	3.00	3.03	6
3 Oct.	342,164	342	312,000	3.00	3.02	3.04	8
11	367,380	378	308,000	3.25	3.29	3.30	7
18	378,950	398	318,500	3.25	3.29	3.30	7
25	378,282	387	314,000	3.25	3.30	3.31	7
1 Nov.	382,135	366	307,000	3.25	3.31	3.32	7
Longer-term refinancing operations							
2005 1 Dec.	52,369	152	30,000	-	2.40	2.41	84
22 [5)]	89,877	165	12,500	-	2.45	2.46	98
23 [5)]	45,003	127	17,500	-	2.44	2.45	97
2006 26 Jan.	69,438	168	40,000	-	2.47	2.48	91
23 Feb.	63,980	164	40,000	-	2.57	2.57	98
30 Mar.	56,708	170	40,000	-	2.73	2.75	91
27 Apr.	63,596	188	40,000	-	2.76	2.78	91
1 June	59,771	161	40,000	-	2.87	2.88	91
29	57,185	167	40,000	-	3.00	3.01	91
27 July	54,824	158	40,000	-	3.08	3.09	91
31 Aug.	51,079	148	40,000	-	3.20	3.21	91
28 Sep.	49,801	136	40,000	-	3.30	3.32	84
26 Oct.	62,854	159	40,000	-	3.48	3.50	98

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 [4)]	Weighted average rate	
	1	2	3	4	5	6	7	8	9
2005 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
11 Oct.	Collection of fixed-term deposits	23,995	22	8,500	2.00	-	-	-	1
5 Dec.	Collection of fixed-term deposits	21,240	18	7,500	2.00	-	-	-	1
2006 17 Jan.	Reverse transaction	24,900	28	7,000	-	2.25	2.27	2.28	1
7 Feb.	Reverse transaction	28,260	28	6,500	-	2.25	2.31	2.32	1
7 Mar.	Collection of fixed-term deposits	2,600	3	2,600	2.25	-	-	-	1
11 Apr.	Reverse transaction	47,545	29	26,000	-	2.50	2.55	2.58	1
9 May	Collection of fixed-term deposits	15,810	16	11,500	2.50	-	-	-	1
14 June	Collection of fixed-term deposits	4,910	8	4,910	2.50	-	-	-	1
11 July	Collection of fixed-term deposits	9,000	9	8,500	2.75	-	-	-	1
8 Aug.	Collection of fixed-term deposits	19,860	21	18,000	2.75	-	-	-	1
5 Sep.	Collection of fixed-term deposits	13,635	17	11,500	3.00	-	-	-	1
10 Oct.	Reverse transaction	36,120	26	9,500	-	3.00	3.05	3.06	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.
5) An exceptional operation based on longer-term refinancing operation (LTRO) procedures was carried out because an erroneous bid had prevented the ECB from executing its LTRO in the full amount on the previous day.

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 [1]: | 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
2004	12,415.9	6,593.7	458.1	1,565.2	913.7	2,885.3
2005	14,040.7	7,409.5	499.2	1,753.5	1,174.9	3,203.6
2006 Q1	14,500.2	7,604.7	550.2	1,825.1	1,241.5	3,278.8
2006 Apr.	14,649.5	7,740.4	563.8	1,833.0	1,231.5	3,280.7
May	14,769.0	7,765.7	583.5	1,843.6	1,264.4	3,311.7
June	14,712.2	7,764.5	550.9	1,877.1	1,174.4	3,345.3
July	14,797.1	7,787.3	553.4	1,891.9	1,192.2	3,372.4
Aug.	14,850.7	7,760.2	576.3	1,906.6	1,234.7	3,372.8

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
2004	137.9	138.5	0.6	0.0	2.05
2005	152.0	153.0	1.0	0.0	2.07
2006 Q1	157.7	158.3	0.6	0.0	2.31
Q2	162.6	163.3	0.7	0.0	2.57
2006 11 July	165.6	166.3	0.8	0.0	2.81
8 Aug.	166.5	167.1	0.6	0.0	2.80
5 Sep.	165.8	166.4	0.6	0.0	3.04
10 Oct.	166.3	167.0	0.7	0.0	3.03
7 Nov.	166.2	.	.	.	.

3. Liquidity

Maintenance period ending on:	Liquidity-providing factors					Liquidity-absorbing factors					Credit institutions' current accounts	Base money
		Monetary policy operations of the Eurosystem										
	Eurosystem's net assets in gold and foreign currency	Main refinancing operations	Longer-term refinancing operations	Marginal lending facility	Other liquidity-providing operations	Deposit facility	Other liquidity-absorbing operations	Banknotes in circulation	Central government deposits with the Eurosystem	Other factors (net)		
	1	2	3	4	5	6	7	8	9	10	11	12
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	313.2	301.3	90.0	0.0	0.0	0.1	0.3	539.8	51.0	-39.6	153.0	692.9
2006 Q1	324.7	299.3	104.7	0.1	0.0	0.2	0.1	550.8	53.3	-34.0	158.3	709.2
Q2	336.9	287.0	120.0	0.1	0.0	0.1	0.1	572.0	45.5	-37.0	163.3	735.4
2006 11 July	334.3	316.5	120.0	0.2	0.0	0.6	0.3	578.8	67.0	-42.1	166.3	745.7
8 Aug.	327.6	329.7	120.0	0.2	0.0	0.1	0.6	588.2	73.0	-51.5	167.1	755.4
5 Sep.	327.3	314.0	120.0	0.1	0.0	0.1	0.4	588.7	61.4	-55.6	166.4	755.2
10 Oct.	326.7	308.7	120.0	0.1	0.3	0.2	0.0	588.5	59.1	-59.1	167.0	755.7

Source: ECB.
1) End of period.

2

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 [1]	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
Eurosystem														
2004	1,197.3	546.5	21.5	0.6	524.3	154.8	140.0	1.7	13.1	-	14.2	294.1	14.0	173.8
2005	1,404.9	635.5	20.7	0.6	614.2	185.7	165.6	2.1	18.1	-	14.8	337.0	14.7	217.2
2006 Q1	1,431.3	636.9	20.7	0.6	615.6	188.2	168.0	2.3	18.0	-	15.8	348.9	14.7	226.7
2006 Apr.	1,468.7	661.0	20.7	0.6	639.7	189.9	168.6	2.3	19.0	-	16.8	358.9	14.7	227.4
May	1,472.2	662.3	20.7	0.6	641.0	194.0	171.4	2.3	20.3	-	16.4	357.2	14.6	227.6
June	1,532.1	731.1	20.3	0.6	710.1	192.8	170.3	2.3	20.2	-	16.4	343.7	14.6	233.5
July	1,554.2	741.4	20.3	0.6	720.4	197.9	173.6	2.1	22.1	-	16.4	352.6	14.8	231.2
Aug.	1,529.5	709.0	20.3	0.6	688.0	204.4	179.0	2.2	23.3	-	16.4	348.9	14.8	236.0
Sep. (p)	1,521.8	694.5	20.3	0.6	673.5	206.5	180.0	2.2	24.3	-	16.5	348.5	14.8	241.1
MFIs excluding the Eurosystem														
2004	21,355.4	12,825.3	811.9	7,555.6	4,457.8	3,188.1	1,299.9	465.5	1,422.7	72.6	945.5	2,943.4	159.6	1,220.9
2005	23,653.0	13,684.2	826.9	8,287.4	4,569.9	3,498.6	1,429.4	551.5	1,517.7	83.1	1,007.0	3,671.8	165.7	1,542.6
2006 Q1	24,358.8	14,024.2	816.3	8,551.5	4,656.4	3,584.9	1,440.5	573.5	1,570.9	83.6	1,092.3	3,850.1	166.3	1,557.6
2006 Apr.	24,698.8	14,222.9	816.8	8,644.1	4,762.1	3,596.5	1,434.6	584.7	1,577.2	82.9	1,151.2	3,889.2	166.5	1,589.6
May	24,907.2	14,363.8	806.2	8,707.9	4,849.7	3,604.0	1,407.5	593.0	1,603.5	85.4	1,157.0	3,921.9	166.8	1,608.4
June	24,722.2	14,324.1	809.3	8,784.3	4,730.5	3,588.2	1,402.8	600.0	1,585.3	86.7	1,104.8	3,872.7	167.9	1,577.8
July	24,900.8	14,439.8	806.2	8,859.0	4,774.5	3,601.4	1,385.1	612.8	1,603.6	86.2	1,107.4	3,956.7	168.2	1,541.1
Aug.	24,925.8	14,447.7	800.9	8,874.1	4,772.7	3,583.6	1,361.7	609.5	1,612.4	89.4	1,111.2	3,963.3	168.4	1,562.3
Sep. (p)	25,370.1	14,609.1	804.1	8,979.5	4,825.5	3,601.3	1,354.4	618.3	1,628.6	88.1	1,132.0	4,105.8	168.9	1,664.9

2. Liabilities

	Total	Currency in circulation	Deposits of euro area residents				Money market fund shares/ units [2]	Debt securities issued [3]	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
Eurosystem											
2004	1,197.3	517.3	346.6	24.7	15.0	306.8	-	0.5	138.4	27.2	167.4
2005	1,404.9	582.7	385.4	24.4	14.5	346.5	-	0.1	202.9	27.6	206.2
2006 Q1	1,431.3	574.7	405.0	45.0	15.0	345.0	-	0.1	214.5	30.3	206.6
2006 Apr.	1,468.7	586.6	425.9	45.8	17.4	362.6	-	0.1	218.3	28.4	209.4
May	1,472.2	588.8	427.8	34.8	19.4	373.6	-	0.1	217.2	31.2	207.1
June	1,532.1	598.2	487.4	69.3	21.5	396.5	-	0.1	206.2	30.6	209.5
July	1,554.2	607.7	490.1	64.7	19.3	406.1	-	0.1	214.0	31.0	211.3
Aug.	1,529.5	603.9	467.6	63.7	15.0	388.9	-	0.1	211.4	31.7	214.8
Sep. (p)	1,521.8	607.7	449.2	55.2	16.1	377.8	-	0.1	211.6	33.8	219.5
MFIs excluding the Eurosystem											
2004	21,355.4	-	11,487.5	137.7	6,640.9	4,709.0	677.4	3,496.9	1,203.1	2,815.0	1,675.6
2005	23,653.0	-	12,214.6	149.2	7,214.2	4,851.2	698.9	3,858.3	1,310.6	3,518.0	2,052.7
2006 Q1	24,358.8	-	12,419.6	148.1	7,322.0	4,949.5	686.7	3,991.5	1,368.7	3,733.7	2,158.7
2006 Apr.	24,698.8	-	12,615.2	136.8	7,430.4	5,048.0	696.0	4,007.5	1,368.7	3,790.2	2,221.3
May	24,907.2	-	12,709.5	132.5	7,455.3	5,121.8	707.0	4,060.7	1,373.8	3,812.0	2,244.2
June	24,722.2	-	12,708.6	138.1	7,512.7	5,057.8	703.3	4,060.8	1,376.2	3,701.3	2,171.9
July	24,900.8	-	12,751.2	129.6	7,517.6	5,104.0	713.7	4,095.8	1,395.5	3,779.3	2,165.3
Aug.	24,925.8	-	12,723.9	121.1	7,522.0	5,080.8	720.6	4,126.0	1,400.8	3,795.0	2,159.4
Sep. (p)	25,370.1	-	12,882.8	147.5	7,615.1	5,120.2	727.6	4,163.8	1,404.0	3,901.4	2,290.6

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						
2004	15,723.6	8,389.6	833.4	7,556.3	1,907.1	1,439.9	467.2	669.9	3,237.4	173.6	1,345.9
2005	17,892.2	9,135.6	847.5	8,288.1	2,148.5	1,595.0	553.6	708.8	4,008.8	180.4	1,710.0
2006 Q1	18,475.2	9,389.1	837.0	8,552.1	2,184.2	1,608.4	575.8	780.1	4,199.0	181.0	1,741.8
2006 Apr.	18,704.2	9,482.2	837.5	8,644.7	2,190.2	1,603.2	587.0	831.7	4,248.1	181.2	1,770.8
May	18,782.6	9,535.4	826.9	8,708.5	2,174.2	1,578.8	595.4	821.6	4,279.1	181.4	1,790.8
June	18,738.1	9,614.6	829.6	8,785.0	2,175.5	1,573.1	602.4	782.3	4,216.4	182.5	1,766.8
July	18,867.6	9,686.2	826.5	8,859.7	2,173.7	1,558.7	614.9	788.2	4,309.3	183.0	1,727.3
Aug.	18,884.2	9,696.0	821.2	8,874.7	2,152.4	1,540.7	611.7	787.2	4,312.1	183.2	1,753.4
Sep. (p)	19,261.1	9,804.6	824.5	8,980.1	2,154.9	1,534.4	620.5	802.2	4,454.3	183.7	1,861.4
					Transactions						
2004	1,269.9	499.7	-6.7	506.4	92.1	58.1	33.9	36.5	437.7	2.7	201.3
2005	1,606.2	711.2	12.8	698.4	152.4	72.8	79.6	48.5	450.5	1.4	242.1
2006 Q1	597.9	240.5	-10.4	250.8	54.4	28.6	25.8	65.0	206.5	-0.2	31.7
2006 Apr.	280.2	98.1	0.7	97.4	12.4	0.2	12.2	52.2	88.6	0.2	28.7
May	116.7	57.0	-10.5	67.4	-8.8	-17.6	8.9	-4.8	54.6	0.3	18.5
June	-29.9	80.5	2.6	77.9	9.7	1.8	7.9	-37.9	-57.1	1.1	-26.2
July	115.6	72.5	-3.8	76.3	-4.9	-16.9	11.9	2.5	84.2	0.3	-38.9
Aug.	22.5	12.4	-5.3	17.7	-23.6	-22.5	-1.1	-3.9	10.8	0.2	26.6
Sep. (p)	361.9	114.3	6.0	108.3	-1.5	-9.8	8.3	18.6	123.3	0.5	106.7

2. Liabilities

	Total	Currency in circulation	Deposits of central government	Deposits of other general government/ other euro area residents	Money market fund shares/ units [1]	Debt securities issued [2]	Capital and reserves	External liabilities	Remaining liabilities	Excess of inter- MFI liabilities
	1	2	3	4	5	6	7	8	9	10
				Outstanding amounts						
2004	15,723.6	468.4	162.4	6,655.9	604.9	2,061.7	1,051.6	2,842.2	1,842.9	33.6
2005	17,892.2	532.8	173.6	7,228.8	615.8	2,322.6	1,200.6	3,545.6	2,258.9	13.6
2006 Q1	18,475.2	532.3	193.1	7,337.0	603.1	2,402.7	1,255.2	3,764.0	2,365.3	22.5
2006 Apr.	18,704.2	540.3	182.6	7,447.8	613.1	2,411.4	1,250.7	3,818.6	2,430.7	8.9
May	18,782.6	543.6	167.2	7,474.7	621.6	2,437.0	1,239.3	3,843.2	2,451.3	4.7
June	18,738.1	553.7	207.4	7,534.2	616.7	2,455.4	1,243.5	3,731.9	2,381.4	13.8
July	18,867.6	562.7	194.3	7,536.9	627.4	2,470.2	1,274.0	3,810.3	2,376.7	15.1
Aug.	18,884.2	559.0	184.8	7,537.0	631.2	2,490.5	1,271.8	3,826.7	2,374.2	9.1
Sep. (p)	19,261.1	563.2	202.7	7,631.2	639.5	2,511.0	1,269.2	3,935.2	2,510.0	-1.0
				Transactions						
2004	1,269.9	70.5	6.1	377.4	22.3	197.2	49.6	276.9	232.1	37.8
2005	1,606.2	64.4	10.8	501.1	-3.0	213.5	88.3	445.0	337.1	-51.0
2006 Q1	597.9	-0.5	19.6	103.0	9.0	77.1	27.0	240.6	87.7	34.5
2006 Apr.	280.2	8.1	-10.5	116.0	10.1	18.3	-5.8	95.9	52.0	-3.8
May	116.7	3.3	-15.4	29.2	9.9	34.7	-3.0	43.4	12.3	2.3
June	-29.9	10.1	41.1	59.6	-5.1	12.0	13.2	-120.0	-47.6	6.7
July	115.6	9.0	-13.1	2.8	12.6	16.3	21.0	79.8	-14.1	1.3
Aug.	22.5	-3.7	-9.5	0.6	2.9	24.6	-4.4	22.2	-5.9	-4.3
Sep. (p)	361.9	4.2	17.9	93.4	-1.9	16.6	-0.8	103.1	141.1	-11.7

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.

1. Monetary aggregates[1] and counterparts

	M1	M2-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	Loans	Net external assets[2]
	1	2	3	4	5	6	7	8	9	10	11
					Outstanding amounts							
2004	2,908.7	2,660.5	5,569.2	964.6	6,533.8	-	4,465.3	2,294.6	8,694.9	7,548.8	385.9
2005	3,423.4	2,650.6	6,074.0	993.7	7,067.6	-	5,005.8	2,468.0	9,555.1	8,281.4	455.7
2006 Q1	3,496.6	2,722.5	6,219.1	1,007.5	7,226.6	-	5,142.0	2,439.1	9,905.6	8,561.6	441.9
2006 Apr.	3,507.6	2,762.8	6,270.4	1,013.3	7,283.7	-	5,169.5	2,430.1	10,019.3	8,643.3	446.3
May	3,549.0	2,743.7	6,292.7	1,035.0	7,327.7	-	5,186.5	2,388.4	10,080.7	8,703.8	461.2
June	3,564.3	2,779.0	6,343.3	1,028.2	7,371.6	-	5,223.6	2,391.4	10,136.4	8,755.5	481.1
July	3,545.9	2,805.4	6,351.3	1,036.4	7,387.6	-	5,281.9	2,378.8	10,247.8	8,836.0	500.9
Aug.	3,571.0	2,836.7	6,407.7	1,057.0	7,464.7	-	5,297.8	2,369.4	10,329.4	8,908.0	480.1
Sep. (p)	3,591.6	2,882.2	6,473.8	1,090.9	7,564.7	-	5,317.2	2,368.7	10,439.3	8,996.6	507.9
					Transactions							
2004	238.6	110.7	349.3	57.7	407.0	-	341.7	54.5	578.1	506.1	166.0
2005	338.6	138.8	477.5	6.5	483.9	-	399.8	90.1	830.0	699.4	7.3
2006 Q1	74.9	74.6	149.5	28.8	178.3	-	102.8	-13.6	334.5	267.0	-19.6
2006 Apr.	12.8	42.6	55.4	5.7	61.1	-	37.2	-3.4	120.0	86.5	2.7
May	42.5	-17.4	25.1	25.5	50.6	-	31.7	-35.0	70.7	64.2	19.7
June	15.0	34.7	49.7	-3.3	46.4	-	37.1	10.4	59.4	53.1	34.1
July	-18.4	26.5	8.1	11.3	19.3	-	49.1	-15.8	108.9	82.2	9.7
Aug.	25.0	31.9	56.9	20.1	76.9	-	17.8	-13.9	83.6	74.5	-18.6
Sep. (p)	19.8	44.5	64.2	25.2	89.5	-	16.6	-1.4	115.9	91.5	14.3
					Growth rates							
2004 Dec.	8.9	4.3	6.7	6.4	6.6	6.5	8.2	2.4	7.1	7.2	166.0
2005 Dec.	11.4	5.4	8.5	0.7	7.3	7.5	8.8	3.9	9.5	9.2	7.3
2006 Mar.	10.1	7.8	9.0	5.6	8.5	8.4	8.7	1.9	11.5	10.9	-6.2
2006 Apr.	9.8	8.9	9.3	5.1	8.7	8.7	8.8	1.2	11.8	11.4	-17.1
May	10.2	8.0	9.1	6.7	8.8	8.6	8.9	0.3	11.8	11.4	37.0
June	9.3	8.8	9.1	4.9	8.5	8.3	8.0	0.1	11.5	11.0	-1.8
July	7.4	9.2	8.2	5.3	7.8	8.1	8.7	-0.7	11.8	11.1	2.8
Aug.	7.2	9.8	8.4	7.0	8.2	8.2	8.4	-1.5	11.9	11.3	-10.6
Sep. (p)	7.1	10.0	8.4	9.6	8.5	.	8.1	-1.6	12.2	11.4	29.9

C1 Monetary aggregates
(annual growth rates; seasonally adjusted)

Legend: M1, M3

C2 Counterparts
(annual growth rates; seasonally adjusted)

Legend: longer-term financial liabilities, credit to general government, loans to other euro area residents
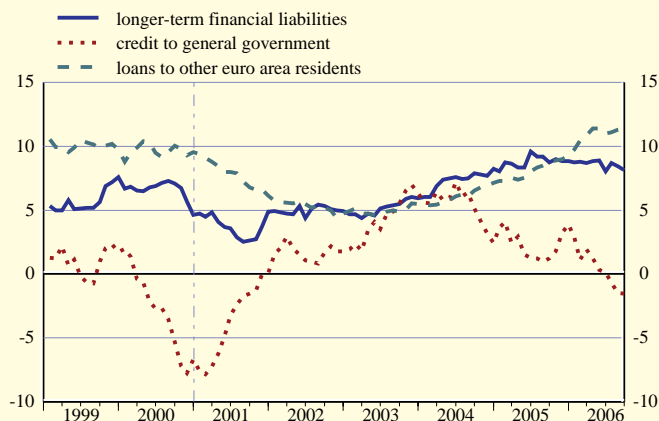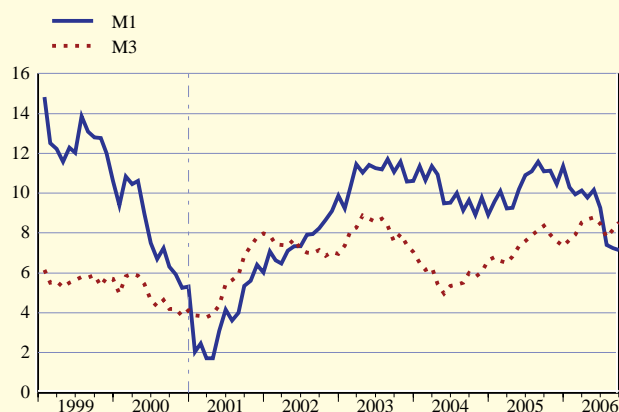
Source: ECB.
1) Monetary liabilities of MFIs and central government (post office, treasury) vis-à-vis non-MFI euro area residents excluding central government (M1, M2, M3: see glossary).
2) Values in the section "growth rates" are sums of the transactions during the 12 months ending in the period indicated.

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						
2004	456.4	2,452.3	1,024.5	1,636.0	242.3	620.0	102.3	1,964.8	90.2	1,359.5	1,050.8
2005	520.4	2,903.0	1,107.9	1,542.7	236.6	630.8	126.2	2,203.9	87.0	1,515.3	1,199.6
2006 Q1	535.5	2,961.1	1,159.3	1,563.3	240.9	603.5	163.1	2,240.0	88.4	1,559.7	1,253.8
2006 Apr.	540.6	2,967.1	1,199.2	1,563.6	243.8	605.6	163.9	2,248.4	89.2	1,576.1	1,255.8
May	544.6	3,004.3	1,174.6	1,569.1	248.0	613.3	173.7	2,259.0	90.8	1,590.8	1,246.0
June	547.8	3,016.6	1,215.6	1,563.4	247.3	619.1	161.8	2,290.5	92.2	1,601.0	1,239.9
July	552.3	2,993.6	1,242.7	1,562.7	252.5	623.5	160.4	2,304.6	93.8	1,611.2	1,272.3
Aug.	558.7	3,012.3	1,270.0	1,566.7	255.3	622.8	178.9	2,314.4	95.7	1,617.5	1,270.2
Sep. (p)	563.4	3,028.2	1,314.6	1,567.6	269.3	641.2	180.4	2,328.4	97.7	1,627.1	1,264.0
					Transactions						
2004	67.7	170.9	-2.2	112.9	24.5	21.9	11.3	185.9	-0.9	107.1	49.6
2005	64.0	274.7	69.3	69.5	-6.7	-3.2	16.4	199.2	-4.3	116.9	88.0
2006 Q1	15.2	59.8	53.8	20.8	4.3	-5.6	30.1	39.9	1.4	34.8	26.7
2006 Apr.	5.0	7.8	42.1	0.4	3.0	2.2	0.4	18.4	0.8	17.4	0.6
May	4.1	38.4	-23.0	5.6	3.4	9.1	12.9	16.5	1.5	14.9	-1.3
June	3.1	11.9	40.5	-5.7	0.7	5.7	-9.8	23.1	1.4	9.7	2.8
July	4.5	-22.9	27.2	-0.7	5.2	6.1	-0.1	14.3	1.6	10.3	22.9
Aug.	6.4	18.6	27.8	4.1	2.8	-1.6	18.8	13.8	1.9	6.4	-4.3
Sep. (p)	4.7	15.1	43.6	0.9	14.0	8.1	3.1	8.5	2.0	10.6	-4.5
					Growth rates						
2004 Dec.	17.4	7.5	-0.2	7.4	11.3	3.7	12.3	10.3	-1.0	8.6	4.9
2005 Dec.	14.0	10.9	6.6	4.4	-2.8	-0.5	15.7	10.0	-4.7	8.5	8.1
2006 Mar.	12.4	9.8	12.7	4.4	3.8	-0.5	43.5	8.7	-3.2	9.1	9.1
2006 Apr.	12.2	9.4	16.0	4.0	10.4	-1.1	26.4	8.7	-2.4	9.7	8.9
May	11.9	9.9	14.6	3.6	6.8	-0.7	45.5	8.6	-0.5	10.4	8.1
June	11.1	8.9	17.2	3.0	2.6	0.8	30.5	8.1	1.6	9.0	7.2
July	11.5	6.7	19.0	2.5	4.7	0.8	29.7	8.6	4.1	9.2	8.7
Aug.	11.4	6.5	20.9	2.2	5.2	0.6	42.6	8.2	7.1	9.3	7.8
Sep. (p)	11.0	6.4	21.6	1.8	12.2	1.3	45.6	8.1	10.7	9.4	6.5

C3 Components of monetary aggregates
(annual growth rates; seasonally adjusted)

- currency in circulation
- overnight deposits
- deposits redeemable at notice up to 3 months
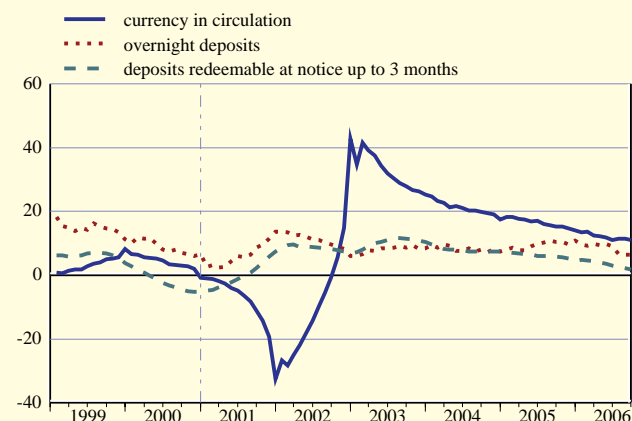
C4 Components of longer-term financial liabilities
(annual growth rates; seasonally adjusted)
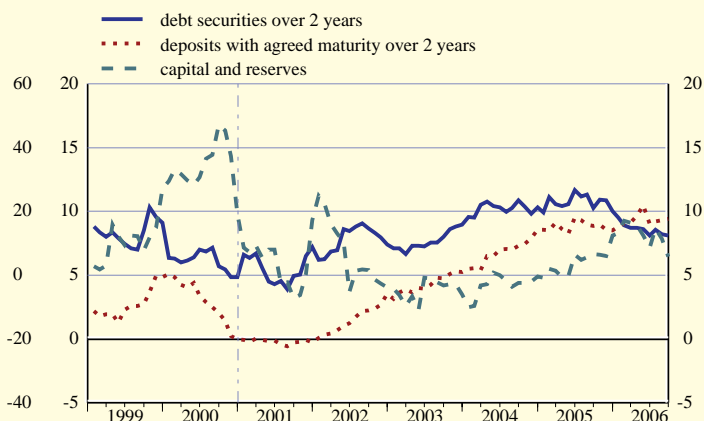
- debt securities over 2 years
- deposits with agreed maturity over 2 years
- capital and reserves

Source: ECB.

1. Loans to financial intermediaries and non-financial corporations [2]

	Insurance corporations and pension funds		Other financial intermediaries [3]		Non-financial corporations			
	Total		Total		Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years
		Up to 1 year		Up to 1 year				
	1	2	3	4	5	6	7	8
	Outstanding amounts							
2004	48.6	31.4	546.3	334.4	3,152.2	973.8	547.3	1,631.2
2005	64.6	41.6	620.4	370.2	3,409.1	1,037.8	594.0	1,777.2
2006 Q1	81.9	57.1	661.9	412.0	3,525.1	1,060.9	626.7	1,837.5
2006 Apr.	88.1	62.9	677.2	428.5	3,567.8	1,080.6	634.3	1,852.9
May	86.9	61.7	682.5	433.9	3,595.4	1,078.1	644.4	1,873.0
June	84.7	59.6	673.5	419.6	3,640.0	1,098.6	651.0	1,890.4
July	90.1	64.4	667.0	407.8	3,685.5	1,110.7	668.0	1,906.8
Aug.	86.7	61.3	678.6	415.9	3,679.0	1,086.4	670.8	1,921.8
Sep. (p)	89.5	63.4	699.4	436.6	3,729.9	1,108.2	682.6	1,939.1
	Transactions							
2004	13.1	9.1	52.1	27.7	163.9	24.5	31.1	108.2
2005	15.0	9.8	60.8	29.2	262.7	57.0	54.3	151.5
2006 Q1	17.1	15.6	46.6	45.2	108.9	26.9	35.8	46.1
2006 Apr.	6.2	5.9	17.0	17.7	45.4	20.5	8.6	16.2
May	-1.1	-1.2	5.8	5.5	30.2	-1.6	10.9	20.9
June	-2.3	-2.1	-9.0	-14.1	45.2	20.5	6.9	17.8
July	5.5	4.9	-4.9	-9.6	44.1	12.3	16.1	15.6
Aug.	-3.4	-3.2	11.8	8.2	-4.9	-24.0	3.7	15.4
Sep. (p)	2.8	2.1	22.4	20.6	51.1	21.9	11.8	17.4
	Growth rates							
2004 Dec.	36.9	41.5	10.5	9.1	5.4	2.6	6.0	7.0
2005 Dec.	30.6	31.2	11.0	8.7	8.3	5.8	9.9	9.3
2006 Mar.	40.3	44.1	17.0	16.8	10.5	7.7	14.9	10.6
2006 Apr.	47.6	54.5	20.7	24.0	10.9	8.8	15.1	10.8
May	39.8	44.2	19.8	23.1	11.3	8.6	16.2	11.2
June	32.5	36.3	16.2	16.7	11.3	8.0	17.4	11.3
July	41.2	49.4	15.6	16.5	11.8	9.2	18.4	11.1
Aug.	34.3	43.9	19.3	21.9	12.0	9.2	19.5	11.2
Sep. (p)	37.1	48.6	17.2	19.1	12.7	10.5	20.6	11.4

C5 Loans to financial intermediaries and non-financial corporations
(annual growth rates)
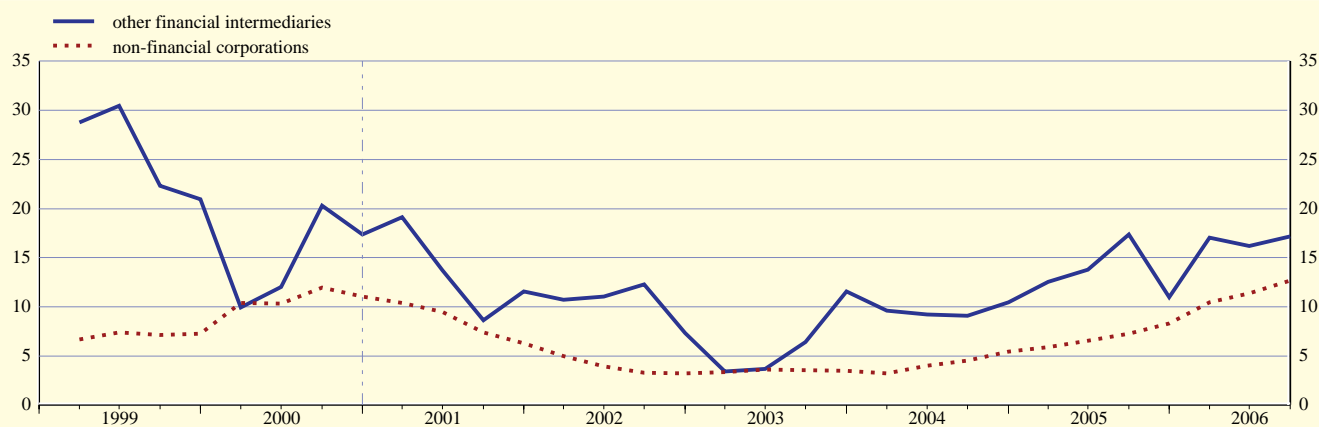
— other financial intermediaries
···· non-financial corporations

Source: ECB.
1) MFI sector excluding the Eurosystem; sectoral classification is based on ESA 95.
2) Before January 2003 data were collected in March, June, September and December each year. Monthly data prior to January 2003 are derived from quarterly data.
3) This category includes investment funds.

2.4 MFI loans, breakdown [1]
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

2. Loans to households [2], [3]

	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								
2004	3,808.4	515.4	120.3	189.6	205.6	2,591.5	14.6	65.8	2,511.1	701.5	144.1	99.2	458.2
2005	4,193.3	554.1	129.2	200.7	224.2	2,917.6	15.2	67.5	2,834.9	721.6	147.3	99.9	474.4
2006 Q1	4,282.5	557.1	126.2	200.9	230.0	3,006.3	15.1	67.9	2,923.3	719.1	146.4	98.1	474.5
2006 Apr.	4,311.0	561.5	127.0	202.5	232.0	3,029.5	15.0	67.7	2,946.8	720.0	146.0	97.7	476.3
May	4,343.0	568.9	129.1	204.8	235.0	3,053.2	15.1	68.5	2,969.7	720.9	144.6	97.6	478.7
June	4,386.2	576.1	130.6	205.5	240.0	3,081.7	15.8	70.0	2,995.8	728.4	150.7	98.3	479.4
July	4,416.4	579.6	131.3	206.0	242.3	3,110.4	15.8	70.4	3,024.2	726.4	146.8	98.5	481.1
Aug.	4,429.8	580.1	130.2	205.5	244.4	3,124.7	15.8	70.5	3,038.4	725.0	145.5	98.5	480.9
Sep. (p)	4,460.7	582.7	131.0	206.4	245.3	3,149.3	16.5	70.9	3,061.9	728.6	146.9	99.2	482.5
					Transactions								
2004	277.4	27.7	6.4	8.4	12.9	237.4	0.8	2.7	233.9	12.3	-0.9	2.0	11.1
2005	359.8	40.7	9.1	11.6	20.0	302.9	0.8	4.8	297.3	16.2	3.9	1.3	11.1
2006 Q1	78.3	5.2	-2.2	1.2	6.2	71.8	0.0	0.4	71.4	1.2	-0.2	0.4	1.1
2006 Apr.	29.0	4.6	0.8	1.3	2.4	23.4	-0.2	0.0	23.6	1.0	-0.3	-0.5	1.8
May	32.6	7.5	2.1	2.3	3.0	23.6	0.0	0.4	23.1	1.5	-1.4	0.4	2.5
June	43.9	7.3	1.6	0.7	5.0	28.6	0.8	1.5	26.3	8.0	6.1	0.9	1.0
July	31.7	3.9	0.7	0.5	2.6	29.2	0.0	0.5	28.8	-1.4	-3.8	0.1	2.2
Aug.	14.2	0.5	-0.8	-0.5	1.8	14.4	0.0	0.1	14.3	-0.6	-1.4	0.2	0.6
Sep. (p)	32.0	4.3	1.0	1.0	2.2	24.8	0.7	0.4	23.7	2.9	1.4	0.7	0.9
					Growth rates								
2004 Dec.	7.9	5.7	5.8	4.6	6.7	10.1	5.3	4.4	10.3	1.8	-0.6	2.1	2.5
2005 Dec.	9.4	7.9	7.6	6.1	9.7	11.6	5.6	7.5	11.8	2.3	2.7	1.3	2.4
2006 Mar.	9.8	8.0	6.0	5.8	11.1	12.2	7.3	6.0	12.4	2.2	1.6	2.1	2.4
2006 Apr.	9.8	8.0	6.9	5.6	10.8	12.2	6.0	7.2	12.3	2.2	2.7	1.4	2.3
May	9.8	8.4	7.4	5.7	11.5	12.1	6.5	7.5	12.2	2.0	1.7	1.0	2.3
June	9.6	8.4	6.3	4.8	13.1	11.8	7.9	8.0	12.0	2.1	0.8	2.4	2.4
July	9.5	8.7	8.5	4.0	13.1	11.4	7.6	7.9	11.6	2.3	1.3	2.4	2.6
Aug.	9.2	8.4	6.9	4.0	13.2	11.1	9.2	7.4	11.2	2.3	1.4	2.5	2.5
Sep. (p)	9.1	8.3	5.7	4.2	13.5	11.0	10.1	7.4	11.1	2.5	1.4	3.3	2.6

C6 Loans to households
(annual growth rates)

- consumer credit
- lending for house purchase
- other lending

Source: ECB.
1) MFI sector excluding the Eurosystem; sectoral classification is based on ESA 95.
2) Before January 2003 data were collected in March, June, September and December each year. Monthly data prior to January 2003 are derived from quarterly data.
3) Including non-profit institutions serving households.

3. Loans to government and non-euro area residents

	General government					Non-euro area residents				
	Total	Central government	Other general government			Total	Banks [2]	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										
2004	811.9	130.1	252.3	405.7	23.8	1,974.7	1,342.2	632.5	61.3	571.1
2005	826.9	125.1	246.8	425.8	29.2	2,485.0	1,723.4	761.6	66.0	695.6
2006 Q1	816.3	118.5	240.9	427.7	29.2	2,594.6	1,822.9	771.7	62.9	708.8
Q2 (p)	809.3	107.1	234.5	438.2	29.2	2,611.2	1,840.6	770.5	62.9	707.7
Transactions										
2004	-5.6	2.2	-13.9	17.3	-11.2	275.6	194.9	80.4	1.8	78.6
2005	13.7	-5.6	-8.1	21.9	5.5	296.7	209.2	87.6	4.7	82.9
2006 Q1	-10.4	-6.3	-5.9	1.9	-0.1	131.2	111.6	19.6	-3.0	22.6
Q2 (p)	-6.8	-11.2	-6.4	10.5	0.1	56.3	42.3	14.0	0.0	14.0
Growth rates										
2004 Dec.	-0.7	1.7	-5.2	4.4	-32.1	15.6	16.4	13.9	3.1	15.2
2005 Dec.	1.7	-4.3	-3.2	5.4	22.9	14.8	15.4	13.4	7.7	14.0
2006 Mar.	1.2	-8.0	-3.9	5.8	29.5	13.6	14.5	11.7	1.7	12.7
June (p)	0.1	-13.5	-6.3	7.9	2.4	11.2	11.0	11.6	1.5	12.5

C7 Loans to government and non-euro area residents
(annual growth rates)
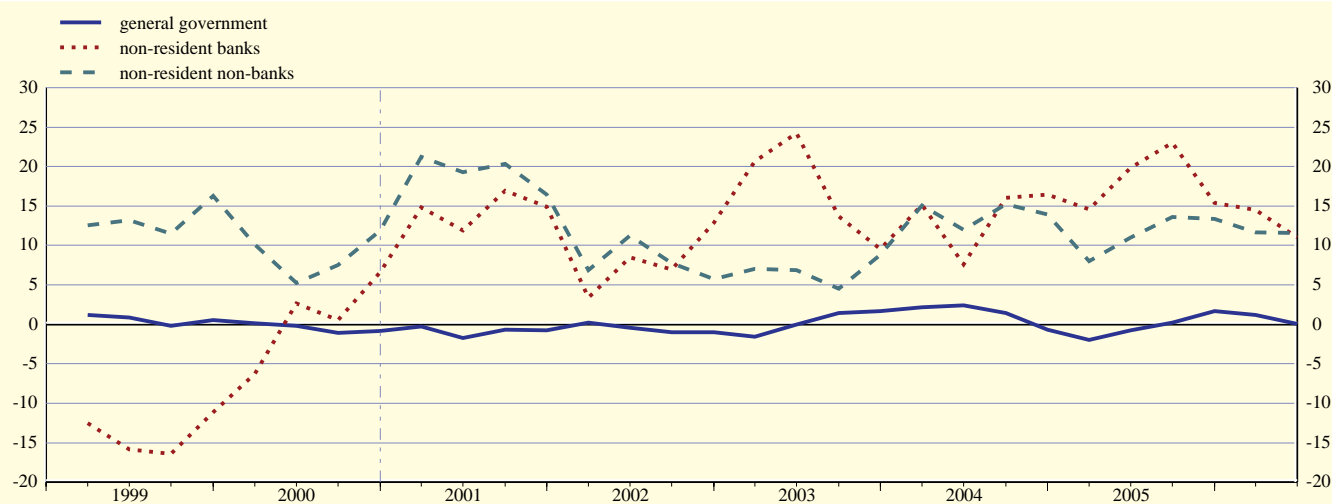
- general government
- non-resident banks
- non-resident non-banks

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 [1]
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

1. Deposits by financial intermediaries [2]

	Insurance corporations and pension funds							Other financial intermediaries [3]						
	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														
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	612.6	67.8	51.9	469.7	1.2	1.4	20.6	882.8	233.9	185.0	332.2	10.5	0.1	121.1
2006 Q1	613.0	65.6	50.4	474.8	1.1	1.4	19.7	989.2	271.5	195.1	376.3	11.0	0.1	135.2
2006 Apr.	628.3	67.9	50.4	479.5	1.1	1.4	28.0	1,036.9	275.4	221.3	387.2	10.5	0.1	142.5
May	621.1	66.2	45.9	481.1	1.1	1.4	25.6	1,036.8	273.6	206.7	397.4	11.7	0.2	147.2
June	625.7	68.6	47.9	484.7	1.0	1.4	22.1	1,048.2	278.1	213.3	407.0	10.8	0.2	138.8
July	633.0	65.3	51.9	488.6	1.0	1.4	24.9	1,037.5	263.5	213.0	415.4	9.9	0.2	135.4
Aug.	636.6	61.6	52.0	491.9	1.0	1.4	28.7	1,037.9	257.6	215.0	416.2	9.4	0.2	139.4
Sep. (p)	637.4	66.7	51.3	492.7	1.0	1.4	24.4	1,083.8	272.2	236.2	421.0	10.2	0.3	144.0
Transactions														
2004	39.9	0.7	10.3	27.7	-0.1	-0.1	1.5	72.1	0.9	5.8	43.6	4.1	0.0	17.7
2005	26.3	7.4	-0.6	19.2	0.4	0.0	-0.2	181.4	40.1	37.3	102.2	1.5	0.0	0.4
2006 Q1	0.6	-2.0	-1.4	5.0	-0.1	0.0	-0.8	98.2	38.3	10.7	34.4	0.5	0.0	14.2
2006 Apr.	15.5	2.3	0.1	4.8	0.0	0.0	8.3	50.0	4.6	26.9	11.6	-0.5	0.0	7.3
May	-7.0	-1.6	-4.5	1.5	0.0	0.0	-2.5	-0.7	-1.4	-14.9	10.3	1.2	0.1	4.0
June	4.5	2.3	2.0	3.7	0.0	0.0	-3.4	12.4	4.4	6.5	9.4	-0.8	0.0	-7.0
July	7.3	-3.3	4.0	3.9	0.0	0.0	2.8	-10.7	-14.6	-0.3	8.5	-1.0	0.0	-3.4
Aug.	3.6	-3.7	0.1	3.3	0.0	0.0	3.8	0.1	-6.4	2.1	0.9	-0.4	0.0	4.1
Sep. (p)	0.8	5.0	-0.7	0.8	0.0	0.0	-4.3	45.0	14.4	20.9	4.5	0.7	0.1	4.5
Growth rates														
2004 Dec.	7.4	1.2	24.6	6.6	-8.0	-43.1	7.9	12.7	0.5	4.3	30.3	67.6	-	17.1
2005 Dec.	4.5	12.4	-1.2	4.3	36.0	2.9	-0.8	27.8	22.2	25.0	50.6	14.3	-	0.4
2006 Mar.	2.4	-1.7	2.2	3.1	11.3	0.9	-0.3	31.9	20.7	41.8	53.2	6.1	-	4.7
2006 Apr.	4.0	1.8	-1.9	3.6	12.6	0.7	32.8	36.3	25.0	50.6	53.8	-10.8	-	11.6
May	3.0	0.3	-9.7	4.1	-9.7	1.1	17.4	31.9	20.3	40.1	55.0	4.3	-	4.5
June	4.9	11.8	-1.7	4.6	-8.9	0.8	7.5	27.7	18.2	43.5	43.4	-1.8	-	-1.8
July	4.7	1.3	-0.9	5.1	-7.1	-0.7	24.0	25.0	13.5	37.0	43.2	-14.4	-	-3.5
Aug.	5.2	3.9	1.3	5.5	-8.2	-3.5	13.2	25.2	14.0	36.7	43.3	-16.1	-	-2.5
Sep. (p)	5.6	10.8	0.1	5.5	-12.0	-3.8	8.6	25.2	7.9	39.5	41.0	-3.2	-	7.3

C8 Total deposits by sector
(annual growth rates)

- insurance corporations and pension funds (total)
- other financial intermediaries (total)

C9 Total deposits and deposits included in M3 by sector
(annual growth rates)

- insurance corporations and pension funds (total)
- other financial intermediaries (total)
- insurance corporations and pension funds (included in M3) [4]
- other financial intermediaries (included in M3) [5]
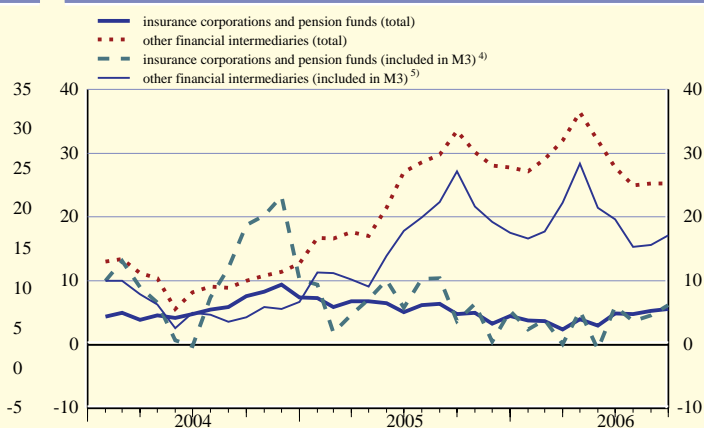
Source: ECB.
1) MFI sector excluding the Eurosystem; sectoral classification is based on ESA 95.
2) Before January 2003 data were collected in March, June, September and December each year. Monthly data prior to January 2003 are derived from quarterly data.
3) This category includes investment funds.
4) Covers deposits in columns 2, 3, 5 and 7.
5) Covers deposits in columns 9, 10, 12 and 14.

2. Deposits by non-financial corporations and households [2]

	Non-financial corporations							Households [3]						
	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														
2004	1,114.6	674.7	291.1	73.8	44.2	1.1	29.7	4,162.0	1,403.1	515.0	634.3	1,466.1	88.0	55.6
2005	1,211.9	769.2	305.1	67.2	44.5	1.2	24.6	4,343.1	1,685.9	534.0	631.7	1,354.2	84.5	52.8
2006 Q1	1,199.9	745.5	313.0	71.9	46.7	1.2	21.6	4,355.8	1,673.8	549.3	623.6	1,367.7	86.3	55.1
2006 Apr.	1,212.2	751.3	319.8	72.5	45.8	1.3	21.4	4,384.9	1,703.9	552.7	621.1	1,366.6	86.5	54.1
May	1,230.4	772.4	314.2	72.7	45.5	1.4	24.3	4,390.3	1,702.1	560.5	619.0	1,364.3	87.7	56.6
June	1,236.7	783.6	313.1	73.2	43.6	1.2	22.0	4,423.0	1,725.6	569.4	616.5	1,363.9	89.0	58.5
July	1,231.1	775.3	315.8	72.4	42.8	1.3	23.5	4,434.7	1,718.3	587.3	614.0	1,361.9	90.2	63.0
Aug.	1,242.7	769.9	330.3	72.4	43.1	1.3	25.7	4,421.8	1,686.7	602.9	612.8	1,360.8	91.7	66.9
Sep. (p)	1,269.8	790.3	334.6	74.0	43.8	1.3	25.8	4,438.7	1,702.9	613.6	608.8	1,355.5	93.0	64.8
Transactions														
2004	80.8	48.5	17.1	6.6	8.0	0.7	-0.2	178.1	90.5	-29.6	31.1	85.2	-1.9	2.7
2005	96.6	88.9	11.4	-1.6	3.7	-0.4	-5.4	177.7	125.1	16.3	-2.8	45.9	-4.0	-2.9
2006 Q1	-10.4	-23.0	8.9	4.8	2.0	0.0	-3.1	14.0	-11.9	16.0	-8.1	13.9	1.8	2.3
2006 Apr.	14.2	6.6	7.7	0.8	-0.8	0.1	-0.2	30.0	30.3	4.0	-2.4	-1.1	0.2	-1.0
May	20.2	21.6	-4.3	0.3	-0.3	0.0	2.9	6.1	-1.6	8.2	-2.1	-2.2	1.2	2.5
June	5.6	11.1	-1.4	0.2	-1.9	-0.1	-2.3	32.5	23.5	8.7	-2.5	-0.4	1.3	1.9
July	-5.5	-8.3	2.8	-0.8	-0.8	0.0	1.5	11.8	-7.3	18.0	-2.5	-2.0	1.1	4.5
Aug.	12.1	-5.2	14.8	0.1	0.3	0.0	2.2	-12.6	-31.5	15.8	-1.2	-1.1	1.5	3.9
Sep. (p)	26.2	20.0	3.9	1.5	0.7	0.0	0.2	17.9	16.1	10.4	-2.6	-5.3	1.3	-2.1
Growth rates														
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 Dec.	8.6	13.1	3.8	-2.0	9.0	-29.0	-18.2	4.3	8.5	3.1	-0.4	3.3	-4.5	-5.1
2006 Mar.	9.7	9.8	11.5	6.6	14.2	-27.6	-9.8	4.2	7.4	6.6	-1.7	3.2	-2.7	7.6
2006 Apr.	10.4	10.2	12.4	12.4	10.4	-20.0	-9.9	4.2	7.4	7.1	-2.2	2.9	-1.9	6.6
May	11.5	11.4	12.1	13.1	7.9	-20.7	10.9	4.2	6.9	9.0	-2.1	2.5	-0.1	8.7
June	10.1	8.9	15.4	8.3	4.3	-19.5	1.1	4.2	6.0	11.5	-2.5	2.2	2.1	14.9
July	9.4	8.1	14.4	8.8	1.0	-5.6	10.1	4.0	4.6	14.5	-2.7	1.8	4.4	17.5
Aug.	9.9	7.9	16.2	9.0	2.7	1.9	13.6	4.4	4.8	17.0	-2.9	1.5	7.3	22.9
Sep. (p)	11.0	10.1	13.8	14.9	-0.5	4.1	13.9	4.6	4.8	19.1	-2.8	1.1	10.8	25.7

C10 Total deposits by sector
(annual growth rates)
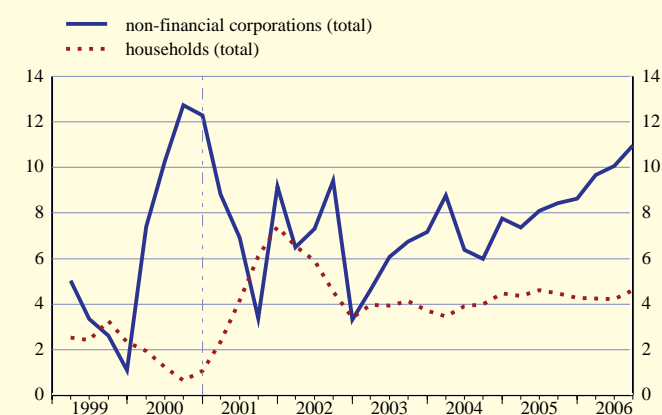
- non-financial corporations (total)
- households (total)

C11 Total deposits and deposits included in M3 by sector (annual growth rates)

- non-financial corporations (total)
- households (total)
- non-financial corporations (included in M3) [4]
- households (included in M3) [5]
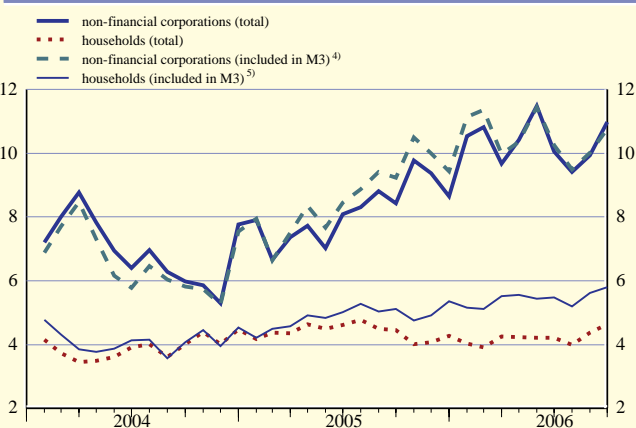
Source: ECB.
1) MFI sector excluding the Eurosystem; sectoral classification is based on ESA 95.
2) Before January 2003 data were collected in March, June, September and December each year. Monthly data prior to January 2003 are derived from quarterly data.
3) Including non-profit institutions serving households.
4) Covers deposits in columns 2, 3, 5 and 7.
5) Covers deposits in columns 9, 10, 12 and 14.

2.5 Deposits held with MFIs, breakdown [1]
(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 [2]	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					
2004	282.2	137.7	30.5	69.6	44.3	2,428.9	1,748.0	680.9	103.4	577.5
2005	313.1	149.2	38.3	80.9	44.7	3,050.5	2,250.5	800.0	125.8	674.2
2006 Q1	312.2	148.1	38.1	77.0	48.9	3,241.9	2,410.3	831.5	128.2	703.3
Q2 (p)	317.2	138.1	39.6	82.5	57.0	3,202.9	2,379.8	825.6	127.7	698.0
					Transactions					
2004	11.0	2.7	1.8	2.8	3.8	247.1	214.9	32.0	6.9	25.0
2005	30.8	11.2	7.8	11.5	0.3	378.1	292.8	85.3	22.4	63.0
2006 Q1	-1.0	-1.1	-0.2	-3.9	4.3	210.4	171.8	39.5	2.4	37.1
Q2 (p)	6.0	-9.1	1.6	5.5	8.1	7.9	3.8	6.7	-0.5	7.2
					Growth rates					
2004 Dec.	4.0	2.0	5.6	4.1	9.2	11.0	13.5	4.8	7.2	4.4
2005 Dec.	10.9	8.1	25.4	16.6	0.7	15.3	16.4	12.3	21.6	10.6
2006 Mar.	15.6	17.0	14.1	14.3	14.6	14.3	15.6	11.1	21.6	9.3
June (p)	10.3	2.7	13.1	13.1	17.8	12.9	13.3	12.2	7.7	13.0

C12 Deposits by government and non-euro area residents
(annual growth rates)
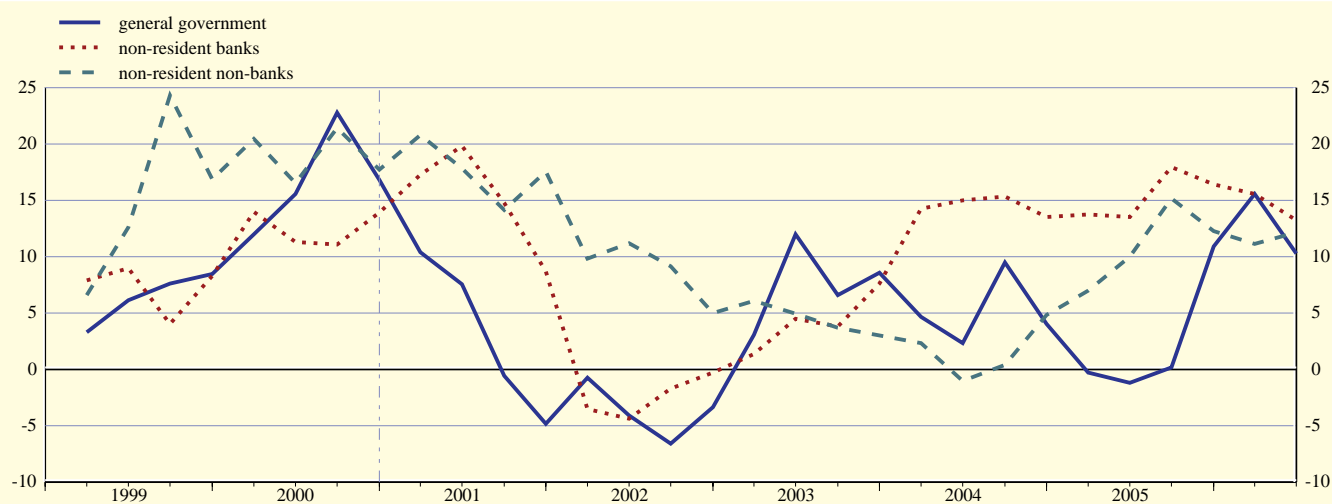
general government
non-resident banks
non-resident non-banks

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 [1]

(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							
2004	3,939.9	1,362.7	59.9	1,284.1	15.8	449.2	16.3	751.8	1,161.2	285.4	660.1	215.7
2005	4,434.7	1,450.4	67.3	1,412.5	17.0	525.7	25.8	936.2	1,256.4	308.5	698.4	249.4
2006 Q1	4,567.1	1,501.6	69.3	1,423.8	16.6	544.9	28.6	982.2	1,364.4	323.6	768.7	272.1
2006 Apr.	4,581.8	1,506.1	71.0	1,418.0	16.6	555.1	29.6	985.3	1,421.5	331.9	819.3	270.4
May	4,597.5	1,535.0	68.4	1,391.1	16.4	564.4	28.7	993.5	1,425.6	347.4	809.6	268.6
June	4,584.6	1,519.5	65.8	1,385.6	17.2	572.7	27.4	996.4	1,368.6	334.5	770.3	263.8
July	4,629.7	1,533.9	69.6	1,367.9	17.2	584.5	28.3	1,028.3	1,372.2	331.1	776.3	264.8
Aug.	4,624.1	1,544.6	67.7	1,344.8	17.0	580.6	28.9	1,040.5	1,381.9	336.0	775.2	270.7
Sep. (p)	4,682.7	1,559.1	69.5	1,337.7	16.7	589.4	28.9	1,081.4	1,414.5	341.9	790.2	282.4
					Transactions							
2004	368.4	148.0	4.9	40.3	1.3	34.9	-1.3	140.3	69.7	2.3	36.4	30.9
2005	358.1	85.7	2.0	48.9	-0.9	71.6	7.6	143.1	101.3	26.9	48.7	25.8
2006 Q1	171.9	59.2	3.5	23.5	0.2	22.2	3.4	60.0	91.2	10.7	64.3	16.1
2006 Apr.	35.8	5.1	2.8	-1.7	0.3	10.5	1.6	17.1	57.8	8.2	51.2	-1.6
May	25.0	25.9	-2.0	-20.2	0.0	9.4	-0.5	12.5	12.2	16.5	-4.8	0.5
June	-7.3	-15.9	-2.8	1.4	0.7	9.3	-1.4	1.5	-53.3	-11.3	-37.9	-4.1
July	42.1	13.3	3.7	-19.5	-0.1	11.2	0.9	32.4	-2.2	-4.0	2.6	-0.8
Aug.	-8.1	10.0	-1.8	-27.0	-0.1	-1.8	0.7	11.9	4.3	3.7	-3.7	4.4
Sep. (p)	50.2	19.4	1.4	-9.9	-0.5	8.4	-0.2	31.5	31.0	2.4	18.7	10.0
					Growth rates							
2004 Dec.	10.2	12.2	8.4	3.3	7.7	8.5	-7.2	22.0	6.5	0.9	5.9	17.3
2005 Dec.	9.0	6.3	3.6	3.9	-4.5	15.9	43.3	18.5	8.7	9.5	7.3	11.9
2006 Mar.	9.4	8.3	1.2	1.3	-0.4	16.4	67.6	20.9	11.1	10.0	14.2	3.7
2006 Apr.	8.7	6.9	8.8	0.5	-9.8	16.6	64.6	20.2	9.7	6.9	12.1	6.0
May	8.9	9.0	5.1	-0.4	-7.8	17.3	52.9	18.8	11.0	11.1	12.0	8.3
June	7.4	5.9	1.0	-1.0	12.4	17.4	50.9	17.4	11.3	12.6	11.5	9.0
July	8.1	6.2	6.6	-2.2	8.9	20.1	48.1	20.7	11.0	10.2	12.9	6.8
Aug.	7.8	7.1	3.6	-3.5	7.2	20.4	46.3	19.5	11.6	12.1	12.3	8.7
Sep. (p)	9.3	8.7	5.8	-3.6	1.8	21.8	51.4	23.4	13.0	12.7	13.3	12.6

C13 MFI holdings of securities
(annual growth rates)
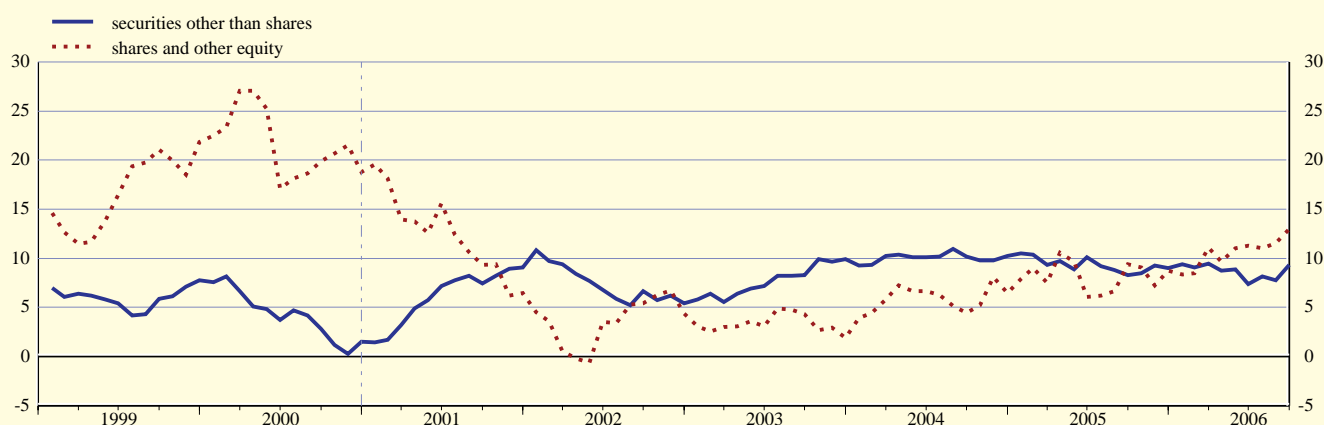
- securities other than shares
- shares and other equity

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

2.7 Revaluation of selected MFI balance sheet items [1)]
(EUR billions)

1. Write-offs/write-downs of loans to households [2)]

	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
2004	-3.2	-1.3	-0.7	-1.3	-3.4	-0.3	-0.1	-3.0	-6.7	-2.3	-0.3	-4.1
2005	-4.1	-1.7	-0.9	-1.5	-4.4	-0.3	-1.1	-3.0	-9.8	-2.7	-3.2	-3.9
2006 Q1	-1.1	-0.4	-0.2	-0.5	-1.3	-0.1	0.0	-1.2	-2.0	-0.5	-0.3	-1.2
2006 Apr.	-0.2	-0.1	-0.1	-0.1	0.1	0.1	0.0	0.1	-0.3	-0.1	-0.1	-0.2
May	-0.2	-0.1	0.0	-0.1	-0.1	0.0	0.0	-0.1	-0.6	0.0	-0.4	-0.2
June	-0.3	-0.1	-0.1	-0.1	-0.2	0.0	0.0	-0.1	-0.5	0.0	-0.2	-0.3
July	-0.3	-0.1	-0.1	-0.1	-0.1	0.0	0.0	-0.1	-0.4	-0.1	-0.1	-0.2
Aug.	-0.2	-0.1	-0.1	-0.1	-0.1	0.0	0.0	-0.1	-0.2	0.0	0.0	-0.2
Sep. [(p)]	-0.3	-0.1	-0.1	-0.1	-0.1	0.0	0.0	-0.1	-0.5	-0.1	-0.1	-0.4

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
2004	-16.1	-8.8	-0.8	-6.5	-1.6	-0.5	-1.1
2005	-19.3	-7.4	-5.6	-6.2	-1.2	-0.3	-0.9
2006 Q1	-3.5	-1.2	-0.7	-1.6	-0.2	0.0	-0.2
2006 Apr.	-0.4	-0.1	-0.1	-0.2	-0.1	0.0	0.0
May	-1.1	-0.3	-0.6	-0.3	0.0	0.0	0.0
June	-1.1	-0.2	-0.4	-0.5	0.0	0.0	0.0
July	-0.6	-0.1	-0.2	-0.3	0.0	0.0	0.0
Aug.	-1.0	0.0	-0.8	-0.2	-0.1	0.0	-0.1
Sep. [(p)]	-0.9	-0.3	-0.2	-0.4	-0.1	0.0	-0.1

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
2004	13.5	1.5	-0.1	10.8	-0.2	0.9	-0.1	0.6	5.4	1.3	0.8	3.3
2005	24.8	3.4	0.5	7.5	0.7	1.6	0.3	10.7	37.4	4.6	17.4	15.4
2006 Q1	-5.1	-1.1	-0.1	-4.1	-0.1	-0.8	0.0	1.2	17.1	3.9	6.8	6.3
2006 Apr.	-8.3	-0.4	-0.1	-4.1	-0.1	-0.3	-0.1	-3.2	-0.7	0.0	-0.6	-0.2
May	-1.3	0.3	-0.1	1.9	0.0	0.0	-0.1	-3.4	-10.2	-1.0	-5.0	-4.2
June	-3.5	0.3	0.1	-2.2	0.1	-1.0	0.0	-0.8	-3.4	-1.3	-1.4	-0.7
July	5.1	0.1	0.0	2.7	0.0	1.3	0.0	0.9	5.1	0.6	2.6	1.9
Aug.	3.6	0.6	0.0	1.6	0.0	0.2	0.0	1.3	4.6	0.7	2.4	1.5
Sep. [(p)]	4.8	0.8	0.0	2.7	0.0	0.5	0.0	0.8	3.9	0.9	1.2	1.8

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

1. Deposits

	MFIs [2]							Non-MFIs						
	All currencies (outstanding amount)	Euro [3]	Non-euro currencies					All currencies (outstanding amount)	Euro [3]	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
						By euro area residents								
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	4,851.2	90.9	9.1	5.6	0.4	1.5	1.0	7,363.4	96.8	3.2	1.9	0.3	0.1	0.5
2006 Q1	4,949.5	89.8	10.2	6.2	0.4	1.5	1.4	7,470.1	96.6	3.4	2.0	0.3	0.1	0.6
Q2 (p)	5,057.8	90.3	9.7	5.8	0.4	1.5	1.5	7,650.8	96.6	3.4	2.0	0.3	0.1	0.6
						By non-euro area residents								
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	2,250.5	46.2	53.8	35.4	2.7	2.8	10.0	800.0	51.8	48.2	32.1	1.7	2.2	9.2
2006 Q1	2,410.3	47.4	52.6	34.3	2.9	2.6	9.7	831.5	51.9	48.1	32.6	1.4	2.0	9.1
Q2 (p)	2,379.8	47.6	52.4	33.8	2.8	2.6	10.0	825.6	53.0	47.0	30.8	1.5	2.2	9.1

2. Debt securities issued by euro area MFIs

	All currencies (outstanding amount)	Euro [3]	Non-euro currencies				
			Total				
				USD	JPY	CHF	GBP
	1	2	3	4	5	6	7
2004	3,653.9	84.6	15.4	7.6	1.7	1.9	2.7
2005	4,051.7	81.2	18.8	9.6	1.8	1.9	3.2
2006 Q1	4,204.3	81.2	18.8	9.5	1.8	1.9	3.2
Q2 (p)	4,273.7	81.2	18.8	9.3	1.8	2.0	3.3

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 [1]
(percentages of total; outstanding amounts in EUR billions; end of period)

3. Loans

	MFIs [2]							Non-MFIs						
	All currencies (outstanding amount)	Euro [3]	Non-euro currencies					All currencies (outstanding amount)	Euro [3]	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														
2004	4,457.8	-	-	-	-	-	-	8,367.5	96.6	3.4	1.4	0.2	1.3	0.4
2005	4,569.9	-	-	-	-	-	-	9,114.3	96.3	3.7	1.6	0.2	1.3	0.5
2006 Q1	4,656.4	-	-	-	-	-	-	9,367.8	96.3	3.7	1.7	0.2	1.2	0.5
Q2 (p)	4,730.5	-	-	-	-	-	-	9,593.6	96.4	3.6	1.6	0.2	1.2	0.5
To non-euro area residents														
2004	1,342.2	51.4	48.6	29.9	3.7	2.2	8.7	632.5	42.2	57.8	40.1	2.6	4.5	7.2
2005	1,723.4	48.5	51.5	30.6	4.3	2.0	10.1	761.6	38.2	61.8	43.6	1.8	4.2	8.6
2006 Q1	1,822.9	49.6	50.4	30.4	3.8	2.4	9.2	771.7	39.0	61.0	44.0	1.7	3.9	7.8
Q2 (p)	1,840.6	49.9	50.1	29.5	3.7	2.4	10.0	770.5	40.4	59.6	42.9	1.1	4.1	7.6

4. Holdings of securities other than shares

	Issued by MFIs [2]							Issued by non-MFIs						
	All currencies (outstanding amount)	Euro [3]	Non-euro currencies					All currencies (outstanding amount)	Euro [3]	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														
2004	1,422.7	95.8	4.2	1.8	0.3	0.5	1.3	1,765.4	98.2	1.8	0.9	0.5	0.1	0.3
2005	1,517.7	95.6	4.4	2.0	0.3	0.4	1.4	1,980.9	97.8	2.2	1.1	0.3	0.1	0.5
2006 Q1	1,570.9	95.6	4.4	2.0	0.2	0.4	1.5	2,014.0	97.8	2.2	1.1	0.3	0.1	0.6
Q2 (p)	1,585.3	95.8	4.2	1.9	0.3	0.4	1.3	2,002.8	97.8	2.2	1.2	0.3	0.1	0.6
Issued by non-euro area residents														
2004	341.4	50.3	49.7	28.6	1.0	0.5	17.0	410.5	44.8	55.2	30.5	8.6	0.7	9.2
2005	395.5	49.4	50.6	29.7	0.8	0.6	15.9	540.7	36.2	63.8	36.3	8.6	0.8	12.6
2006 Q1	422.4	51.0	49.0	28.2	0.8	0.6	16.0	559.7	37.2	62.8	35.2	6.1	0.8	15.1
Q2 (p)	440.0	52.1	47.9	27.8	0.9	0.5	15.3	556.3	37.9	62.1	34.3	6.4	0.7	15.2

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.

1. Assets

	Total	Deposits	Holdings of securities other than shares			Holdings of shares/ other equity	Holdings of investment fund shares	Fixed assets	Other assets
			Total	Up to 1 year	Over 1 year				
	1	2	3	4	5	6	7	8	9
2005 Q1	4,058.4	288.2	1,692.1	79.3	1,612.8	1,320.2	376.0	163.1	218.7
Q2	4,313.4	296.4	1,783.0	91.5	1,691.5	1,399.9	417.5	167.6	249.0
Q3	4,631.2	303.5	1,860.6	101.2	1,759.4	1,553.4	460.0	171.6	282.1
Q4	4,789.2	291.4	1,848.1	109.6	1,738.5	1,683.1	505.2	176.1	285.4
2006 Q1	5,197.1	315.9	1,905.2	139.8	1,765.3	1,896.3	569.2	177.3	333.3
Q2 (p)	5,135.4	316.4	1,908.1	145.2	1,762.9	1,775.8	601.8	180.3	352.9

2. Liabilities

	Total	Deposits and loans taken	Investment fund shares	Other liabilities
	1	2	3	4
2005 Q1	4,058.4	61.6	3,798.0	198.8
Q2	4,313.4	58.6	4,034.4	220.4
Q3	4,631.2	60.4	4,351.7	219.1
Q4	4,789.2	61.8	4,516.8	210.5
2006 Q1	5,197.1	73.6	4,868.9	254.6
Q2 (p)	5,135.4	76.4	4,787.2	271.8

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

	Total	Funds by investment policy					Funds by type of investor	
		Equity funds	Bond funds	Mixed funds	Real estate funds	Other funds	General public funds	Special investors' funds
	1	2	3	4	5	6	7	8
2005 Q1	4,058.4	864.6	1,285.8	984.4	201.1	722.5	3,041.3	1,017.0
Q2	4,313.4	1,097.2	1,510.2	1,011.1	207.1	487.9	3,245.6	1,067.9
Q3	4,631.2	1,224.8	1,581.9	1,071.1	213.2	540.2	3,507.5	1,123.8
Q4	4,789.2	1,335.8	1,538.0	1,109.2	216.2	590.0	3,659.1	1,130.1
2006 Q1	5,197.1	1,530.3	1,592.6	1,238.8	214.0	621.5	3,996.6	1,200.5
Q2 (p)	5,135.4	1,442.1	1,569.8	1,255.8	217.4	650.2	3,911.3	1,224.1

C14 Total assets of investment funds
(EUR billions)

- equity funds
- bond funds
- mixed funds
- real estate funds
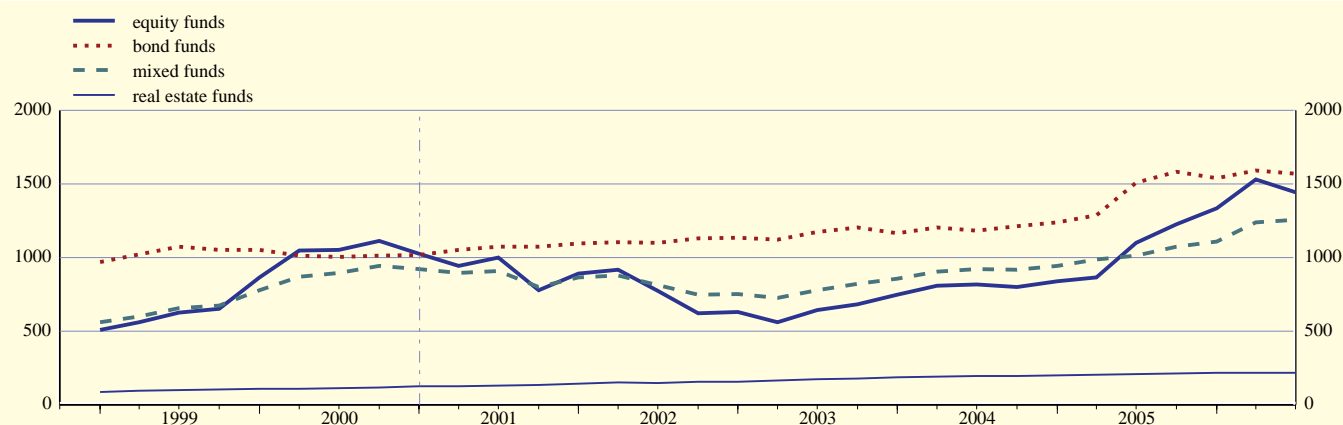
Source: ECB.
1) Other than money market funds. For further details, see the General notes.

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 | Deposits | Holdings of securities other than shares | | | Holdings of shares/ other equity | Holdings of investment fund shares | Fixed assets | Other assets |
			Total	Up to 1 year	Over 1 year				
	1	2	3	4	5	6	7	8	9
				Equity funds					
2005 Q1	864.6	33.8	37.0	4.0	33.0	729.9	33.3	-	30.6
Q2	1,097.2	45.0	41.6	4.5	37.1	936.5	40.0	-	34.1
Q3	1,224.8	48.3	43.4	4.9	38.5	1,044.8	52.4	-	35.9
Q4	1,335.8	50.8	45.8	5.7	40.2	1,145.4	60.3	-	33.5
2006 Q1	1,530.3	55.0	51.4	6.3	45.1	1,308.2	71.0	-	44.6
Q2 (p)	1,442.1	52.1	51.4	6.5	44.9	1,220.4	69.7	-	48.6
				Bond funds					
2005 Q1	1,285.8	97.8	1,046.0	44.8	1,001.2	39.4	34.5	-	68.0
Q2	1,510.2	110.5	1,229.5	58.4	1,171.1	38.4	40.1	-	91.7
Q3	1,581.9	110.3	1,289.1	67.0	1,222.1	38.4	43.8	-	100.2
Q4	1,538.0	100.0	1,251.7	67.6	1,184.2	38.6	46.3	-	101.3
2006 Q1	1,592.6	108.9	1,285.4	82.6	1,202.8	41.1	49.3	-	107.9
Q2 (p)	1,569.8	106.5	1,264.6	87.3	1,177.3	38.5	48.2	-	112.1
				Mixed funds					
2005 Q1	984.4	61.1	388.4	22.5	365.9	315.0	155.3	0.2	64.5
Q2	1,011.1	65.5	418.3	21.2	397.0	277.6	170.2	0.2	79.4
Q3	1,071.1	67.0	426.0	21.7	404.3	301.2	185.5	0.2	91.3
Q4	1,109.2	60.9	440.9	26.9	413.9	315.5	202.0	0.1	89.9
2006 Q1	1,238.8	67.9	465.2	38.6	426.6	349.2	238.5	0.1	117.9
Q2 (p)	1,255.8	71.8	483.8	40.3	443.6	318.2	253.4	0.2	128.4
				Real estate funds					
2005 Q1	201.1	14.3	8.4	0.7	7.7	1.1	7.5	160.8	9.0
Q2	207.1	14.0	8.2	0.8	7.5	1.1	7.6	167.1	9.0
Q3	213.2	15.2	8.8	1.2	7.6	1.3	8.1	171.0	8.7
Q4	216.2	14.5	7.8	1.5	6.3	1.4	6.9	175.1	10.4
2006 Q1	214.0	15.1	6.1	1.7	4.4	1.8	4.4	176.5	10.1
Q2 (p)	217.4	15.5	5.6	1.5	4.1	1.6	5.4	179.4	9.9

2. Funds by type of investor

	Total	Deposits	Holdings of securities other than shares	Holdings of shares/ other equity	Holdings of investment fund shares	Fixed assets	Other assets
	1	2	3	4	5	6	7
			General public funds				
2005 Q1	3,041.3	241.7	1,134.4	1,058.3	285.7	141.1	180.1
Q2	3,245.6	247.7	1,207.1	1,125.1	313.7	144.8	207.2
Q3	3,507.5	251.6	1,261.0	1,257.9	353.3	146.5	237.3
Q4	3,659.1	242.8	1,277.5	1,371.0	381.0	150.1	236.7
2006 Q1	3,996.6	263.2	1,334.2	1,549.4	427.4	150.2	272.2
Q2 (p)	3,911.3	256.7	1,321.1	1,448.1	452.9	151.2	281.2
			Special investors' funds				
2005 Q1	1,017.0	46.6	557.7	261.9	90.3	22.0	38.6
Q2	1,067.9	48.7	575.9	274.8	103.9	22.8	41.9
Q3	1,123.8	51.9	599.6	295.5	106.7	25.2	44.8
Q4	1,130.1	48.6	570.6	312.0	124.3	25.9	48.7
2006 Q1	1,200.5	52.7	571.0	346.9	141.7	27.1	61.1
Q2 (p)	1,224.1	59.7	587.0	327.7	148.9	29.1	71.7

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)

	Total	Currency and deposits								Deposits with non-MFIs	Memo: deposits of non-MFIs with banks outside the euro area
		Total	Currency	Deposits of non-financial sectors other than central government with euro area MFIs					Deposits of central government with euro area MFIs		
				Total	Overnight	With agreed maturity	Redeemable at notice	Repos			
	1	2	3	4	5	6	7	8	9	10	11
					Outstanding amounts						
2005 Q1	16,977.4	6,358.0	409.6	5,432.8	2,174.3	1,560.0	1,620.0	78.5	187.4	328.2	371.9
Q2	17,426.5	6,528.6	431.8	5,549.2	2,448.4	1,552.8	1,471.1	76.8	211.5	336.1	369.0
Q3	17,775.6	6,528.9	439.9	5,565.0	2,440.3	1,571.7	1,475.5	77.6	182.4	341.5	396.6
Q4	18,218.0	6,730.1	465.5	5,732.3	2,559.1	1,604.4	1,488.5	80.3	173.6	358.8	369.2
2006 Q1	18,710.2	6,751.8	459.7	5,733.7	2,517.7	1,629.2	1,505.9	80.9	193.1	365.3	376.9
Q2	18,641.8	6,906.1	478.9	5,859.2	2,619.4	1,653.9	1,501.6	84.2	207.4	360.6	373.9
					Transactions						
2005 Q1	146.3	13.3	-2.6	-4.0	7.4	-17.4	15.7	-9.7	25.0	-5.1	26.7
Q2	303.8	163.7	22.2	110.0	110.9	-10.1	10.9	-1.7	24.1	7.4	-9.5
Q3	95.0	0.5	8.1	16.7	-7.3	18.8	4.4	0.7	-29.4	5.1	14.2
Q4	297.3	204.0	25.6	170.7	119.2	34.9	14.2	2.4	-8.9	16.6	-6.7
2006 Q1	154.1	24.2	-5.8	4.2	-40.5	26.6	17.5	0.6	19.6	6.3	4.6
Q2	310.8	159.9	19.2	130.1	103.2	27.7	-4.1	3.3	15.2	-4.7	-3.4
					Growth rates						
2005 Q1	4.7	5.7	16.5	5.1	7.9	1.5	5.6	-3.3	1.7	5.6	5.1
Q2	4.6	5.8	15.8	5.5	9.0	1.8	4.9	-3.2	-5.5	7.5	3.5
Q3	4.4	5.4	14.5	5.3	8.4	2.7	4.5	-6.3	-10.8	5.8	4.3
Q4	5.0	6.0	12.9	5.4	10.6	1.7	2.8	-9.3	6.7	7.1	7.4
2006 Q1	5.0	6.2	12.2	5.6	8.4	4.5	2.9	2.7	2.9	10.8	0.7
Q2	4.9	6.0	10.9	5.8	7.1	7.0	2.2	9.2	-1.6	6.9	2.4

	Securities other than shares			Shares [1]				Insurance technical reserves		
	Total	Short-term	Long-term	Total	Quoted shares	Mutual fund shares	Money market fund shares/units	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						
2005 Q1	1,963.1	229.8	1,733.4	4,333.5	2,304.9	2,028.6	411.2	4,322.8	3,931.4	391.4
Q2	2,010.8	238.1	1,772.6	4,456.0	2,370.9	2,085.0	408.5	4,431.2	4,036.5	394.7
Q3	2,002.3	234.5	1,767.8	4,716.3	2,550.9	2,165.3	409.5	4,528.1	4,129.0	399.1
Q4	1,992.3	220.1	1,772.2	4,851.2	2,677.6	2,173.6	399.6	4,644.3	4,242.5	401.8
2006 Q1	2,060.7	254.5	1,806.2	5,159.5	2,940.1	2,219.3	381.1	4,738.3	4,330.2	408.0
Q2	2,089.7	258.2	1,831.6	4,992.3	2,847.8	2,144.5	379.5	4,653.7	4,244.6	409.1
				Transactions						
2005 Q1	19.8	-5.7	25.5	36.8	3.0	33.8	6.4	76.4	67.5	8.9
Q2	29.6	9.6	20.0	36.7	20.2	16.5	-1.0	73.9	70.3	3.6
Q3	-5.2	2.5	-7.7	24.7	-7.9	32.6	2.9	75.0	70.7	4.4
Q4	5.6	-14.5	20.1	6.1	7.3	-1.2	-8.6	81.5	78.8	2.7
2006 Q1	68.2	34.1	34.1	-32.3	-47.3	15.0	5.1	94.0	87.1	6.9
Q2	40.7	6.0	34.7	41.1	45.3	-4.2	-2.7	69.0	68.0	1.1
				Growth rates						
2005 Q1	3.9	15.8	2.6	1.4	1.1	1.8	-3.3	6.8	6.9	5.7
Q2	3.5	8.2	3.0	0.7	-0.9	2.4	-3.4	7.0	7.2	5.4
Q3	2.6	5.7	2.2	0.9	-1.7	3.6	-1.9	7.2	7.4	5.5
Q4	2.5	-3.4	3.3	2.5	1.0	4.1	-0.1	7.3	7.5	5.1
2006 Q1	5.0	13.8	3.8	0.8	-1.2	3.1	-0.4	7.5	7.8	4.5
Q2	5.4	11.8	4.6	0.9	-0.1	2.0	-0.8	7.2	7.5	3.8

Source: ECB.
1) 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)

	Total	Loans taken from euro area MFIs and other financial corporations by											Memo: loans taken from outside the euro area by non-MFIs
		Total		General government			Non-financial corporations			Households [1]			
			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												
2005 Q1	18,251.8	9,030.9	7,877.9	925.3	77.4	847.9	3,811.7	1,190.4	2,621.3	4,293.9	292.2	4,001.8	451.3
Q2	18,805.1	9,246.5	8,110.3	926.7	82.2	844.5	3,907.7	1,239.2	2,668.5	4,412.0	302.7	4,109.3	518.3
Q3	19,266.9	9,377.0	8,240.1	930.9	87.5	843.4	3,943.1	1,226.4	2,716.7	4,503.0	300.2	4,202.8	527.8
Q4	19,525.3	9,600.9	8,450.6	937.8	79.8	858.1	4,044.7	1,266.8	2,777.9	4,618.4	306.7	4,311.7	586.0
2006 Q1	20,155.4	9,824.3	8,645.3	932.7	86.7	846.0	4,181.0	1,286.5	2,894.5	4,710.6	302.7	4,407.9	648.1
Q2	20,092.5	9,912.8	8,856.2	861.4	86.2	775.2	4,233.1	1,305.8	2,927.3	4,818.4	312.3	4,506.1	694.5
	Transactions												
2005 Q1	235.6	101.9	87.2	-6.2	-3.4	-2.7	43.1	5.8	37.3	64.9	0.7	64.2	7.6
Q2	342.0	199.1	187.8	0.8	4.8	-4.0	84.6	39.3	45.3	113.7	10.4	103.2	60.9
Q3	207.4	131.0	133.4	4.5	5.3	-0.9	33.4	-16.6	50.0	93.1	-2.5	95.6	23.4
Q4	281.6	268.2	227.0	14.4	-7.5	21.9	131.5	45.6	85.9	122.2	6.7	115.6	53.9
2006 Q1	302.4	204.7	176.8	-5.0	6.9	-11.9	120.8	21.7	99.1	88.8	-2.3	91.1	56.7
Q2	325.8	240.1	218.8	-7.9	-0.2	-7.7	134.1	47.2	86.8	113.9	9.8	104.0	59.8
	Growth rates												
2005 Q1	4.5	5.7	6.0	-1.9	-10.1	-1.0	4.8	3.1	5.6	8.3	3.9	8.7	1.7
Q2	4.8	6.2	6.6	-0.8	-10.1	0.2	5.2	4.8	5.3	8.7	4.9	9.0	16.7
Q3	5.1	6.6	7.1	0.2	-2.8	0.5	5.8	4.4	6.5	8.8	5.0	9.1	21.9
Q4	6.0	7.8	8.2	1.5	-0.9	1.7	7.7	6.2	8.4	9.3	5.2	9.6	33.5
2006 Q1	6.2	8.9	9.2	1.6	12.4	0.6	9.7	7.6	10.7	9.7	4.2	10.1	43.2
Q2	5.9	9.1	9.3	0.7	5.6	0.2	10.7	7.9	12.1	9.5	3.9	9.9	37.4

	Securities other than shares issued by							Quoted shares issued by non-financial corporations	Deposit liabilities of general government	Pension fund reserves of non-financial corporations
	Total	General government			Non-financial corporations					
		Total	Short-term	Long-term	Total	Short-term	Long-term			
	14	15	16	17	18	19	20	21	22	23
	Outstanding amounts									
2005 Q1	5,499.4	4,834.2	602.4	4,231.8	665.2	237.0	428.2	3,138.6	279.1	303.7
Q2	5,714.5	5,032.5	625.7	4,406.8	682.0	246.0	436.0	3,243.6	293.6	307.0
Q3	5,703.2	5,026.3	611.8	4,414.5	676.8	239.1	437.7	3,580.2	296.1	310.5
Q4	5,623.4	4,960.3	587.6	4,372.7	663.1	233.9	429.2	3,675.5	311.7	313.8
2006 Q1	5,611.5	4,943.6	597.1	4,346.5	668.0	245.8	422.2	4,082.8	319.6	317.1
Q2	5,605.2	4,921.3	610.7	4,310.7	683.9	250.5	433.4	3,940.1	314.1	320.2
	Transactions									
2005 Q1	135.6	125.6	11.1	114.5	10.0	15.3	-5.4	4.7	-9.3	2.8
Q2	123.6	112.9	24.5	88.4	10.7	9.0	1.8	1.4	14.5	3.3
Q3	-8.8	-4.1	-13.7	9.6	-4.8	-7.0	2.3	79.3	2.6	3.4
Q4	-24.7	-19.7	-24.4	4.7	-5.0	-5.2	0.2	20.5	14.4	3.3
2006 Q1	89.0	79.0	9.7	69.3	10.0	12.1	-2.1	-2.5	7.9	3.3
Q2	69.9	47.2	13.1	34.1	22.7	4.6	18.1	18.2	-5.4	3.1
	Growth rates									
2005 Q1	4.8	4.8	1.4	5.3	5.0	8.3	3.3	0.5	4.6	4.5
Q2	4.8	5.1	1.9	5.5	3.1	5.8	1.7	0.5	7.1	4.5
Q3	3.7	4.0	-0.4	4.7	1.1	4.3	-0.6	3.2	5.3	4.5
Q4	4.2	4.5	-0.4	5.3	1.7	5.5	-0.3	3.6	7.7	4.2
2006 Q1	3.3	3.5	-0.6	4.1	1.6	3.7	0.5	3.1	14.1	4.4
Q2	2.2	2.0	-2.4	2.7	3.4	1.8	4.2	3.6	6.6	4.2

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												
2005 Q1	4,373.8	597.0	65.7	508.8	2.7	19.8	364.7	63.1	301.6	1,765.1	82.3	1,682.9
Q2	4,509.3	595.8	61.2	511.3	2.7	20.6	360.4	64.7	295.7	1,829.9	83.8	1,746.0
Q3	4,682.9	602.9	60.0	517.7	2.7	22.4	367.1	70.6	296.6	1,874.9	81.8	1,793.1
Q4	4,769.2	612.6	67.8	521.6	2.6	20.6	370.6	76.6	294.0	1,898.1	84.3	1,813.8
2006 Q1	4,917.7	613.0	65.6	525.2	2.5	19.7	383.5	81.0	302.5	1,917.4	88.1	1,829.3
Q2	4,919.0	625.7	68.6	532.6	2.4	22.1	383.6	82.0	301.6	1,930.6	88.7	1,842.0
Transactions												
2005 Q1	83.8	12.5	6.4	6.9	0.2	-1.0	-2.4	0.9	-3.3	45.0	-1.8	46.8
Q2	58.8	-2.0	-5.3	2.2	0.2	0.8	-4.6	1.6	-6.2	34.2	0.6	33.6
Q3	82.1	7.1	-1.2	6.4	0.1	1.8	2.2	1.3	0.8	35.8	-2.0	37.8
Q4	71.4	8.7	7.4	3.1	0.0	-1.9	1.3	5.6	-4.3	41.4	1.8	39.5
2006 Q1	91.5	0.6	-2.0	3.6	-0.1	-0.8	12.9	4.4	8.5	39.6	3.1	36.5
Q2	66.7	12.9	3.0	7.6	0.0	2.4	0.8	1.2	-0.4	25.4	-1.0	26.5
Growth rates												
2005 Q1	6.0	6.8	2.2	8.3	-11.6	-10.5	-1.2	1.1	-1.7	9.6	6.9	9.7
Q2	6.4	5.1	1.8	5.7	23.8	-2.8	-2.0	2.4	-2.9	9.6	6.0	9.8
Q3	7.0	4.8	-2.8	5.3	30.1	12.0	-1.2	5.0	-2.5	9.7	3.0	10.0
Q4	7.0	4.5	12.5	3.7	18.4	-0.8	-1.0	15.0	-4.3	9.1	-1.6	9.6
2006 Q1	6.9	2.4	-1.7	3.0	7.2	-0.3	3.2	20.4	-0.3	8.6	4.3	8.8
Q2	6.9	4.9	11.8	4.0	-3.1	7.5	4.8	19.2	1.6	7.8	2.3	8.0

Main financial assets / Main liabilities

	Shares [1]				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/ units			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	14	15	16	17	18	19	20	21	22	23	24	25
Outstanding amounts													
2005 Q1	1,517.3	725.9	791.4	67.0	129.7	4,536.1	90.1	58.2	21.5	220.3	4,204.3	3,587.3	617.0
Q2	1,591.4	758.1	833.3	87.0	131.9	4,654.9	92.8	63.8	21.6	223.3	4,317.2	3,702.7	614.5
Q3	1,703.8	830.5	873.3	87.8	134.3	4,782.1	92.4	65.2	22.2	251.2	4,416.2	3,793.8	622.4
Q4	1,751.6	853.1	898.5	80.6	136.3	4,904.0	64.9	64.6	22.2	285.9	4,530.9	3,901.8	629.0
2006 Q1	1,864.9	911.3	953.6	79.7	138.9	5,029.0	82.4	81.9	22.1	298.7	4,625.8	3,987.1	638.7
Q2	1,837.6	879.0	958.7	84.1	141.3	5,053.9	85.3	84.7	22.0	272.5	4,674.1	4,032.0	642.1
Transactions													
2005 Q1	25.2	7.0	18.2	-0.3	3.4	85.6	9.7	8.6	0.6	0.0	75.3	62.7	12.7
Q2	29.1	4.5	24.6	6.6	2.0	75.7	2.8	5.5	0.0	0.5	72.4	68.5	4.0
Q3	34.5	16.9	17.6	0.9	2.4	78.0	-0.4	1.4	0.5	1.1	76.8	68.9	7.9
Q4	18.6	-4.8	23.4	-8.1	1.4	85.9	-0.5	-0.6	0.1	4.0	82.3	76.7	5.6
2006 Q1	34.6	0.8	33.7	-0.8	3.8	112.8	17.3	17.1	0.0	0.1	95.4	84.6	10.9
Q2	24.2	6.1	18.1	3.4	3.3	76.6	3.0	2.8	0.0	0.1	73.5	70.1	3.4
Growth rates													
2005 Q1	3.5	2.0	4.8	6.2	4.2	6.3	5.4	23.7	-6.1	1.2	6.6	6.9	4.9
Q2	5.4	3.2	7.5	17.0	4.9	6.5	3.5	17.6	-5.4	1.4	6.9	7.3	4.6
Q3	6.9	4.4	9.2	19.7	5.1	6.8	1.1	22.8	5.7	0.9	7.2	7.6	5.0
Q4	7.4	3.4	11.1	-1.5	7.4	7.4	14.4	30.8	6.0	2.7	7.5	7.9	5.0
2006 Q1	7.7	2.4	12.6	-2.2	7.5	7.8	21.2	40.4	3.1	2.6	7.8	8.3	4.6
Q2	7.0	2.5	11.1	-5.3	8.3	7.6	20.8	32.5	2.8	2.4	7.6	8.1	4.5

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 1)	Non-produced assets	Total	Monetary gold and SDRs	Currency and deposits	Securities other than shares 2)	Loans	Shares and other equity	Insurance technical reserves	Other investment (net) 3)
	1	2	3	4	5	6	7	8	9	10	11	12	13
1999	508.0	1,353.7	-871.5	25.7	0.1	3,313.5	-1.3	566.5	499.5	879.5	1,090.1	264.7	14.4
2000	565.4	1,456.0	-927.2	36.3	0.3	3,282.1	-1.3	369.1	334.9	797.9	1,506.6	251.4	23.5
2001	517.6	1,483.0	-976.7	10.6	0.6	2,797.7	0.5	583.2	578.4	693.8	727.1	254.4	-39.6
2002	453.0	1,481.8	-1,013.9	-15.3	0.5	2,545.7	-0.9	802.0	376.5	520.7	599.7	226.2	21.5
2003	464.0	1,507.3	-1,043.4	-0.3	0.4	2,756.8	-1.7	737.8	576.0	613.6	577.0	240.9	13.2
2004	509.7	1,573.2	-1,086.0	22.6	-0.2	3,148.8	-1.6	1,007.4	647.0	710.5	520.3	257.7	7.6

	Changes in net worth 4)				Net incurrence of liabilities					
	Total	Gross saving	Consumption of fixed capital (-)	Net capital transfers receivable	Total	Currency and deposits	Securities other than shares 2)	Loans	Shares and other equity	Insurance technical reserves
	14	15	16	17	18	19	20	21	22	23
1999	488.6	1,347.3	-871.5	12.8	3,333.0	842.5	554.4	773.5	894.5	268.0
2000	505.3	1,419.7	-927.2	12.8	3,342.1	507.7	474.0	903.2	1,200.7	256.6
2001	481.8	1,451.1	-976.7	7.4	2,833.4	614.0	512.4	673.2	773.1	260.7
2002	517.9	1,521.3	-1,013.9	10.6	2,480.7	637.8	437.7	565.4	610.0	229.8
2003	500.3	1,528.8	-1,043.4	14.9	2,720.5	672.9	587.1	581.0	629.1	250.4
2004	538.9	1,608.4	-1,086.0	16.5	3,119.5	1,120.9	684.5	548.1	506.5	259.5

2. Non-financial corporations

	Net acquisition of non-financial assets			Net acquisition of financial assets					Changes in net worth 4)		Net incurrence of liabilities			
	Total	Gross fixed capital formation	Consumption of fixed capital (-)	Total	Currency and deposits	Securities other than shares 2)	Loans	Shares and other equity	Total	Gross saving	Total	Securities other than shares 2)	Loans	Shares and other equity
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1999	257.5	728.5	-489.2	619.9	29.9	79.6	187.4	319.4	96.6	529.8	780.8	46.8	433.4	289.7
2000	380.8	803.4	-524.2	938.4	68.2	68.5	244.2	543.7	83.4	557.3	1,235.8	70.3	632.6	521.1
2001	279.6	821.3	-554.9	623.3	106.5	45.6	183.2	234.3	95.6	587.9	807.3	104.1	381.0	310.8
2002	219.8	810.8	-576.9	408.8	24.9	22.1	65.5	256.7	123.2	639.8	505.3	17.8	268.5	206.5
2003	218.6	814.5	-592.0	378.0	91.2	-26.0	150.5	202.1	116.3	663.2	480.2	72.5	210.4	183.5
2004	254.8	850.6	-614.2	267.5	83.5	-48.6	85.2	164.9	156.0	714.6	366.3	16.8	165.9	170.5

3. Households 5)

	Net acquisition of non-financial assets			Net acquisition of financial assets					Changes in net worth 4)		Net incurrence of liabilities		Memo:	
	Total	Gross fixed capital formation	Consumption of fixed capital (-)	Total	Currency and deposits	Securities other than shares 2)	Shares and other equity	Insurance technical reserves	Total	Gross saving	Total	Loans	Gross disposable income	Gross saving ratio 6)
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1999	199.1	427.4	-232.9	472.0	116.6	-60.7	190.4	250.0	400.9	608.5	270.3	268.8	4,230.0	14.2
2000	201.4	445.2	-245.1	422.5	78.7	28.8	119.8	245.5	392.7	612.0	231.3	229.3	4,436.0	13.7
2001	184.8	443.9	-257.6	433.2	168.1	59.4	35.7	234.2	435.9	675.6	182.1	180.4	4,667.4	14.3
2002	185.9	455.4	-267.9	493.2	219.6	16.2	0.1	216.3	458.1	719.0	221.0	218.9	4,824.2	14.7
2003	190.1	465.1	-278.6	531.0	217.5	-45.6	92.3	240.0	470.7	735.9	250.4	248.3	4,958.7	14.7
2004	202.5	491.4	-291.9	601.6	237.3	62.8	18.9	246.4	485.9	761.9	318.1	315.8	5,128.9	14.7

Source: ECB.
1) Including net acquisition of valuables.
2) Excluding financial derivatives.
3) Financial derivatives and other accounts receivable/payable.
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 divided by gross disposable income and net increase in claims on pension funds reserves.

FINANCIAL MARKETS

	Total in euro [1]			By euro area residents								
				In euro			In all currencies					
	Outstanding amounts	Gross issues	Net issues	Outstanding amounts	Gross issues	Net issues	Outstanding amounts	Gross issues	Net issues	Annual growth rates	Seasonally adjusted [2]	
											Net issues	6-month growth rates
	1	2	3	4	5	6	7	8	9	10	11	12
						Total						
2005 Aug.	10,630.4	758.3	4.0	9,077.8	705.7	-10.8	10,068.9	746.3	-3.4	7.4	38.8	6.8
Sep.	10,729.4	894.5	100.5	9,113.9	787.6	37.5	10,125.6	832.4	48.6	7.4	48.3	7.3
Oct.	10,744.4	798.4	15.3	9,150.5	745.0	36.7	10,180.2	794.9	53.8	7.5	54.3	6.4
Nov.	10,821.8	801.7	79.1	9,210.5	734.6	61.6	10,267.3	781.5	74.2	7.6	71.1	7.3
Dec.	10,836.1	871.0	12.6	9,187.8	794.8	-24.3	10,249.8	841.6	-24.9	7.6	75.8	6.1
2006 Jan.	10,885.4	972.1	55.1	9,266.7	927.6	84.7	10,332.9	987.8	103.1	7.6	61.5	7.1
Feb.	10,993.7	918.4	105.8	9,346.2	846.7	76.9	10,440.3	903.5	89.6	7.2	61.9	7.5
Mar.	11,147.6	1,052.7	153.6	9,427.5	937.9	81.1	10,525.0	999.4	97.6	7.6	70.7	8.0
Apr.	11,169.4	873.5	18.5	9,479.4	821.8	48.8	10,583.1	883.0	68.1	7.2	56.3	8.0
May	11,295.9	1,008.7	126.6	9,593.6	940.2	114.3	10,706.2	992.4	128.1	7.8	90.9	8.3
June	11,352.7	892.3	61.2	9,613.6	794.0	24.4	10,734.9	844.3	30.3	6.6	22.8	7.2
July	.	.	.	9,649.1	821.0	34.8	10,786.9	871.4	47.3	7.1	56.4	7.0
Aug.	.	.	.	9,671.0	778.8	21.3	10,817.0	821.3	24.7	7.3	74.8	7.2
						Long-term						
2005 Aug.	9,677.5	86.9	-4.9	8,222.6	63.8	-16.8	9,086.3	77.3	-9.3	8.1	28.3	7.4
Sep.	9,745.2	188.6	68.6	8,265.5	143.8	43.5	9,146.1	163.3	54.9	8.0	47.5	7.5
Oct.	9,776.7	166.5	32.5	8,283.1	137.4	18.4	9,180.6	159.3	31.6	8.0	44.8	6.8
Nov.	9,859.1	168.3	83.3	8,348.0	131.9	65.8	9,270.1	152.6	80.5	8.2	76.7	7.7
Dec.	9,903.0	178.4	41.7	8,375.2	147.2	25.2	9,302.8	166.0	27.4	8.3	72.0	6.2
2006 Jan.	9,946.1	195.9	48.3	8,414.5	173.5	44.5	9,343.2	195.4	56.9	8.1	57.3	7.3
Feb.	10,036.0	215.0	88.5	8,476.2	170.7	60.1	9,429.0	196.3	72.3	7.6	49.9	7.8
Mar.	10,134.6	245.3	98.9	8,547.6	194.3	71.8	9,498.3	220.1	80.1	7.8	60.7	8.1
Apr.	10,169.7	173.3	33.6	8,577.1	141.5	28.2	9,536.3	170.6	48.1	7.5	49.5	8.1
May	10,268.0	203.5	98.5	8,663.0	167.4	86.1	9,629.6	187.0	95.7	7.7	63.7	7.8
June	10,324.0	195.2	57.2	8,727.7	167.5	65.7	9,711.8	189.7	79.1	6.8	51.1	7.2
July	.	.	.	8,753.2	158.1	25.8	9,755.3	179.5	39.6	7.2	51.6	7.1
Aug.	.	.	.	8,764.7	71.2	11.5	9,773.6	87.5	21.0	7.6	65.9	7.4

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.
2) For the calculation of the growth rates, see the Technical notes. The 6-month growth rates have been annualised.

4.2 Securities, other than shares, issued by euro area residents, by sector of the issuer and instrument type
(EUR billions ; transactions during the month and end-of-period outstanding amounts; nominal values)

1. Outstanding amounts and gross issues

	Outstanding amounts						Gross issues					
	Total	MFIs (including Eurosystem)	Non-MFI corporations Non-monetary financial corporations	Non-financial corporations	General government Central government	Other general government	Total	MFIs (including Eurosystem)	Non-MFI corporations Non-monetary financial corporations	Non-financial corporations	General government Central government	Other general government
	1	2	3	4	5	6	7	8	9	10	11	12
Total												
2004	9,429	3,713	737	591	4,138	250	8,307	5,480	223	1,028	1,493	83
2005	10,250	4,109	927	610	4,322	283	9,878	6,983	325	1,032	1,444	95
2005 Q3	10,126	4,046	842	613	4,354	271	2,386	1,732	49	251	332	21
Q4	10,250	4,109	927	610	4,322	283	2,418	1,747	116	250	279	26
2006 Q1	10,525	4,260	970	619	4,387	289	2,891	2,107	83	257	421	22
Q2	10,735	4,335	1,034	636	4,432	298	2,720	1,974	108	261	355	22
2006 May	10,706	4,352	1,003	639	4,419	293	992	740	30	94	121	8
June	10,735	4,335	1,034	636	4,432	298	844	595	46	85	110	9
July	10,787	4,370	1,050	637	4,431	299	871	615	29	86	135	6
Aug.	10,817	4,396	1,058	630	4,434	300	821	637	17	82	80	6
Short-term												
2004	926	447	7	90	376	5	6,368	4,574	44	931	785	33
2005	947	482	7	90	363	5	7,808	6,046	45	942	741	33
2005 Q3	979	475	7	99	393	5	1,999	1,560	12	235	184	9
Q4	947	482	7	90	363	5	1,940	1,531	10	221	170	8
2006 Q1	1,027	539	7	98	377	5	2,279	1,817	13	242	199	8
Q2	1,023	531	10	101	376	5	2,172	1,739	16	229	180	8
2006 May	1,077	579	9	106	378	5	805	662	6	78	57	3
June	1,023	531	10	101	376	5	655	509	5	77	61	3
July	1,032	536	10	102	378	5	692	543	5	77	63	3
Aug.	1,043	557	11	96	374	5	734	593	3	80	55	2
Long-term [1]												
2004	8,503	3,266	729	501	3,762	245	1,940	905	179	97	708	49
2005	9,303	3,627	920	519	3,959	278	2,069	937	279	89	702	61
2005 Q3	9,146	3,571	835	514	3,961	265	387	172	38	17	148	12
Q4	9,303	3,627	920	519	3,959	278	478	216	106	29	109	18
2006 Q1	9,498	3,720	963	521	4,010	285	612	290	70	15	222	15
Q2	9,712	3,804	1,024	535	4,056	293	547	234	92	32	175	14
2006 May	9,630	3,774	994	533	4,040	288	187	78	24	15	64	5
June	9,712	3,804	1,024	535	4,056	293	190	86	41	8	49	6
July	9,755	3,834	1,040	534	4,053	294	179	72	24	8	72	3
Aug.	9,774	3,839	1,047	533	4,059	295	87	44	14	1	25	3
Of which long-term fixed rate												
2004	6,380	1,929	416	410	3,439	186	1,193	408	70	61	620	36
2005	6,711	2,016	458	409	3,611	217	1,227	413	91	54	620	48
2005 Q3	6,671	2,014	435	412	3,603	207	235	80	8	8	133	8
Q4	6,711	2,016	458	409	3,611	217	264	95	35	16	103	14
2006 Q1	6,812	2,060	475	404	3,649	225	400	155	31	8	195	12
Q2	6,907	2,079	500	410	3,686	232	331	109	42	20	150	10
2006 May	6,871	2,073	482	410	3,678	227	115	38	7	10	57	3
June	6,907	2,079	500	410	3,686	232	114	40	21	5	41	6
July	6,918	2,085	501	409	3,690	233	109	29	5	6	66	2
Aug.	6,924	2,087	503	408	3,692	234	54	22	7	0	21	3
Of which long-term variable rate												
2004	1,870	1,148	310	77	276	59	620	404	110	32	60	14
2005	2,258	1,343	457	94	304	60	715	429	188	28	58	12
2005 Q3	2,165	1,310	396	86	315	58	124	76	30	6	8	5
Q4	2,258	1,343	457	94	304	60	185	95	70	12	4	4
2006 Q1	2,331	1,383	484	97	307	60	172	108	39	4	18	3
Q2	2,429	1,421	520	108	319	61	174	93	50	12	15	4
2006 May	2,395	1,409	507	104	313	61	62	33	17	5	4	2
June	2,429	1,421	520	108	319	61	59	31	19	3	6	1
July	2,461	1,434	534	109	323	61	59	33	19	2	4	1
Aug.	2,468	1,435	539	109	324	61	25	15	7	1	2	0

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; transactions during the period; nominal values)

2. Net issues

	Non-seasonally adjusted						Seasonally adjusted					
	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												
2004	675.1	350.4	75.2	8.4	209.6	31.5	679.6	354.0	73.1	8.2	212.6	31.7
2005	715.3	315.6	177.2	21.8	168.3	32.2	716.9	319.0	173.0	22.0	170.5	32.4
2005 Q3	49.8	38.3	12.3	-0.8	-4.5	4.5	100.0	51.9	24.6	2.9	13.8	6.8
Q4	103.2	44.8	81.3	-0.2	-35.0	12.3	201.3	78.1	59.2	5.8	47.1	11.0
2006 Q1	290.4	158.7	45.3	10.6	68.7	6.9	194.1	107.0	65.4	7.3	8.4	6.1
Q2	226.5	81.8	66.4	20.9	48.5	8.9	169.9	86.2	53.9	14.2	7.2	8.4
2006 May	128.1	59.5	17.2	14.6	32.5	4.3	90.9	51.0	18.6	9.1	7.8	4.3
June	30.3	-16.8	30.6	-1.0	12.5	5.0	22.8	4.2	16.3	0.0	-1.9	4.2
July	47.3	30.6	15.7	0.4	-0.6	1.3	56.4	22.8	14.0	-2.0	19.4	2.1
Aug.	24.7	19.7	8.1	-6.6	3.0	0.6	74.8	36.9	24.6	-4.5	15.1	2.7
Long-term												
2004	615.1	297.8	73.8	12.0	201.7	29.8	617.8	299.1	71.7	12.0	205.1	30.0
2005	708.5	292.9	177.6	22.2	183.3	32.5	710.2	294.8	173.4	22.1	187.2	32.6
2005 Q3	43.3	28.1	12.7	5.8	-7.7	4.5	83.9	32.1	25.0	7.8	12.3	6.7
Q4	139.4	40.6	81.5	8.6	-3.9	12.7	193.6	68.7	59.4	7.8	45.9	11.6
2006 Q1	209.3	100.8	45.3	2.8	53.4	7.0	168.0	70.3	65.4	8.0	18.3	6.0
Q2	222.9	85.5	63.5	15.5	49.6	8.9	164.3	83.2	50.9	8.9	12.8	8.5
2006 May	95.7	35.3	16.8	9.2	29.9	4.5	63.7	25.7	18.1	5.8	9.7	4.6
June	79.1	28.1	29.4	1.5	15.0	5.0	51.1	35.8	14.7	-1.9	-1.6	4.1
July	39.6	26.1	15.5	-0.1	-2.7	0.9	51.6	21.0	14.0	-2.1	16.6	2.1
Aug.	21.0	6.9	7.7	-0.9	6.6	0.7	65.9	19.2	24.3	1.4	18.4	2.6

C16 Net issues of securities, other than shares, seasonally adjusted and non-seasonally adjusted
(EUR billions; transactions during the month; nominal values)

- net issues
- net issues, seasonally adjusted
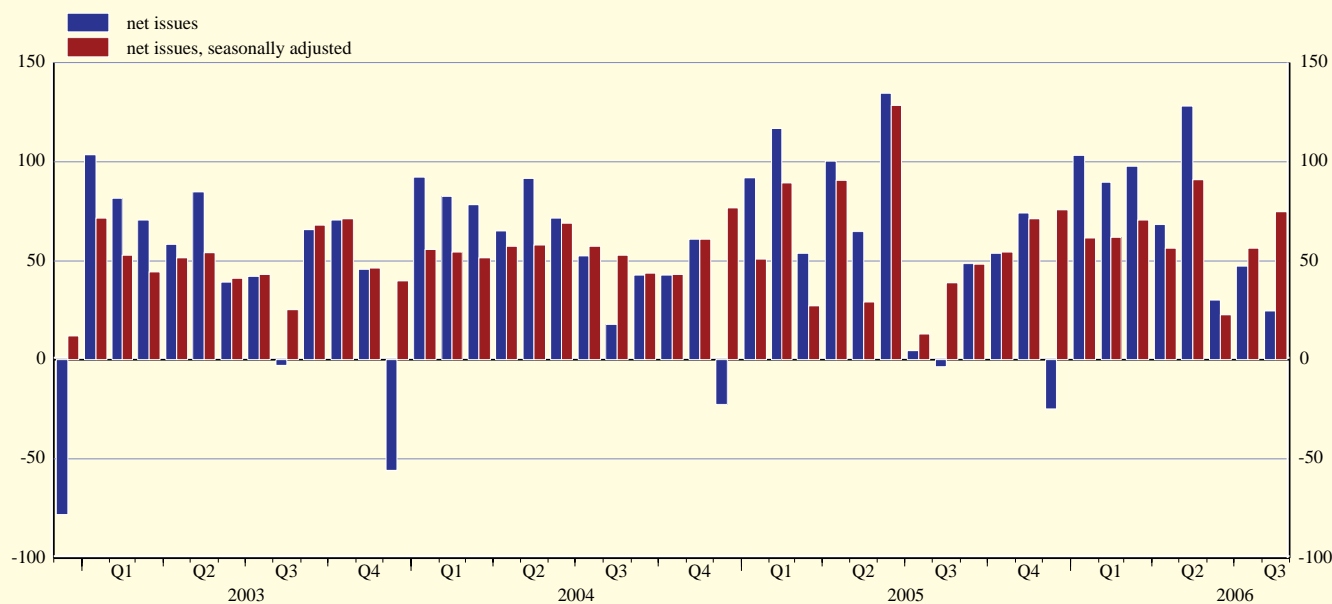
Source: ECB.

4.3 Growth rates of securities, other than shares, issued by euro area residents [1]
(percentage changes)

	Annual growth rates (non-seasonally adjusted)						6-month seasonally adjusted growth rates					
	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												
2005 Aug.	7.4	10.0	18.8	2.3	3.7	12.1	6.8	9.6	22.9	1.9	2.2	9.4
Sep.	7.4	9.4	21.2	2.9	3.8	11.8	7.3	9.2	23.3	1.9	3.4	10.2
Oct.	7.5	9.4	21.4	4.1	3.6	12.2	6.4	8.4	23.5	2.0	2.2	9.0
Nov.	7.6	9.4	21.1	3.2	4.0	12.3	7.3	9.2	22.3	1.5	3.3	13.8
Dec.	7.6	8.4	23.8	3.7	4.1	12.9	6.1	6.6	21.4	2.9	2.8	13.9
2006 Jan.	7.6	9.1	24.3	3.6	3.6	11.3	7.1	7.7	26.2	4.6	3.1	12.7
Feb.	7.2	8.9	26.9	3.2	2.5	11.9	7.5	8.1	31.0	4.6	2.8	14.2
Mar.	7.6	9.3	27.3	3.0	3.0	11.6	8.0	9.3	31.5	4.3	2.6	13.0
Apr.	7.2	8.9	27.4	2.9	2.4	10.2	8.0	9.3	31.3	3.8	2.7	11.4
May	7.8	10.0	26.7	4.3	2.6	12.1	8.3	10.6	31.3	7.3	1.8	10.5
June	6.6	8.1	24.7	5.0	1.8	12.3	7.2	9.5	28.0	7.1	0.7	10.5
July	7.1	8.3	26.6	5.1	2.2	11.6	7.0	8.9	27.1	5.6	1.2	10.6
Aug.	7.3	8.5	28.2	3.9	2.5	12.0	7.2	8.8	25.7	3.2	2.3	10.0
Long-term												
2005 Aug.	8.1	10.0	18.8	3.5	4.8	12.4	7.4	9.3	23.5	4.5	3.0	9.9
Sep.	8.0	9.3	21.3	3.7	4.8	12.2	7.5	8.5	23.7	4.1	3.9	10.5
Oct.	8.0	9.2	21.5	4.3	4.7	12.5	6.8	8.4	24.0	5.0	2.3	9.1
Nov.	8.2	9.3	21.2	3.7	5.0	13.0	7.7	9.0	22.7	5.5	3.6	14.2
Dec.	8.3	8.9	24.1	4.4	4.9	13.2	6.2	5.8	21.8	6.3	3.0	14.6
2006 Jan.	8.1	9.1	24.6	5.1	4.2	11.8	7.3	7.3	26.5	7.4	3.2	13.1
Feb.	7.6	8.5	27.3	6.1	3.0	12.6	7.8	7.6	31.1	7.6	2.9	15.0
Mar.	7.8	8.2	27.7	5.2	3.6	12.1	8.1	7.9	31.9	6.3	3.3	13.6
Apr.	7.5	8.1	27.6	5.6	3.0	10.5	8.1	7.8	31.4	6.2	3.6	12.0
May	7.7	8.4	26.9	7.0	3.1	12.5	7.8	7.7	31.2	8.6	2.6	11.0
June	6.8	7.2	24.7	6.5	2.3	12.7	7.2	8.6	27.5	6.6	1.6	10.7
July	7.2	7.7	26.5	6.1	2.6	11.9	7.1	8.0	26.6	4.7	2.1	10.6
Aug.	7.6	7.7	28.0	5.5	3.1	12.4	7.4	7.9	25.2	3.5	3.3	9.9

C17 Annual growth rates of long-term debt securities, by sector of the issuer, in all currencies combined
(annual percentage changes)

- general government
- MFIs (including Eurosystem)
- non-MFI corporations

Source: ECB.
1)   For the calculation of the growth rates, see the Technical notes. The 6-month growth rates have been annualised.

	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											
2004	5.1	3.1	6.5	3.4	5.8	14.7	16.2	18.5	27.1	8.8	0.3	26.5
2005	4.7	3.1	5.7	0.3	5.4	15.0	19.4	18.3	35.9	22.6	9.8	4.7
2005 Q3	4.5	3.0	6.4	0.6	5.0	15.6	20.7	19.7	38.9	17.7	11.5	1.7
Q4	4.7	3.9	6.4	0.5	4.8	15.9	19.1	15.3	43.9	19.6	11.7	1.9
2006 Q1	4.3	4.2	8.9	0.7	3.5	15.6	19.0	14.3	48.9	24.5	7.8	1.1
Q2	4.2	4.4	11.7	1.0	3.0	13.5	16.9	11.9	46.2	28.3	3.6	5.1
2006 Mar.	4.4	4.4	10.3	0.3	3.6	14.5	18.0	12.7	51.3	24.9	4.9	3.2
Apr.	4.1	4.3	11.5	0.5	3.1	12.3	17.1	12.3	48.9	26.8	2.0	3.4
May	4.3	4.7	11.9	1.8	3.0	14.0	17.4	12.2	45.5	30.3	5.1	6.5
June	3.8	4.1	13.2	1.1	2.2	14.2	14.6	9.8	38.4	30.6	2.7	7.5
July	4.3	4.5	14.4	0.7	2.8	13.7	15.4	10.1	40.8	31.3	4.3	5.6
Aug.	4.5	4.7	15.7	0.4	3.0	14.0	15.6	10.1	42.3	29.7	4.2	6.4
	In euro											
2004	4.8	1.3	10.5	2.0	5.9	14.7	15.6	17.8	27.2	9.1	0.2	25.3
2005	4.3	0.9	9.1	-0.1	5.3	15.3	18.8	17.2	35.2	22.6	10.2	5.3
2005 Q3	4.1	1.0	9.9	0.4	4.9	16.0	20.5	18.9	38.4	18.5	12.1	2.6
Q4	4.2	1.9	8.5	0.6	4.6	16.2	18.3	13.9	41.6	21.2	12.2	2.2
2006 Q1	3.7	2.4	9.1	0.5	3.5	16.1	18.2	12.9	46.2	26.4	8.2	0.9
Q2	3.6	2.7	10.0	0.8	3.1	13.9	15.7	10.2	42.1	31.6	3.7	4.0
2006 Mar.	3.8	2.7	9.2	0.2	3.5	15.1	17.3	11.5	48.2	26.9	5.0	2.8
Apr.	3.5	2.5	10.3	0.3	3.1	12.7	15.8	10.6	44.6	29.8	2.1	2.8
May	3.8	3.1	10.3	1.5	3.1	14.4	16.1	10.4	41.3	34.1	5.2	4.9
June	3.2	2.6	9.9	0.8	2.4	14.1	12.9	7.6	34.1	34.6	2.7	5.9
July	3.6	3.0	11.0	-0.5	2.9	13.6	13.9	8.1	35.9	35.4	4.4	4.1
Aug.	3.7	3.2	11.3	-0.9	3.1	13.9	14.2	8.3	37.4	33.4	4.2	5.1

C18 Annual growth rates of short-term debt securities, by sector of the issuer, in all currencies combined
(annual percentage changes)

- general government
- MFIs (including Eurosystem)
- non-MFI corporations
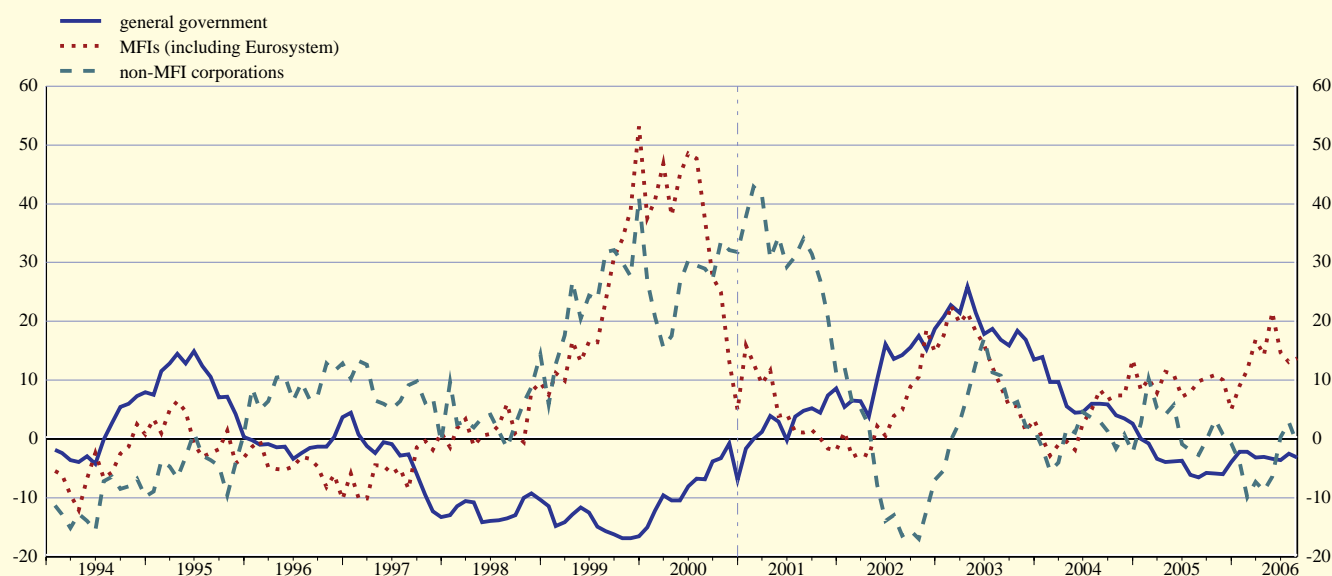
Source: ECB.
1) For the calculation of the growth rates, see the Technical notes.

4.4 Quoted shares issued by euro area residents [1]
(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
2004 Aug.	3,621.2	102.0	0.9	562.5	1.4	355.3	1.6	2,703.4	0.6
Sep.	3,707.9	102.1	0.9	579.6	1.3	364.2	2.1	2,764.1	0.7
Oct.	3,787.6	102.2	0.9	598.0	1.2	374.6	2.0	2,815.0	0.7
Nov.	3,906.5	102.5	1.2	623.9	2.8	388.6	0.9	2,894.1	0.9
Dec.	4,033.8	102.6	1.2	643.7	2.9	407.7	1.1	2,982.4	0.8
2005 Jan.	4,138.0	102.6	1.1	662.6	2.9	414.2	0.9	3,061.3	0.8
Feb.	4,254.5	102.7	1.1	681.1	2.6	434.1	1.0	3,139.2	0.8
Mar.	4,242.4	102.7	0.9	677.7	2.3	424.0	1.0	3,140.7	0.6
Apr.	4,094.7	102.9	1.0	656.0	2.1	409.4	2.2	3,029.3	0.5
May	4,272.7	102.9	1.0	678.1	2.1	424.0	2.2	3,170.5	0.6
June	4,381.2	103.1	1.1	698.0	2.4	441.5	2.9	3,241.6	0.6
July	4,631.2	103.1	1.0	727.9	2.3	466.7	2.4	3,436.6	0.6
Aug.	4,605.9	103.1	1.1	723.4	3.0	457.1	2.4	3,425.4	0.5
Sep.	4,827.2	103.3	1.1	764.1	3.2	483.7	2.6	3,579.3	0.5
Oct.	4,659.4	103.4	1.2	752.4	3.2	480.5	3.1	3,426.6	0.5
Nov.	4,882.0	103.7	1.2	809.2	1.3	513.6	3.2	3,559.2	0.9
Dec.	5,056.2	103.8	1.2	836.4	0.8	540.8	3.4	3,679.1	1.0
2006 Jan.	5,289.1	103.9	1.3	884.8	1.2	535.8	3.4	3,868.5	1.0
Feb.	5,429.2	103.9	1.2	938.8	1.2	561.8	3.4	3,928.7	0.9
Mar.	5,629.8	103.9	1.2	962.3	1.8	579.1	3.4	4,088.4	0.7
Apr.	5,653.2	104.0	1.1	948.8	1.4	572.9	2.0	4,131.5	0.9
May	5,364.6	104.2	1.2	896.7	1.6	533.5	2.1	3,934.4	1.0
June	5,376.5	104.3	1.1	905.0	1.5	529.6	1.3	3,941.9	1.0
July	5,372.7	104.4	1.2	918.5	1.9	543.3	1.5	3,910.8	1.0
Aug.	5,536.2	104.4	1.2	958.7	1.6	594.3	1.5	3,983.3	1.1

C19 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.

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
2004 Aug.	2.0	3.1	-1.1	0.1	2.2	-2.1	0.0	0.0	0.0	1.9	1.0	0.9
Sep.	4.9	2.2	2.8	0.1	0.9	-0.8	0.0	0.0	0.0	4.8	1.3	3.5
Oct.	3.3	0.7	2.6	0.1	0.0	0.1	0.0	0.0	0.0	3.2	0.7	2.5
Nov.	15.3	3.6	11.7	12.8	0.3	12.5	0.1	0.0	0.1	2.4	3.3	-0.9
Dec.	5.7	2.2	3.5	1.2	0.0	1.2	0.4	0.1	0.3	4.1	2.1	2.0
2005 Jan.	1.1	1.2	0.0	0.1	0.0	0.1	0.2	0.0	0.2	0.9	1.2	-0.3
Feb.	4.0	1.3	2.7	0.1	0.0	0.1	0.2	0.1	0.1	3.7	1.2	2.5
Mar.	5.0	1.8	3.2	0.9	0.8	0.1	0.1	0.1	0.0	4.0	0.8	3.2
Apr.	10.4	2.3	8.1	2.5	0.0	2.5	5.8	0.0	5.7	2.1	2.3	-0.2
May	4.0	3.2	0.7	0.0	0.0	0.0	0.3	0.6	-0.3	3.7	2.7	1.0
June	11.6	4.9	6.7	1.9	1.0	0.9	4.1	0.7	3.3	5.6	3.2	2.5
July	7.5	6.6	0.9	2.4	2.9	-0.4	0.5	0.0	0.5	4.5	3.7	0.8
Aug.	2.9	2.2	0.8	2.5	0.0	2.5	0.0	0.2	-0.1	0.4	2.0	-1.6
Sep.	8.2	2.3	5.9	0.4	0.0	0.4	1.1	0.1	1.0	6.7	2.2	4.5
Oct.	8.3	1.6	6.7	0.0	0.1	-0.1	2.6	0.0	2.6	5.6	1.4	4.2
Nov.	17.0	3.8	13.2	2.1	0.0	2.1	0.5	0.0	0.5	14.4	3.8	10.6
Dec.	10.9	7.3	3.5	1.3	4.3	-3.0	1.9	0.4	1.5	7.6	2.6	5.0
2006 Jan.	4.8	0.8	4.1	3.3	0.0	3.3	0.2	0.0	0.2	1.3	0.7	0.6
Feb.	1.7	1.7	0.0	0.3	0.1	0.2	0.0	0.0	0.0	1.3	1.6	-0.3
Mar.	9.1	5.4	3.7	5.7	0.0	5.7	0.1	0.0	0.1	3.3	5.4	-2.1
Apr.	5.8	0.4	5.4	0.0	0.2	-0.1	0.0	0.0	0.0	5.8	0.3	5.5
May	8.5	2.2	6.3	1.9	0.0	1.8	0.1	0.0	0.1	6.5	2.2	4.4
June	9.4	2.6	6.7	0.8	0.3	0.5	0.0	0.0	0.0	8.5	2.4	6.2
July	12.5	7.1	5.3	3.6	0.4	3.2	5.1	3.5	1.6	3.8	3.2	0.6
Aug.	3.2	1.6	1.5	0.4	0.0	0.4	0.0	0.1	-0.1	2.7	1.5	1.2

C20 Gross issues of quoted shares by sector of the issuer
(EUR billions; transactions during the month; market values)

- non-financial corporations
- MFIs
- non-monetary financial corporations
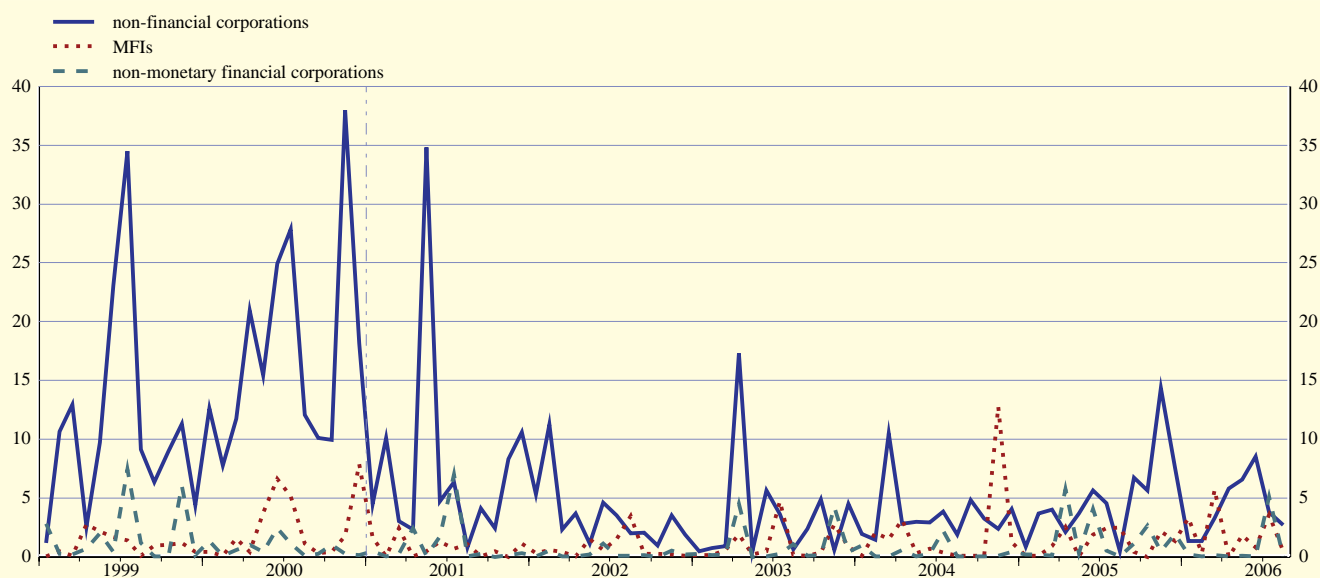
Source: ECB.
1) For the calculation of the index and the growth rates, see the Technical notes.

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 [1]	With agreed maturity			Redeemable at notice [1], [2]		Overnight [1]	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
2005 Sep.	0.69	1.97	2.05	2.04	1.98	2.29	0.97	2.04	2.23	2.97	2.03
Oct.	0.69	1.99	2.28	2.16	1.97	2.27	0.97	2.04	2.58	3.54	2.01
Nov.	0.70	2.02	2.34	2.18	2.00	2.27	1.00	2.08	2.18	3.52	2.02
Dec.	0.71	2.15	2.25	2.21	1.97	2.30	1.02	2.25	2.48	3.55	2.22
2006 Jan.	0.73	2.21	2.47	2.56	2.00	2.32	1.05	2.27	2.40	3.52	2.25
Feb.	0.74	2.24	2.52	2.36	1.97	2.34	1.08	2.31	2.69	3.37	2.26
Mar.	0.76	2.37	2.60	2.45	1.98	2.37	1.14	2.48	2.93	3.28	2.44
Apr.	0.79	2.40	2.81	2.49	2.00	2.42	1.16	2.51	2.93	3.71	2.49
May	0.79	2.45	2.86	2.48	2.00	2.48	1.18	2.58	3.18	3.38	2.48
June	0.81	2.57	2.88	2.57	2.03	2.52	1.22	2.70	3.22	3.27	2.65
July	0.81	2.70	3.04	2.80	2.08	2.58	1.24	2.78	3.31	3.98	2.76
Aug.	0.85	2.79	2.97	2.82	2.23	2.64	1.32	2.91	3.25	3.76	2.86

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

	Bank overdrafts [1]	Consumer credit				Lending for house purchase					Other lending by initial rate fixation		
		By initial rate fixation			Annual percentage rate of charge [3]	By initial rate fixation				Annual percentage rate of charge [3]	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
2005 Sep.	9.61	7.03	6.43	7.94	7.83	3.31	3.69	3.99	3.97	3.82	3.85	4.51	4.29
Oct.	9.65	6.82	6.43	8.01	7.74	3.33	3.68	3.99	3.96	3.81	3.88	4.50	4.33
Nov.	9.70	6.75	6.40	7.85	7.61	3.38	3.71	3.98	3.98	3.84	4.00	4.28	4.37
Dec.	9.67	6.76	6.36	7.43	7.45	3.49	3.85	4.03	4.01	3.98	4.06	4.57	4.40
2006 Jan.	9.80	6.94	6.48	8.13	7.87	3.61	3.91	4.14	4.06	4.09	4.15	4.59	4.34
Feb.	9.61	6.88	6.34	7.95	7.76	3.66	3.97	4.14	4.06	4.08	4.24	4.66	4.35
Mar.	9.90	6.79	6.28	7.88	7.65	3.73	3.99	4.22	4.10	4.15	4.33	4.72	4.49
Apr.	9.76	7.06	6.31	7.92	7.76	3.84	4.07	4.33	4.17	4.29	4.30	4.85	4.62
May	9.78	7.24	6.23	7.89	7.77	3.90	4.15	4.40	4.19	4.34	4.43	5.05	4.76
June	9.84	7.11	6.31	7.82	7.71	4.00	4.19	4.48	4.25	4.42	4.52	5.09	4.71
July	9.86	7.33	6.33	8.02	7.87	4.11	4.23	4.52	4.34	4.52	4.55	5.24	4.74
Aug.	9.93	7.84	6.39	8.15	8.11	4.21	4.33	4.60	4.37	4.59	4.64	5.27	4.84

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

	Bank overdrafts [1]	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	2	3	4	5	6	7
2005 Sep.	5.13	3.81	4.36	4.05	2.97	3.40	3.88
Oct.	5.11	3.88	4.43	4.04	2.94	3.58	3.80
Nov.	5.09	3.91	4.44	4.03	3.10	3.60	3.98
Dec.	5.12	3.99	4.50	4.12	3.25	3.58	3.96
2006 Jan.	5.23	4.07	4.59	4.13	3.18	3.72	3.96
Feb.	5.29	4.13	4.69	4.16	3.26	4.36	4.02
Mar.	5.30	4.23	4.59	4.16	3.50	3.83	4.18
Apr.	5.40	4.34	4.73	4.15	3.51	3.94	4.22
May	5.36	4.38	4.83	4.26	3.57	4.13	4.32
June	5.45	4.47	4.84	4.33	3.74	4.12	4.23
July	5.52	4.57	4.99	4.38	3.84	4.21	4.36
Aug.	5.57	4.69	5.09	4.53	3.97	4.33	4.42

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. Interest rates on deposits (outstanding amounts)

	Deposits from households					Deposits from non-financial corporations			Repos
	Overnight [1]	With agreed maturity		Redeemable at notice [1),2)]		Overnight [1]	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
2005 Sep.	0.69	1.92	3.19	1.98	2.29	0.97	2.12	3.56	2.01
Oct.	0.69	1.93	3.17	1.97	2.27	0.97	2.12	3.40	2.03
Nov.	0.70	1.96	3.15	2.00	2.27	1.00	2.16	3.43	2.06
Dec.	0.71	2.01	3.15	1.97	2.30	1.02	2.30	3.41	2.16
2006 Jan.	0.73	2.05	3.10	2.00	2.32	1.05	2.32	3.47	2.21
Feb.	0.74	2.09	3.12	1.97	2.34	1.08	2.38	3.47	2.27
Mar.	0.76	2.16	3.00	1.98	2.37	1.14	2.48	3.46	2.38
Apr.	0.79	2.21	3.01	2.00	2.42	1.16	2.53	3.51	2.42
May	0.79	2.27	3.04	2.00	2.48	1.18	2.59	3.52	2.49
June	0.81	2.34	3.07	2.03	2.52	1.22	2.72	3.53	2.63
July	0.81	2.43	3.02	2.08	2.58	1.24	2.80	3.57	2.71
Aug.	0.85	2.52	3.05	2.23	2.64	1.32	2.93	3.64	2.81

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
2005 Sep.	4.49	4.23	4.59	7.91	6.85	5.67	4.25	3.78	4.26
Oct.	4.49	4.19	4.57	7.92	6.80	5.64	4.24	3.77	4.24
Nov.	4.48	4.17	4.53	7.86	6.77	5.66	4.29	3.79	4.25
Dec.	4.54	4.14	4.52	7.89	6.77	5.62	4.35	3.84	4.24
2006 Jan.	4.62	4.14	4.50	7.99	6.78	5.60	4.42	3.88	4.26
Feb.	4.59	4.17	4.54	7.97	6.78	5.68	4.49	3.95	4.31
Mar.	4.60	4.15	4.52	8.06	6.80	5.73	4.53	3.98	4.31
Apr.	4.63	4.16	4.52	8.10	6.73	5.75	4.59	4.05	4.34
May	4.63	4.16	4.52	8.10	6.70	5.71	4.64	4.10	4.36
June	4.69	4.21	4.55	8.10	6.75	5.73	4.72	4.19	4.40
July	4.70	4.21	4.57	8.15	6.71	5.82	4.81	4.27	4.45
Aug.	4.75	4.23	4.60	8.21	6.72	5.83	4.85	4.33	4.48

C21 New deposits with agreed maturity
(percentages per annum excluding charges; period averages)

- by households, up to 1 year
- by non-financial corporations, up to 1 year
- by households, over 2 years
- by non-financial corporations, over 2 years

C22 New loans at floating rate and up to 1 year initial rate fixation (percentages per annum excluding charges; period averages)

- to households for consumption
- to households for house purchase
- to non-financial corporations, up to EUR 1 million
- to non-financial corporations, over EUR 1 million
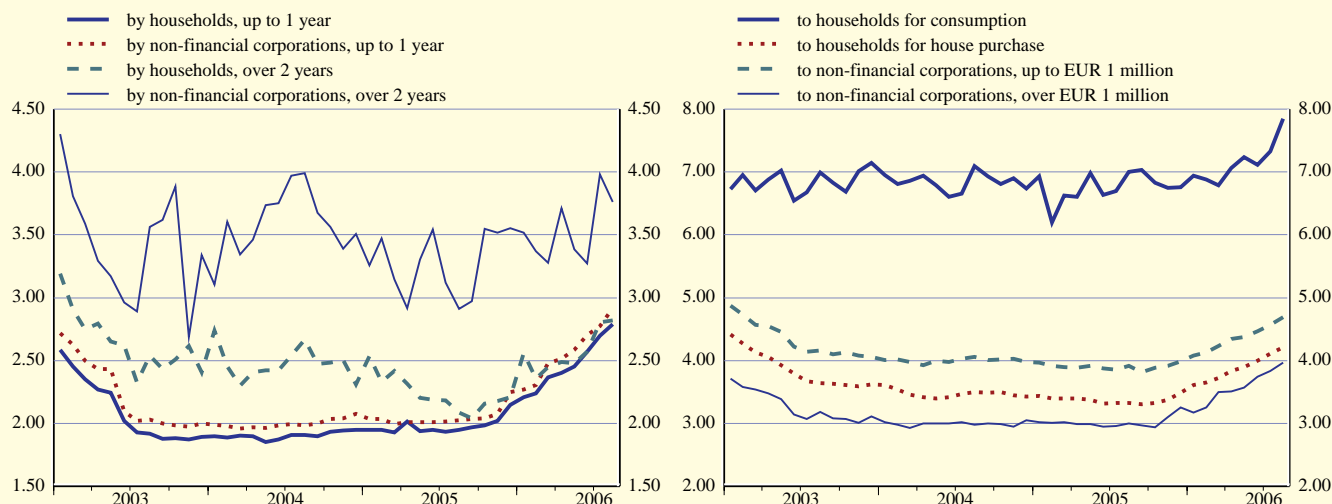
Source: ECB.

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

	Euro area [1]					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
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
2005	2.09	2.14	2.18	2.23	2.33	3.56	0.06
2005 Q3	2.08	2.11	2.13	2.15	2.20	3.77	0.06
Q4	2.14	2.25	2.34	2.46	2.63	4.34	0.06
2006 Q1	2.40	2.50	2.61	2.75	2.95	4.76	0.08
Q2	2.63	2.74	2.90	3.06	3.32	5.21	0.21
Q3	2.94	3.06	3.22	3.41	3.62	5.43	0.41
2005 Oct.	2.07	2.12	2.20	2.27	2.41	4.17	0.06
Nov.	2.09	2.22	2.36	2.50	2.68	4.35	0.06
Dec.	2.28	2.41	2.47	2.60	2.78	4.49	0.07
2006 Jan.	2.33	2.39	2.51	2.65	2.83	4.60	0.07
Feb.	2.35	2.46	2.60	2.72	2.91	4.76	0.07
Mar.	2.52	2.63	2.72	2.87	3.11	4.92	0.10
Apr.	2.63	2.65	2.79	2.96	3.22	5.07	0.11
May	2.58	2.69	2.89	3.06	3.31	5.18	0.19
June	2.70	2.87	2.99	3.16	3.40	5.38	0.32
July	2.81	2.94	3.10	3.29	3.54	5.50	0.40
Aug.	2.97	3.09	3.23	3.41	3.62	5.42	0.41
Sep.	3.04	3.16	3.34	3.53	3.72	5.38	0.42
Oct.	3.28	3.35	3.50	3.64	3.80	5.37	0.44

C23 Euro area money market rates
(monthly; percentages per annum)

- 1-month rate
- 3-month rate
- 12-month rate

C24 3-month money market rates
(monthly; percentages per annum)
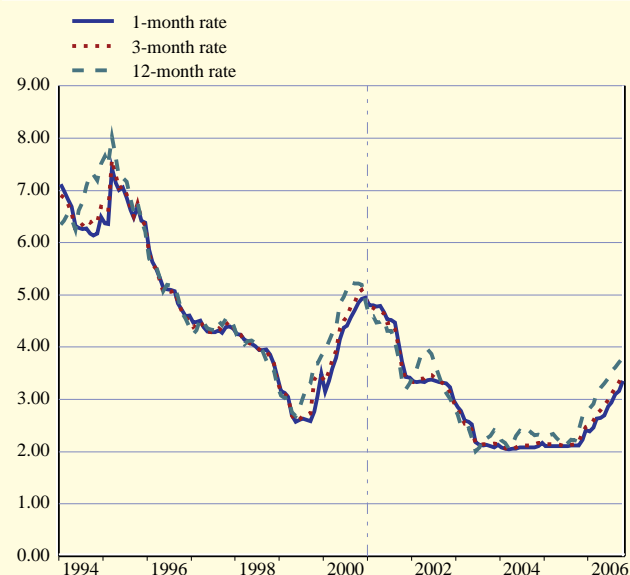
- euro area
- Japan
- United States
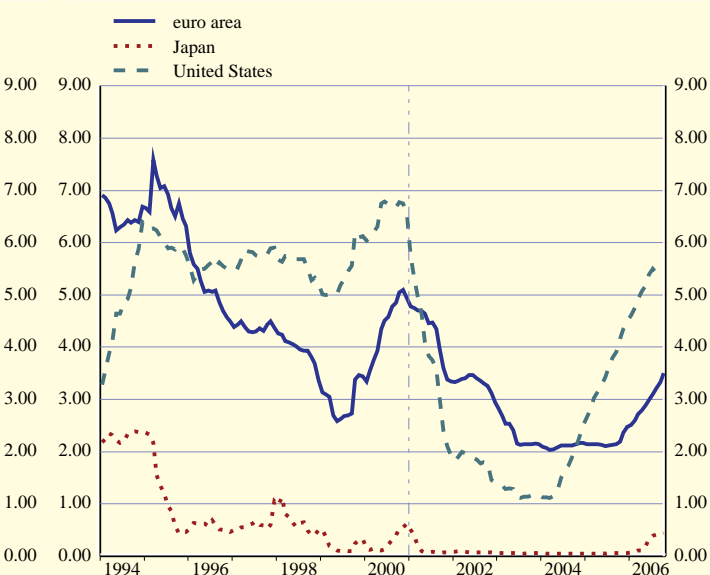
Source: ECB.
1) Before January 1999 synthetic euro area rates were calculated on the basis of national rates weighted by GDP. For further information, see the General notes.

4.7 Government bond yields
(percentages per annum; period averages)

	Euro area [1]					United States	Japan
	2 years	3 years	5 years	7 years	10 years	10 years	10 years
	1	2	3	4	5	6	7
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
2005	2.38	2.55	2.85	3.14	3.44	4.28	1.39
2005 Q3	2.21	2.36	2.65	2.94	3.26	4.21	1.36
Q4	2.66	2.79	3.01	3.18	3.42	4.48	1.53
2006 Q1	3.02	3.11	3.28	3.39	3.56	4.57	1.58
Q2	3.41	3.53	3.75	3.88	4.05	5.07	1.90
Q3	3.60	3.66	3.76	3.84	3.97	4.90	1.80
2005 Oct.	2.45	2.61	2.85	3.05	3.32	4.45	1.54
Nov.	2.73	2.86	3.10	3.28	3.53	4.53	1.52
Dec.	2.80	2.88	3.07	3.21	3.41	4.46	1.54
2006 Jan.	2.86	2.94	3.10	3.21	3.39	4.41	1.47
Feb.	2.97	3.07	3.26	3.37	3.55	4.56	1.57
Mar.	3.22	3.30	3.47	3.57	3.73	4.72	1.70
Apr.	3.37	3.49	3.71	3.83	4.01	4.99	1.91
May	3.38	3.52	3.74	3.89	4.06	5.10	1.91
June	3.47	3.59	3.78	3.91	4.07	5.10	1.87
July	3.58	3.69	3.84	3.94	4.10	5.10	1.91
Aug.	3.59	3.65	3.75	3.83	3.97	4.88	1.81
Sep.	3.62	3.64	3.70	3.74	3.84	4.72	1.68
Oct.	3.69	3.70	3.77	3.80	3.88	4.73	1.76

C25 Euro area government bond yields
(monthly; percentages per annum)

- 2-year yield
- 5-year yield
- 7-year yield

C26 10-year government bond yields
(monthly; percentages per annum)

- euro area
- United States
- Japan
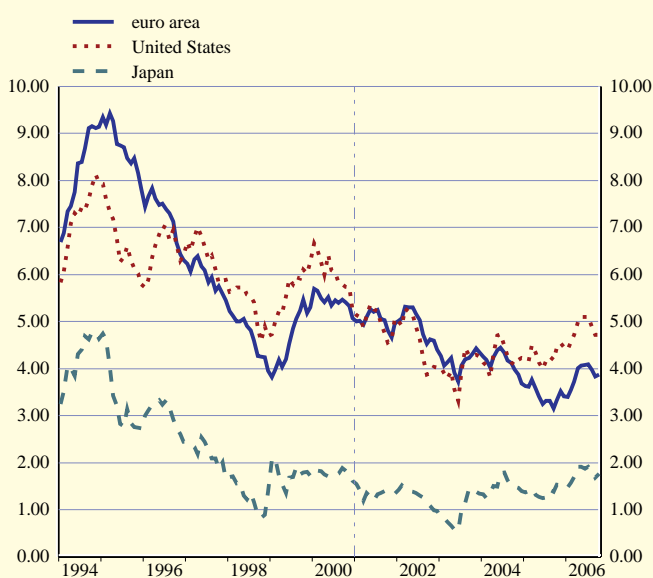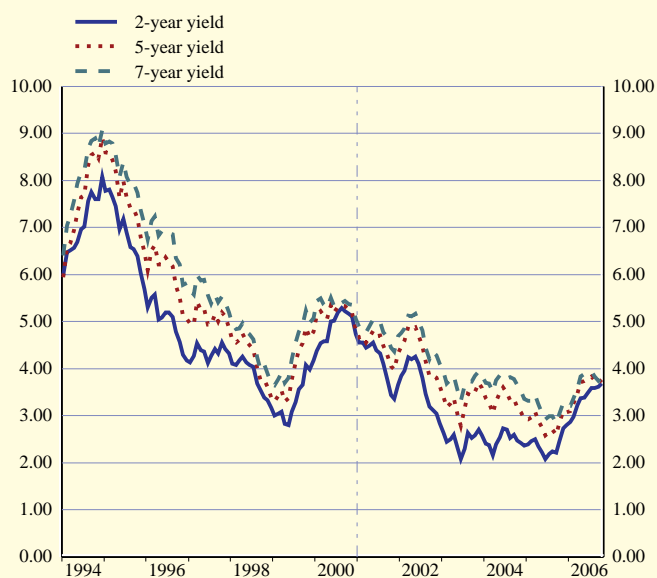
Source: ECB.
1) To December 1998, euro area yields are calculated on the basis of harmonised national government bond yields weighted by GDP. Thereafter, the weights are the nominal outstanding amounts of government bonds in each maturity band.

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	Standard & Poor's 500	Nikkei 225
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
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
2005	293.8	3,208.6	307.0	181.3	245.1	378.6	287.7	307.3	297.2	334.1	433.1	457.0	1,207.4	12,421.3
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	12,310.9
Q4	315.2	3,433.1	334.0	185.5	262.8	411.8	316.8	327.6	325.0	358.6	423.4	478.3	1,231.6	14,487.0
2006 Q1	347.6	3,729.4	373.1	199.2	286.5	423.6	358.4	379.7	354.5	413.3	415.8	522.4	1,283.2	16,207.8
Q2	348.2	3,692.9	386.0	199.6	285.5	412.8	357.5	387.5	358.0	417.7	403.5	539.1	1,280.9	16,190.0
Q3	350.2	3,726.8	399.7	202.0	287.9	410.1	364.7	378.4	325.8	438.1	397.8	532.9	1,288.6	15,622.2
2005 Oct.	306.8	3,340.1	322.4	182.4	260.6	405.3	302.6	317.3	312.4	347.7	434.0	466.8	1,192.0	13,384.9
Nov.	312.7	3,404.9	330.8	183.2	259.3	411.2	316.4	322.3	322.9	354.0	418.2	471.6	1,238.7	14,362.0
Dec.	325.7	3,550.1	348.4	190.8	268.4	418.5	330.8	342.7	339.2	373.5	418.5	496.1	1,262.4	15,664.0
2006 Jan.	335.5	3,626.9	356.5	196.1	276.1	429.6	340.6	361.4	344.6	391.3	414.6	519.2	1,277.7	16,103.4
Feb.	349.0	3,743.8	375.9	198.0	288.5	424.3	361.7	383.9	351.7	417.8	409.1	513.8	1,277.2	16,187.6
Mar.	358.0	3,814.9	386.5	203.1	294.9	417.4	372.5	393.6	366.3	430.4	422.7	532.9	1,293.7	16,325.2
Apr.	362.3	3,834.6	399.0	204.8	299.9	433.6	372.9	404.0	381.1	429.3	415.8	545.4	1,301.5	17,233.0
May	351.7	3,726.8	392.2	200.9	287.9	415.8	362.7	394.5	358.9	420.4	401.0	542.2	1,289.6	16,430.7
June	331.8	3,528.7	367.8	193.6	269.8	390.7	338.2	365.2	336.0	404.4	394.8	530.2	1,253.1	14,990.3
July	339.6	3,617.3	389.0	196.6	277.0	409.5	348.2	369.8	321.7	415.7	393.3	548.6	1,261.2	15,133.2
Aug.	351.1	3,743.9	399.7	200.9	289.3	418.2	366.5	375.9	324.4	442.3	394.9	525.3	1,287.2	15,786.8
Sep.	359.9	3,817.6	410.4	208.4	297.2	401.9	379.1	389.6	331.3	456.0	405.6	525.4	1,317.5	15,930.9
Oct.	375.8	3,975.8	435.6	216.9	306.8	419.4	397.5	405.6	341.1	475.6	431.1	532.2	1,363.4	16,515.7

C27 Dow Jones EURO STOXX Broad, Standard & Poor's 500 and Nikkei 225
(January 1994 = 100; monthly averages)
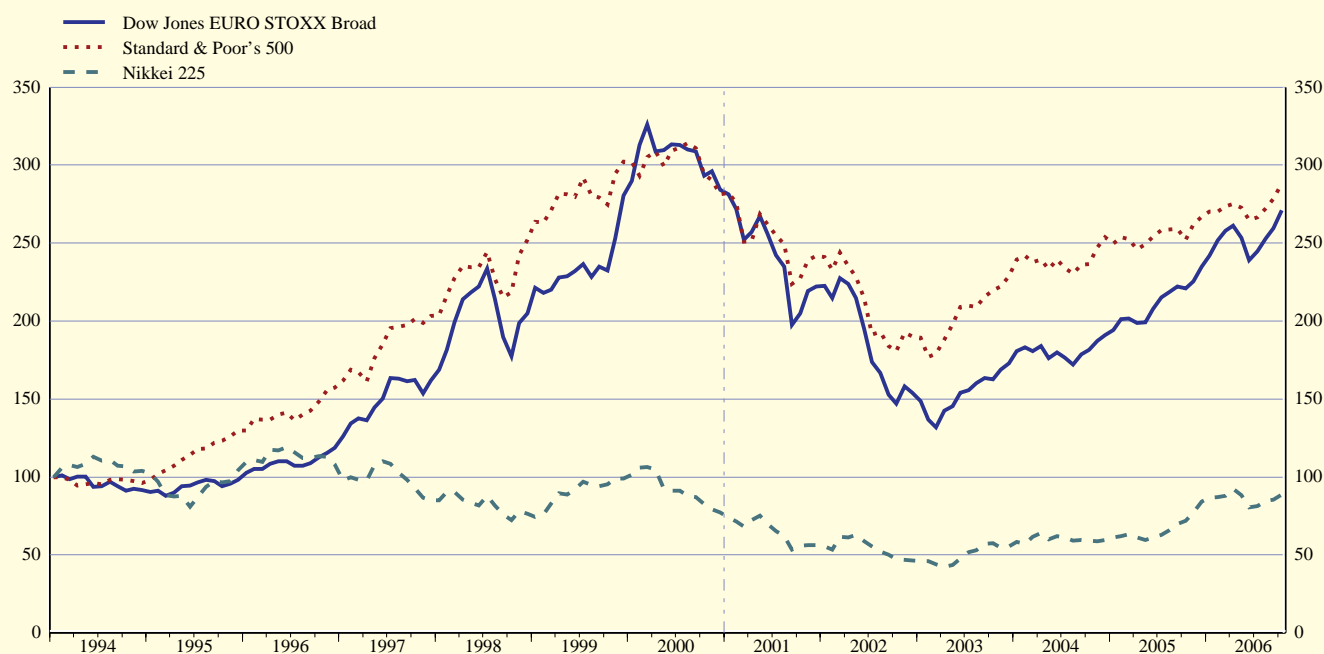
- Dow Jones EURO STOXX Broad
- Standard & Poor's 500
- Nikkei 225

Source: ECB.

5 PRICES, OUTPUT, DEMAND AND LABOUR MARKETS

1. Harmonised Index of Consumer Prices

	Total					Total (s.a., percentage change on previous period)					
	Index 2005 = 100	Total	Total excl. unprocessed food and energy	Goods	Services	Total	Processed food	Unprocessed food	Non-energy industrial goods	Energy (n.s.a.)	Services
% of total [1]	100.0	100.0	83.4	59.2	40.8	100.0	11.8	7.4	30.7	9.2	40.8
	1	2	3	4	5	6	7	8	9	10	11
2002	93.9	2.2	2.5	1.7	3.1	-	-	-	-	-	-
2003	95.8	2.1	2.0	1.8	2.5	-	-	-	-	-	-
2004	97.9	2.1	2.1	1.8	2.6	-	-	-	-	-	-
2005	100.0	2.2	1.5	2.1	2.3	-	-	-	-	-	-
2005 Q3	100.3	2.3	1.4	2.4	2.2	0.8	0.6	-0.3	0.1	5.6	0.6
Q4	101.0	2.3	1.5	2.4	2.1	0.4	0.7	0.6	0.2	0.4	0.5
2006 Q1	101.0	2.3	1.4	2.6	1.9	0.4	0.5	0.7	0.1	1.3	0.4
Q2	102.4	2.5	1.5	2.8	2.0	0.8	0.4	0.6	0.3	3.9	0.5
Q3	102.5	2.1	1.5	2.3	2.0	0.5	0.5	1.9	0.1	0.6	0.6
2006 May	102.5	2.5	1.5	2.9	1.8	0.2	0.1	0.4	0.1	1.0	0.2
June	102.6	2.5	1.6	2.8	2.0	0.1	0.1	0.4	0.1	-0.1	0.2
July	102.4	2.4	1.6	2.7	2.1	0.3	0.2	0.7	0.0	1.4	0.2
Aug.	102.5	2.3	1.5	2.5	1.9	0.1	0.1	0.8	0.0	0.1	0.1
Sep.	102.5	1.7	1.5	1.6	2.0	-0.1	0.2	0.6	0.1	-3.2	0.2
Oct. [2]	.	1.6	.	.	.	.	.	.	.	.	.

	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 [1]	19.3	11.8	7.4	39.9	30.7	9.2	10.3	6.3	6.4	2.9	14.5	6.6
	12	13	14	15	16	17	18	19	20	21	22	23
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	2.4	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
2005	1.6	2.0	0.8	2.4	0.3	10.1	2.6	2.0	2.7	-2.2	2.3	3.1
2005 Q3	1.4	1.8	0.8	2.8	0.1	12.7	2.5	2.1	2.6	-2.2	2.3	3.0
Q4	1.9	2.2	1.4	2.7	0.4	11.1	2.5	1.9	2.7	-2.7	2.3	2.7
2006 Q1	1.8	2.0	1.4	3.0	0.3	12.2	2.5	2.0	2.4	-3.3	2.2	2.3
Q2	2.0	2.2	1.6	3.1	0.7	11.6	2.5	2.1	2.8	-3.6	2.3	2.2
Q3	2.8	2.1	3.9	2.0	0.7	6.3	2.5	2.1	2.6	-3.6	2.4	2.3
2006 Apr.	1.8	2.2	1.2	3.0	0.7	11.0	2.6	2.1	3.1	-3.7	2.7	2.1
May	2.0	2.2	1.5	3.4	0.7	12.9	2.5	2.1	2.6	-3.5	1.9	2.2
June	2.2	2.2	2.1	3.1	0.7	11.0	2.5	2.1	2.8	-3.6	2.2	2.3
July	2.7	2.3	3.2	2.7	0.6	9.5	2.5	2.1	2.8	-3.5	2.5	2.3
Aug.	2.9	2.2	3.9	2.4	0.6	8.1	2.5	2.1	2.6	-3.9	2.3	2.3
Sep.	2.9	1.8	4.6	1.0	0.8	1.5	2.5	2.1	2.4	-3.4	2.3	2.4

Sources: Eurostat and ECB calculations.
1) Referring to the index period 2006.
2) Estimate based on provisional national releases covering around 95% of the euro area, 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 [1]	Residential property prices [2]	World market prices of raw materials [3]		Oil prices [4] (EUR per barrel)
	Total (index 2000 = 100)	Total		Industry excluding construction and energy						Energy			Total		
			Manu-facturing	Total	Intermediate goods	Capital goods	Consumer goods								
							Total	Durable	Non-durable					Total excluding energy	
% of total [5]	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
2002	101.9	-0.1	0.3	0.5	-0.3	0.9	1.0	1.3	1.0	-2.3	2.7	6.9	-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	6.9	-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	7.2	18.4	10.8	30.5
2005	110.1	4.1	3.2	1.8	2.9	1.3	1.1	1.3	1.0	13.4	3.1	7.6	28.5	9.4	44.6
2005 Q3	110.8	4.2	3.0	1.3	1.7	1.2	0.9	1.2	0.9	15.7	3.0	-	33.5	11.6	50.9
Q4	111.9	4.4	2.8	1.4	1.7	1.1	1.4	1.2	1.4	15.6	3.0	7.2 [6]	34.2	23.2	48.6
2006 Q1	113.9	5.2	3.2	1.7	2.3	1.0	1.5	1.4	1.5	19.0	2.6	-	36.4	23.6	52.3
Q2	115.8	5.8	3.9	2.7	4.4	1.2	1.7	1.6	1.8	17.4	3.5	.	30.0	26.2	56.2
Q3	.	.	.	.	.	.	.	.	.	.	.	-	13.4	26.6	55.7
2006 May	115.8	6.0	4.2	2.7	4.6	1.1	1.7	1.7	1.7	18.7	-	-	36.2	31.5	55.7
June	116.1	5.8	4.0	3.0	5.3	1.3	1.8	1.6	1.9	16.0	-	-	20.0	22.0	55.4
July	116.9	6.0	4.3	3.5	6.2	1.6	2.0	1.7	2.0	14.9	-	-	21.6	26.7	58.8
Aug.	117.1	5.7	4.0	3.6	6.5	1.6	2.0	1.8	2.0	12.7	-	-	14.8	26.8	57.8
Sep.	.	.	.	.	.	.	.	.	.	.	-	-	4.0	26.4	50.3
Oct.	.	.	.	.	.	.	.	.	.	.	-	-	3.9	28.7	47.6

3. Hourly labour costs [7]

	Total (s.a. index 2000 = 100)	Total	By component		By selected economic activity			Memo: indicator of negotiated wages
			Wages and salaries	Employers' social contributions	Mining, manufacturing and energy	Construction	Services	
% of total [5]	100.0	100.0	73.1	26.9	34.6	9.1	56.3	
	1	2	3	4	5	6	7	8
2002	107.6	3.5	3.3	4.4	3.2	4.4	3.6	2.7
2003	110.9	3.1	2.9	3.9	3.1	3.9	2.9	2.4
2004	113.4	2.3	2.1	2.6	2.7	2.9	1.9	2.1
2005	116.0	2.2	2.3	1.9	2.3	2.1	2.2	2.1
2005 Q2	115.8	2.3	2.2	2.4	2.2	2.3	2.4	2.1
Q3	116.3	1.8	2.2	0.6	2.2	1.6	1.7	2.1
Q4	117.0	2.0	2.1	1.8	2.1	1.5	2.0	2.0
2006 Q1	117.6	2.2	2.5	1.1	2.3	2.1	2.1	2.1
Q2	118.2	2.4	2.4	1.9	3.0	0.7	2.2	2.4

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

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	Public administration, education, health and other services
	1	2	3	4	5	6	7	8
Unit labour costs [1]								
2002	104.6	2.4	0.9	1.0	3.0	1.8	3.1	3.4
2003	106.4	1.6	6.0	0.4	3.0	2.5	1.1	2.3
2004	107.5	1.1	-9.7	-1.1	3.0	-0.1	3.0	2.8
2005	108.5	0.9	6.4	-0.9	3.5	0.0	1.9	1.6
2005 Q2	108.4	0.9	7.9	-0.5	4.1	0.2	2.1	1.1
Q3	108.2	0.5	6.1	-0.7	2.1	-0.6	1.9	1.4
Q4	109.0	0.8	6.9	-1.9	3.1	-0.4	2.2	2.4
2006 Q1	109.1	0.8	2.7	-2.1	3.4	-0.3	2.5	2.3
Q2	109.1	0.6	0.0	-2.3	2.2	-0.5	1.5	3.0
Compensation per employee								
2002	105.2	2.6	2.2	2.0	3.2	2.4	2.6	3.1
2003	107.3	2.0	2.6	2.1	2.7	1.8	2.2	1.9
2004	109.6	2.1	2.1	2.6	2.6	1.3	2.1	2.3
2005	111.3	1.6	2.4	1.5	1.9	1.3	2.0	1.6
2005 Q2	111.0	1.4	2.5	1.5	2.3	1.2	2.4	0.9
Q3	111.3	1.5	1.8	1.7	2.0	1.3	1.9	1.3
Q4	112.2	1.9	1.7	1.6	2.3	1.2	1.7	2.7
2006 Q1	112.7	1.9	0.3	2.2	3.2	1.8	1.6	1.8
Q2	113.4	2.1	0.0	2.3	2.7	1.8	0.9	2.9
Labour productivity [2]								
2002	100.6	0.2	1.2	1.0	0.2	0.6	-0.5	-0.3
2003	100.9	0.3	-3.2	1.7	-0.4	-0.6	1.1	-0.4
2004	101.9	1.0	13.1	3.7	-0.4	1.4	-0.8	-0.5
2005	102.6	0.7	-3.7	2.4	-1.6	1.3	0.1	0.0
2005 Q2	102.4	0.5	-5.0	1.9	-1.8	1.0	0.3	-0.2
Q3	102.9	0.9	-4.1	2.4	-0.1	1.9	0.0	-0.1
Q4	102.9	1.0	-4.8	3.6	-0.7	1.6	-0.5	0.3
2006 Q1	103.4	1.2	-2.3	4.4	-0.3	2.2	-0.9	-0.5
Q2	103.9	1.4	0.0	4.7	0.5	2.3	-0.6	-0.1

5. Gross domestic product deflators

	Total (s.a. index 2000 = 100)	Total	Domestic demand				Exports [3]	Imports [3]
			Total	Private consumption	Government consumption	Gross fixed capital formation		
	1	2	3	4	5	6	7	8
2002	105.1	2.6	2.0	1.9	3.1	1.4	-0.2	-2.0
2003	107.3	2.1	2.0	2.1	2.3	1.2	-1.2	-1.8
2004	109.3	1.9	2.1	2.1	2.3	2.4	1.1	1.5
2005	111.4	1.8	2.2	2.1	2.2	2.1	2.8	3.7
2005 Q2	111.0	1.6	1.9	1.9	1.6	2.0	2.4	3.1
Q3	111.6	1.8	2.3	2.1	2.2	1.8	2.6	3.9
Q4	112.3	2.0	2.4	2.2	2.7	2.1	3.1	4.2
2006 Q1	112.5	1.8	2.6	2.3	2.0	2.6	3.2	5.3
Q2	113.2	1.9	2.5	2.2	2.8	2.8	3.4	5.1

Sources: ECB calculations based on Eurostat data.
1) Compensation (at current prices) per employee divided by value added (volumes) per person employed.
2) Value added (volumes) 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

	Total	GDP					External balance [1]		
		Domestic demand							
		Total	Private consumption	Government consumption	Gross fixed capital formation	Changes in inventories [2]	Total	Exports [1]	Imports [1]
	1	2	3	4	5	6	7	8	9
	Current prices (EUR billions, seasonally adjusted)								
2002	7,251.4	7,058.9	4,141.9	1,465.0	1,464.8	-12.8	192.6	2,629.0	2,436.4
2003	7,460.9	7,304.0	4,278.5	1,526.1	1,498.3	1.0	156.9	2,624.8	2,467.9
2004	7,734.1	7,573.7	4,425.6	1,579.5	1,561.6	6.9	160.4	2,821.6	2,661.1
2005	7,993.5	7,876.8	4,579.0	1,636.6	1,639.3	21.9	116.7	3,029.6	2,912.8
2005 Q2	1,985.6	1,955.2	1,138.3	406.5	406.7	3.8	30.4	745.0	714.5
Q3	2,008.2	1,982.0	1,153.1	410.3	413.8	4.8	26.2	771.2	745.0
Q4	2,029.6	2,005.7	1,160.1	418.0	418.4	9.2	23.9	786.3	762.5
2006 Q1	2,049.0	2,026.5	1,175.0	420.2	426.4	5.0	22.5	820.5	798.0
Q2	2,079.4	2,054.9	1,183.8	427.6	438.2	5.3	24.5	836.9	812.4
	percentage of GDP								
2005	100.0	98.5	57.3	20.5	20.5	0.3	1.5	-	-
	Chain-linked volumes (prices of the previous year, seasonally adjusted [3])								
	quarter-on-quarter percentage changes								
2005 Q2	0.4	0.6	0.4	0.6	1.1	-	-	1.8	2.6
Q3	0.6	0.5	0.6	0.6	1.2	-	-	2.6	2.4
Q4	0.4	0.6	0.1	0.4	0.4	-	-	0.9	1.6
2006 Q1	0.8	0.4	0.7	0.9	1.0	-	-	3.6	2.7
Q2	0.9	0.9	0.3	0.5	2.1	-	-	1.2	1.2
	annual percentage changes								
2002	0.9	0.4	0.8	2.4	-1.5	-	-	1.7	0.3
2003	0.8	1.5	1.2	1.8	1.0	-	-	1.1	3.1
2004	1.9	1.8	1.5	1.2	2.1	-	-	6.8	6.7
2005	1.4	1.7	1.3	1.4	2.6	-	-	4.2	5.3
2005 Q2	1.3	1.9	1.4	1.4	2.6	-	-	3.4	5.4
Q3	1.7	1.7	1.8	1.5	3.4	-	-	5.4	5.8
Q4	1.8	2.0	1.1	1.7	3.4	-	-	5.0	5.6
2006 Q1	2.2	2.2	1.8	2.5	3.8	-	-	9.3	9.7
Q2	2.7	2.5	1.7	2.3	4.8	-	-	8.6	8.2
	contributions to quarter-on-quarter percentage changes of GDP in percentage points								
2005 Q2	0.4	0.6	0.2	0.1	0.2	0.0	-0.2	-	-
Q3	0.6	0.5	0.4	0.1	0.2	-0.2	0.1	-	-
Q4	0.4	0.6	0.1	0.1	0.1	0.4	-0.2	-	-
2006 Q1	0.8	0.4	0.4	0.2	0.2	-0.4	0.4	-	-
Q2	0.9	0.9	0.2	0.1	0.4	0.2	0.0	-	-
	contributions to annual percentage changes of GDP in percentage points								
2002	0.9	0.3	0.5	0.5	-0.3	-0.3	0.5	-	-
2003	0.8	1.4	0.7	0.4	0.2	0.2	-0.7	-	-
2004	1.9	1.7	0.9	0.2	0.4	0.2	0.2	-	-
2005	1.4	1.7	0.8	0.3	0.5	0.1	-0.3	-	-
2005 Q2	1.3	1.9	0.8	0.3	0.5	0.3	-0.6	-	-
Q3	1.7	1.7	1.0	0.3	0.7	-0.3	0.0	-	-
Q4	1.8	2.0	0.7	0.4	0.7	0.3	-0.1	-	-
2006 Q1	2.2	2.1	1.1	0.5	0.8	-0.2	0.0	-	-
Q2	2.7	2.4	1.0	0.5	1.0	0.0	0.3	-	-

Sources: Eurostat and ECB calculations.
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.
3) Annual data are not adjusted for the variations in the number of working days.

2. Value added by economic activity

	Gross value added (basic prices)							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
Current prices (EUR billions, seasonally adjusted)								
2002	6,517.1	153.1	1,381.0	373.8	1,389.0	1,748.1	1,472.1	734.3
2003	6,703.5	152.5	1,382.0	390.2	1,423.3	1,825.6	1,530.0	757.4
2004	6,940.6	156.5	1,428.2	413.7	1,472.8	1,892.7	1,576.7	793.6
2005	7,160.1	144.4	1,461.5	434.8	1,519.3	1,971.7	1,628.6	833.4
2005 Q2	1,780.2	35.6	364.7	107.3	378.4	489.0	405.2	205.4
Q3	1,797.6	36.0	366.4	109.7	382.4	496.0	407.1	210.6
Q4	1,815.3	36.5	368.7	112.3	383.4	500.3	414.0	214.3
2006 Q1	1,831.6	35.8	373.3	114.0	385.2	510.1	413.2	217.5
Q2	1,859.2	36.6	376.6	117.1	390.6	518.1	420.2	220.3
percentage of value added								
2005	100.0	2.0	20.4	6.1	21.2	27.5	22.7	-
Chain-linked volumes (prices of the previous year, seasonally adjusted [1])								
quarter-on-quarter percentage changes								
2005 Q2	0.4	-1.6	0.6	1.2	0.8	0.2	0.1	0.1
Q3	0.5	0.3	0.7	0.3	0.7	0.6	0.2	1.5
Q4	0.4	0.8	0.5	0.9	0.6	0.1	0.2	0.2
2006 Q1	0.8	-2.1	1.4	-0.4	0.7	1.1	0.4	0.8
Q2	1.1	1.5	1.2	2.1	1.4	1.0	0.3	-0.2
annual percentage changes								
2002	0.9	-0.6	-0.3	0.0	1.2	1.5	1.6	0.2
2003	0.7	-5.9	0.3	0.4	0.0	1.7	1.3	1.5
2004	2.1	11.7	2.2	1.3	2.5	1.5	1.5	0.8
2005	1.4	-5.5	1.3	0.9	1.9	2.0	1.1	1.2
2005 Q2	1.3	-6.3	0.6	0.9	1.7	2.2	1.1	1.2
Q3	1.6	-6.2	1.3	1.7	2.4	2.1	1.3	2.2
Q4	1.8	-6.0	2.3	1.7	2.4	2.1	1.3	1.9
2006 Q1	2.1	-2.6	3.4	2.1	2.9	2.0	0.9	2.7
Q2	2.8	0.4	4.0	3.0	3.5	2.8	1.1	2.3
contributions to quarter-on-quarter percentage changes of value added in percentage points								
2005 Q2	0.4	0.0	0.1	0.1	0.2	0.0	0.0	-
Q3	0.5	0.0	0.2	0.0	0.1	0.2	0.0	-
Q4	0.4	0.0	0.1	0.1	0.1	0.0	0.0	-
2006 Q1	0.8	0.0	0.3	0.0	0.2	0.3	0.1	-
Q2	1.1	0.0	0.3	0.1	0.3	0.3	0.1	-
contributions to annual percentage changes of value added in percentage points								
2002	0.9	0.0	-0.1	0.0	0.3	0.4	0.4	-
2003	0.7	-0.1	0.1	0.0	0.0	0.5	0.3	-
2004	2.1	0.3	0.4	0.1	0.5	0.4	0.3	-
2005	1.4	-0.1	0.3	0.1	0.4	0.6	0.2	-
2005 Q2	1.3	-0.1	0.1	0.1	0.4	0.6	0.3	-
Q3	1.6	-0.1	0.3	0.1	0.5	0.6	0.3	-
Q4	1.8	-0.1	0.5	0.1	0.5	0.6	0.3	-
2006 Q1	2.1	-0.1	0.7	0.1	0.6	0.5	0.2	-
Q2	2.8	0.0	0.8	0.2	0.7	0.8	0.3	-

Sources: Eurostat and ECB calculations.
1)   Annual data are not adjusted for the variations in the number of working days.

5.2 Output and demand
(annual percentage changes, unless otherwise indicated)

3. Industrial production

	Total	Industry excluding construction										Construction
		Total (s.a. index 2000 = 100)	Total		Industry excluding construction and energy						Energy	
				Manu-facturing	Total	Intermediate goods	Capital goods	Consumer goods				
								Total	Durable	Non-durable		
% of total [1]	100.0	82.9	82.9	75.0	74.0	30.0	22.4	21.5	3.6	17.9	8.9	17.1
	1	2	3	4	5	6	7	8	9	10	11	12
2003	0.4	100.3	0.3	0.1	0.1	0.3	-0.1	-0.4	-4.4	0.4	2.8	0.6
2004	2.1	102.3	2.0	2.1	1.9	2.2	3.3	0.5	0.1	0.6	2.0	-0.1
2005	0.9	103.6	1.2	1.2	1.0	0.7	2.6	0.6	-1.0	0.9	1.2	-0.6
2005 Q3	1.2	104.0	1.4	1.4	1.4	0.8	2.9	1.5	-0.4	1.8	0.4	0.9
Q4	1.7	104.7	2.1	2.2	2.2	2.3	2.9	1.3	1.7	1.2	1.8	0.2
2006 Q1	3.7	105.9	3.4	3.5	3.4	2.9	5.1	2.0	2.1	2.0	3.8	1.6
Q2	2.7	107.1	3.8	3.8	4.1	5.2	4.8	2.3	3.5	2.1	0.7	3.6
2006 Mar.	5.7	106.4	4.2	5.0	5.0	4.7	5.5	2.9	3.1	2.8	3.2	4.4
Apr.	0.2	105.8	1.7	0.7	0.7	2.4	2.2	0.2	-0.8	0.4	1.3	2.1
May	4.0	107.7	5.2	6.0	6.3	6.4	7.7	4.1	7.8	3.4	-0.8	5.2
June	4.0	107.8	4.5	4.8	5.5	6.8	4.7	2.6	3.7	2.4	1.7	3.4
July	.	107.3	3.0	3.2	3.2	4.4	3.3	1.4	2.9	1.1	2.3	.
Aug.	.	109.2	5.4	5.7	5.5	7.8	6.2	2.6	8.6	1.9	2.6	.
month-on-month percentage changes (s.a.)												
2006 Mar.	1.3	-	0.8	0.7	1.1	1.4	0.6	0.2	0.8	0.1	0.5	-0.3
Apr.	-1.4	-	-0.6	-0.3	-0.9	-0.1	-0.9	-0.4	-0.7	-0.4	-2.5	1.7
May	2.0	-	1.8	2.1	2.5	2.3	2.8	1.7	4.3	1.3	-1.7	2.2
June	0.2	-	0.1	-0.1	0.1	0.3	-0.8	-0.4	-1.3	-0.3	3.2	-0.6
July	.	-	-0.5	-0.6	-0.9	-0.8	-0.3	-0.5	-0.5	-0.5	0.9	.
Aug.	.	-	1.8	2.2	2.2	3.4	1.8	1.4	4.3	0.9	-1.4	.

4. Industrial new orders and turnover, retail sales and new passenger car registrations

	Industrial new orders		Industrial turnover		Retail sales							New passenger car registrations	
	Manufacturing [2] (current prices)		Manufacturing (current prices)		Current prices	Constant prices							
	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			Total (s.a., thousands) [3]	Total
										Textiles, clothing, footwear	Household equipment		
% of total [1]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	43.7	56.3	10.6	14.8		
	1	2	3	4	5	6	7	8	9	10	11	12	13
2003	98.4	0.2	101.3	-0.2	2.2	103.7	0.7	1.3	0.2	-1.8	0.6	911	-1.5
2004	105.3	7.3	106.2	5.1	2.3	105.2	1.5	1.2	1.7	1.8	3.3	922	1.1
2005	110.7	4.6	110.7	3.7	2.2	106.6	1.2	0.6	1.7	2.1	1.2	936	1.5
2005 Q4	117.3	7.4	113.2	4.1	2.3	107.2	1.2	0.6	1.7	2.7	1.6	934	-1.2
2006 Q1	117.3	11.9	115.5	9.0	2.3	107.4	0.9	0.3	1.4	1.4	2.4	946	2.0
Q2	118.6	8.0	118.3	6.4	3.1	108.1	1.8	0.7	2.5	2.5	3.6	958	2.4
Q3	.	.	.	.	.	.	.	.	.	.	.	936	-1.9
2006 Apr.	117.3	3.8	116.5	-0.4	3.2	108.0	2.2	1.4	2.5	1.7	3.3	956	1.8
May	120.5	14.9	120.2	13.3	3.1	107.9	1.5	-0.1	3.1	4.1	4.8	968	8.9
June	118.1	5.7	118.3	6.5	3.0	108.2	1.6	0.9	2.0	1.7	2.7	949	-2.5
July	120.4	9.8	118.9	7.2	3.5	108.5	1.8	1.7	1.9	2.6	2.5	917	-4.7
Aug.	124.8	14.2	120.4	8.7	4.0	109.3	2.4	0.7	3.7	3.2	3.7	936	-1.2
Sep.	.	.	.	.	.	.	.	.	.	.	.	954	0.8
month-on-month percentage changes (s.a.)													
2006 Apr.	-	-0.7	-	0.6	0.7	-	0.9	0.9	0.8	6.0	0.6	-	0.5
May	-	2.7	-	3.2	0.4	-	0.0	-0.5	0.4	-1.0	1.2	-	1.3
June	-	-2.0	-	-1.6	0.3	-	0.3	0.6	-0.1	1.8	-0.6	-	-2.0
July	-	1.9	-	0.5	0.5	-	0.3	0.5	0.1	2.2	-0.1	-	-3.3
Aug.	-	3.7	-	1.3	0.8	-	0.7	-0.5	1.7	1.1	1.6	-	2.1
Sep.	-	.	-	.	.	-	.	-	.	.	.	-	1.8

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. Business and Consumer Surveys

	Economic sentiment indicator [2] (long-term average = 100)	Manufacturing industry					Consumer confidence indicator [3]				
		Industrial confidence indicator				Capacity utilisation [4] (percentages)	Total [5]	Financial situation over next 12 months	Economic situation over next 12 months	Unemployment situation over next 12 months	Savings over next 12 months
		Total [5]	Order books	Stocks of finished products	Production expectations						
	1	2	3	4	5	6	7	8	9	10	11
2002	94.9	-11	-25	11	3	81.0	-11	-1	-11	26	-4
2003	93.7	-10	-25	10	4	80.8	-18	-5	-20	37	-10
2004	99.8	-5	-16	8	10	81.5	-14	-4	-14	30	-9
2005	98.4	-7	-17	11	6	81.2	-14	-4	-15	28	-9
2005 Q3	98.0	-7	-17	11	6	80.9	-15	-4	-17	29	-9
Q4	100.6	-6	-15	10	7	81.5	-13	-4	-15	22	-9
2006 Q1	103.0	-2	-9	9	11	82.2	-11	-3	-11	20	-9
Q2	107.2	2	0	6	13	83.0	-10	-3	-10	16	-9
Q3	108.8	4	3	5	12	83.8	-8	-3	-10	12	-8
2006 May	107.4	2	-2	6	14	-	-9	-3	-10	14	-8
June	107.8	3	2	5	13	-	-9	-4	-11	13	-10
July	108.6	4	3	5	13	83.6	-8	-4	-10	13	-7
Aug.	108.5	2	3	5	10	-	-9	-4	-10	11	-10
Sep.	109.3	4	4	4	13	-	-8	-3	-9	12	-7
Oct.	110.3	5	5	4	14	83.9	-8	-3	-8	11	-9

	Construction confidence indicator			Retail trade confidence indicator				Services confidence indicator			
	Total [5]	Order books	Employment expectations	Total [5]	Present business situation	Volume of stocks	Expected business situation	Total [5]	Business climate	Demand in recent months	Demand in the months ahead
	12	13	14	15	16	17	18	19	20	21	22
2002	-15	-22	-8	-14	-16	16	-9	3	-2	-4	15
2003	-16	-23	-9	-10	-12	16	-1	4	-5	3	14
2004	-12	-20	-4	-8	-12	14	1	11	7	8	18
2005	-7	-12	-2	-7	-13	13	4	11	5	10	18
2005 Q3	-7	-13	-1	-7	-12	14	4	11	5	10	17
Q4	-3	-8	2	-5	-9	15	10	14	10	13	19
2006 Q1	-2	-8	3	-3	-4	15	9	15	10	14	20
Q2	-1	-6	4	1	1	14	16	19	14	18	24
Q3	3	-2	7	2	5	13	14	20	14	19	26
2006 May	-2	-6	3	-1	-3	14	16	20	16	19	23
June	-1	-5	4	2	3	12	17	19	14	19	24
July	2	-2	5	0	2	15	12	20	16	18	26
Aug.	2	-4	8	3	6	13	15	21	14	21	28
Sep.	4	0	9	3	8	12	15	18	12	19	24
Oct.	3	-2	7	4	9	13	15	21	14	23	26

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 assessments 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 [1]
(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 [2]	100.0	100.0	84.6	15.4	4.3	17.7	7.5	24.9	15.0	30.4
	1	2	3	4	5	6	7	8	9	10
2002	134.862	0.7	0.8	0.3	-1.8	-1.2	-0.1	0.6	2.0	2.0
2003	135.461	0.4	0.5	0.0	-2.7	-1.4	0.8	0.7	0.7	1.7
2004	136.421	0.7	0.7	0.8	-1.7	-1.4	1.4	0.9	1.9	1.5
2005	137.471	0.8	0.9	-0.2	-1.7	-1.2	2.5	0.8	2.1	1.2
2005 Q2	137.269	0.7	0.8	0.3	-1.3	-1.6	2.7	0.8	1.8	1.3
Q3	137.543	0.7	0.9	-0.7	-2.1	-0.9	1.7	0.4	2.1	1.3
Q4	137.999	0.7	1.0	-0.8	-1.0	-1.2	2.3	0.6	2.6	0.8
2006 Q1	138.451	1.0	1.1	0.4	-0.5	-1.0	2.3	0.7	2.9	1.3
Q2	139.005	1.2	1.3	0.7	0.4	-0.6	2.4	1.1	3.4	1.1
quarter-on-quarter percentage changes (s.a.)										
2005 Q2	0.195	0.1	0.2	0.0	0.1	-0.4	0.6	-0.1	0.4	0.4
Q3	0.274	0.2	0.3	-0.2	0.0	-0.1	0.0	0.0	0.7	0.4
Q4	0.456	0.3	0.4	0.1	0.1	-0.2	1.1	0.4	1.1	0.1
2006 Q1	0.452	0.3	0.3	0.7	-0.6	-0.2	0.6	0.3	0.6	0.6
Q2	0.554	0.4	0.4	0.4	0.9	0.0	0.7	0.4	1.0	0.2

2. Unemployment
(seasonally adjusted)

	Total		By age [3]				By gender [4]			
	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 [2]	100.0		75.6		24.4		48.4		51.6	
	1	2	3	4	5	6	7	8	9	10
2002	11.760	8.3	8.740	7.0	3.020	16.8	5.515	6.9	6.245	10.1
2003	12.548	8.7	9.420	7.5	3.128	17.6	5.975	7.4	6.573	10.5
2004	12.900	8.9	9.751	7.6	3.149	18.0	6.186	7.6	6.714	10.5
2005	12.628	8.6	9.545	7.4	3.083	17.8	6.116	7.4	6.511	10.1
2005 Q2	12.790	8.7	9.673	7.5	3.117	17.9	6.211	7.6	6.579	10.2
Q3	12.489	8.5	9.472	7.3	3.016	17.5	6.070	7.4	6.419	9.9
Q4	12.298	8.4	9.268	7.2	3.030	17.7	5.910	7.2	6.388	9.9
2006 Q1	11.926	8.1	8.942	6.9	2.984	17.3	5.740	7.0	6.185	9.6
Q2	11.581	7.9	8.704	6.7	2.877	16.7	5.619	6.8	5.962	9.2
2006 Mar.	11.778	8.0	8.824	6.8	2.954	17.2	5.693	6.9	6.084	9.4
Apr.	11.647	7.9	8.748	6.8	2.899	16.9	5.650	6.9	5.997	9.3
May	11.566	7.9	8.702	6.7	2.865	16.7	5.618	6.8	5.949	9.2
June	11.530	7.9	8.662	6.7	2.867	16.6	5.590	6.8	5.939	9.2
July	11.514	7.8	8.614	6.7	2.900	16.8	5.570	6.8	5.944	9.2
Aug.	11.521	7.9	8.590	6.6	2.931	17.0	5.569	6.8	5.953	9.2

Source: Eurostat.
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 2005.
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.

6

GOVERNMENT FINANCE

6.1 Revenue, expenditure and deficit/surplus [1]
(as a percentage of GDP)

1. Euro area − revenue

	Total		Current revenue									Capital revenue		Memo: fiscal burden [2]
			Direct taxes	Households	Corporations	Indirect taxes	Received by EU institutions	Social contributions	Employers	Employees	Sales		Capital taxes	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1997	47.0	46.5	11.9	9.0	2.6	13.3	0.7	17.1	8.5	5.4	2.3	0.5	0.3	42.7
1998	46.5	46.3	12.2	9.5	2.3	13.9	0.6	16.1	8.3	4.9	2.3	0.3	0.3	42.5
1999	47.0	46.8	12.5	9.7	2.5	14.1	0.6	16.1	8.3	4.9	2.3	0.3	0.3	43.0
2000	46.6	46.4	12.7	9.8	2.6	13.9	0.6	15.9	8.2	4.8	2.2	0.3	0.3	42.7
2001	45.8	45.6	12.3	9.6	2.4	13.6	0.6	15.7	8.2	4.7	2.2	0.2	0.3	41.8
2002	45.3	45.0	11.9	9.4	2.2	13.5	0.4	15.7	8.2	4.6	2.1	0.3	0.3	41.3
2003	45.2	44.5	11.5	9.1	2.1	13.5	0.4	15.8	8.3	4.7	2.1	0.6	0.5	41.3
2004	44.7	44.3	11.4	8.9	2.2	13.6	0.3	15.6	8.2	4.6	2.1	0.5	0.4	40.9
2005	45.1	44.7	11.7	8.8	2.5	13.7	0.3	15.5	8.2	4.5	2.2	0.5	0.3	41.2

2. Euro area − expenditure

	Total		Current expenditure								Capital expenditure				Memo: primary expenditure [3]
		Total	Compensation of employees	Intermediate consumption	Interest	Current transfers	Social payments	Subsidies	Paid by EU institutions		Investment	Capital transfers	Paid by EU institutions		
	1	2	3	4	5	6	7	8	9	10	11	12	13		14
1997	49.6	46.0	10.9	4.8	5.0	25.4	22.6	2.1	0.6	3.6	2.4	1.2	0.1		44.7
1998	48.8	45.1	10.6	4.7	4.6	25.2	22.2	2.1	0.5	3.8	2.4	1.4	0.1		44.2
1999	48.4	44.5	10.6	4.8	4.0	25.1	22.1	2.1	0.5	3.9	2.5	1.4	0.1		44.3
2000	47.6	43.9	10.4	4.8	3.9	24.8	21.7	2.0	0.5	3.8	2.5	1.3	0.0		43.7
2001	47.7	43.8	10.3	4.8	3.8	24.9	21.8	1.9	0.5	3.9	2.5	1.4	0.0		43.9
2002	47.8	44.0	10.4	4.9	3.5	25.2	22.3	1.9	0.5	3.8	2.4	1.4	0.0		44.3
2003	48.2	44.3	10.5	5.0	3.3	25.5	22.7	1.9	0.5	4.0	2.5	1.4	0.1		44.9
2004	47.6	43.8	10.4	5.0	3.1	25.2	22.5	1.8	0.5	3.8	2.5	1.4	0.0		44.5
2005	47.5	43.7	10.4	5.1	3.0	25.3	22.5	1.7	0.5	3.8	2.5	1.3	0.0		44.5

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

	Deficit (-)/surplus (+)					Primary deficit (-)/ surplus (+)	Government consumption [4]							
	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
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1997	-2.6	-2.4	-0.4	0.1	0.1	2.4	20.1	10.9	4.8	4.8	1.9	2.3	8.4	11.7
1998	-2.3	-2.2	-0.2	0.1	0.1	2.3	19.7	10.6	4.7	4.8	1.9	2.3	8.2	11.5
1999	-1.4	-1.7	-0.1	0.1	0.4	2.7	19.9	10.6	4.8	4.9	1.9	2.3	8.3	11.6
2000	-1.0	-1.4	-0.1	0.1	0.5	2.9	19.8	10.4	4.8	4.9	1.9	2.2	8.2	11.6
2001	-1.9	-1.7	-0.4	-0.1	0.3	1.9	19.9	10.3	4.8	5.0	1.9	2.2	8.1	11.7
2002	-2.6	-2.1	-0.5	-0.2	0.2	0.9	20.3	10.4	4.9	5.1	1.9	2.1	8.2	12.0
2003	-3.1	-2.4	-0.5	-0.2	0.0	0.2	20.5	10.5	5.0	5.2	1.9	2.1	8.3	12.2
2004	-2.8	-2.4	-0.3	-0.2	0.1	0.3	20.4	10.4	5.0	5.2	1.9	2.1	8.3	12.2
2005	-2.4	-2.1	-0.3	-0.2	0.2	0.6	20.5	10.4	5.1	5.2	1.9	2.2	8.2	12.3

4. Euro area countries − deficit (-)/surplus (+) [5]

	BE	DE	GR	ES	FR	IE	IT	LU	NL	AT	PT	FI
	1	2	3	4	5	6	7	8	9	10	11	12
2002	0.0	-3.7	-5.2	-0.3	-3.2	-0.4	-2.9	2.1	-2.0	-0.5	-2.9	4.1
2003	0.0	-4.0	-6.1	0.0	-4.2	0.3	-3.5	0.3	-3.1	-1.6	-2.9	2.5
2004	0.0	-3.7	-7.8	-0.2	-3.7	1.5	-3.4	-1.1	-1.8	-1.2	-3.2	2.3
2005	-2.3	-3.2	-5.2	1.1	-2.9	1.1	-4.1	-1.0	-0.3	-1.5	-6.0	2.7

Sources: ECB for euro area aggregated data; European Commission for data relating to countries' deficit/surplus.
1) 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 0.0% of GDP). Transactions involving the EU budget are included and consolidated. Transactions among Member States' governments are not consolidated.
2) The fiscal burden comprises taxes and social contributions.
3) Comprises total expenditure minus interest expenditure.
4) Corresponds to final consumption expenditure (P.3) of general government in the ESA 95.
5) Includes proceeds from the sale of UMTS licences and settlements under swaps and forward rate agreements.

6.2 Debt [1]
(as a percentage of GDP)

1. Euro area – by financial instrument and sector of the holder

	Total	Financial instruments				Holders				Other creditors [3]
		Currency and deposits	Loans	Short-term securities	Long-term securities	Domestic creditors [2]				
						Total	MFIs	Other financial corporations	Other sectors	
	1	2	3	4	5	6	7	8	9	10
1996	75.1	2.8	17.0	7.9	47.3	58.3	30.3	12.1	15.9	16.8
1997	74.1	2.8	16.0	6.5	48.8	55.4	28.3	13.6	13.5	18.7
1998	72.8	2.7	15.1	5.6	49.3	52.1	26.4	14.5	11.2	20.7
1999	72.0	2.9	14.2	4.2	50.6	48.5	25.4	12.0	11.2	23.4
2000	69.4	2.7	13.1	3.6	50.0	44.1	22.0	11.0	11.0	25.3
2001	68.3	2.8	12.3	4.0	49.2	42.1	20.6	10.4	11.1	26.2
2002	68.1	2.7	11.7	4.6	49.2	40.2	19.2	9.9	11.1	28.0
2003	69.3	2.1	12.3	5.0	49.9	39.1	19.2	10.3	9.6	30.2
2004	69.8	2.2	11.9	5.1	50.7	37.3	18.2	10.0	9.1	32.5
2005	70.7	2.4	11.7	4.9	51.6	35.4	17.1	10.3	8.0	35.4

2. Euro area – by issuer, maturity and currency denomination

	Total	Issued by [4]				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 [5]	Other currencies
	1	2	3	4	5	6	7	8	9	10	11	12	13
1996	75.1	62.9	5.9	5.7	0.5	11.6	63.5	8.6	19.1	25.7	30.2	73.1	2.0
1997	74.1	62.1	6.1	5.4	0.6	9.9	64.2	8.5	18.3	25.3	30.5	72.1	2.0
1998	72.8	61.1	6.1	5.2	0.4	8.9	63.9	7.6	15.8	26.4	30.6	70.9	1.8
1999	72.0	60.5	6.0	5.1	0.4	7.7	64.3	6.6	13.6	28.0	30.4	69.8	2.1
2000	69.4	58.2	5.9	4.9	0.4	6.8	62.6	5.9	13.4	28.0	28.0	67.5	1.9
2001	68.3	57.1	6.1	4.8	0.4	7.2	61.2	5.0	13.7	26.8	27.8	66.6	1.7
2002	68.1	56.7	6.3	4.8	0.4	8.2	60.0	5.0	15.4	25.3	27.5	66.7	1.5
2003	69.3	57.0	6.6	5.1	0.6	8.5	60.8	5.0	14.4	26.1	28.9	68.2	1.1
2004	69.8	57.5	6.7	5.2	0.4	8.5	61.4	4.7	14.3	26.6	28.9	68.8	1.1
2005	70.7	58.0	6.8	5.3	0.5	8.7	62.0	4.7	14.7	26.1	29.9	69.5	1.2

3. Euro area countries

	BE	DE	GR	ES	FR	IE	IT	LU	NL	AT	PT	FI
	1	2	3	4	5	6	7	8	9	10	11	12
2002	103.3	60.3	110.7	52.5	58.2	32.2	105.6	6.5	50.5	65.8	55.5	41.3
2003	98.6	63.9	107.8	48.7	62.4	31.1	104.3	6.3	52.0	64.6	57.0	44.3
2004	94.3	65.7	108.5	46.2	64.4	29.7	103.9	6.6	52.6	63.8	58.6	44.3
2005	93.2	67.9	107.5	43.1	66.6	27.4	106.6	6.0	52.7	63.4	64.0	41.3

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.

1. Euro area − by source, financial instrument and sector of the holder

	Total	Source of change				Financial instruments				Holders			Other creditors [7]
		Borrowing requirement [2]	Valuation effects [3]	Other changes in volume [4]	Aggregation effect [5]	Currency and deposits	Loans	Short-term securities	Long-term securities	Domestic creditors [6]	MFIs	Other financial corporations	
	1	2	3	4	5	6	7	8	9	10	11	12	13
1997	1.9	2.5	0.0	-0.3	-0.2	0.0	-0.3	-1.1	3.3	-0.6	-0.8	1.9	2.6
1998	1.8	2.2	-0.2	0.0	-0.1	0.1	-0.3	-0.6	2.6	-0.9	-0.7	1.5	2.7
1999	2.0	1.6	0.4	0.0	-0.1	0.2	-0.2	-1.2	3.1	-1.6	0.0	-2.0	3.6
2000	1.0	1.1	0.0	0.0	-0.1	0.0	-0.5	-0.4	1.9	-2.0	-2.1	-0.3	3.0
2001	1.9	1.9	-0.1	0.1	0.0	0.2	-0.2	0.5	1.3	-0.1	-0.6	-0.1	2.0
2002	2.1	2.6	-0.5	0.0	0.0	0.0	-0.2	0.7	1.7	-0.5	-0.7	-0.2	2.6
2003	3.1	3.3	-0.2	0.0	0.0	-0.6	1.0	0.6	2.1	0.1	0.5	0.7	3.0
2004	3.1	3.2	-0.1	0.0	0.0	0.2	0.1	0.2	2.6	-0.4	-0.3	0.1	3.5
2005	3.1	3.0	0.0	0.0	0.0	0.3	0.2	0.0	2.5	-0.8	-0.5	0.6	3.8

2. Euro area − deficit-debt adjustment

	Change in debt [8]	Deficit (-) / surplus (+) [8]	Deficit-debt adjustment [9]											Other [10]
			Total	Transactions in main financial assets held by general government							Valuation effects	Exchange rate effects	Other changes in volume	
				Total	Currency and deposits	Loans	Securities [11]	Shares and other equity	Privatisations	Equity injections				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1997	1.9	-2.6	-0.7	-0.4	0.1	0.0	-0.1	-0.5	-0.7	0.1	0.0	0.1	-0.3	0.1
1998	1.8	-2.3	-0.5	-0.3	0.2	0.0	0.0	-0.5	-0.7	0.2	-0.2	0.0	0.0	0.1
1999	2.0	-1.4	0.6	0.0	0.5	0.1	0.0	-0.5	-0.8	0.1	0.4	0.2	0.0	0.2
2000	1.0	0.0	1.0	1.1	0.7	0.2	0.2	0.0	-0.4	0.2	0.0	0.1	0.0	0.0
2001	1.9	-1.8	0.0	-0.5	-0.7	0.1	0.1	-0.1	-0.3	0.2	-0.1	0.0	0.1	0.6
2002	2.1	-2.6	-0.4	0.1	0.0	0.0	0.0	0.0	-0.3	0.2	-0.5	-0.1	0.0	-0.1
2003	3.1	-3.1	0.0	0.1	0.0	0.0	0.0	0.1	-0.2	0.2	-0.2	-0.1	0.0	0.1
2004	3.1	-2.8	0.3	0.3	0.2	0.0	0.1	0.0	-0.4	0.2	-0.1	0.0	0.0	0.1
2005	3.1	-2.4	0.7	0.7	0.3	0.1	0.2	0.1	-0.3	0.2	0.0	0.0	0.0	-0.1

Source: ECB.
1) Data are partially estimated. Annual change in gross nominal consolidated debt is expressed as a percentage of GDP, i.e. [debt(t) - debt(t-1)] ÷ 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 2001.
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 [1]
(as a percentage of GDP)

1. Euro area – quarterly revenue

	Total		Current revenue						Capital revenue		Memo: fiscal burden [2]
			Direct taxes	Indirect taxes	Social contributions	Sales	Property income			Capital taxes	
	1	2	3	4	5	6	7	8	9	10
2000 Q2	47.7	47.2	13.8	13.4	15.8	2.1	1.2	0.5	0.3	43.2
Q3	44.1	43.7	11.9	12.5	15.6	2.0	0.8	0.4	0.2	40.3
Q4	49.9	49.4	13.9	14.1	16.6	2.9	1.0	0.5	0.3	44.9
2001 Q1	42.3	41.9	10.5	12.7	15.3	1.8	0.9	0.4	0.2	38.7
Q2	46.9	46.5	13.5	13.0	15.6	2.0	1.6	0.4	0.2	42.3
Q3	43.4	43.0	11.6	12.3	15.5	1.9	0.9	0.4	0.3	39.7
Q4	49.2	48.7	13.5	14.0	16.3	2.9	1.1	0.5	0.3	44.0
2002 Q1	42.0	41.6	10.1	12.7	15.5	1.7	0.8	0.4	0.2	38.6
Q2	45.6	45.1	12.6	12.7	15.5	2.0	1.5	0.5	0.3	41.1
Q3	43.5	43.0	11.2	12.7	15.5	2.0	0.8	0.4	0.3	39.6
Q4	49.1	48.6	13.4	14.1	16.2	2.9	0.9	0.6	0.3	44.1
2003 Q1	42.0	41.5	9.8	12.8	15.6	1.7	0.7	0.5	0.2	38.5
Q2	46.0	44.5	12.1	12.7	15.8	2.0	1.3	1.5	1.2	41.7
Q3	42.9	42.4	10.8	12.7	15.5	1.9	0.7	0.5	0.2	39.2
Q4	49.3	48.3	13.1	14.3	16.2	2.9	0.8	1.0	0.3	43.9
2004 Q1	41.5	41.0	9.6	12.8	15.4	1.7	0.7	0.5	0.3	38.1
Q2	45.1	44.4	12.2	13.1	15.4	2.0	0.9	0.8	0.6	41.2
Q3	42.7	42.2	10.7	12.6	15.4	1.9	0.7	0.5	0.3	38.9
Q4	49.5	48.5	13.0	14.5	16.2	2.9	0.8	1.0	0.4	44.1
2005 Q1	42.2	41.7	10.0	13.0	15.4	1.7	0.6	0.5	0.3	38.6
Q2	45.0	44.3	12.0	13.3	15.3	2.0	0.9	0.6	0.3	40.9
Q3	43.4	42.7	11.1	12.8	15.3	1.9	0.8	0.7	0.3	39.5
Q4	49.6	48.8	13.5	14.5	16.2	2.9	0.9	0.8	0.3	44.4
2006 Q1	42.8	42.2	10.3	13.3	15.3	1.6	0.8	0.6	0.3	39.2
Q2	46.0	45.4	12.6	13.7	15.3	1.9	1.1	0.6	0.3	41.9

2. Euro area – quarterly expenditure and deficit/surplus

	Total	Current expenditure							Capital expenditure			Deficit (-)/ surplus (+)	Primary deficit (-)/ surplus (+)
		Total	Compensation of employees	Intermediate consumption	Interest	Current transfers	Social benefits	Subsidies		Investment	Capital transfers		
	1	2	3	4	5	6	7	8	9	10	11	12	13
2000 Q2	46.2	42.8	10.3	4.6	3.9	24.0	20.7	1.4	3.4	2.3	1.1	1.5	5.4
Q3	43.1	42.7	10.1	4.6	4.0	24.2	20.9	1.5	0.3	2.5	1.1	1.0	5.0
Q4	49.7	45.9	11.0	5.3	3.7	25.9	22.0	1.6	3.8	3.1	1.5	0.2	3.9
2001 Q1	45.7	42.3	10.1	4.2	4.0	24.1	20.9	1.3	3.4	1.9	1.5	-3.4	0.6
Q2	46.3	42.8	10.2	4.6	3.9	24.1	20.8	1.3	3.5	2.3	1.1	0.7	4.5
Q3	46.1	42.4	10.0	4.6	3.8	24.1	20.8	1.4	3.7	2.5	1.2	-2.7	1.1
Q4	51.1	46.2	11.0	5.7	3.6	25.9	22.1	1.7	4.9	3.2	1.7	-1.9	1.6
2002 Q1	46.3	42.9	10.3	4.3	3.7	24.6	21.3	1.4	3.5	2.0	1.5	-4.3	-0.7
Q2	46.7	43.2	10.3	4.9	3.5	24.4	21.2	1.3	3.4	2.3	1.1	-1.0	2.5
Q3	46.8	43.1	10.0	4.7	3.5	24.9	21.5	1.4	3.7	2.5	1.2	-3.3	0.2
Q4	50.8	46.4	11.0	5.7	3.3	26.4	22.7	1.6	4.4	2.8	1.6	-1.6	1.7
2003 Q1	47.0	43.5	10.4	4.5	3.5	25.1	21.6	1.3	3.5	1.9	1.6	-5.1	-1.5
Q2	47.4	43.9	10.4	4.8	3.4	25.3	21.8	1.3	3.6	2.4	1.2	-1.5	1.9
Q3	47.0	43.3	10.2	4.8	3.3	25.1	21.6	1.3	3.7	2.5	1.1	-4.1	-0.9
Q4	51.1	46.3	11.0	5.7	3.1	26.5	22.9	1.5	4.8	3.2	1.6	-1.8	1.3
2004 Q1	46.6	43.2	10.4	4.6	3.2	25.1	21.5	1.2	3.4	1.9	1.4	-5.1	-1.9
Q2	46.8	43.4	10.4	4.9	3.1	24.9	21.6	1.2	3.4	2.3	1.1	-1.6	1.5
Q3	46.1	42.8	10.0	4.6	3.2	25.0	21.6	1.3	3.4	2.4	1.0	-3.5	-0.3
Q4	50.8	45.9	11.0	5.7	3.0	26.2	22.7	1.4	4.9	3.1	1.8	-1.3	1.7
2005 Q1	46.8	43.4	10.3	4.6	3.1	25.3	21.6	1.2	3.4	1.9	1.5	-4.6	-1.4
Q2	46.4	43.0	10.3	5.0	3.1	24.7	21.6	1.1	3.4	2.3	1.0	-1.4	1.6
Q3	45.9	42.5	9.9	4.7	3.0	24.9	21.5	1.2	3.4	2.4	1.0	-2.5	0.5
Q4	50.7	46.0	11.1	5.7	2.8	26.3	22.7	1.4	4.8	3.1	1.6	-1.2	1.7
2006 Q1	46.0	42.7	10.1	4.8	3.0	24.8	21.3	1.1	3.2	1.9	1.3	-3.1	-0.1
Q2	46.2	42.7	10.3	5.1	3.0	24.4	21.4	1.1	3.4	2.4	1.1	-0.2	2.8

Source: ECB calculations based on Eurostat and national data.
1) Revenue, expenditure and deficit/surplus are based on the ESA 95. Transactions between the EU budget and entities outside the government sector are not included. 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.

1. Euro area − Maastricht debt by financial instrument [1]

	Total	Financial instruments			
		Currency and deposits	Loans	Short-term securities	Long-term securities
	1	2	3	4	5
2003 Q3	70.4	2.7	11.7	5.5	50.5
Q4	69.3	2.1	12.3	5.0	49.9
2004 Q1	70.8	2.1	12.3	5.5	50.8
Q2	71.4	2.2	12.1	5.5	51.5
Q3	71.3	2.3	12.1	5.6	51.4
Q4	69.8	2.2	11.9	5.1	50.7
2005 Q1	71.1	2.2	11.9	5.3	51.7
Q2	72.0	2.4	11.7	5.3	52.6
Q3	71.5	2.4	11.7	5.3	52.1
Q4	70.7	2.4	11.7	4.9	51.6
2006 Q1	71.1	2.5	11.7	5.1	51.8
Q2	71.1	2.5	11.6	5.1	51.9

2. Euro area − deficit-debt adjustment

	Change in debt	Deficit (-)/ surplus (+)	Deficit-debt adjustment								Memo: Borrowing requirement
			Total	Transactions in main financial assets held by general government					Valuation effects and other changes in volume	Other	
				Total	Currency and deposits	Loans	Securities	Shares and other equity			
	1	2	3	4	5	6	7	8	9	10	11
2003 Q3	2.9	-4.1	-1.3	-1.2	-1.2	0.0	-0.1	0.2	-0.1	0.0	2.9
Q4	-2.0	-1.8	-3.8	-3.9	-2.1	-0.3	-0.1	-1.3	-0.5	0.6	-1.5
2004 Q1	8.5	-5.1	3.4	2.0	1.4	-0.1	0.2	0.5	-0.1	1.5	8.6
Q2	5.6	-1.6	4.0	4.1	3.4	0.2	0.2	0.3	0.0	-0.1	5.6
Q3	2.0	-3.5	-1.4	-1.1	-1.4	0.0	0.2	0.1	-0.3	-0.1	2.3
Q4	-3.1	-1.3	-4.4	-3.4	-2.6	0.0	-0.2	-0.7	0.0	-1.0	-3.1
2005 Q1	7.0	-4.6	2.4	2.4	1.4	0.2	0.4	0.4	-0.2	0.2	7.2
Q2	5.8	-1.4	4.4	3.6	2.7	0.2	0.3	0.4	0.2	0.6	5.6
Q3	0.4	-2.5	-2.1	-2.5	-2.5	-0.1	0.3	-0.3	0.1	0.4	0.4
Q4	-0.7	-1.2	-1.9	-0.6	-0.3	0.1	-0.4	0.0	0.0	-1.3	-0.7
2006 Q1	5.0	-3.1	1.9	1.6	1.1	0.1	0.6	-0.3	-0.4	0.7	5.4
Q2	2.7	-0.2	2.5	3.1	2.4	0.1	0.3	0.2	0.7	-1.2	2.1

C28 Deficit, borrowing requirement and change in debt
(four-quarter moving sum as a percentage of GDP)

- deficit
- change in debt
- borrowing requirement
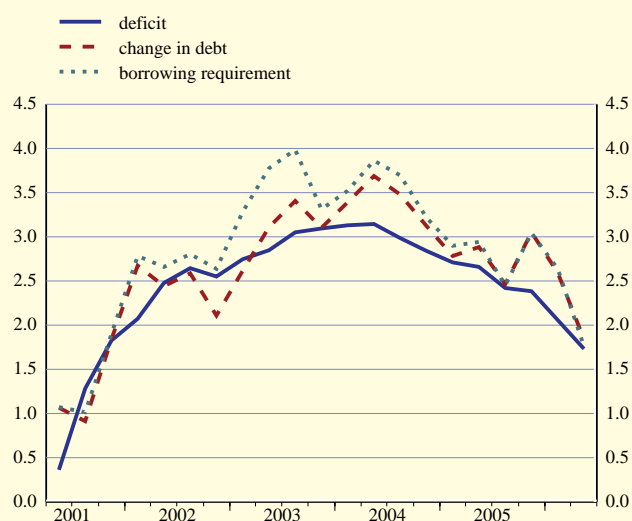
C29 Maastricht debt
(annual change in the debt to GDP ratio and underlying factors)

- deficit-debt adjustment
- primary deficit/surplus
- growth/interest rate differential
- change in debt to GDP ratio
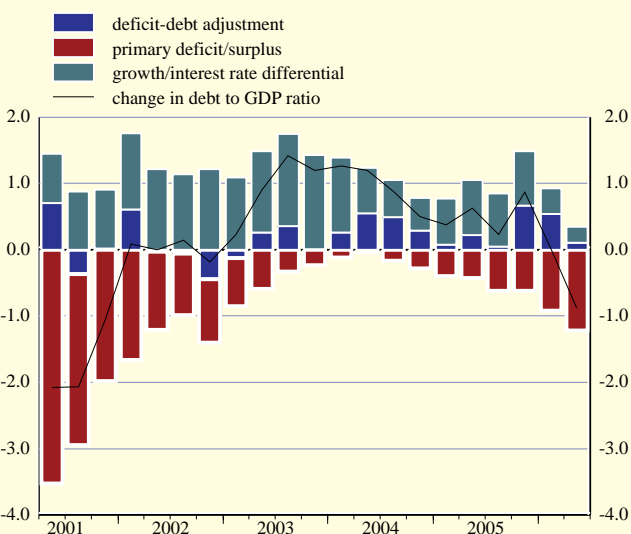
Source: ECB calculations based on Eurostat and national data.
1) The stock data in quarter t are expressed as a percentage of the sum of GDP in t and the previous three quarters.

7 EXTERNAL TRANSACTIONS AND POSITIONS

7.1 Balance of payments
(EUR billions; net transactions)

1. Summary balance of payments

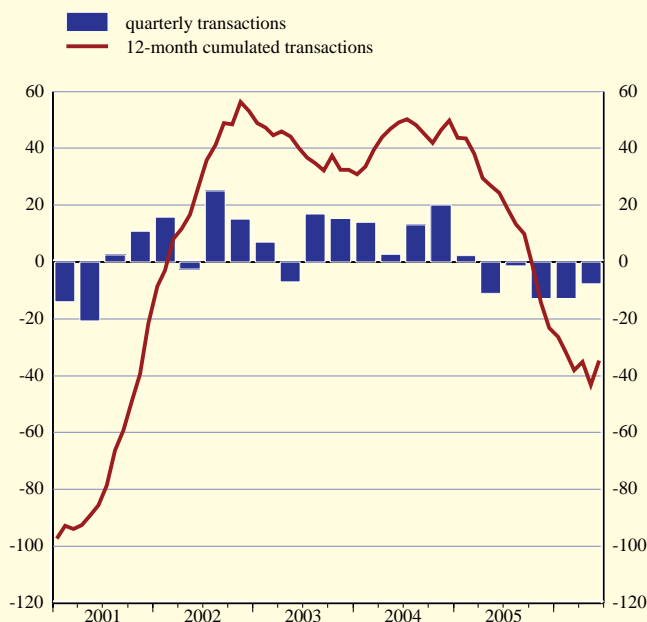|	Current account					Capital account	Net lending/ borrowing to/from rest of the world (columns 1+6)	Financial account						Errors and omissions
	Total	Goods	Services	Income	Current transfers			Total	Direct investment	Portfolio investment	Financial derivatives	Other investment	Reserve assets	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2003	32.4	106.1	19.5	-37.2	-56.0	12.9	45.4	-1.3	-12.3	74.9	-13.0	-79.1	28.2	-44.1
2004	49.9	105.3	29.0	-28.0	-56.4	17.5	67.3	-10.9	-41.2	60.3	-5.0	-37.5	12.5	-56.4
2005	-23.1	54.1	34.8	-43.8	-68.2	12.5	-10.6	79.1	-156.3	155.4	-15.2	76.5	18.8	-68.5
2005 Q2	-11.2	18.1	10.3	-23.6	-16.0	4.0	-7.2	49.5	-14.7	107.8	1.3	-48.0	3.1	-42.3
Q3	-1.4	16.0	9.6	-7.1	-19.8	2.8	1.5	34.6	-97.6	89.8	-0.4	40.8	2.0	-36.0
Q4	-12.8	4.9	10.8	-12.3	-16.2	4.7	-8.1	-23.7	-20.2	-49.1	-8.8	45.6	8.8	31.9
2006 Q1	-12.8	-2.8	4.8	1.4	-16.2	2.0	-10.8	65.7	-31.5	22.9	-8.5	76.8	6.1	-54.9
Q2	-7.6	6.3	12.1	-10.3	-15.8	1.0	-6.6	51.1	-12.1	98.9	-1.7	-32.5	-1.4	-44.5
2005 Aug.	-2.7	1.0	1.5	1.0	-6.2	0.8	-2.0	0.4	-12.0	-13.3	-0.7	26.5	-0.1	1.6
Sep.	-1.6	5.5	3.6	-2.6	-8.1	1.2	-0.4	33.2	-0.5	26.0	-1.2	9.3	-0.5	-32.8
Oct.	-7.5	1.7	4.7	-8.5	-5.5	0.6	-6.9	-12.8	-7.9	-1.9	-4.3	1.0	0.2	19.7
Nov.	-5.6	1.5	2.9	-4.9	-5.0	0.9	-4.6	2.2	-3.9	-43.7	-0.3	48.9	1.2	2.4
Dec.	0.3	1.7	3.2	1.1	-5.7	3.2	3.4	-13.2	-8.5	-3.6	-4.2	-4.3	7.4	9.7
2006 Jan.	-10.2	-6.3	0.9	0.0	-4.7	0.8	-9.4	-3.2	-2.7	-36.4	-2.9	41.1	-2.3	12.6
Feb.	-0.6	0.5	2.3	0.8	-4.3	1.0	0.4	19.5	-29.1	21.4	-3.3	28.6	1.9	-19.9
Mar.	-2.1	3.0	1.5	0.6	-7.2	0.2	-1.9	49.5	0.3	37.9	-2.3	7.1	6.5	-47.6
Apr.	-7.5	0.6	3.0	-5.0	-6.1	0.2	-7.3	25.1	8.3	-6.0	-5.6	29.5	-1.1	-17.8
May	-10.9	0.6	3.8	-9.9	-5.4	0.2	-10.7	31.9	-4.6	44.4	2.0	-8.2	-1.7	-21.2
June	10.8	5.2	5.3	4.5	-4.3	0.6	11.4	-5.9	-15.9	60.5	1.9	-53.8	1.4	-5.5
July	2.5	5.6	5.6	-1.8	-7.0	0.7	3.2	12.3	-9.4	1.0	1.8	19.6	-0.8	-15.4
Aug.	-3.9	-3.8	-0.7	7.3	-6.7	1.1	-2.8	-3.9	-2.8	-15.5	-3.9	19.1	-0.8	6.8
12-month cumulated transactions														
2006 Aug.	-36.4	15.8	36.1	-18.3	-70.0	10.7	-25.6	134.6	-76.6	84.2	-22.3	137.9	11.4	-108.9

C30 B.o.p. current account balance
(EUR billions)

- quarterly transactions
- 12-month cumulated transactions

C31 B.o.p. net direct and portfolio investment
(EUR billions)

- direct investment (quarterly transactions)
- portfolio investment (quarterly transactions)
- direct investment (12-month cumulated transactions)
- portfolio investment (12-month cumulated transactions)
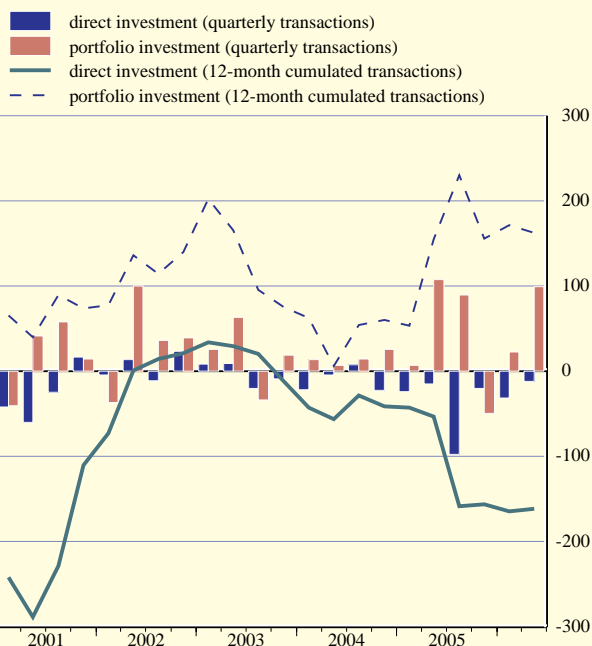
Source: ECB.

2. Current and capital accounts

	Current account											Capital account	
	Total			Goods		Services		Income		Current transfers			
	Credit	Debit	Net	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit
	1	2	3	4	5	6	7	8	9	10	11	12	13
2003	1,693.2	1,660.8	32.4	1,036.0	929.9	331.8	312.3	243.3	280.5	82.1	138.1	23.7	10.8
2004	1,843.0	1,793.2	49.9	1,128.2	1,022.9	362.1	333.1	270.9	298.9	81.9	138.3	24.1	6.6
2005	2,022.6	2,045.7	-23.1	1,220.0	1,166.0	397.3	362.5	321.6	365.4	83.6	151.8	23.4	10.9
2005 Q2	503.4	514.5	-11.2	305.2	287.1	97.3	87.0	83.8	107.3	17.1	33.1	5.8	1.8
Q3	509.7	511.1	-1.4	309.0	293.0	108.9	99.3	76.5	83.6	15.3	35.1	4.6	1.8
Q4	548.7	561.5	-12.8	327.4	322.4	105.8	95.0	93.3	105.7	22.2	38.4	8.1	3.5
2006 Q1	542.3	555.1	-12.8	329.7	332.6	96.6	91.8	86.3	84.9	29.6	45.8	5.9	3.9
Q2	578.9	586.5	-7.6	341.8	335.4	106.6	94.5	113.2	123.5	17.3	33.1	4.6	3.6
2006 June	204.5	193.8	10.8	118.1	112.9	38.0	32.7	42.2	37.7	6.2	10.5	1.9	1.4
July	190.7	188.2	2.5	116.0	110.4	39.1	33.5	31.0	32.8	4.6	11.6	1.9	1.2
Aug.	187.9	191.8	-3.9	107.3	111.0	36.9	37.7	37.8	30.5	5.9	12.6	1.6	0.6
					Seasonally adjusted								
2005 Q2	491.6	490.6	1.0	297.1	279.2	95.9	88.7	77.0	87.3	21.5	35.4	.	.
Q3	513.5	522.6	-9.1	312.5	301.8	100.7	92.8	80.2	91.0	20.0	37.0	.	.
Q4	531.8	553.4	-21.5	317.4	313.1	104.5	93.4	88.1	107.9	21.9	39.1	.	.
2006 Q1	559.8	568.0	-8.1	335.2	330.0	106.5	96.2	92.2	97.4	26.0	44.3	.	.
Q2	572.3	569.6	2.7	338.7	334.0	106.2	97.8	105.7	101.9	21.7	35.9	.	.
2005 Dec.	181.0	184.0	-3.0	108.5	106.9	34.3	30.7	30.1	32.2	7.9	14.2	.	.
2006 Jan.	178.5	178.0	0.5	109.4	108.7	35.5	32.0	30.5	29.3	3.2	8.0	.	.
Feb.	195.6	200.0	-4.5	112.9	111.5	36.5	32.6	29.2	32.4	16.9	23.5	.	.
Mar.	185.7	189.9	-4.2	112.9	109.8	34.5	31.6	32.5	35.7	5.8	12.8	.	.
Apr.	184.6	183.7	0.9	113.8	112.2	34.8	31.7	29.4	27.0	6.6	12.8	.	.
May	192.7	199.8	-7.1	110.9	111.1	35.5	33.2	38.9	42.7	7.4	12.8	.	.
June	195.0	186.1	8.9	114.0	110.7	35.9	32.9	37.4	32.2	7.7	10.3	.	.
July	187.8	191.7	-3.9	114.2	115.9	35.0	31.3	32.6	32.3	6.0	12.3	.	.
Aug.	198.2	205.2	-6.9	115.2	118.7	34.8	34.2	40.7	38.3	7.6	14.0	.	.

C32 B.o.p. goods
(EUR billions, seasonally adjusted; three-month moving average)

- exports (credit)
- imports (debit)
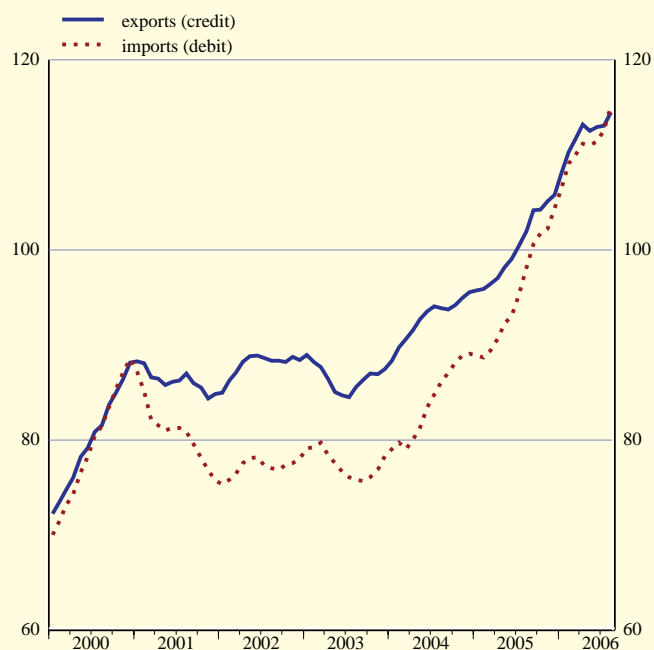
C33 B.o.p. services
(EUR billions, seasonally adjusted; three-month moving average)

- exports (credit)
- imports (debit)

Source: ECB.

**EURO AREA
STATISTICS**

External
transactions
and
positions
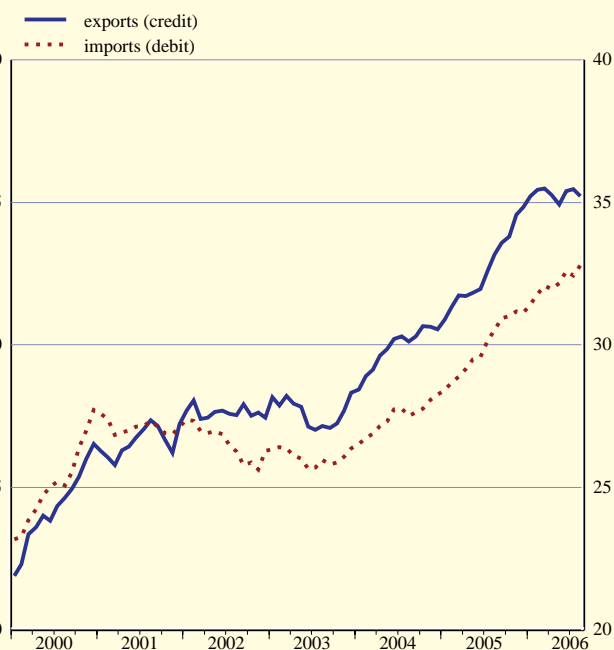
7.1 Balance of payments
(EUR billions)

3. Income account
(transactions)

	Compensation of employees		Investment income											
	Credit	Debit	Total		Direct investment				Portfolio investment				Other investment	
					Equity		Debt		Equity		Debt			
	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2003	14.8	7.2	228.5	273.3	66.3	56.3	10.0	10.2	18.6	53.5	65.5	80.7	68.1	72.6
2004	15.3	7.7	255.6	291.1	87.0	72.0	12.1	11.8	23.8	56.9	67.5	79.0	65.2	71.5
2005	15.4	9.3	306.2	356.1	97.4	97.6	13.0	13.2	30.8	71.1	79.8	79.3	85.2	94.9
2005 Q2	3.8	2.3	80.0	105.0	27.4	26.1	3.3	3.5	9.9	30.2	19.5	22.0	19.9	23.1
Q3	3.8	2.8	72.6	80.7	19.9	22.3	2.9	2.9	7.6	15.8	21.5	17.0	20.7	22.7
Q4	4.0	2.5	89.3	103.2	31.3	34.4	3.9	3.9	7.3	13.8	21.3	23.0	25.4	28.1
2006 Q1	4.0	2.0	82.3	82.9	19.8	12.2	4.2	3.5	8.2	16.1	23.5	21.2	26.7	29.9
Q2	4.1	2.9	109.1	120.6	36.4	19.2	4.4	4.0	13.2	40.8	24.6	21.4	30.5	35.2

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
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2003	-147.2	-130.0	-1.9	-128.2	-17.1	0.0	-17.1	134.9	124.4	3.1	121.3	10.5	0.1	10.5
2004	-141.7	-152.0	-17.3	-134.7	10.3	0.1	10.2	100.5	86.5	1.2	85.3	14.0	0.6	13.4
2005	-232.7	-171.9	-9.2	-162.7	-60.7	0.4	-61.1	76.4	45.7	-0.1	45.8	30.7	1.1	29.7
2005 Q2	-28.4	-23.6	-1.9	-21.8	-4.7	0.0	-4.8	13.7	4.2	0.4	3.8	9.5	-0.1	9.6
Q3	-115.9	-92.0	-4.9	-87.1	-23.9	0.1	-24.0	18.3	5.5	0.9	4.7	12.8	0.4	12.3
Q4	-47.2	-33.0	-0.1	-32.9	-14.2	0.2	-14.4	27.0	18.0	-1.7	19.7	9.0	0.4	8.6
2006 Q1	-50.5	-41.7	-1.8	-39.9	-8.8	0.2	-9.1	19.0	14.7	0.7	14.0	4.3	-0.3	4.6
Q2	-111.0	-88.7	-6.2	-82.4	-22.4	-1.1	-21.3	98.9	86.6	0.5	86.1	12.3	1.0	11.3
2005 Aug.	-11.7	-4.7	-0.5	-4.1	-7.0	0.0	-7.0	-0.4	-0.8	0.2	-1.0	0.4	0.1	0.3
Sep.	-11.2	-1.4	-1.0	-0.3	-9.8	0.0	-9.9	10.7	-4.1	0.4	-4.5	14.7	0.3	14.4
Oct.	-11.5	-0.7	0.3	-1.1	-10.8	0.0	-10.8	3.7	5.9	0.2	5.7	-2.2	0.3	-2.5
Nov.	-8.6	-5.9	0.2	-6.1	-2.7	0.0	-2.7	4.8	3.6	-1.7	5.2	1.2	0.2	1.0
Dec.	-27.0	-26.4	-0.7	-25.7	-0.7	0.2	-0.9	18.6	8.5	-0.2	8.7	10.0	0.0	10.1
2006 Jan.	-6.5	4.4	-0.6	5.0	-10.9	-0.1	-10.8	3.8	6.2	0.2	6.0	-2.4	0.1	-2.5
Feb.	-39.4	-33.8	-1.6	-32.3	-5.6	0.1	-5.7	10.3	12.0	0.4	11.6	-1.7	0.1	-1.8
Mar.	-4.6	-12.2	0.4	-12.6	7.6	0.2	7.4	4.9	-3.4	0.2	-3.6	8.3	-0.5	8.9
Apr.	-84.4	-59.8	-1.9	-57.9	-24.6	-0.5	-24.1	92.7	78.2	0.0	78.1	14.6	0.2	14.4
May	-14.6	-18.5	-3.3	-15.2	3.9	-0.3	4.2	10.1	8.5	0.4	8.1	1.5	0.4	1.1
June	-12.0	-10.3	-1.0	-9.3	-1.7	-0.2	-1.4	-3.9	-0.1	0.1	-0.1	-3.8	0.4	-4.2
July	-13.1	-11.6	-1.2	-10.4	-1.4	0.0	-1.4	3.7	3.4	0.2	3.2	0.2	-0.2	0.4
Aug.	-1.8	-7.5	-0.8	-6.7	5.8	-0.1	5.8	-1.1	3.1	0.3	2.9	-4.2	-0.1	-4.1

Source: ECB.

5. Portfolio investment by instrument and sector of holder

	Equity					Debt instruments									
						Bonds and notes					Money market instruments				
	Assets				Liabilities	Assets				Liabilities	Assets				Liabilities
	Eurosystem	MFIs excluding Eurosystem	Non-MFIs	General gov.		Eurosystem	MFIs excluding Eurosystem	Non-MFIs	General gov.		Eurosystem	MFIs excluding Eurosystem	Non-MFIs	General gov.	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2003	-0.3	-13.9	-64.4	-2.6	110.3	-2.4	-45.0	-128.3	-0.2	198.9	0.2	-45.9	23.7	0.6	42.2
2004	0.0	-22.4	-81.0	-3.4	128.1	1.2	-81.8	-97.1	-2.1	254.9	-0.1	-43.2	-13.7	0.1	15.4
2005	-0.1	-15.6	-124.9	-3.9	279.5	-0.7	-124.6	-161.4	-0.5	255.8	0.1	-11.6	-3.8	0.1	62.9
2005 Q2	0.0	21.7	-22.8	-0.8	25.0	-0.7	-39.5	-34.3	-0.1	158.1	-0.4	-9.1	-5.2	-2.4	14.9
Q3	-0.1	-4.9	-26.9	-1.1	150.7	-0.4	-21.3	-49.7	0.1	24.5	0.1	-7.1	1.6	0.2	23.4
Q4	0.0	-4.8	-53.9	-0.9	62.5	0.6	-28.1	-36.4	-0.1	26.4	0.1	-1.4	5.8	5.9	-19.8
2006 Q1	0.0	-19.1	-77.9	-0.6	121.2	-0.1	-53.7	-36.2	-0.2	80.8	0.7	2.5	-10.3	-3.8	15.0
Q2	0.0	11.6	7.6	-2.6	35.5	1.0	-23.9	-26.2	0.1	115.4	-3.2	-7.1	-0.7	-3.2	-11.0
2005 Aug.	0.0	2.0	-8.8	-	23.4	-0.5	-5.7	-13.8	-	-6.9	0.3	-11.5	-0.1	-	8.2
Sep.	0.0	-3.4	-3.4	-	15.9	-0.2	-11.5	-21.4	-	33.7	0.4	4.4	3.3	-	8.2
Oct.	0.0	4.6	-10.8	-	-4.5	0.6	-17.4	-14.8	-	24.7	0.0	6.4	4.0	-	5.3
Nov.	0.0	-6.7	-21.4	-	10.6	0.1	-3.6	-15.7	-	5.5	0.1	-5.1	0.0	-	-7.4
Dec.	0.0	-2.7	-21.7	-	56.4	-0.2	-7.1	-5.9	-	-3.7	0.0	-2.7	1.8	-	-17.7
2006 Jan.	0.0	-6.7	-37.2	-	35.5	0.2	-32.8	-2.5	-	1.0	0.4	3.0	-7.5	-	10.2
Feb.	0.0	-3.7	-23.4	-	36.2	-0.2	-7.1	-16.9	-	25.0	0.3	1.5	-2.3	-	12.0
Mar.	0.0	-8.7	-17.4	-	49.5	-0.1	-13.8	-16.8	-	54.9	0.0	-2.0	-0.5	-	-7.1
Apr.	0.0	3.5	-5.8	-	-9.4	0.5	-6.1	-11.4	-	26.1	-1.1	-6.5	0.2	-	3.9
May	0.0	3.4	12.2	-	-10.2	0.4	-11.2	-11.8	-	65.8	-1.6	-2.2	-2.0	-	1.7
June	0.0	4.6	1.2	-	55.1	0.0	-6.6	-3.0	-	23.5	-0.5	1.6	1.1	-	-16.6
July	0.0	2.3	-8.2	-	45.5	0.2	-10.5	-4.0	-	0.6	0.4	-18.3	-1.9	-	-5.2
Aug.	0.0	-4.8	-5.0	-	-2.8	0.0	-8.9	-8.0	-	7.4	1.0	0.0	2.3	-	3.3

6. Other investment by sector

	Total		Eurosystem		General government			MFIs (excluding Eurosystem)						Other sectors		
								Total		Long-term		Short-term				
	Assets	Liabilities	Assets	Liabilities	Assets	Currency and deposits	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Currency and deposits	Liabilities
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2003	-253.1	174.1	-0.8	10.0	-0.4	-	-3.4	-152.6	134.8	-50.7	52.3	-101.9	82.5	-99.3	-	32.7
2004	-312.5	275.0	-0.2	6.9	-2.3	-2.0	-3.6	-259.4	246.9	-20.1	-3.6	-239.3	250.5	-50.6	-10.5	24.7
2005	-564.8	641.3	-1.2	6.1	5.1	-2.3	-2.4	-385.3	477.0	-99.6	50.6	-285.6	426.4	-183.4	-22.4	160.6
2005 Q2	-156.6	108.5	-1.3	0.3	-7.6	-8.6	-1.9	-97.1	45.0	-18.5	22.5	-78.6	22.5	-50.5	18.0	65.2
Q3	-108.4	149.2	0.4	4.3	7.7	4.7	1.2	-87.8	122.9	-21.9	14.6	-65.8	108.3	-28.9	-18.9	20.8
Q4	-121.5	167.2	-0.8	-3.4	-2.3	-1.1	-2.0	-73.7	113.3	-37.7	3.2	-36.0	110.1	-44.7	7.9	59.3
2006 Q1	-218.3	295.1	-3.4	6.6	7.6	3.8	-3.6	-136.4	222.2	-13.3	12.8	-123.2	209.4	-86.1	-8.4	69.8
Q2	-103.9	71.4	0.8	2.3	-11.2	-12.1	0.3	-57.6	10.1	-31.4	21.1	-26.2	-10.9	-35.9	15.5	58.6
2005 Aug.	19.6	6.9	0.2	0.8	6.3	8.4	0.5	20.1	-2.0	-1.4	3.1	21.4	-5.1	-7.0	-6.5	7.6
Sep.	-84.4	93.7	-0.1	4.6	2.1	0.9	-0.2	-69.2	76.6	-14.3	6.0	-54.9	70.7	-17.3	-9.0	12.6
Oct.	-53.9	54.9	0.0	-1.0	0.7	-0.3	1.8	-46.4	50.7	-3.8	1.2	-42.7	49.5	-8.2	3.5	3.4
Nov.	-149.6	198.5	-0.9	1.7	-1.2	1.3	0.2	-113.3	170.9	-0.9	-3.2	-112.4	174.1	-34.2	-6.0	25.7
Dec.	82.0	-86.3	0.1	-4.1	-1.8	-2.1	-4.1	86.0	-108.3	-33.1	5.2	119.1	-113.5	-2.3	10.3	30.2
2006 Jan.	-103.2	144.3	0.1	4.9	3.7	2.3	-2.4	-71.1	117.7	6.6	-1.0	-77.8	118.6	-35.9	-15.8	24.2
Feb.	-44.5	73.1	-4.4	0.2	1.2	1.0	-1.2	-3.9	36.3	-7.4	9.8	3.5	26.4	-37.5	-3.4	37.9
Mar.	-70.5	77.6	1.0	1.6	2.6	0.5	0.0	-61.5	68.3	-12.5	4.0	-48.9	64.3	-12.7	10.9	7.8
Apr.	-82.1	111.6	0.1	-1.3	-4.4	-4.8	4.3	-64.3	82.3	-5.5	9.8	-58.8	72.5	-13.4	6.0	26.3
May	-72.3	64.1	0.0	5.0	-4.1	-4.5	-4.8	-45.1	40.6	-8.4	2.5	-36.7	38.1	-23.1	-3.5	23.3
June	50.5	-104.3	0.6	-1.3	-2.6	-2.9	0.9	51.8	-112.8	-17.4	8.8	69.3	-121.6	0.6	13.1	9.0
July	-53.7	73.3	0.8	0.1	7.0	6.9	1.8	-42.9	64.5	-13.1	7.6	-29.8	56.9	-18.6	-2.8	7.0
Aug.	-2.0	21.1	-2.5	1.3	0.5	-0.1	-0.5	7.9	18.5	-7.7	5.8	15.7	12.6	-7.9	-5.4	1.8

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
2003	-0.8	0.0	10.0	0.0	-0.1	0.7	-0.3	0.9	-1.0	0.0	-3.7	0.3
2004	0.1	-0.3	6.9	0.1	0.0	-0.6	1.4	-2.0	-1.7	0.0	-3.5	0.0
2005	-1.0	-0.1	6.1	0.0	0.0	6.6	8.9	-2.3	-1.5	0.0	-2.2	-0.3
2005 Q2	-1.2	-0.1	0.3	0.0	0.0	-7.1	1.5	-8.6	-0.5	0.0	-2.0	0.0
Q3	0.4	0.0	4.3	0.0	0.0	8.0	3.3	4.7	-0.3	0.0	1.3	-0.1
Q4	-0.8	0.0	-3.4	0.0	0.0	-2.1	-1.0	-1.1	-0.2	0.0	-2.1	0.0
2006 Q1	-3.4	0.0	6.6	0.1	0.0	7.8	4.0	3.8	-0.1	0.0	-3.2	-0.4
Q2	0.8	0.0	2.4	0.0	0.0	-10.8	1.4	-12.1	-0.4	0.0	0.2	0.1

	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
2003	-152.1	-0.5	134.8	-0.1	-1.2	-95.8	-9.6	-86.3	-2.3	4.2	28.4	0.2
2004	-256.3	-3.1	244.0	2.9	-6.0	-39.5	-29.0	-10.5	-5.1	8.6	13.4	2.7
2005	-381.2	-4.0	475.0	2.0	-7.8	-163.3	-140.9	-22.4	-12.3	9.0	147.9	3.7
2005 Q2	-97.0	-0.1	43.8	1.2	-5.4	-43.1	-61.1	18.0	-2.1	1.1	62.8	1.3
Q3	-82.5	-5.2	120.2	2.7	2.0	-24.3	-5.4	-18.9	-6.6	0.5	22.1	-1.7
Q4	-77.0	3.3	118.0	-4.7	-1.7	-42.1	-49.9	7.9	-0.9	4.4	56.0	-1.1
2006 Q1	-132.6	-3.9	216.3	5.9	-3.8	-74.0	-65.5	-8.4	-8.4	4.4	60.0	5.4
Q2	-58.1	0.5	15.7	-5.5	-3.6	-34.7	-50.3	15.5	2.4	4.0	59.6	-4.9

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
2003	28.2	1.7	0.0	-1.6	28.1	-2.5	1.9	-0.1	22.1	6.7	0.1	0.0
2004	12.5	1.2	0.5	4.0	6.9	-3.8	4.0	0.4	18.3	-11.9	-0.1	0.0
2005	18.8	3.9	-0.2	8.6	6.5	0.1	7.8	0.0	-4.8	3.5	0.0	0.0
2005 Q2	3.1	1.3	0.0	1.3	0.5	-4.4	1.1	0.0	0.9	2.9	0.0	0.0
Q3	2.0	0.5	0.0	2.6	-1.1	1.6	0.9	0.0	-4.9	1.4	-0.1	0.0
Q4	8.8	1.2	-0.1	3.0	4.6	-2.3	6.9	0.0	-2.0	2.1	0.0	0.0
2006 Q1	6.1	0.8	0.0	3.4	2.4	6.2	-4.8	0.0	-3.6	4.6	0.0	-0.5
Q2	-1.4	1.4	0.0	-0.5	-3.0	0.9	2.4	0.0	-6.8	0.5	0.0	0.7

Source: ECB.

	Current and capital accounts balance	Direct investment		Portfolio investment			Other investment		Financial derivatives	Errors and omissions	Total of columns 1 to 10	Memo: Transactions in the external counterpart of M3
		By resident units abroad (non-MFIs)	By non-resident units in the euro area	Assets	Liabilities		Assets	Liabilities				
				Non-MFIs	Equity [1]	Debt instruments [2]	Non-MFIs	Non-MFIs				
	1	2	3	4	5	6	7	8	9	10	11	12
2003	45.4	-145.3	134.8	-169.0	114.5	241.3	-99.7	29.3	-13.0	-44.1	94.2	93.7
2004	67.3	-124.5	99.9	-191.9	118.0	250.4	-52.9	21.2	-5.0	-56.4	126.2	160.8
2005	-10.6	-223.8	75.3	-290.1	236.3	294.6	-178.4	158.2	-15.2	-68.5	-22.3	5.5
2005 Q2	-7.2	-26.5	13.8	-62.2	-0.8	178.6	-58.1	63.3	1.3	-42.3	59.9	64.4
Q3	1.5	-111.1	17.9	-75.0	155.3	41.1	-21.1	22.0	-0.4	-36.0	-6.0	-19.2
Q4	-8.1	-47.2	26.6	-84.5	47.8	2.8	-47.0	57.3	-8.8	31.9	-29.4	-15.2
2006 Q1	-10.8	-49.0	19.3	-124.4	116.1	73.8	-78.5	66.2	-8.5	-54.9	-50.8	-34.1
Q2	-6.6	-103.8	97.9	-19.3	28.9	100.3	-47.1	58.9	-1.7	-44.5	63.1	66.8
2005 Aug.	-2.0	-11.1	-0.4	-22.6	25.0	0.2	-0.7	8.1	-0.7	1.6	-2.6	1.9
Sep.	-0.4	-10.2	10.3	-21.5	11.9	38.0	-15.2	12.4	-1.2	-32.8	-8.5	-21.1
Oct.	-6.9	-11.9	3.4	-21.5	-5.3	24.0	-7.5	5.3	-4.3	19.7	-5.0	-5.2
Nov.	-4.6	-8.8	4.6	-37.2	10.6	-1.4	-35.4	25.9	-0.3	2.4	-44.4	-44.9
Dec.	3.4	-26.5	18.6	-25.8	42.5	-19.8	-4.1	26.1	-4.2	9.7	19.9	34.9
2006 Jan.	-9.4	-5.8	3.8	-47.1	31.8	3.6	-32.2	21.8	-2.9	12.6	-23.9	5.7
Feb.	0.4	-37.9	10.2	-42.6	31.3	31.0	-36.3	36.7	-3.3	-19.9	-30.3	-19.2
Mar.	-1.9	-5.3	5.4	-34.7	52.9	39.2	-10.0	7.7	-2.3	-47.6	3.5	-20.6
Apr.	-7.3	-82.0	92.5	-17.0	-13.5	20.4	-17.8	30.6	-5.6	-17.8	-17.5	-7.3
May	-10.7	-11.0	9.7	-1.6	-10.6	63.3	-27.2	18.5	2.0	-21.2	11.0	11.2
June	11.4	-10.7	-4.3	-0.7	53.1	16.6	-2.0	9.8	1.9	-5.5	69.6	62.9
July	3.2	-11.8	3.8	-14.1	27.3	-1.0	-11.6	8.8	1.8	-15.4	-9.2	4.4
Aug.	-2.8	-0.9	-1.0	-10.7	1.1	3.3	-7.4	1.3	-3.9	6.8	-14.1	-11.4
12-month cumulated transactions												
2006 Aug.	-25.6	-223.0	157.0	-274.5	233.0	217.2	-206.7	205.0	-22.3	-108.9	-48.9	-10.5

C34 Main b.o.p. transactions underlying the developments in MFI net external assets
(EUR billions; 12-month cumulated transactions)

- MFI net external assets
- current and capital accounts balance
- direct and portfolio equity investment abroad by non-MFIs
- portfolio investment liabilities in the form of debt instruments [2]
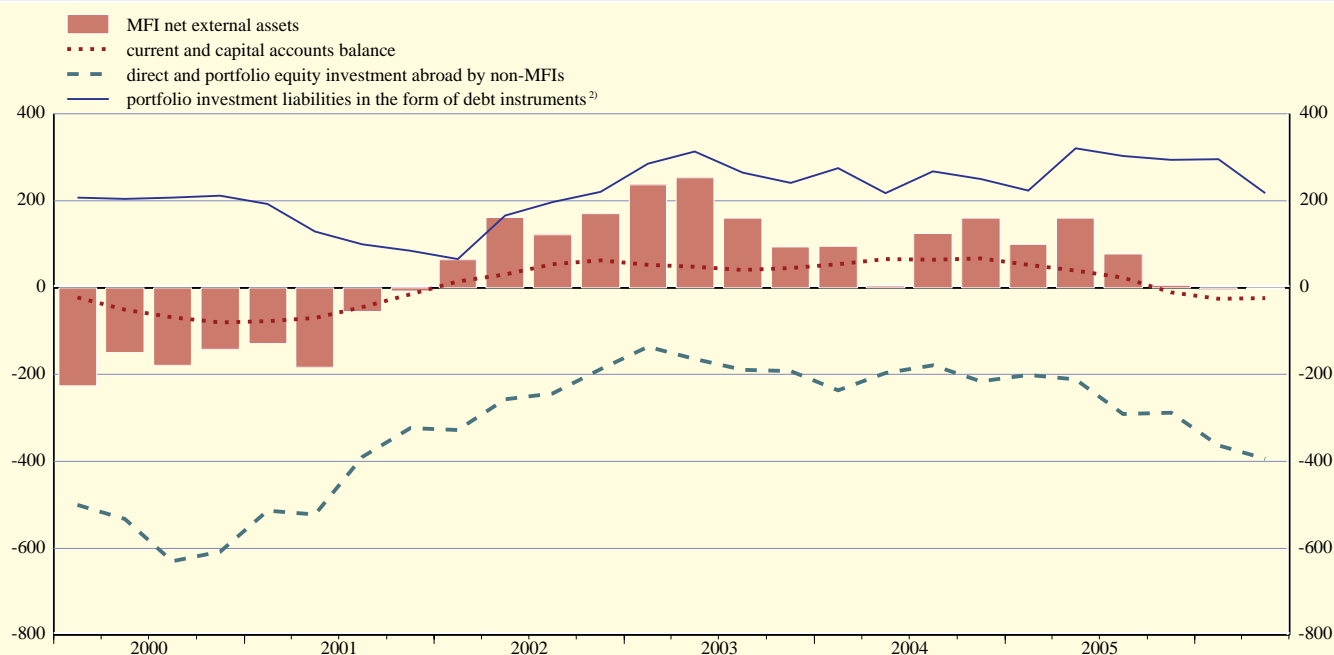
Source: ECB.
1) Excluding money market fund shares/units.
2) Excluding debt securities with a maturity of up to two years issued by euro area MFIs.

**EURO AREA
STATISTICS**

External
transactions
and
positions

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					
2005 Q3 to 2006 Q2	1	2	3	4	5	6	7	8	9	10	11	12
					Credits							
Current account	2,179.5	793.1	45.1	69.6	418.6	201.4	58.4	28.8	53.9	142.8	373.2	787.7
Goods	1,307.9	454.0	30.6	46.5	216.2	160.7	0.1	17.1	34.0	72.6	195.5	534.8
Services	417.9	147.0	8.2	11.2	101.3	21.2	5.1	6.1	12.0	40.4	78.4	133.9
Income	369.3	131.9	5.9	11.3	91.5	17.3	5.8	5.1	7.1	23.7	92.7	108.9
of which: investment income	353.3	126.6	5.8	11.2	89.8	17.2	2.6	5.1	7.0	17.6	91.2	105.8
Current transfers	84.4	60.2	0.5	0.6	9.6	2.2	47.3	0.4	0.8	6.1	6.7	10.2
Capital account	23.3	19.8	0.0	0.0	0.8	0.3	18.7	0.0	0.0	0.4	0.5	2.4
					Debits							
Current account	2,214.2	706.3	37.7	66.4	349.6	161.4	91.1	21.0	82.3	135.4	335.7	933.5
Goods	1,283.5	365.0	26.2	43.2	166.8	128.9	0.0	10.1	52.2	65.1	124.9	666.3
Services	380.6	120.0	6.8	9.1	79.3	24.7	0.2	5.5	7.6	30.8	85.4	131.3
Income	397.7	125.5	4.3	13.4	95.5	6.5	5.8	4.2	22.2	34.4	117.7	93.7
of which: investment income	387.4	120.5	4.2	13.3	94.4	2.6	5.8	4.1	22.1	33.8	116.8	90.2
Current transfers	152.4	95.8	0.4	0.7	8.1	1.4	85.1	1.2	0.3	5.2	7.7	42.2
Capital account	12.7	1.4	0.0	0.1	0.8	0.2	0.2	0.1	0.0	0.3	1.1	9.8
					Net							
Current account	-34.7	86.8	7.4	3.2	69.0	40.0	-32.7	7.8	-28.4	7.3	37.6	-145.8
Goods	24.4	89.0	4.4	3.3	49.4	31.8	0.1	7.0	-18.2	7.5	70.6	-131.5
Services	37.3	27.0	1.4	2.1	22.0	-3.5	5.0	0.6	4.5	9.6	-7.0	2.6
Income	-28.3	6.4	1.6	-2.1	-4.0	10.8	0.0	0.9	-15.1	-10.7	-25.0	15.1
of which: investment income	-34.1	6.1	1.6	-2.2	-4.6	14.5	-3.2	1.0	-15.1	-16.2	-25.6	15.7
Current transfers	-68.0	-35.6	0.0	-0.1	1.5	0.8	-37.8	-0.7	0.5	0.9	-1.0	-32.0
Capital account	10.5	18.4	0.0	-0.1	0.0	0.0	18.5	-0.1	0.0	0.1	-0.6	-7.3

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						
2005 Q3 to 2006 Q2	1	2	3	4	5	6	7	8	9	10	11	12	13
Direct investment	-161.5	-130.7	1.7	13.6	-122.7	-23.2	0.0	-0.6	11.0	7.5	-14.3	9.7	-44.1
Abroad	-324.7	-236.7	0.6	4.1	-218.0	-23.4	0.0	-6.4	8.0	0.0	-24.0	-15.4	-50.3
Equity/reinvested earnings	-255.3	-213.6	-0.7	0.3	-191.0	-22.1	0.0	-1.8	8.5	-0.6	3.2	-6.6	-44.4
Other capital	-69.4	-23.1	1.4	3.9	-27.0	-1.3	0.0	-4.6	-0.5	0.7	-27.2	-8.8	-5.9
In the euro area	163.2	106.0	1.1	9.5	95.3	0.2	0.0	5.8	3.0	7.5	9.6	25.1	6.2
Equity/reinvested earnings	124.9	82.7	0.3	9.3	71.8	1.1	0.0	4.7	2.7	5.1	-10.3	36.2	3.8
Other capital	38.3	23.4	0.7	0.1	23.5	-1.0	0.0	1.1	0.3	2.3	19.9	-11.0	2.4

Source: ECB.

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						
2005 Q3 to 2006 Q2	1	2	3	4	5	6	7	8	9	10	11	12	13
Portfolio investment assets	-462.3	-135.5	-0.6	-11.9	-105.6	-12.8	-4.5	-9.8	-31.0	1.5	-107.6	-80.9	-98.9
Equity	-168.6	-14.4	0.8	-5.5	-9.0	-0.7	0.0	-4.5	-23.1	4.8	-49.5	-23.9	-58.0
Debt instruments	-293.7	-121.0	-1.4	-6.4	-96.6	-12.2	-4.5	-5.4	-7.9	-3.3	-58.2	-56.9	-41.0
Bonds and notes	-274.5	-105.9	-0.9	-3.7	-82.5	-13.7	-5.0	-4.1	-6.8	-1.2	-63.6	-51.1	-41.9
Money market instruments	-19.1	-15.2	-0.5	-2.6	-14.1	1.6	0.5	-1.2	-1.1	-2.1	5.5	-5.9	0.9

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							
2005 Q3 to 2006 Q2	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Other investment	130.7	14.8	-8.8	12.9	12.6	-13.7	11.7	-2.1	34.2	-20.3	44.2	47.8	10.1	2.0
Assets	-552.1	-368.8	-25.4	4.1	-320.2	-26.9	-0.3	-3.4	17.6	-42.8	8.0	-67.1	-2.4	-93.3
General government	1.8	-5.5	1.4	-0.8	-5.5	0.1	-0.7	0.1	0.0	0.0	0.6	0.0	-1.3	8.0
MFIs	-358.5	-202.6	-26.0	5.2	-158.3	-23.7	0.2	-3.3	16.9	-37.2	-6.5	-46.6	-0.7	-78.4
Other sectors	-195.5	-160.6	-0.7	-0.4	-156.4	-3.3	0.2	-0.2	0.7	-5.6	13.9	-20.5	-0.4	-22.8
Liabilities	682.9	383.5	16.6	8.8	332.8	13.2	12.1	1.3	16.6	22.5	36.2	115.0	12.5	95.3
General government	-4.1	-2.9	0.0	0.0	-2.6	0.0	-0.3	0.0	0.0	-0.3	-0.8	0.0	1.0	-1.2
MFIs	478.4	219.6	16.0	7.6	183.5	11.2	1.3	1.7	14.3	17.7	17.0	109.8	11.3	87.1
Other sectors	208.6	166.8	0.6	1.3	151.9	2.1	11.0	-0.4	2.2	5.2	20.0	5.2	0.2	9.3

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							
2004	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Direct investment	33.1	-273.1	-10.4	-11.8	-361.5	110.8	-0.2	22.7	-4.0	35.3	-63.5	-30.9	0.0	346.7
Abroad	2,265.1	759.8	26.1	71.1	537.6	125.1	0.0	66.8	55.9	220.3	486.6	272.2	0.0	403.5
Equity/reinvested earnings	1,825.7	608.4	22.9	43.8	432.7	108.9	0.0	58.3	50.5	171.0	377.2	255.7	0.0	304.8
Other capital	439.3	151.4	3.1	27.2	104.9	16.2	0.0	8.5	5.4	49.4	109.4	16.5	0.0	98.7
In the euro area	2,231.9	1,032.9	36.5	82.8	899.1	14.3	0.2	44.1	59.8	185.1	550.2	303.0	0.1	56.8
Equity/reinvested earnings	1,642.1	814.3	23.0	67.4	719.4	4.4	0.1	40.4	48.8	129.6	387.7	177.0	0.0	44.2
Other capital	589.9	218.6	13.4	15.4	179.8	9.9	0.1	3.7	11.1	55.4	162.4	126.1	0.0	12.6
Portfolio investment assets	2,984.0	941.1	45.1	100.8	680.8	56.8	57.6	63.4	174.3	91.9	1,050.2	310.3	28.4	324.4
Equity	1,238.7	315.3	6.6	32.9	261.4	14.4	0.0	12.6	109.5	82.3	483.3	106.8	0.9	128.0
Debt instruments	1,745.3	625.8	38.5	67.9	419.4	42.4	57.6	50.8	64.8	9.7	566.9	203.5	27.5	196.3
Bonds and notes	1,458.6	513.8	34.4	58.7	322.5	41.1	57.1	48.7	39.9	8.5	463.5	185.9	27.1	171.2
Money market instruments	286.7	112.1	4.1	9.2	96.9	1.3	0.5	2.1	25.0	1.2	103.4	17.6	0.3	25.1
Other investment	-195.9	34.7	26.1	30.2	90.7	20.8	-133.0	3.6	20.0	-68.9	-42.6	-232.8	-13.4	103.4
Assets	2,940.3	1,472.4	53.8	67.1	1,261.0	85.5	5.0	14.5	85.0	174.1	415.3	258.2	39.8	481.0
General government	98.6	10.4	1.1	0.0	4.1	2.2	3.1	0.0	0.2	0.1	2.8	1.2	34.3	49.6
MFIs	2,004.7	1,136.1	45.0	54.2	971.8	64.0	1.1	7.4	67.1	106.8	244.4	171.5	4.8	266.7
Other sectors	837.0	325.9	7.8	12.9	285.2	19.3	0.8	7.1	17.7	67.2	168.1	85.6	0.7	164.6
Liabilities	3,136.2	1,437.6	27.7	36.9	1,170.3	64.8	138.0	10.9	65.0	243.0	457.9	491.1	53.2	377.5
General government	43.6	24.0	0.0	0.2	5.3	0.0	18.5	0.0	0.9	0.1	4.1	0.3	2.9	11.3
MFIs	2,539.5	1,143.3	23.9	20.5	955.2	52.2	91.6	6.9	44.5	207.0	355.4	449.5	48.7	284.2
Other sectors	553.2	270.2	3.8	16.2	209.8	12.5	27.9	4.0	19.6	35.9	98.4	41.3	1.6	82.1

Source: ECB.

**EURO AREA
STATISTICS**

External
transactions
and
positions

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							
2002	-703.6	-9.7	184.5	-937.6	-12.0	-304.6	366.1
2003	-809.3	-10.9	43.1	-914.0	-8.3	-236.8	306.6
2004	-946.2	-12.2	33.1	-1,049.4	-14.8	-195.9	280.8
2005 Q4	-1,061.1	-13.3	259.1	-1,306.9	-16.8	-316.6	320.1
2006 Q1	-960.3	-11.6	327.7	-1,217.9	-6.7	-390.6	327.2
Q2	-955.0	-11.5	340.7	-1,280.3	-2.0	-337.2	323.8
Outstanding assets							
2002	7,429.3	102.5	2,008.7	2,292.7	136.0	2,625.9	366.1
2003	7,934.3	106.4	2,152.0	2,634.6	158.0	2,683.1	306.6
2004	8,632.6	111.4	2,265.1	2,984.0	162.3	2,940.3	280.8
2005 Q4	10,511.3	131.4	2,564.9	3,758.2	232.0	3,636.1	320.1
2006 Q1	11,277.9	135.9	2,747.5	4,082.3	269.7	3,851.3	327.2
Q2	11,297.5	136.1	2,837.0	3,963.5	268.3	3,904.9	323.8
Outstanding liabilities							
2002	8,132.9	112.2	1,824.3	3,230.2	147.9	2,930.5	-
2003	8,743.6	117.3	2,108.9	3,548.6	166.3	2,919.8	-
2004	9,578.8	123.6	2,231.9	4,033.4	177.2	3,136.2	-
2005 Q4	11,572.4	144.7	2,305.8	5,065.1	248.8	3,952.7	-
2006 Q1	12,238.3	147.4	2,419.8	5,300.2	276.4	4,241.9	-
Q2	12,252.5	147.6	2,496.3	5,243.8	270.3	4,242.1	-

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	MFIs excluding Eurosystem	Non-MFIs	Total	MFIs excluding Eurosystem	Non-MFIs	Total	MFIs excluding Eurosystem	Non-MFIs	Total	MFIs excluding Eurosystem	Non-MFIs
	1	2	3	4	5	6	7	8	9	10	11	12
2002	1,547.4	133.3	1,414.1	461.4	1.6	459.7	1,293.1	42.1	1,251.0	531.2	2.9	528.3
2003	1,702.8	125.9	1,577.0	449.2	1.4	447.8	1,526.9	46.6	1,480.3	582.0	2.9	579.1
2004	1,825.7	139.9	1,685.9	439.3	1.2	438.1	1,642.1	46.1	1,596.0	589.9	3.4	586.5
2005 Q4	2,038.6	156.7	1,881.9	526.2	4.8	521.4	1,683.4	49.9	1,633.5	622.4	4.7	617.7
2006 Q1	2,219.1	163.4	2,055.7	528.4	6.8	521.6	1,814.7	44.3	1,770.4	605.1	10.0	595.1
Q2	2,288.0	165.6	2,122.4	549.0	7.3	541.7	1,883.6	44.4	1,839.2	612.6	10.1	602.6

3. Portfolio investment assets by instrument and sector of holder

	Equity					Debt instruments									
						Bonds and notes					Money market instruments				
	Assets				Liabilities	Assets				Liabilities	Assets				Liabilities
	Eurosystem	MFIs excluding Eurosystem	Non-MFIs			Eurosystem	MFIs excluding Eurosystem	Non-MFIs			Eurosystem	MFIs excluding Eurosystem	Non-MFIs		
			General gov.	Other sectors				General gov.	Other sectors				General gov.	Other sectors	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2002	0.7	43.6	8.3	799.2	1,364.3	6.4	402.9	8.0	784.6	1,654.4	1.2	189.4	1.3	47.1	211.5
2003	1.7	53.6	11.5	1,008.2	1,555.0	8.3	459.2	8.0	842.5	1,744.1	1.1	191.5	0.6	48.4	249.5
2004	2.1	74.1	15.8	1,146.7	1,782.6	6.2	538.4	9.7	904.3	2,011.2	1.0	231.6	0.5	53.7	239.6
2005 Q4	2.9	105.4	23.3	1,521.3	2,438.0	6.7	698.4	9.9	1,076.8	2,319.2	0.8	251.7	0.3	60.7	307.9
2006 Q1	2.9	121.5	28.7	1,722.1	2,671.4	6.7	733.4	11.0	1,145.7	2,309.8	0.2	247.7	4.1	58.4	319.0
Q2	2.8	104.9	29.7	1,611.5	2,561.9	5.8	732.5	10.7	1,144.3	2,369.8	3.3	253.6	7.3	57.0	312.0

Source: ECB.

4. Other investment by 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	3.6	0.1	57.2	0.2	1.3	59.4	54.7	4.7	54.5	0.1	42.2	13.8
2003	4.4	0.6	65.3	0.2	1.4	54.2	50.1	4.1	39.1	0.0	40.2	3.8
2004	4.5	0.1	73.0	0.2	1.4	57.6	51.0	6.7	39.6	0.0	40.1	3.5
2005 Q4	5.4	0.2	80.1	0.2	1.3	56.1	46.0	10.0	41.8	0.0	41.1	3.6
2006 Q1	8.2	0.2	86.5	0.3	0.1	50.2	42.1	8.1	43.3	0.0	40.8	2.7
Q2	7.9	0.2	88.5	0.3	0.1	60.6	40.4	20.2	42.6	0.0	41.1	2.8

	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	1,686.3	60.8	2,251.1	48.5	174.5	492.6	204.4	288.1	92.7	104.4	365.2	47.8
2003	1,739.6	38.4	2,242.9	30.9	170.3	538.4	208.7	329.8	96.7	106.6	383.5	46.3
2004	1,955.8	44.3	2,424.3	42.0	172.3	558.6	227.5	331.1	106.2	109.5	394.7	48.9
2005 Q4	2,447.4	56.2	3,039.5	54.0	176.9	723.1	363.9	359.2	127.8	124.6	544.9	64.7
2006 Q1	2,575.2	55.5	3,236.0	54.7	189.2	789.0	420.2	368.9	140.4	130.2	607.3	83.3
Q2	2,588.6	53.6	3,197.0	47.2	190.9	823.8	470.0	353.7	136.7	134.1	653.4	77.9

5. International reserves

		Reserve assets														Memo	
																Assets	Liabilities
	Total	Monetary gold		Special drawing rights	Reserve position in the IMF	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)			Total	Currency and deposits		Securities				Financial derivatives			
							With monetary authorities and the BIS	With banks	Total	Equity	Bonds and notes	Money market instruments				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
						Eurosystem										
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	306.6	130.0	393.543	4.4	23.3	148.9	10.0	30.4	107.7	1.0	80.2	26.5	0.9	0.0	20.3	-16.3
2004	280.8	125.4	389.998	3.9	18.6	132.9	12.5	25.5	94.7	0.5	58.5	35.6	0.2	0.0	19.1	-12.8
2005 Q4	320.1	163.4	375.861	4.3	10.6	141.7	12.7	21.4	107.9	0.6	69.6	37.7	-0.2	0.0	25.6	-17.9
2006 Q1	327.2	179.7	373.695	4.3	6.9	136.3	6.5	26.0	103.7	0.5	71.2	31.9	0.1	0.0	27.7	-19.4
Q2	323.8	178.9	370.694	4.2	7.8	133.0	5.4	22.0	105.3	0.5	74.6	30.2	0.2	0.0	26.9	-19.0
2006 June	323.8	178.9	370.694	4.2	7.8	133.0	5.4	22.0	105.3	-	-	-	0.2	0.0	26.9	-19.0
July	330.1	183.3	369.890	4.2	7.6	135.0	4.4	25.6	104.9	-	-	-	0.1	0.0	26.3	-19.7
Aug.	326.4	179.4	369.671	4.4	7.3	135.3	3.9	23.2	108.1	-	-	-	0.2	0.0	26.2	-19.7
Sep.	325.0	174.2	367.958	4.5	7.0	139.4	4.5	25.3	109.7	-	-	-	-0.1	0.0	26.8	-21.9
						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	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 Q4	41.5	10.1	23.145	0.2	0.0	31.2	5.1	2.5	23.6	0.0	10.6	12.9	0.0	0.0	2.9	-0.9
2006 Q1	40.5	11.1	23.145	0.2	0.0	29.3	2.6	3.6	23.1	0.0	15.3	7.8	0.0	0.0	3.9	-0.5
Q2	39.2	10.3	21.312	0.2	0.0	28.7	1.3	2.4	25.1	0.0	18.6	6.5	0.0	0.0	3.5	0.0
2006 June	39.2	10.3	21.312	0.2	0.0	28.7	1.3	2.4	25.1	-	-	-	0.0	0.0	3.5	0.0
July	41.0	10.6	21.312	0.2	0.0	30.3	1.1	4.5	24.7	-	-	-	0.0	0.0	2.6	-0.7
Aug.	40.4	10.3	21.312	0.2	0.0	29.8	0.7	4.4	24.7	-	-	-	0.0	0.0	2.8	-0.4
Sep.	40.8	10.1	21.312	0.2	0.0	30.5	1.4	3.8	25.3	-	-	-	0.0	0.0	2.9	-0.7

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	Intermediate	Capital	Consumption	Memo: Manufactures	Total	Intermediate	Capital	Consumption	Memo: Manufactures	Oil
	1	2	3	4	5	6	7	8	9	10	11	12	13
					Values (EUR billions; annual percentage changes for columns 1 and 2)								
2002	2.0	-3.0	1,083.5	512.9	227.8	309.6	949.2	984.6	559.4	163.5	234.2	717.7	105.2
2003	-2.3	0.5	1,060.1	501.3	222.8	300.4	924.0	991.2	553.2	164.4	241.0	716.4	109.0
2004	8.9	9.4	1,146.9	547.6	247.4	313.6	999.4	1,074.9	605.4	184.1	256.3	770.2	129.5
2005	7.4	12.7	1,237.7	588.2	267.3	330.6	1,068.7	1,217.2	697.7	202.9	273.6	842.8	184.4
2005 Q1	3.3	8.9	291.4	138.6	62.5	78.2	255.4	278.6	159.6	44.2	64.6	198.5	37.1
Q2	6.2	11.2	302.8	144.5	64.7	81.6	258.9	293.6	167.2	50.4	66.5	201.6	41.6
Q3	10.0	15.1	319.5	150.3	70.6	85.0	275.1	317.9	183.7	53.2	70.4	217.9	52.7
Q4	9.8	15.1	324.0	154.7	69.4	85.9	279.3	327.1	187.1	55.2	72.1	224.8	53.0
2006 Q1	16.5	23.0	332.8	159.3	71.2	89.0	285.2	336.4	197.0	52.4	73.8	224.6	55.8
Q2	9.6	14.6	338.5	161.2	71.3	89.4	290.5	343.5	203.1	51.6	74.0	232.5	56.0
2006 Mar.	18.8	22.5	112.2	54.2	23.7	29.9	95.1	112.1	66.3	17.2	24.7	74.4	19.8
Apr.	5.6	9.5	112.5	53.4	23.5	29.2	96.0	113.9	66.1	17.0	24.3	76.9	17.7
May	14.3	20.1	112.5	53.7	23.9	30.1	96.9	114.8	68.4	17.4	25.0	77.3	19.5
June	8.8	14.1	113.5	54.1	23.9	30.0	97.5	114.8	68.6	17.2	24.6	78.3	18.7
July	7.3	13.7	111.1	53.4	22.5	29.3	95.1	117.4	68.9	16.4	24.6	78.4	18.8
Aug.	7.4	10.3	114.7	54.9	23.4	30.6	98.4	120.2	73.2	17.4	25.2	80.2	.
					Volume indices (2000 = 100; annual percentage changes for columns 1 and 2)								
2002	2.9	-0.7	107.9	105.0	106.2	115.2	108.4	98.2	98.9	89.8	104.1	96.4	101.4
2003	1.0	3.7	109.1	105.9	108.0	115.0	109.3	102.0	100.4	95.4	110.5	100.1	104.9
2004	9.1	6.7	118.2	115.4	121.5	120.0	118.7	108.0	104.4	108.1	118.6	107.6	105.7
2005	4.4	4.5	124.1	119.1	129.6	123.9	124.3	113.4	106.9	120.0	123.4	115.4	109.6
2005 Q1	1.0	2.5	118.7	114.4	122.6	119.0	120.2	109.3	105.5	106.1	119.3	110.3	107.9
Q2	4.2	5.3	122.4	118.3	125.9	123.3	121.2	112.0	105.8	120.4	121.7	111.4	106.3
Q3	6.7	5.4	127.3	121.0	136.5	126.4	127.4	115.6	108.3	124.4	125.9	118.6	113.3
Q4	5.6	4.9	127.8	122.8	133.5	126.8	128.6	116.8	108.0	129.1	126.8	121.2	110.8
2006 Q1	11.4	8.6	129.5	124.9	135.7	130.0	130.1	116.4	109.6	120.0	128.0	118.8	108.6
Q2	5.3	3.7	131.5	126.3	136.3	129.9	132.6	118.5	111.0	121.0	130.0	123.5	104.0
2006 Mar.	13.7	10.0	130.7	127.2	135.6	130.5	129.8	116.6	110.3	118.1	128.9	117.9	116.1
Apr.	1.6	-1.6	131.2	125.8	135.2	127.6	131.6	117.5	108.4	118.2	127.1	121.9	100.3
May	9.1	7.3	131.1	125.9	136.0	131.4	132.6	119.0	112.3	122.4	131.5	122.8	109.1
June	5.3	5.3	132.3	127.1	137.6	130.6	133.6	119.1	112.2	122.3	131.4	125.8	102.6
July	4.2	5.9	129.6	125.2	129.6	127.7	130.2	120.6	111.1	117.6	128.1	124.2	101.7
Aug.	.	.	.	.	.	.	.	.	.	.	.	.	.
					Unit value indices (2000 = 100; annual percentage changes for columns 1 and 2)								
2002	-0.9	-2.3	100.1	99.1	99.2	102.4	100.1	97.8	95.7	99.6	101.9	100.0	84.5
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	-0.2	2.4	96.7	96.3	94.2	99.5	96.2	97.1	98.1	93.0	97.8	96.1	99.5
2005	2.8	7.7	99.4	100.2	95.3	101.7	98.2	104.6	110.4	92.4	100.3	98.1	136.8
2005 Q1	2.3	6.2	97.9	98.3	94.4	100.1	97.1	99.5	102.5	91.1	98.1	96.7	112.1
Q2	2.0	5.5	98.7	99.2	95.1	100.9	97.6	102.3	107.1	91.5	99.0	97.2	127.8
Q3	3.0	9.2	100.0	100.9	95.8	102.5	98.7	107.3	114.9	93.5	101.2	98.7	151.5
Q4	4.0	9.8	101.1	102.2	96.2	103.3	99.3	109.3	117.3	93.5	102.9	99.6	155.9
2006 Q1	4.6	13.3	102.4	103.6	97.1	104.4	100.2	112.8	121.7	95.5	104.4	101.6	167.5
Q2	4.0	10.5	102.6	103.7	96.8	104.9	100.1	113.1	123.9	93.2	103.1	101.1	175.3
2006 Mar.	4.5	11.4	102.7	103.8	97.0	104.7	100.4	112.6	122.0	95.5	104.1	101.7	166.8
Apr.	4.0	11.2	102.5	103.5	96.5	104.8	100.0	113.5	123.8	94.3	104.0	101.6	172.4
May	4.8	11.9	102.7	103.8	97.4	104.6	100.2	113.0	123.7	93.1	103.4	101.4	175.2
June	3.3	8.4	102.6	103.7	96.5	105.2	100.1	112.8	124.2	92.1	101.8	100.3	178.4
July	3.0	7.4	102.6	103.9	96.6	104.9	100.1	113.9	126.0	91.6	104.3	101.7	180.3
Aug.	.	.	.	.	.	.	.	.	.	.	.	.	.

Sources: Eurostat and ECB calculations based on Eurostat data (volume indices and seasonal adjustment of unit value indices).

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
Exports (f.o.b.)															
2002	1,083.5	25.3	37.1	205.7	112.1	27.1	64.0	21.4	184.1	29.9	33.1	140.4	59.5	43.4	100.3
2003	1,060.1	24.9	38.7	194.8	117.6	29.3	63.4	24.9	166.3	35.2	31.2	135.5	59.5	37.8	101.0
2004	1,146.9	25.6	41.8	203.9	128.0	35.3	66.1	31.8	173.7	40.3	33.2	149.8	63.8	40.6	112.9
2005	1,237.7	28.6	44.9	202.9	142.3	43.1	70.2	34.6	184.8	43.6	34.1	165.8	72.9	46.7	123.1
2005 Q1	291.4	6.7	11.0	49.9	33.3	9.9	17.4	7.9	43.5	10.2	8.5	38.9	17.1	11.0	26.1
Q2	302.8	7.0	11.1	49.7	33.8	10.5	16.9	8.2	45.2	10.1	8.5	40.5	17.2	11.4	32.9
Q3	319.5	7.3	11.4	51.6	36.2	11.2	17.9	9.1	47.2	11.5	8.5	44.0	19.4	12.2	31.8
Q4	324.0	7.6	11.4	51.8	39.0	11.5	18.0	9.4	48.8	11.8	8.6	42.4	19.2	12.1	32.2
2006 Q1	332.8	7.6	11.6	52.7	40.9	12.1	18.0	9.7	50.3	12.5	8.8	43.9	19.0	13.5	32.3
Q2	338.5	7.8	12.2	53.8	42.9	12.8	18.2	9.8	49.2	12.7	8.3	44.8	19.1	13.4	33.5
2006 Mar.	112.2	2.6	3.9	17.7	13.7	4.1	6.0	3.3	16.8	4.2	2.9	14.5	6.2	4.4	12.0
Apr.	112.5	2.5	3.9	17.7	14.5	4.2	6.1	3.2	16.6	4.2	2.8	15.2	6.3	4.3	11.0
May	112.5	2.6	4.1	17.8	14.1	4.2	6.1	3.3	16.5	4.2	2.8	14.4	6.3	4.2	11.9
June	113.5	2.7	4.2	18.2	14.3	4.4	6.1	3.3	16.1	4.3	2.8	15.2	6.5	4.9	10.6
July	111.1	2.6	4.2	17.5	14.4	4.4	6.4	3.0	16.0	4.2	2.8	14.8	6.2	3.9	10.7
Aug.	114.7	.	.	.	.	4.5	6.4	3.2	16.4	4.3	2.8	14.6	6.2	4.5	.
% share of total exports															
2005	100.0	2.3	3.6	16.4	11.5	3.5	5.7	2.8	14.9	3.5	2.8	13.4	5.9	3.8	9.9
Imports (c.i.f.)															
2002	984.6	23.0	35.7	149.7	93.5	42.1	52.1	17.7	125.6	61.7	52.7	143.0	67.8	39.4	80.6
2003	991.2	23.7	36.9	138.9	102.0	47.4	50.6	19.3	110.3	74.5	52.2	141.8	68.9	39.8	84.7
2004	1,074.9	25.3	39.6	144.1	107.1	56.3	53.0	22.8	113.8	92.1	53.9	161.1	72.6	45.1	88.1
2005	1,217.2	25.4	41.9	151.4	116.7	75.4	58.1	24.8	120.4	117.6	52.9	188.8	95.0	53.1	95.6
2005 Q1	278.6	6.2	10.0	36.0	27.2	17.2	13.5	6.3	28.5	26.2	12.9	41.8	20.4	12.1	20.4
Q2	293.6	6.4	10.2	36.7	28.6	18.0	14.4	5.8	30.0	27.7	12.6	43.6	22.2	12.2	25.1
Q3	317.9	6.2	10.7	39.4	29.9	19.9	14.9	6.1	30.9	31.3	13.6	50.8	26.3	13.9	24.1
Q4	327.1	6.5	11.0	39.4	30.9	20.3	15.4	6.6	30.9	32.5	13.8	52.6	26.1	14.9	26.1
2006 Q1	336.4	6.7	11.3	40.7	32.3	23.6	15.1	6.7	31.7	33.4	13.9	51.1	26.9	15.6	27.2
Q2	343.5	6.7	11.5	43.3	34.2	24.8	15.4	7.5	31.5	34.4	13.7	53.0	27.2	15.7	24.5
2006 Mar.	112.1	2.3	3.8	13.9	10.7	8.2	5.1	2.3	10.4	11.1	4.5	16.2	9.0	5.2	9.3
Apr.	113.9	2.3	3.7	14.6	11.3	7.8	5.1	2.6	10.4	11.2	4.4	17.7	8.8	5.1	8.9
May	114.8	2.3	3.9	14.6	11.4	8.5	5.1	2.5	10.5	11.4	4.5	17.9	9.2	5.2	8.0
June	114.8	2.1	3.8	14.0	11.5	8.6	5.3	2.5	10.7	11.9	4.8	17.3	9.1	5.4	7.7
July	117.4	2.5	4.0	14.0	11.7	7.8	5.3	2.3	10.7	11.7	4.6	18.4	9.0	5.5	9.9
Aug.	120.2	.	.	.	.	8.7	5.4	2.4	10.8	11.6	4.7	18.7	10.0	5.6	.
% share of total imports															
2005	100.0	2.1	3.5	12.5	9.6	6.2	4.8	2.0	9.9	9.6	4.4	15.5	7.8	4.4	7.9
Balance															
2002	98.9	2.3	1.4	56.0	18.6	-15.0	12.0	3.7	58.4	-31.8	-19.6	-2.6	-8.3	4.0	19.7
2003	69.0	1.2	1.7	56.0	15.6	-18.1	12.7	5.5	56.0	-39.3	-20.9	-6.3	-9.4	-1.9	16.2
2004	71.9	0.3	2.2	59.9	20.9	-21.0	13.1	8.9	59.9	-51.8	-20.7	-11.3	-8.9	-4.5	24.8
2005	20.4	3.2	3.0	51.5	25.6	-32.3	12.0	9.8	64.4	-74.0	-18.9	-22.9	-22.2	-6.4	27.5
2005 Q1	12.8	0.5	1.1	13.9	6.0	-7.3	3.9	1.7	15.0	-16.0	-4.5	-2.9	-3.3	-1.2	5.8
Q2	9.2	0.6	0.8	13.0	5.1	-7.5	2.5	2.4	15.2	-17.7	-4.1	-3.2	-5.0	-0.8	7.9
Q3	1.5	1.1	0.7	12.2	6.4	-8.7	3.0	2.9	16.3	-19.8	-5.1	-6.7	-6.9	-1.7	7.7
Q4	-3.1	1.1	0.4	12.4	8.1	-8.8	2.6	2.8	17.8	-20.6	-5.3	-10.2	-6.9	-2.8	6.2
2006 Q1	-3.5	0.8	0.3	12.0	8.5	-11.5	2.9	3.0	18.5	-20.9	-5.1	-7.2	-7.9	-2.2	5.1
Q2	-5.0	1.1	0.7	10.5	8.7	-12.0	2.8	2.3	17.7	-21.7	-5.4	-8.2	-8.1	-2.3	9.0
2006 Mar.	0.0	0.2	0.2	3.8	3.0	-4.2	0.8	0.9	6.4	-6.9	-1.7	-1.7	-2.7	-0.8	2.6
Apr.	-1.4	0.2	0.2	3.1	3.2	-3.6	1.0	0.7	6.2	-7.0	-1.6	-2.5	-2.5	-0.8	2.1
May	-2.3	0.3	0.2	3.2	2.7	-4.2	1.0	0.8	6.0	-7.2	-1.7	-3.5	-2.9	-1.0	4.0
June	-1.3	0.5	0.3	4.2	2.7	-4.2	0.8	0.8	5.5	-7.5	-2.1	-2.2	-2.6	-0.5	2.9
July	-6.2	0.1	0.2	3.6	2.7	-3.3	1.1	0.7	5.3	-7.5	-1.9	-3.6	-2.8	-1.6	0.8
Aug.	-5.5	.	.	.	.	-4.1	1.0	0.7	5.6	-7.3	-1.9	-4.1	-3.8	-1.1	.

Sources: Eurostat and ECB calculations based on Eurostat data (balance and columns 5, 12 and 15).

EXCHANGE RATES

	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
2003	99.9	101.7	102.1	100.8	96.2	99.2	106.6	101.6
2004	103.8	105.9	105.2	104.4	100.3	103.6	111.0	105.4
2005	102.9	105.2	103.6	103.2	98.3	101.5	109.5	103.5
2005 Q3	101.9	104.2	102.4	101.3	97.0	100.2	108.3	102.5
Q4	100.9	103.1	101.1	103.0	95.7	99.0	107.2	101.1
2006 Q1	101.2	103.5	102.0	103.0	95.0	98.8	107.2	101.1
Q2	103.5	105.8	104.3	105.1	96.7	100.4	109.9	103.5
Q3	104.3	106.6	105.1	.	.	.	111.0	104.4
2005 Oct.	101.4	103.6	101.4	-	-	-	107.8	101.8
Nov.	100.7	102.9	100.9	-	-	-	106.9	100.8
Dec.	100.7	102.9	101.0	-	-	-	106.9	100.8
2006 Jan.	101.4	103.7	101.9	-	-	-	107.5	101.4
Feb.	100.7	103.0	101.7	-	-	-	106.6	100.5
Mar.	101.5	103.9	102.5	-	-	-	107.4	101.3
Apr.	102.7	105.1	103.6	-	-	-	108.6	102.4
May	103.8	106.1	104.7	-	-	-	110.3	103.8
June	103.9	106.2	104.7	-	-	-	110.9	104.2
July	104.3	106.6	105.2	-	-	-	111.0	104.5
Aug.	104.4	106.7	105.3	-	-	-	111.1	104.4
Sep.	104.2	106.5	104.7	-	-	-	110.9	104.1
Oct.	103.7	105.9	103.9	-	-	-	110.2	103.5
% change versus previous month								
2006 Oct.	-0.5	-0.5	-0.8	-	-	-	-0.6	-0.6
% change versus previous year								
2006 Oct.	2.2	2.2	2.5	-	-	-	2.3	1.7

C35 Effective exchange rates
(monthly averages; index 1999 Q1=100)

— nominal EER-23
···· real CPI-deflated EER-23
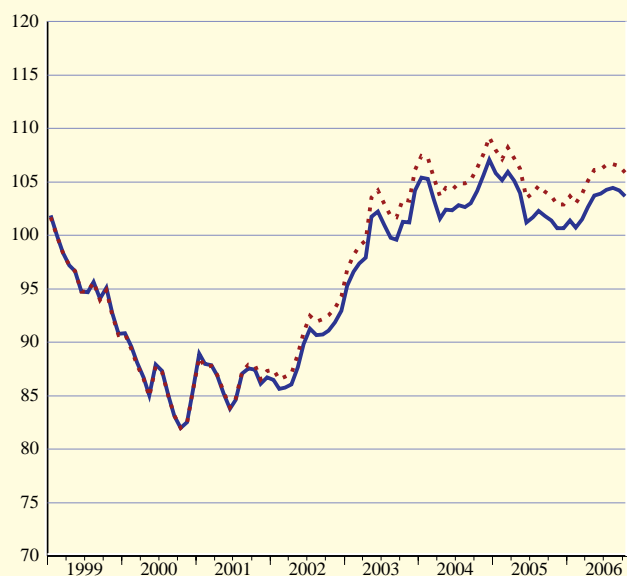
C36 Bilateral exchange rates
(monthly averages; index 1999 Q1=100)

— USD/EUR
···· JPY/EUR
– – GBP/EUR
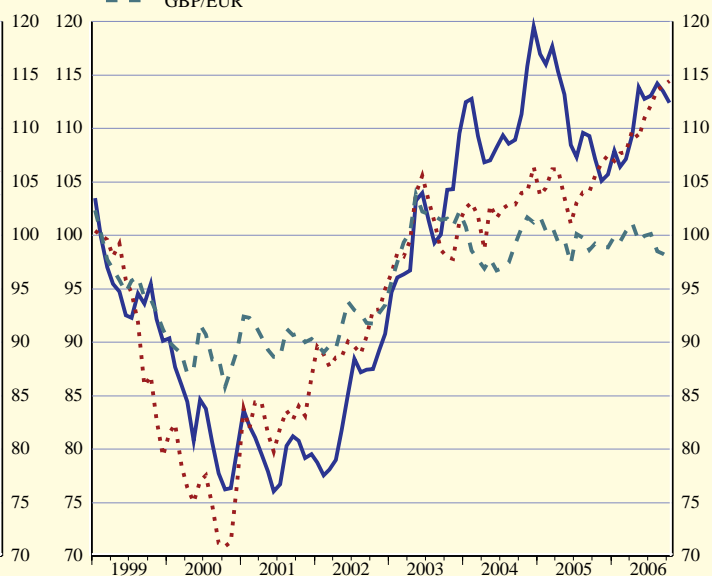
Source: ECB.
1) For the definition of the trading partner groups and other information, please refer to the General notes.

	Danish krone	Swedish krona	Pound sterling	US dollar	Japanese yen	Swiss franc	South Korean won	Hong Kong dollar	Singapore dollar	Canadian dollar	Norwegian krone	Australian dollar
	1	2	3	4	5	6	7	8	9	10	11	12
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	7.4518	9.2822	0.68380	1.2441	136.85	1.5483	1,273.61	9.6768	2.0702	1.5087	8.0092	1.6320
2006 Q1	7.4621	9.3525	0.68625	1.2023	140.51	1.5590	1,173.72	9.3273	1.9567	1.3894	8.0227	1.6274
Q2	7.4581	9.2979	0.68778	1.2582	143.81	1.5631	1,194.34	9.7618	1.9989	1.4108	7.8314	1.6838
Q3	7.4604	9.2304	0.67977	1.2743	148.09	1.5768	1,217.10	9.9109	2.0125	1.4283	8.0604	1.6831
2006 Apr.	7.4618	9.3346	0.69463	1.2271	143.59	1.5748	1,168.67	9.5182	1.9643	1.4052	7.8413	1.6662
May	7.4565	9.3310	0.68330	1.2770	142.70	1.5564	1,202.04	9.9019	2.0133	1.4173	7.7988	1.6715
June	7.4566	9.2349	0.68666	1.2650	145.11	1.5601	1,207.64	9.8210	2.0129	1.4089	7.8559	1.7104
July	7.4602	9.2170	0.68782	1.2684	146.70	1.5687	1,205.89	9.8600	2.0083	1.4303	7.9386	1.6869
Aug.	7.4609	9.2098	0.67669	1.2811	148.53	1.5775	1,231.42	9.9627	2.0185	1.4338	7.9920	1.6788
Sep.	7.4601	9.2665	0.67511	1.2727	148.99	1.5841	1,212.64	9.9051	2.0101	1.4203	8.2572	1.6839
Oct.	7.4555	9.2533	0.67254	1.2611	149.65	1.5898	1,202.31	9.8189	1.9905	1.4235	8.3960	1.6733
					% change versus previous month							
2006 Oct.	-0.1	-0.1	-0.4	-0.9	0.4	0.4	-0.9	-0.9	-1.0	0.2	1.7	-0.6
					% change versus previous year							
2006 Oct.	-0.1	-1.8	-1.3	5.0	8.4	2.6	-4.3	5.4	-2.1	0.6	7.2	5.0

	Czech koruna	Estonian kroon	Cyprus pound	Latvian lats	Lithuanian litas	Hungarian forint	Maltese lira	Polish zloty	Slovenian tolar	Slovak koruna	Bulgarian lev	New Romanian leu [1]
	13	14	15	16	17	18	19	20	21	22	23	24
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	29.782	15.6466	0.57683	0.6962	3.4528	248.05	0.4299	4.0230	239.57	38.599	1.9558	3.6209
2006 Q1	28.599	15.6466	0.57449	0.6961	3.4528	254.56	0.4293	3.8346	239.51	37.456	1.9558	3.5638
Q2	28.378	15.6466	0.57538	0.6960	3.4528	266.83	0.4293	3.9482	239.63	37.690	1.9558	3.5172
Q3	28.337	15.6466	0.57579	0.6960	3.4528	275.41	0.4293	3.9537	239.62	37.842	1.9558	3.5415
2006 Apr.	28.501	15.6466	0.57613	0.6960	3.4528	265.47	0.4293	3.9177	239.60	37.374	1.9558	3.4892
May	28.271	15.6466	0.57510	0.6960	3.4528	262.37	0.4293	3.8954	239.63	37.578	1.9558	3.5072
June	28.386	15.6466	0.57504	0.6960	3.4528	272.39	0.4293	4.0261	239.65	38.062	1.9558	3.5501
July	28.448	15.6466	0.57500	0.6960	3.4528	277.49	0.4293	3.9962	239.65	38.377	1.9558	3.5715
Aug.	28.194	15.6466	0.57585	0.6960	3.4528	274.41	0.4293	3.9046	239.62	37.669	1.9558	3.5271
Sep.	28.383	15.6466	0.57650	0.6961	3.4528	274.42	0.4293	3.9649	239.59	37.497	1.9558	3.5274
Oct.	28.290	15.6466	0.57672	0.6961	3.4528	267.10	0.4293	3.9014	239.60	36.804	1.9558	3.5191
					% change versus previous month							
2006 Oct.	-0.3	0.0	0.0	0.0	0.0	-2.7	0.0	-1.6	0.0	-1.8	0.0	-0.2
					% change versus previous year							
2006 Oct.	-4.7	0.0	0.6	-0.1	0.0	6.1	0.0	-0.5	0.0	-5.4	0.0	-

	Chinese yuan renminbi [2]	Croatian kuna [2]	Icelandic krona	Indonesian rupiah [2]	Malaysian ringgit [2]	New Zealand dollar	Philippine peso [2]	Russian rouble [2]	South African rand	Thai baht [2]	New Turkish lira [3]
	25	26	27	28	29	30	31	32	33	34	35
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	10.1955	7.4008	78.23	12,072.83	4.7119	1.7660	68.494	35.1884	7.9183	50.068	1.6771
2006 Q1	9.6793	7.3426	78.43	11,178.36	4.4814	1.8128	62.292	33.8349	7.4067	47.273	1.6026
Q2	10.0815	7.2786	92.72	11,479.67	4.5853	2.0172	65.819	34.1890	8.1745	47.981	1.8473
Q3	10.1506	7.3109	91.21	11,626.90	4.6786	2.0079	65.356	34.1602	9.1094	48.015	1.9118
2006 Apr.	9.8361	7.3111	91.94	10,956.51	4.4918	1.9733	63.077	33.7987	7.4656	46.619	1.6381
May	10.2353	7.2731	91.69	11,536.41	4.6107	2.0240	66.622	34.5386	8.0859	48.534	1.8400
June	10.1285	7.2575	94.38	11,850.97	4.6364	2.0462	67.259	34.1587	8.8431	48.541	2.0258
July	10.1347	7.2509	94.33	11,582.39	4.6527	2.0551	66.291	34.1393	8.9892	48.197	1.9712
Aug.	10.2141	7.2893	90.08	11,649.96	4.7078	2.0220	65.712	34.2755	8.9034	48.192	1.8802
Sep.	10.0971	7.3945	89.31	11,646.15	4.6724	1.9453	64.029	34.0549	9.4553	47.640	1.8870
Oct.	9.9651	7.3913	86.29	11,569.46	4.6390	1.9066	63.022	33.8849	9.6481	47.068	1.8654
					% change versus previous month						
2006 Oct.	-1.3	0.0	-3.4	-0.7	-0.7	-2.0	-1.6	-0.5	2.0	-1.2	-1.1
					% change versus previous year						
2006 Oct.	2.5	0.1	17.7	-4.5	2.3	10.8	-5.6	-1.3	21.9	-4.2	14.2

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													
2004	2.6	0.9	3.0	1.9	6.2	1.2	6.8	2.7	3.6	3.7	7.5	1.0	1.3
2005	1.6	1.7	4.1	2.0	6.9	2.7	3.5	2.5	2.2	2.5	2.8	0.8	2.1
2006 Q1	2.4	2.0	4.4	2.3	7.0	3.3	2.4	2.5	0.9	2.3	4.2	1.2	2.0
Q2	2.5	2.0	4.5	2.6	6.5	3.6	2.7	3.4	1.4	3.1	4.6	1.9	2.2
Q3	2.4	1.8	4.4	2.6	6.6	4.0	4.6	3.2	1.5	2.5	4.8	1.5	2.4
2006 May	2.8	2.1	4.6	2.5	7.1	3.6	2.9	3.5	1.5	3.4	4.8	1.9	2.2
June	2.3	2.1	4.4	2.6	6.3	3.7	2.9	3.3	1.5	3.0	4.5	1.9	2.5
July	2.4	2.0	4.5	2.8	6.9	4.4	3.2	3.6	1.4	1.9	5.0	1.8	2.4
Aug.	2.6	1.9	5.0	2.7	6.8	4.3	4.7	3.0	1.7	3.1	5.0	1.6	2.5
Sep.	2.2	1.5	3.8	2.2	5.9	3.3	5.9	3.1	1.4	2.5	4.5	1.2	2.4
General government deficit (-)/surplus (+) as a % of GDP													
2003	-6.6	1.1	2.0	-6.3	-1.2	-1.3	-6.3	-10.0	-4.7	-2.8	-3.7	0.1	-3.3
2004	-2.9	2.7	2.3	-4.1	-0.9	-1.5	-5.3	-5.0	-3.9	-2.3	-3.0	1.8	-3.2
2005	-3.6	4.9	2.3	-2.3	0.1	-0.5	-6.5	-3.2	-2.5	-1.4	-3.1	3.0	-3.3
General government gross debt as a % of GDP													
2003	30.1	44.4	5.7	69.1	14.4	21.2	55.8	70.2	43.9	28.5	42.7	51.8	38.9
2004	30.7	42.6	5.2	70.3	14.5	19.4	56.3	74.9	41.9	28.7	41.6	50.5	40.4
2005	30.4	35.9	4.5	69.2	12.1	18.7	57.7	74.2	42.0	28.0	34.5	50.4	42.4
Long-term government bond yield as a % per annum, period average													
2006 Apr.	3.85	3.98	-	4.07	3.60	3.92	7.00	4.19	5.03	3.73	4.27	3.84	4.37
May	3.93	4.02	-	4.07	3.60	4.13	6.85	4.24	5.27	3.73	4.50	3.89	4.49
June	4.05	4.03	-	4.03	4.14	4.34	7.26	4.27	5.55	3.87	4.66	3.93	4.50
July	4.04	4.06	-	4.21	4.32	4.28	7.55	4.31	5.56	3.86	5.42	3.96	4.49
Aug.	3.85	3.93	-	4.28	4.36	4.28	7.49	4.34	5.62	3.92	5.13	3.84	4.49
Sep.	3.90	3.79	-	4.28	4.38	4.28	7.58	4.34	5.48	3.98	4.79	3.70	4.44
3-month interest rate as a % per annum, period average													
2006 Apr.	2.11	2.92	2.91	3.22	3.91	2.84	6.26	3.24	4.14	3.50	3.86	2.27	4.63
May	2.12	2.98	2.92	3.22	4.48	2.90	-	3.24	4.15	3.50	3.96	2.31	4.70
June	2.16	3.08	3.06	3.19	4.16	3.00	-	3.45	4.17	3.38	4.20	2.47	4.73
July	2.29	3.20	3.18	3.20	4.43	3.13	6.90	3.63	4.19	3.34	4.92	2.56	4.73
Aug.	2.36	3.33	3.32	3.21	5.07	3.27	7.11	3.69	4.19	3.52	4.93	2.70	4.94
Sep.	2.49	3.45	3.40	3.39	4.84	3.38	7.88	3.65	4.21	3.55	4.95	2.83	5.03
Real GDP													
2004	4.2	1.9	8.1	3.9	8.6	7.3	5.2	0.0	5.3	4.2	5.4	3.7	3.1
2005	6.1	3.0	10.5	3.7	10.2	7.6	4.1	2.2	3.3	3.9	6.0	2.7	1.8
2006 Q1	7.1	3.5	11.6	3.4	13.1	8.1	4.3	-1.8	4.6	4.8	6.7	4.2	2.3
Q2	6.2	3.6	11.8	3.8	11.1	8.5	4.0	5.5	5.6	5.6	6.7	4.8	2.6
Q3	.	.	.	.	.	7.1	.	.	.	.	.	.	2.8
Current and capital accounts balance as a % of GDP													
2004	-6.5	2.4	-11.7	-4.2	-11.9	-6.4	-8.1	-6.6	-3.8	-3.1	-3.3	6.8	-1.5
2005	-1.9	3.5	-9.5	-5.2	-11.4	-5.9	-5.9	-7.1	-1.4	-2.4	-8.6	6.3	-2.1
2005 Q4	-2.4	2.6	-7.9	-23.8	-14.3	-6.0	-4.7	-15.9	-1.7	-6.5	-14.9	5.6	-2.1
2006 Q1	0.7	-0.8	-11.3	-12.2	-13.0	-9.6	-7.4	-12.4	-1.6	-2.0	-6.4	5.7	-2.8
Q2	-6.3	2.5	-9.7	-4.0	-16.5	-9.0	-6.4	-7.9	-1.5	0.7	-9.5	5.7	-3.0
Unit labour costs													
2004	1.8	1.0	4.4	0.8	6.6	3.0	5.6	1.1	-1.5	3.6	3.2	-0.6	2.1
2005	-0.6	1.2	2.7	1.5	5.8	3.7	.	-0.1	0.4	1.6	1.2	1.4	.
2005 Q4	-1.3	0.5	4.3	-	-	5.8	-	-1.8	-	-	1.2	2.6	.
2006 Q1	-0.2	1.4	3.7	-	-	3.6	-	.	-	-	3.3	-1.5	.
Q2	.	1.5	5.1	-	-	3.5	-	.	-	-	1.8	0.1	.
Standardised unemployment rate as a % of labour force (s.a.)													
2004	8.3	5.5	9.7	4.6	10.4	11.4	6.1	7.4	19.0	6.3	18.2	7.7	4.7
2005	7.9	4.8	7.9	5.3	8.8	8.2	7.2	7.3	17.7	6.5	16.3	7.8	4.8
2006 Q1	7.6	4.2	5.9	5.3	7.6	5.8	7.4	7.6	15.2	6.4	14.2	7.8	5.2
Q2	7.3	4.1	6.3	5.2	7.3	5.8	7.3	7.6	14.4	6.3	13.6	.	5.5
Q3	7.1	3.6	4.5	5.1	7.0	6.0	7.6	7.5	14.2	5.9	13.0	.	.
2006 May	7.3	4.1	6.2	5.3	7.2	5.7	7.2	7.5	14.4	6.3	13.6	.	5.5
June	7.1	4.0	6.1	5.2	7.1	5.7	7.2	7.6	14.2	6.2	13.5	.	5.5
July	7.2	3.7	4.7	5.2	7.3	5.7	7.5	7.5	14.4	6.1	13.2	.	5.6
Aug.	7.1	3.7	4.6	5.1	7.0	6.0	7.6	7.5	14.2	5.9	13.0	.	.
Sep.	7.0	3.5	4.4	5.0	6.8	6.1	7.6	7.5	14.1	5.7	12.8	.	.

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

1. Economic and financial developments

	Consumer price index	Unit labour costs [1] (manufacturing)	Real GDP	Industrial production index (manufacturing)	Unemployment rate as a % of labour force (s.a.)	Broad money [2]	3-month interbank deposit rate [3] as a % per annum	10-year government bond yield [3] as a % per annum	Exchange rate [4] as national currency per euro	Fiscal deficit (-)/ surplus (+) as a % of GDP	Gross public debt [5] as a % of GDP
	1	2	3	4	5	6	7	8	9	10	11
					United States						
2002	1.6	0.3	1.6	0.3	5.8	8.0	1.80	4.60	0.9456	-3.8	45.4
2003	2.3	0.8	2.5	0.7	6.0	6.4	1.22	4.00	1.1312	-4.8	48.0
2004	2.7	0.1	3.9	5.0	5.5	5.0	1.62	4.26	1.2439	-4.6	48.8
2005	3.4	0.5	3.2	3.9	5.1	6.0	3.56	4.28	1.2441	-3.7	49.2
2005 Q3	3.8	0.3	3.4	3.1	5.0	5.9	3.77	4.21	1.2199	-4.3	48.7
Q4	3.7	-0.9	3.1	4.3	4.9	7.4	4.34	4.48	1.1884	-3.4	49.2
2006 Q1	3.6	2.1	3.7	4.8	4.7	8.2	4.76	4.57	1.2023	-2.3	49.8
Q2	4.0	2.3	3.5	5.7	4.6	9.0	5.21	5.07	1.2582	-2.0	48.6
Q3	3.3	.	2.9	6.1	4.7	9.0	5.43	4.90	1.2743	.	.
2006 June	4.3	-	-	5.9	4.6	9.2	5.38	5.10	1.2650	-	-
July	4.1	-	-	6.2	4.8	9.3	5.50	5.10	1.2684	-	-
Aug.	3.8	-	-	6.0	4.7	9.0	5.42	4.88	1.2811	-	-
Sep.	2.1	-	-	6.2	4.6	8.9	5.38	4.72	1.2727	-	-
Oct.	.	-	-	.	.	.	5.37	4.73	1.2611	-	-
					Japan						
2002	-0.9	-3.2	0.1	-1.2	5.4	3.3	0.08	1.27	118.06	-8.4	143.9
2003	-0.2	-3.8	1.8	3.2	5.2	1.7	0.06	0.99	130.97	-7.8	151.3
2004	0.0	-5.2	2.3	5.5	4.7	1.9	0.05	1.50	134.44	-5.6	157.9
2005	-0.3	-0.5	2.6	1.1	4.4	1.8	0.06	1.39	136.85	.	.
2005 Q3	-0.3	0.3	2.8	-0.2	4.3	1.7	0.06	1.36	135.62	.	.
Q4	-0.7	-2.1	4.0	3.0	4.5	1.9	0.06	1.53	139.41	.	.
2006 Q1	-0.1	-1.6	3.4	3.2	4.2	1.7	0.08	1.58	140.51	.	.
Q2	0.2	-2.4	2.5	4.2	4.1	1.4	0.21	1.90	143.81	.	.
Q3	0.6	.	.	5.3	4.1	0.5	0.41	1.80	148.09	.	.
2006 June	0.5	-2.5	-	5.0	4.2	1.2	0.32	1.87	145.11	-	-
July	0.3	-2.5	-	5.1	4.1	0.6	0.40	1.91	146.70	-	-
Aug.	0.9	.	-	5.9	4.2	0.5	0.41	1.81	148.53	-	-
Sep.	0.6	.	-	5.1	4.2	0.6	0.42	1.68	148.99	-	-
Oct.	.	.	-	.	.	.	0.44	1.76	149.65	-	-

C37 Real gross domestic product
(annual percentage changes; quarterly)

- euro area
- United States
- Japan
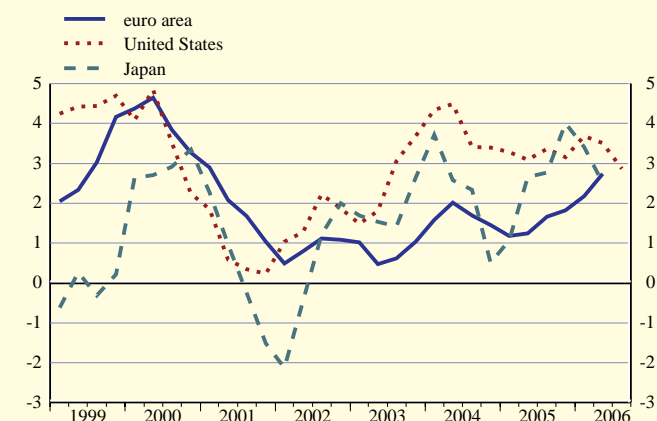
C38 Consumer price indices
(annual percentage changes; monthly)

- euro area
- United States
- Japan
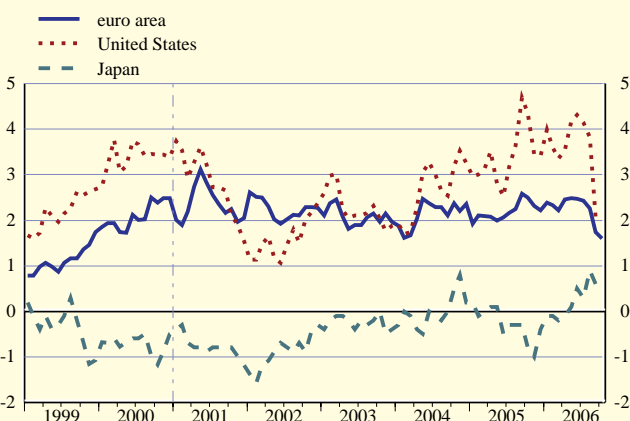
Sources: National data (columns 1, 2 (United States), 3, 4, 5 (United States), 6, 9 and 10); OECD (column 2 (Japan)); Eurostat (column 5 (Japan), euro area chart data); Reuters (columns 7 and 8); ECB calculations (column 11).
1) Data for the United States are seasonally adjusted.
2) Average-of-period 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 [1]			
	Gross saving	Gross capital formation	Net lending to the rest of the world	Gross capital formation	Gross fixed capital formation	Net acquisition of financial assets	Gross saving	Net incurrence of liabilities	Securities and shares	Capital expenditures [2]	Net acquisition of financial assets	Gross saving [3]	Net incurrence of liabilities
	1	2	3	4	5	6	7	8	9	10	11	12	13
United States													
2002	14.2	18.4	-4.4	7.0	7.0	1.2	7.7	0.8	-0.2	13.0	4.4	11.4	7.3
2003	13.3	18.5	-4.7	6.8	6.8	0.8	7.6	0.1	0.4	13.3	8.5	11.3	9.3
2004	13.2	19.3	-5.6	7.0	6.7	6.7	7.6	5.2	0.4	13.5	7.4	11.2	10.1
2005	12.9	19.7	-6.2	7.1	7.0	3.2	7.9	2.6	-0.7	13.8	4.7	9.6	9.7
2004 Q3	13.4	19.5	-5.6	7.0	6.7	6.0	8.1	4.3	0.2	13.6	6.8	11.1	8.7
Q4	12.9	19.6	-6.1	7.2	6.8	7.5	6.7	6.4	0.7	13.6	7.4	11.3	11.8
2005 Q1	13.2	19.8	-6.3	7.3	6.9	3.4	7.4	3.6	0.2	13.6	5.5	10.0	8.5
Q2	12.7	19.5	-6.1	6.9	7.0	3.4	7.9	3.1	-0.4	14.0	4.7	9.4	10.4
Q3	13.2	19.5	-5.7	6.8	7.0	3.3	8.5	1.8	-1.3	13.9	5.2	10.0	10.4
Q4	12.7	20.2	-6.8	7.3	7.1	2.7	7.9	2.0	-1.3	13.6	3.6	9.1	9.7
2006 Q1	14.5	20.3	-6.3	7.5	7.2	3.1	8.4	1.9	-0.7	13.6	5.0	9.1	9.3
Q2	14.5	20.3	-6.4	7.6	7.3	3.2	8.2	2.4	-1.4	13.3	2.4	8.8	8.1
Japan													
2002	25.3	23.3	2.8	12.8	13.2	-1.7	16.0	-7.5	-0.9	4.9	-0.3	7.7	-2.2
2003	25.6	22.9	3.1	13.3	13.4	2.4	17.0	-5.4	0.2	4.7	0.3	7.1	-0.7
2004	25.5	22.9	3.7	13.3	13.6	4.2	17.7	-0.5	1.0	4.7	3.1	6.6	-1.0
2005	.	23.2	.	.	.	4.4	.	-7.4	-4.9	.	2.9	.	0.8
2004 Q3	23.9	23.0	3.9	.	.	10.2	.	0.0	0.1	.	-1.3	.	1.9
Q4	26.1	21.4	3.0	.	.	11.7	.	14.0	2.6	.	9.7	.	-0.6
2005 Q1	31.5	25.4	3.7	.	.	10.3	.	-3.4	-1.7	.	-12.1	.	2.9
Q2	.	23.7	.	.	.	-15.4	.	-13.8	2.2	.	8.9	.	-6.3
Q3	.	23.5	.	.	.	6.3	.	6.2	0.8	.	-2.4	.	2.8
Q4	.	23.9	.	.	.	16.0	.	-17.2	-19.9	.	15.7	.	3.6
2006 Q1	.	23.7	.	.	.	12.1	.	-2.6	-2.4	.	-5.6	.	5.6
Q2	.	23.4	.	.	.	-19.5	.	-16.2	1.3	.	9.5	.	-9.3

C39 Net lending of non-financial corporations
(as a percentage of GDP)

- euro area
- United States
- Japan
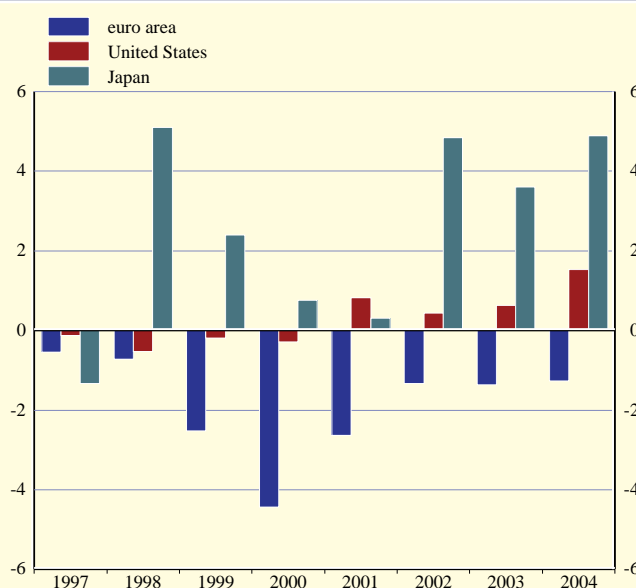
C40 Net lending of households [1]
(as a percentage of GDP)

- euro area
- United States
- Japan
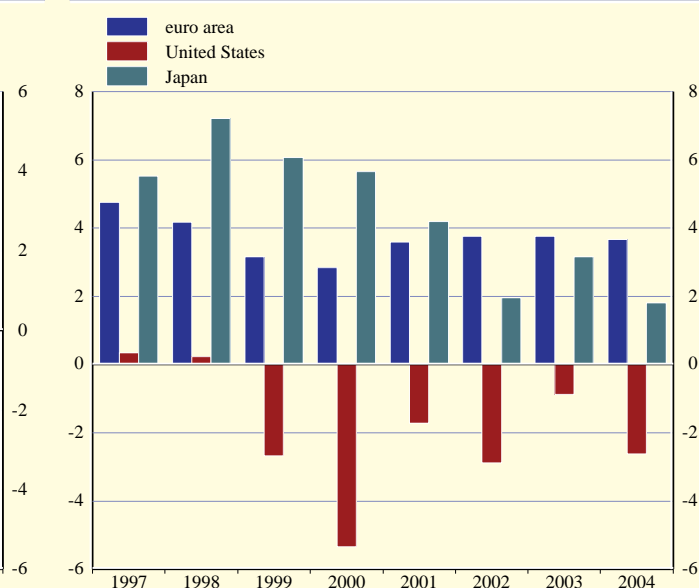
Sources: ECB, Federal Reserve Board, Bank of Japan and Economic and Social Research Institute.
1) Including non-profit institutions serving households.
2) Gross capital formation in Japan. Capital expenditures in the United States include purchases of consumer durable goods.
3) Gross saving in the United States is increased by expenditures on consumer durable goods.

LIST OF CHARTS

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) $$I_t = I_{t-1} \times \left(1 + \frac{F_t}{L_{t-1}}\right)$$

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) 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) $$a_t = \left[\prod_{i=0}^{11}\left(1 + \frac{F_{t-i}^M}{L_{t-1-i}}\right) - 1\right] \times 100$$

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:

$$h) \quad a_t^M = \left(\frac{I_t}{I_{t-1}} - 1 \right) \times 100$$

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:

$$i) \quad I_t = I_{t-3} \times \left(1 + \frac{F_t^Q}{L_{t-3}} \right)$$

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[1]

The approach used relies on a multiplicative decomposition through X-12-ARIMA.[2] 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.[3] 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:

$$j) \quad \frac{\sum_{i=0}^{3} T_{t-i}}{L_{t-4}} \times 100$$

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 notional stocks. If N_t^M represents the transactions (net

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1 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), under the "Money, banking and financial markets" sub-section.

2 For details, see Findley, D., Monsell, B., Bell, W., Otto, M., and Chen, B. C. (1998), "New Capabilities and Methods of the X-12-ARIMA Seasonal Adjustment Program", Journal of Business and Economic Statistics, 16, 2, 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.

3 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.

issues) in month t and L_t the level outstanding at the end of the month t, the index I_t of notional stocks 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:

$$l) \quad a_t = \left[\prod_{i=0}^{11}\left(1 + \frac{N_{t-i}^M}{L_{t-1-i}}\right) - 1\right] \times 100$$

$$m) \quad a_t = \left(\frac{I_t}{I_{t-12}} - 1\right) \times 100$$

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 and the equivalent "transactions" calculated used for the monetary aggregates.

The average growth rate for the quarter ending in month t is calculated as:

$$n) \quad \left(\frac{0.5I_t + \sum\limits_{i=1}^{2}I_{t-i} + 0.5I_{t-3}}{0.5I_{t-12} + \sum\limits_{i=1}^{2}I_{t-i-12} + 0.5I_{t-15}} - 1\right) \times 100$$

where I_t is the index of notional stocks as at month t. Likewise, for the year ending in month t, the average growth rate is calculated as:

$$o) \quad \left(\frac{0.5I_t + \sum\limits_{i=1}^{11}I_{t-i} + 0.5I_{t-12}}{0.5I_{t-12} + \sum\limits_{i=1}^{11}I_{t-i-12} + 0.5I_{t-24}} - 1\right) \times 100$$

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.

SEASONAL ADJUSTMENT OF SECURITIES ISSUES STATISTICS[4]

The approach used relies on a multiplicative decomposition through X-12-ARIMA. The seasonal adjustment for the securities issues total is carried out indirectly by means of a linear combination of sector and maturity component breakdowns.

The seasonal adjustment procedures are applied to the index of notional stocks. The resulting estimates of the seasonal factors are then applied to the outstanding amounts, from which seasonally adjusted net issues are derived. Seasonal factors are revised at annual intervals or as required.

Similar as depicted in formula l) and m), the growth rate a_t for month t corresponding to the change in the 6 months ending in month t, may be calculated using either of the following two formulae:

$$p) \quad a_t = \left[\prod_{i=0}^{5}\left(1 + \frac{N_{t-i}^M}{L_{t-1-i}}\right) - 1\right] \times 100$$

$$q) \quad a_t = \left(\frac{I_t}{I_{t-6}} - 1\right) \times 100$$

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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), under the "Money, banking and financial markets" sub-section.

RELATING TO TABLE 1 IN SECTION 5.1

SEASONAL ADJUSTMENT OF THE HICP[4]

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, services, income and current transfers are pre-adjusted to take a working-day effect into account. For goods, services and income, the working-day adjustment is corrected for national public holidays. Data on goods credits are also pre-adjusted for Easter. The seasonal adjustment for these items is carried out using these pre-adjusted series. 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). 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.

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 31 October 2006.

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[1], as last amended by Regulation ECB/2003/10[2].

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

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1 OJ L 356, 30.12.1998, p. 7.
2 OJ L 250, 2.10.2003, p. 19.

corporations (S.11 in the ESA 95), and households (S.14 in the ESA 95) including non-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.

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 other than shares, by original maturity, residency of the issuer and currency. The section presents outstanding amounts, gross issues and net issues of

securities other than shares denominated in euro and securities other than shares issued by euro area residents in euro and in all currencies for total and long-term debt securities. Net issues differ from the changes in outstanding amounts owing to valuation changes, reclassifications and other adjustments. This section also presents seasonally adjusted statistics including annualised six-month seasonally adjusted growth rates for total and long-term debt securities. The latter are calculated from the seasonally adjusted index of notional stocks from which the seasonal effects have been removed. See the Technical notes for details.

Section 4.2 contains a sectoral breakdown of outstanding amounts, gross issues and net issues for issuers resident in the euro area in line with the ESA 95. 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, corresponds to the data on outstanding amounts for total and long-term debt securities issued by euro area residents in column 7 of Section 4.1. The outstanding amounts for total and long-term debt securities issued by MFIs in column 2 of table 1, Section 4.2 are broadly comparable with data for debt securities issued as shown on the liabilities side of the aggregated MFI balance sheet in column 8 of table 2, Section 2.1. The total net issues for total debt securities in column 1 of table 2 in Section 4.2 correspond to the data on total net issues by euro area residents in column 9 of Section 4.1. The residual difference between long-term debt securities and total fixed and variable rate long-term debt securities in table 1, Section 4.2 consists of zero coupon bonds and revaluation effects.

Section 4.3 shows non-seasonally and seasonally adjusted 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 growth rates therefore exclude reclassifications, revaluations, exchange rate variations and any other changes which do not arise from transactions. The seasonally adjusted growth rates have been annualised for presentational purposes. 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 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[3]. 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 Groupings (MIGs) as defined by Commission Regulation (EC) No 586/2001 of 26 March 2001[4]. 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.

3   OJ L 162, 5.6.1998, p. 1.
4   OJ L 86, 27.3.2001, p. 11

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[5] and in the implementing Commission Regulation (EC) No 1216/2003 of 7 July 2003[6]. 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 6.5 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 Sections 6.4 and 6.5 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[7] 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

5   OJ L 69, 13.3.2003, p. 1.
6   OJ L 169, 8.7.2003, p. 37.
7   OJ L 172, 12.7.2000, p. 3.

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[8] on quarterly non-financial accounts for general government. Section 6.5 presents quarterly figures on gross consolidated government debt, the deficit-debt adjustment and the government borrowing requirement. These figures are compiled using data provided by the Member States under Regulations (EC) No 501/2004 and 1222/2004 and data provided by the National Central Banks.

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)[9], 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 2005), 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). The annual quality report on the euro area b.o.p./i.i.p., 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 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.

8 OJ L 179, 9.7.2002, p. 1.
9 OJ L 354, 30.11.2004, p. 34.

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[1]

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, 6 OCTOBER AND 3 NOVEMBER 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

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1 The chronology of monetary policy measures of the Eurosystem taken between 1999 and 2003 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, on pages 234 to 235 of the ECB's Annual Report 2002 and on pages 217 to 218 of the ECB's Annual Report 2003 respectively.

remain unchanged at 2.0%, 3.0% and 1.0% respectively.

1 DECEMBER 2005

The Governing Council of the ECB decides to increase the minimum bid rate on the main refinancing operations by 0.25 percentage point to 2.25%, starting from the operation to be settled on 6 December 2005. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 3.25% and 1.25% respectively, both with effect from 6 December 2005.

16 DECEMBER 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 2006 from €30 billion to €40 billion. This increased amount takes two aspects into consideration. First, the liquidity needs of the euro area banking system are expected to increase further in the year 2006. Second, the Eurosystem has decided to increase slightly the share of the liquidity needs satisfied by the longer-term refinancing operations. 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 2007.

12 JANUARY AND 2 FEBRUARY 2006

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 2.25%, 3.25% and 1.25% respectively.

2 MARCH 2006

The Governing Council of the ECB decides to increase the minimum bid rate on the main refinancing operations by 25 basis points to 2.50%, starting from the operation to be settled on 8 March 2006. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 25 basis points, to 3.50% and 1.50% respectively, both with effect from 8 March 2006.

6 APRIL AND 4 MAY 2006

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 JUNE 2006

The Governing Council of the ECB decides to increase the minimum bid rate on the main refinancing operations by 25 basis points to 2.75%, starting from the operation to be settled on 15 June 2006. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 25 basis points, to 3.75% and 1.75% respectively, both with effect from 15 June 2006.

6 JULY 2006

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.

3 AUGUST 2006

The Governing Council of the ECB decides to increase the minimum bid rate on the main refinancing operations by 25 basis points to 3.0%, starting from the operation to be settled on 9 August 2006. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 25 basis points, to 4.0% and 2.0%, both with effect from 9 August 2006.

31 AUGUST 2006

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 3.0%, 4.0% and 2.0% respectively.

5 OCTOBER 2006

The Governing Council of the ECB decides to increase the minimum bid rate on the main refinancing operations by 25 basis points to 3.25%, starting from the operation to be settled on 11 October 2006. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 25 basis points, to 4.25% and 2.25%, both with effect from 11 October 2006.

2 NOVEMBER 2006

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 3.25%, 4.25% and 2.25% respectively.

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"Annual Report 2005", April 2006.

CONVERGENCE REPORT
"Convergence Report May 2006".

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"Reply of the ECB to the public consultation by the CEBS on the consolidated financial reporting framework for credit institutions", July 2005 (online only).

"Payment and securities settlement systems in the European Union – Addendum incorporating 2003 figures" (Blue Book, August 2005), August 2005.

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"The European Commission's Green Paper on mortgage credit in the EU. Eurosystem contribution to the public consultation", December 2005 (online only).

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"National implementation of Regulation ECB/2001/13", February 2006 (online only).
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INFORMATION BROCHURES
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"TARGET2-Securities brochure", September 2006.

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).

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 (BLS): 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.

Borrowing requirement (general government): net incurrence of debt by general government.

Central parity (or central rate): 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 gross debt (deposits, loans and debt securities excluding financial derivatives) 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-debt adjustment (general government): the difference between the general government deficit and the change in general government debt.

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.

Deflation: a decline in the general price level, e.g. in the consumer price index.

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.

Euro area: the area formed by those EU Member States in which the euro has been adopted as the single currency in accordance with the Treaty.

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 industries, 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).

Eurosystem: the central banking system made up of the European Central Bank and the national central banks of those EU Member States that have already adopted the euro.

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).

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 (in cash and in kind, including bonuses) and other labour costs (employers' social contributions plus employment-related taxes paid by the employer minus subsidies received by the employer), per hour actually worked (including overtime).

Implied volatility: the expected volatility (i.e. standard deviation) in the rates of change of the price of an asset (e.g. a share or a bond). It can be derived from the asset's price, maturity date and exercise price of its options, as well as from a riskless rate of return, using an option pricing model such as the Black-Scholes model.

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: an increase in the general price level, e.g. in the consumer price index.

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 reserves: external assets readily available to and controlled by monetary authorities for directly financing or regulating the magnitude of payments imbalances through intervention in exchange markets. The international reserves of the euro area comprise non-euro denominated claims on non-euro area residents, gold, special drawing rights (SDRs) and the reserve positions in the IMF which are held by the Eurosystem.

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 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 labour productivity (defined as 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 graphical representation of 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.